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Contents

This Issue in Brief

Widespread interest in old-age pensions gives importance to the questions of how many aged persons there are in the United States, where they are found, and how many would probably be eligible for pensions if pension plans should be adopted. The census of 1930 gives data on the first two questions, and the result of actual experience, both in the United States and in Canada, where old-age pensions have been adopted, throws some light on the third. Page. 1.

The occupation of telegraph messenger, especially when a bicycle or motorcycle is used, is a hazardous one. This is disclosed by a recent study by the United States Children's Bureau, made from the records of the two large telegraph companies. Foot messengers suffer the fewest accidents in proportion to the number employed and motorcycle messengers the most. The ratio of lost-time injuries of Western Union messengers in 1931 was 4 per 100 for foot messengers, 11 per 100 for bicycle messengers, and 44 per 100 for motorcycle messengers. Approximately two thirds of the messengers use bicycles in their work, 30 percent deliver and call for telegrams on foot, and 4 percent use motorcycles or automobiles. Page 14.

The recent opening of the State Welfare Home in Delaware marks the passing of the county almshouses in that State. Medical and hospital care, food, clothing, and shelter are all given in the new State home, which will eventually provide facilities for some 800 persons. This home is intended to supplement the State old-age pension and to care for old persons and indigents either needing institutional care or lacking friends or relatives to care for them. Page 11.

The annual earnings of wageworkers in Ohio in 1932 averaged $980 as against $1,457 in 1929, according to an analysis of the data compiled by the Ohio Department of Industrial Relations. In manufacturing industries alone the average earnings of wageworkers in 1932 was $960 as against $1,499 in 1929. a reduction of about 36 percent. Page 143.

Changing conditions of employment and productivity among the principal groups of railroad employees other than those connected directly with transportation are discussed in the second of three articles on railroad labor (p. 43). Technological changes included mechanical office appliances, track-laying machines, mobile power units, better steel and other materials, chemical treatment of ties, improved roundhouse and shop facilities, etc. Changes in productivity in the

different groups varied widely. The upturn in revenue traffic in 1933 was accompanied by a comparatively slight increase in employment.

Although farm labor productivity has shown an increase during the depression, but this may have been purchased at a high future cost through neglect of equipment and animals and through making excessive drafts upon the fertility resources of the land. Page 63.

The Negro in West Virginia has suffered in the depression, but not disproportionately so, according to the report of the Bureau of Negro Welfare and Statistics on conditions in that State during the last two bienniums. The Negroes are in the main wage earners, the proportion of business and professional men being small. Colored workers are scattered through numerous pursuits, the greatest number of males being found in coal mining. In general, they are reported to be hard working and thrifty, with a great desire to own their own homes. Their activities are summarized and suggestions made as to lines along which improvement in general conditions may be sought in a review of the above report on page 75.

In Buffalo, N.Y., there were 282 unemployed per thousand workers in November 1933 compared with 312 per thousand in November 1932, according to a preliminary report on the fifth annual study of unemployment in selected areas of that city. The November 1933 survey shows substantial improvement in the employment status of men, only 25.1 percent being unemployed compared with 32.6 percent in November 1932. Unemployment among women, however, rose from 25.4 percent in November 1932 to 56.2 percent in November 1933. Page 66.

A study of the effect of the economic depression on health, published by the United States Public Health Service, covers actual conditions among the depression poor in three cities. This study, showing the greatly lowered income among a high percentage of the families in 1932 as compared with 1929, reveals that in the group with diminishing incomes during the period the illness rate was 60 percent higher among persons who were "comfortable" in 1929 but "poor" in 1932 than in the group of persons who were in comfortable circumstances throughout the period. A similar trend is shown among groups which had not experienced so decided a change in economic condition, that is, those who had dropped from comfortable to moderate circumstances. The data for all the groups covered in the study bear out the fact that a relatively large drop in economic status appears to be connected with a high illness rate. Page 82.

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Extent and Distribution of Old-Age Dependency in the United States

By MARY CONYNGTON, OF THE UNITED STATES BUREAU OF LABOR STATISTICS

THE population bulletins based upon the figures of the census of 1930, issued by the Census Bureau, contain a considerable amount of information as to the number of aged persons in the United States, their sex and age grouping, their geographical distribution, the number employed, and other details concerning their situation. These data are the more valuable because the census of 1930 was free from some of the disturbing factors which affected the census of 1920.[1] The concentration of workers in war industries had ceased, the soldiery of the World War had been discharged and absorbed into the general population, immigration had been under strict control for some years, so that there was no longer a tidal wave of foreigners flowing into the United States, and on the whole, conditions affecting the absolute and relative extent and distribution of old age were probably as normal as at any time which could have been selected. It is true that the country had already entered the depression, but at the time the enumeration was made, less than 6 months had elapsed since the crash of October 1929, and the change in conditions was, in the light of subsequent events, relatively small. Moreover, the method of taking the census tended to minimize this change as far as the aged are concerned. The age distribution was not affected in any way, and the occupational distribution was shown without regard to the special conditions of the spring of 1930. The census enumerators were instructed to include as "gainful workers" all persons who usually followed a gainful occupation, "although they may not have been employed when the census was taken." The figures, therefore, on which the following tables are based show approximately the normal position as to age, sex, and gainful employment at the close of the last decade, without regard to the effects of the depression.

The terms "old age" and "aged persons" of course require definition. While the ability to work effectively is largely a personal

[1] An article on this subject, based on the figures of the 1920 census, appeared in the Monthly Labor Review for April 1930 (p. 9).

matter, depending on an individual's strength, health, adaptability and so on, it is unquestionable that at some age, usually considered to vary from 60 upwards, a person's efficiency declines to such an extent that his ability to support himself is progressively impaired, and old age may be said to have begun. Pension systems and discussions of old-age dependency quite frequently set 65 as the dividing line, crossing which enrolls a person among the aged. Probably no one would question that those in the group aged 70 and over are definitely old, and for the sake of convenience the aged are often considered as in two groups, those aged 65 and over, and those aged 70 and over. Table 1 shows for each State the total population in 1930, the number in each of these two age groups, and the percentage they formed of the State's total population.

TABLE 1.—NUMBER AND PERCENT OF POPULATION IN THE UNITED STATES IN SPECIFIED AGE GROUPS IN 1930, BY STATES

State	Total population	Aged 65 and over		Aged 70 and over	
		Number	Percent	Number	Percent
Alabama	2,646,248	99,240	3.8	59,994	2.3
Arizona	435,573	15,768	3.6	9,118	2.1
Arkansas	1,854,482	75,600	4.1	45,614	2.5
California	5,677,251	366,125	6.4	210,379	3.7
Colorado	1,035,791	61,787	6.0	34,904	3.4
Connecticut	1,606,903	93,319	5.8	53,192	3.3
Delaware	238,380	16,678	7.1	9,834	4.2
District of Columbia	486,869	27,253	5.6	15,541	3.2
Florida	1,468,211	71,202	4.8	41,417	2.8
Georgia	2,908,506	113,278	4.0	68,136	2.4
Idaho	445,032	22,310	5.0	12,580	2.8
Illinois	7,630,654	421,073	5.5	237,877	3.1
Indiana	3,238,503	232,787	7.1	138,426	4.2
Iowa	2,470,939	184,239	7.5	111,296	4.5
Kansas	1,880,999	129,468	6.8	79,741	4.2
Kentucky	2,614,589	142,122	5.4	84,252	3.2
Louisiana	2,101,593	75,850	3.6	44,926	2.1
Maine	797,423	69,010	8.6	42,467	5.3
Maryland	1,631,526	92,972	5.7	53,680	3.3
Massachusetts	4,249,614	274,195	6.5	156,590	3.7
Michigan	4,842,325	254,891	5.3	148,853	3.1
Minnesota	2,563,953	163,480	6.4	94,401	3.7
Mississippi	2,009,821	77,443	3.8	47,256	2.3
Missouri	3,629,367	244,525	6.7	145,214	4.0
Montana	537,606	26,700	5.0	14,377	2.7
Nebraska	1,377,963	86,194	6.3	51,763	3.8
Nevada	91,058	4,814	5.3	2,735	3.0
New Hampshire	465,293	41,560	8.9	25,714	5.5
New Jersey	4,041,334	201,043	5.0	112,594	2.8
New Mexico	423,317	16,825	4.0	9,551	2.3
New York	12,588,066	667,325	5.3	373,878	3.0
North Carolina	3,170,276	115,671	3.7	69,586	2.2
North Dakota	680,845	30,280	4.4	17,261	2.5
Ohio	6,646,697	414,836	6.3	244,371	3.7
Oklahoma	2,396,040	96,888	4.1	57,212	2.4
Oregon	953,786	67,332	7.1	39,133	4.1
Pennsylvania	9,631,350	508,278	5.3	289,705	3.0
Rhode Island	687,497	39,953	5.8	22,555	3.3
South Carolina	1,738,765	57,164	3.4	33,568	2.0
South Dakota	692,849	36,915	5.3	21,704	3.1
Tennessee	2,616,556	119,045	4.6	70,567	2.7
Texas	5,824,715	232,459	4.0	140,316	2.4
Utah	507,847	22,665	4.4	13,162	2.5
Vermont	359,611	31,253	8.7	19,755	5.5
Virginia	2,421,851	116,678	4.8	70,743	2.9
Washington	1,563,396	101,503	6.4	57,063	3.6
West Virginia	1,729,205	73,043	4.2	43,368	2.5
Wisconsin	2,939,006	192,059	6.5	112,112	3.8
Wyoming	225,565	8,707	3.8	4,719	2.0
United States	122,775,046	6,633,805	5.5	3,863,200.	3.2

Those aged 70 and over constitute a small group, rather curiously distributed. Maine, New Hampshire, and Vermont have the largest proportions of their populations in this age group, their percentages being respectively 5.3, 5.5, and 5.5 percent. No other State has as much as 5 percent, and only six—Delaware, Indiana, Iowa, Kansas, Missouri, and Oregon—reach or pass 4 percent. South Carolina and Wyoming stand at the bottom of the list, each with 2 percent, but Arizona and Louisiana, each with 2.1 percent, and North Carolina, with 2.2 percent, are nearly on the same level. It is difficult to find any common factor, either economic or social, which might explain the similarity of these different States in this respect. It may be noticed that while the proportion for the whole United States in this age group is 3.2 percent, 27 States fall below this figure, and the District of Columbia and Kentucky exactly equal it.

Those aged 65 and over form 5.5 percent of the total population, their relative importance varying from 3.4 percent in South Carolina and 3.6 percent in Arizona and Louisiana to 8.9 percent in New Hampshire, 8.7 percent in Vermont, and 8.6 percent in Maine. A comparison of the data for the two census periods shows that the proportion in this age group had risen from 4.7 percent in 1920 to 5.5 percent in 1930, but that this increase was far from uniform in the different States. This appears clearly in table 2, which gives the proportion in 1930 of the population aged 65 and over, by States, with the corresponding percentage for each State in 1920:

TABLE 2.—PERCENT OF POPULATION IN THE UNITED STATES AGED 65 AND OVER, IN 1930 AND IN 1920, BY STATES

State	Percent aged 65 and over in—		State	Percent aged 65 and over in—	
	1930	1920		1930	1920
Alabama	3.8	3.6	Nevada	5.3	4.5
Arizona	3.6	3.0	New Hampshire	8.9	7.9
Arkansas	4.1	3.5	New Jersey	5.0	4.2
California	6.4	5.8	New Mexico	4.0	3.4
Colorado	6.0	4.4	New York	5.3	4.7
Connecticut	5.8	5.0	North Carolina	3.7	3.9
Delaware	7.1	5.6	North Dakota	4.4	3.0
District of Columbia	5.6	4.7	Ohio	6.3	5.5
Florida	4.8	4.2	Oklahoma	4.1	3.2
Georgia	4.0	3.5	Oregon	7.1	5.4
Idaho	5.0	3.4	Pennsylvania	5.3	4.5
Illinois	5.5	4.6	Rhode Island	5.8	5.0
Indiana	7.1	6.3	South Carolina	3.4	3.2
Iowa	7.5	6.0	South Dakota	5.3	4.0
Kansas	6.8	5.9	Tennessee	4.6	4.3
Kentucky	5.4	4.7	Texas	4.0	3.5
Louisiana	3.6	3.3	Utah	4.4	3.5
Maine	8.6	8.1	Vermont	8.7	8.4
Maryland	5.7	5.0	Virginia	4.8	4.3
Massachusetts	6.5	5.4	Washington	6.4	4.4
Michigan	5.3	5.2	West Virginia	4.2	3.8
Minnesota	6.4	4.6	Wisconsin	6.5	5.3
Mississippi	3.8	3.7	Wyoming	3.8	2.6
Missouri	6.7	5.4			
Montana	5.0	3.1	United States	5.5	4.7
Nebraska	6.3	5.0			

North Carolina is the only State in which the aged population showed a decrease during the decade, its proportion in the 65 and over group having fallen from 3.9 to 3.7 percent. The most striking change appears in Washington, in which the proportion rose from 4.4 to 6.4 percent; this is particularly noticeable since in 1920 its percentage in this group did not equal that of the country as a whole, while in 1930 it was well above the average. In general, the distinctly Eastern States do not show a marked increase, though Delaware, the District of Columbia, Massachusetts, and New Hampshire all show a gain exceeding that for the whole United States. In the main, however, the States in which the gain in this age group is proportionately greater than that for the country as a whole lie west of the Mississippi. It is not possible from the data at hand to say definitely what are the causes of this situation, but it is at least possible that the shutting off of immigration has lessened the pressure upon the youth of the East to move westward, so that both sections now show a more natural age distribution of their population. The importance of the decrease in immigration during the decade is shown by the fact that in 1920 somewhat over one third (37.2 percent) of the foreign-born whites in the United States were under 35, while in 1930 the proportion had sunk to a little over one fourth (26.5 percent), a difference sufficiently great to have an appreciable effect upon the age level of the States to which the newcomers had flocked. A consideration of the States having the smallest proportion of aged persons supports this theory. Table 3 shows the situation at each of the two census periods in the States having the lowest percentages in the group aged 65 and over:

TABLE 3.—STATES HAVING 4 PERCENT OR LESS OF POPULATION AGED 65 AND OVER IN 1930

State	Percentage of population aged 65 and over in—		State	Percentage of population aged 65 and over in—	
	1930	1920		1930	1920
Alabama	3.8	3.6	New Mexico	4.0	3.4
Arizona	3.6	3.0	North Carolina	3.7	3.9
Georgia	4.0	3.5	South Carolina	3.4	3.2
Louisiana	3.6	3.3	Texas	4.0	3.5
Mississippi	3.8	3.7	Wyoming	3.8	2.6

It will be noticed that seven of these are distinctly Southern States, and the other three—Arizona, New Mexico, and Wyoming—are Mountain States of small population, that neither group has attracted much of the foreign immigration in the past, and that consequently

they would not be much affected by its diminution. It may be noted in passing that in every one of these States, except North Carolina, the foreign-born white population was smaller in 1930 than it had been in 1920.

Summing up the situation it may be said that in 1930 the three New England States—Maine, New Hampshire, and Vermont—led in the proportion of the population aged 65 and over, having respectively 8.6, 8.9, and 8.7 percent in this age group, that Iowa with 7.5 percent stood next, followed by Delaware, Indiana, and Oregon, each with 7.1 percent, and that no other State showed as large a proportion as 7 percent. South Carolina had the lowest proportion, 3.4 percent, and North Carolina, with 3.7 percent, was the only State in which this age group formed a lower proportion than in 1920. The proportion for the whole country was 5.5 percent, with 20 States and the District of Columbia exceeding this figure, 27 falling below it and one, Illinois, showing exactly the same percentage.

Extent of Gainful Employment Among Aged Persons

A PERSON does not become automatically incapable of self-support simply by reaching a given age, but the fact that he is 65 or over makes it increasingly difficult for him to secure or to retain profitable employment. This does not apply, of course, to the highly paid officials of large corporations, where the salary may be simply a recognition of the value of the name of a man who has done conspicuous work in the past, but it is true of the rank and file of paid workers. Nevertheless, a considerable proportion of the people classed as aged are still gainfully employed, and therefore wholly or partly self-dependent. Table 4 (p. 6) shows, by States, the total population which in 1930 was aged 65 and over, and the number and percent of these, by sex, who were recorded as gainfully employed.

The gainfully employed form practically one third (33.2 percent) of the total group, the proportion varying from 27.7 percent in Nebraska and 27.9 percent in Iowa, to 45.7 percent in Nevada and 46.8 percent in Mississippi. As might be expected, the extent of gainful employment varies widely between the sexes, slightly less than one twelfth (8 percent) of the women and well over one half (58.3 percent) of the men coming within the group. The statement following table 4 (p. 6) shows the States in which two thirds or more of the men aged 65 and over were gainfully employed.

TABLE 4.—NUMBER AND PROPORTION OF GAINFULLY EMPLOYED PERSONS IN THE UNITED STATES AGED 65 AND OVER, BY STATE AND SEX

State	Persons aged 65 years and over						
	Total	Gainfully employed					
		Males		Females		Both sexes	
		Number	Percent of all males in State	Number	Percent of all females in State	Number	Percent of total aged 65 and over
Alabama	99,240	34,279	68.8	6,373	12.9	40,652	41.0
Arizona	15,768	5,551	60.1	663	10.1	6,214	39.4
Arkansas	75,600	28,610	69.1	2,927	8.6	31,537	41.7
California	366,125	93,143	50.5	15,250	8.4	108,393	29.6
Colorado	61,787	20,298	60.1	2,570	9.1	22,868	37.0
Connecticut	93,319	25,108	57.7	3,932	7.9	29,040	31.1
Delaware	16,678	4,985	60.9	743	8.8	5,728	34.3
District of Columbia	27,253	6,038	52.6	2,051	13.0	8,089	29.7
Florida	71,202	20,686	54.3	2,992	9.0	23,678	33.3
Georgia	113,278	39,010	69.1	7,263	12.8	46,273	40.8
Idaho	22,310	9,097	67.0	632	7.2	9,729	43.6
Illinois	421,073	109,969	52.9	13,713	6.4	123,682	29.4
Indiana	232,787	70,207	59.7	8,134	7.1	78,341	33.7
Iowa	184,239	46,267	48.8	5,158	5.8	51,425	27.9
Kansas	129,468	37,280	54.8	3,825	6.2	41,105	31.7
Kentucky	142,122	49,456	67.9	6,922	10.0	56,378	39.7
Louisiana	75,850	24,751	67.3	4,779	12.2	29,530	38.9
Maine	69,010	21,101	61.8	3,322	9.5	24,423	35.4
Maryland	92,972	26,014	59.1	4,454	9.1	30,468	32.8
Massachusetts	274,195	69,991	57.5	14,577	9.6	84,568	30.8
Michigan	254,891	73,156	55.9	7,980	6.4	81,136	31.8
Minnesota	163,480	46,588	52.8	4,502	6.0	51,090	31.3
Mississippi	77,443	30,354	74.9	5,902	16.0	36,256	46.8
Missouri	244,525	77,611	61.7	9,059	7.6	86,670	35.4
Montana	26,700	10,964	66.5	888	8.7	11,852	44.4
Nebraska	86,194	21,746	47.0	2,088	5.2	23,834	27.7
Nevada	4,814	2,031	65.9	170	9.8	2,201	45.7
New Hampshire	41,560	11,853	59.0	2,174	10.1	14,027	33.8
New Jersey	201,043	51,908	55.9	7,689	7.1	59,597	29.6
New Mexico	16,825	6,819	68.7	770	11.1	7,589	45.1
New York	667,325	174,754	55.9	28,692	8.1	203,446	30.5
North Carolina	115,671	40,179	69.1	5,371	9.3	45,550	39.4
North Dakota	30,280	9,581	54.8	757	5.9	10,338	34.1
Ohio	414,836	113,242	56.1	14,289	6.7	127,531	30.7
Oklahoma	96,888	32,672	59.7	2,550	6.0	35,222	36.4
Oregon	67,332	22,983	61.1	2,491	8.4	25,474	37.8
Pennsylvania	508,278	139,605	57.4	18,073	6.8	157,678	31.0
Rhode Island	39,953	10,136	56.0	1,949	8.9	12,085	30.2
South Carolina	57,164	20,529	72.1	4,565	15.9	25,094	43.9
South Dakota	36,915	11,006	53.0	960	5.9	11,966	32.4
Tennessee	119,045	41,706	68.2	5,790	10.0	47,496	39.9
Texas	232,459	76,801	62.2	8,574	7.9	85,375	36.7
Utah	22,665	7,175	62.8	659	5.9	7,834	34.6
Vermont	31,253	9,471	61.7	1,479	9.3	10,950	35.0
Virginia	116,678	39,741	67.7	6,205	10.7	45,946	39.4
Washington	101,503	34,973	61.1	3,694	8.4	38,667	38.1
West Virginia	73,043	24,596	64.2	2,460	7.1	27,056	37.0
Wisconsin	192,059	51,204	51.4	5,833	6.3	57,037	29.7
Wyoming	8,707	3,524	66.4	325	9.6	3,849	44.2
United States	6,633,805	1,938,749	58.3	266,218	8.0	2,204,967	33.2

	Percent of men, 65 and over, gainfully employed		*Percent of men, 65 and over, gainfully employed*
Mississippi	74.9	New Mexico	68.2
South Carolina	72.1	Tennessee	68.2
Arkansas	69.1	Kentucky	67.9
Georgia	69.1	Virginia	67.7
North Carolina	69.1	Louisiana	67.3
Alabama	68.8	Idaho	67.0

Montana, with 66.5 percent, and Wyoming, with 66.4 percent of their men aged 65 and over gainfully employed, come very close to the two-thirds line, and several others show more than three fifths in this group. This alinement follows the usual experience that agricultural and rural conditions afford more opportunities for elderly workers to continue in gainful employment than urban and industrial environments. The predominantly industrial States are conspicuous by their absence from the list, several of them falling decidedly below the average for the country as a whole. The size of the Negro population also appears to affect the situation, as there are indications that the colored tend to continue in gainful employment to a later age than the noncolored races. Thus in Mississippi, while Negroes form but 42.9 percent of those aged 65 and over, they constitute 52.7 percent of those in this age group who are gainfully employed.

The States leading in the employment of elderly women show a somewhat similar alinement, those having 10 percent or more of those in this age group gainfully employed being as follows:

	Percent of women, 65 and over, gainfully employed		*Percent of women, 65 and over, gainfully employed*
Mississippi	16.0	New Mexico	11.1
South Carolina	15.9	Virginia	10.7
District of Columbia	13.0	Arizona	10.1
Alabama	12.9	New Hampshire	10.1
Georgia	12.8	Kentucky	10.0
Louisiana	12.2	Tennessee	10.0

In the distinctly southern States, this situation is probably due to the fact that the majority of employed women are colored, and that they are engaged mainly in domestic service or in agriculture, in both of which there are more chances for an elderly worker to be useful than in industrial pursuits. In the District of Columbia, it is apparently due to the number of women employed by the Federal Government, which sets the age of compulsory retirement for the largest groups at 70. In States like Arizona, New Hampshire, and Kentucky, the data at hand do not throw any light on the situation, but in these cases the numbers concerned are small and their continued employment may be attributable to purely local or personal conditions.

Extent of Aged Dependency

THE foregoing tables show that, in 1930, persons aged 65 and over numbered more than 6,500,000, forming 5.5 percent of the total population of the United States, and that practically two thirds of the group were not gainfully employed. It does not follow, however, that a person is dependent, or liable to become so, simply because at the age of 65 or over he is not gainfully employed. Nevertheless,

it is known that a considerable proportion in this age group are dependent, and the importance of old age as in itself a cause of dependency is becoming more and more clearly recognized. A number of studies have been made to discover what proportion of the old are dependent, the results varying considerably, as might be expected, according to the character of the locality investigated. From these studies attempts have been made to estimate the number of aged persons who might be expected to become dependent on community support, what proportion of them could be suitably cared for by means of old-age pensions, and what a pension system might be expected to cost. In the past such estimates had to be mainly theoretical, but the operation of old-age pension systems in various parts of the country, and in other countries, is now presenting a growing body of facts on which future calculations may be based.

The earlier laws establishing old-age pensions in various States usually took the county as the unit of action and were permissive, allowing each county of a State to decide for itself whether or not it would adopt the system. Later, a tendency appeared to make the system compulsory on the counties, the State undertaking to bear a proportion of the cost—or, as in Delaware, the whole cost. The earlier systems, therefore, were "scrappy" in their operation, and their results are not so significant as those of the systems which cover a whole State. Figures are now available for five States—California, Delaware, Massachusetts, New Jersey, and New York—in all of which the system is mandatory. (See Monthly Labor Review, August 1933, p. 251.) The age of eligibility is set at 65 in Delaware, and at 70 in the other States. Table 5 shows the number of pensioners in the five States at the end of 1932. The California law went into effect on January 1, 1930, the laws of Delaware and Massachusetts on July 1, 1931, the New Jersey law on January 2, 1932, and the New York law on April 10, 1930, so that the period of operation covered ranges from 1 year in New Jersey to 2 years in California.[1]

[1] In its issue for November 1933, the periodical, Social Security, publishes reports of a more recent date as to the number of old-age pensioners in the five States cited above. For California, New Jersey, and New York, these show the number receiving pensions during August 1933, for Massachusetts during September, and for Delaware during October. The numbers reported are as follows:

California	13,815
Delaware	1,571
Massachusetts	18,074
New Jersey	7,828
New York	51,976

During the interval between these reports and those for which figures are given above, the number of pensioners increased by 1,295 in California, by only 6 in Delaware, and by 1,023 in Massachusetts, while New Jersey showed a decrease of 20 and New York a decrease of 2,209.

TABLE 5.—NUMBER AND PROPORTION OF OLD-AGE PENSIONERS IN ELIGIBLE AGE GROUP IN SPECIFIED STATES, END OF 1932

State	Number in State having age qualification	Number of pensioners	Percent of eligible age group having pensions	State	Number in State having age qualification	Number of pensioners	Percent of eligible age group having pensions
California	210,379	12,520	6.0	New Jersey	112,594	7,848	7.0
Delaware	16,678	1,565	9.4	New York	373,878	54,185	14.5
Massachusetts	156,590	17,051	10.9				

This does not show the proportion of the aged who are in need of help, for in addition to the age qualification the laws contain a number of provisions as to citizenship, length of residence in the State and in the local unit, and as to character and means, which make it inevitable that the number of pensioners should be less than the number in need. It does give some idea, however, of the proportion who may be expected to need pensions and to meet the tests imposed for their receipt. It is worth noticing that in California pensioners form a smaller proportion than elsewhere of the group possessing the required age qualification, although the California law has been in operation longer than the others, and the percentage of employed Californians in this age group is comparatively low. It is possible that this situation is related to the tendency of well-to-do elderly people to go to California for the sake of the climate, thus increasing the number in the upper age groups while diminishing the proportion who find it necessary to continue in gainful employment or to seek public aid.

Canadian Experience

THE Canadian old-age pension system is on a uniform basis throughout the field of operation, having been authorized by a Dominion act which laid down the conditions which must be accepted by any Province wishing to establish pensions. The conditions are thus summarized in the Canadian Labor Gazette for July 1933:

> Under the old-age pensions act a pension is payable to any British subject of 70 years and upwards who is not in receipt of an income of as much as $365 a year and who has resided in Canada for the 20 years preceding, and has also resided in the Province in which the application is made for the 5 years immediately preceding the granting of the pension. The maximum amount of pension payable under the act is $240 yearly. In cases where pensioners have a private income the amount of their old-age pension is subject to a reduction by the amount, if any, that their private income exceeds $125 a year; and in cases where a pensioner has during part of the 20 years immediately preceding the date of the proposed commencement of pension resided in a Province where the act is not in force, the pension payable is reduced by the same proportion as the duration of the pensioner's residence in these Provinces bears to 20 years.

The Dominion Government at first undertook to meet one half of the amount paid out in pensions by any Province adopting the plan,

but in 1931 increased its share to three fourths. Practically all of the western Provinces have established pension systems, the date at which they became effective in the various units being as follows: Alberta, August 1, 1929; British Columbia, September 1, 1927; Manitoba, September 1, 1928; Ontario, November 1, 1929; Saskatchewan, May 1, 1928; and Northwest Territories, January 25, 1929. The plan, therefore, has been in effect for 6 years in British Columbia, and for lesser periods in the other Provinces, but in no case has it been operative for less than 4 years. The latest available figures respecting its working are as follows:

TABLE 6.—NUMBER AND PROPORTION OF OLD-AGE PENSIONERS IN CANADIAN PROVINCES, MARCH 31, 1933

Province	Number of pensioners	Percent of pensioners to total population	Percent of pensioners to population over age 70	Province	Number of pensioners	Percent of pensioners to total population	Percent of pensioners to population over age 70
Alberta	5,244	0.72	37.09	Saskatchewan	8,195	0.89	46.48
British Columbia	7,128	1.03	34.25	Northwest Territory		.05	5.37
Manitoba	8,280	1.18	45.97				
Ontario	42,853	1.24	30.30				

At the date to which these figures refer, the plan was not in operation in any of the eastern Provinces, and the number of pensioners is affected by the fact that in the sections which have adopted the system the upper age groups are not so numerous, proportionately, as in the older communities. The proportion which persons aged over 70 form of the total population ranges from 0.95 percent in the Northwest Territories to 3 percent in British Columbia and 4.11 percent in Ontario.

State Welfare Home for Aged and Indigent in Delaware

DELAWARE has since 1931 had a State-wide old-age pension law the cost of which is borne entirely by the State. In the same year another measure was passed by the legislature. This carried an appropriation of $500,000 for the erection of the State Welfare Home to care for any legal resident of the State "who has been unable to obtain employment, or is unable to work, who has no property or income sufficient to provide the necessities of life, who has no permanent place of abode, and no relatives or friends to care for him or her." This institution therefore supplements the pension system and takes the place of the county almshouses (now closed), providing, in addition, medical, nursing, and hospital care.

The State Old Age Welfare Commission was charged with carrying out the provisions of the act.

Acting under this authorization the commission acquired a site of 56 acres at Smyrna, Del., the acreage running down to a long narrow lake. Plans were drawn for a group of 8 buildings ("guest pavilions"), housing 72 persons each, with a central building containing the hospital and administrative offices—the whole providing accommodations for some 800 persons.

Thus far only the main building and one pavilion have been built. The institution was opened for inmates on September 25 and was formally dedicated October 11, 1933.

The main building is four stories in height and consists of a central section with a wing at each side. The central portion of the first floor in this building contains the administrative offices, rooms for physical examination and observation, dentist's office, serving kitchen, and a dining room for the staff and one for the guests. There is also a small room which serves as a store, at which the guests can buy candy and other small items. The two wings are given over to sleeping quarters for able-bodied guests. The second floor houses the colored guests, while on the third floor are the hospital cases. The male guests occupy one wing of each floor, the female guests the other wing. The third floor also contains rooms for minor surgery, physical therapy, obstetrics, etc. The fourth floor was planned to be the living quarters of the staff. Because of the need for space for the guests, however, only the heads of the different departments have quarters there, the majority of the staff having to seek living accommodations in town; their quarters in the hospital have been given over to some of the woman guests. The main building is provided with four solariums, one for each wing on the second and third floors.

It is planned, eventually, to have a separate guest house for the Negro inmates.

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The present guest pavilion is situated toward the rear of the main building and is connected with it by a covered walk. It has a large bright living room with fireplace, piano, victrola, small tables for games, etc., and many easy chairs. Back of the living room is the dining room, with its serving kitchen adjoining. The remainder of the building is given over to the sleeping quarters of the guests.

The guests' rooms are finished in different soft colors (some in pale blue, some in light green, buff, etc.) and are of varying size, some accommodating 2, some 4, and some 6 beds. In the rooms containing more than 2 beds there is a partition between the beds so as to provide privacy. Each guest has his own clothes closet, bed table, bed, and rocker. All the furniture is of steel, as is also all the trim, staircases, etc., in the buildings.

All of the food used in the institution is prepared and cooked in the kitchen, now housed temporarily in the building which will eventually be utilized for the laundry. A trained dietitian plans the meals and supervises the preparation of the food. From the kitchen the food is taken in special food carts, electrically heated, to the serving kitchens of the guest pavilion and of the main building. During November, 26,588 individual meals were served, at the cost of 8.11 cents each.

All of the departments of the institution have the best modern equipment and appliances.

A recreation building, to be built later, will contain the general kitchens, workshops in which the inmates can busy themselves, and facilities for religious services, and amusements of various sorts. This building, like the guest pavilions, will be connected with the main building by a covered walk.

Under the old-age pension law payments were being made at the end of 1932 to 1,565 aged persons either not in need of institutional care or having relatives or friends to care for them. As already noted, the State Welfare Home is intended to supplement the pension system and provide for indigent aged who are without friends or who need medical or nursing care. Insane patients are not admitted. Married couples are accepted and given rooms together, but the law provides that, once admitted, "any inmate of the home who shall marry shall be dismissed." There are at present only two married couples in residence.

While the home is intended only for persons who are normal mentally, the present home population includes some mental defectives who will eventually be sent to the institution for the feeble-minded. When the Welfare Home was opened, however, the three county almshouses were closed, and the home took over en masse the almshouse inmates. The present home population consists largely of these former poor-farm inmates.

Although the buildings now in operation will normally accommodate 263 persons, on the day the visit to the home was made (Dec. 5,

1933), new bedding and equipment was being received to care for some 80 more persons who are to be moved from a branch now operated at Farnhurst, which will then be closed. Combining the two institutions will make for more economical and more efficient operation.

There is also a waiting list of about 100 persons who cannot yet be provided for.

The home is under the immediate direction of a physician, Dr. A. V. Gilliland. His wife, a psychologist, is the home's social case worker. The final authority in the home management is the State Old Age Welfare Commission, which is directed to conduct it "with due regard for [the inmates'] comfort and well-being" and to group the inmates, as far as possible, according to "their color, their mental and physical condition, and their previous occupation, with a view to their mental and physical betterment." They are to be assigned, when physically able, to such work as will "interest and encourage them" and are to be provided with facilities for "educational improvement, edifying and inspirational entertainment, and healthful recreation."

The buildings thus far erected—main building, guest pavilion, and powerhouse—cost $530,000 and provide accommodations for 263 persons. This represents an investment of $2,015.20 per person. However, as the medical center and powerhouse are built on a scale adequate to meet the requirements after the whole group of buildings is completed, the investment per guest will decrease as the additional buildings are erected.

The cost of operation for the month of November was nearly $12,000, but this sum included the cost of certain items which are not recurrent monthly. Thus nearly $4,500 was spent for clothing necessary to outfit the guests; this, however, is an expense which after the initial outlay will occur only in small amounts in any one month hereafter. The same is true of dental work. A very large amount of this work is being done now, but once the guests' teeth are put in condition only a comparatively small amount of dental attention will be needed regularly to keep them so. The total per capita cost of operation per day for the month of November, without the clothing item, was 97.7 cents; with that item it was $1.55. The treasurer of the institution states that after the home gets onto its regular basis of operation (i.e., after the large outlays necessary at first are taken care of) the per capita cost will be about $1 per day. This, it should be remembered, includes care of all kinds—food, clothing, medical care, medicines, dental care, etc.

The cost of maintenance of the home is to be apportioned among the three counties of the State on the basis of the number of inmates from each, but half of this cost is to be refunded by the State semiannually.

Accidents to Telegraph Messengers

By Ellen Nathalie Matthews, of the United States Children's Bureau

THE following facts as to industrial injuries sustained by telegraph messengers were collected by the Children's Bureau at the request of the Advisory Committee on Employment of Minors in Hazardous Occupations, which was appointed by the Bureau in conformity with the recommendations of the section on child labor of the White House Conference on Child Health and Protection. The attention of the committee had been drawn to the fact that vehicles, chiefly motor vehicles, are a common cause of injury to young workers, and that vehicular injuries, which are among the most severe of industrial injuries to all workers, are even more severe when minors are concerned.[1] Information furnished for the committee's use by the State departments of labor of New York and Pennsylvania showed that many of the minors injured by vehicles were messenger, errand, and delivery boys. In New York in the 3 years ended June 30, 1931, these boys constituted 33 percent of the minors under 18 injured in the course of their work by automobiles and motor trucks and all the boys injured as a result of industrial accidents caused by bicycles. Moreover, their injuries were severe as compared with those suffered by injured minors in general, and their fatality rate was exceptionally high. The accident experience of the boys in this group is especially serious because of their youth. One third of the accidents to boys employed in these occupations who were injured in New York, as reported by the State department of labor, were to boys under 16, as compared with 11 percent of the accidents to all employed minors under 18 injured in the State in the same period.[2]

With these considerations in mind, the committee asked the Children's Bureau to make a special inquiry into the accident experience of this group. The inquiry was confined to telegraph messengers in view of the practical difficulties of obtaining such information for errand and delivery boys, most of whom are employed by small grocery stores and similar establishments, of which few, if any, keep records adequate for the purpose of such a study. All of the telegraph messengers are employed by two large companies, the Western Union Telegraph Co. and the Postal Telegraph Co., both of which have a complete and accurate system of records relating to their injured employees.

The Western Union Co. tabulates annual statistics of accidents to messengers and calculates the ratio of accidents per 100 messengers employed, grouping together all accidents, including those as a result of which no time is lost from work (table 1). The Postal Telegraph

[1] Child Labor: Report of the subcommittee on hazardous occupations, industrial accidents, and compensation for minors, of the White House Conference on Child Health and Protection. New York, Century Co., 1932, p. 384.

[2] Unpublished data furnished by the New York State Department of Labor.

Co. compiles an annual summary of accidents occurring to all its employees but does not distinguish between messengers and others. As the information compiled by the companies was insufficient for the purpose of the present inquiry, an analysis of the records of accidents occurring in 1 year to messengers employed by the two companies was made by the Children's Bureau. The most recent year for which complete records were available (1931) was selected for study. The selected year is not in all respects representative, however, for conditions for street safety appear to have been unusually favorable in 1931. The ratio of accidents per 100 messengers employed by the Western Union Co. dropped from 20 in 1928 and in 1929 to 13 in 1931, and in the years 1924–27 it had risen from 14 to 17, doubtless indicating a tendency to rise and fall with general business conditions. The active accident-prevention campaign carried on by the companies in recent years has no doubt also had a part in the reduction in the accident rate. Another factor that would tend to modify the messengers' accident record for 1931 as compared with that for more normal years was that the depression had also caused a reduction in the proportion of young boys employed as messengers, and, in consequence, in the number of accidents occurring to this younger group.

TABLE 1.—NUMBER OF INJURIES, AVERAGE NUMBER OF MESSENGERS EMPLOYED DAILY, AND INJURY RATE PER 100 MESSENGERS EMPLOYED, WESTERN UNION CO., 1924 TO 1932

Year	Average number of messengers employed daily	Injuries		Year	Average number of messengers employed daily	Injuries	
		Number [1]	Rate per 100 messengers employed			Number [1]	Rate per 100 messengers employed
1924	11,084	1,549	14	1929	14,136	2,885	20
1925	11,873	1,854	16	1930	14,032	2,278	16
1926	13,300	2,159	16	1931	13,014	1,724	13
1927	12,468	2,071	17	1932	[2] 11,738	[3]	
1928	12,924	2,608	20				

[1] All injuries, including those as a result of which no time was lost from work.
[2] Average number employed not available. The figures given are the number employed on January 1.
[3] Information not available.

Types of Service, Number, and Ages of Telegraph Messengers

ACCORDING to information furnished by the two telegraph companies, they together employed in the United States in the early part of 1932 some 17,000 messengers (Western Union, on Jan. 1, 11,738; Postal Telegraph on Mar. 1, 5,249). In 1929 and in 1930 the average number employed daily had approximated 20,000 (Western Union, more than 14,000; Postal Telegraph, about 6,000).

Of these, the companies stated, approximately two thirds were bicycle messengers, 30 percent were foot messengers, and 4 percent used motorcycles or automobiles as a method of transportation.

The last named are employed chiefly in rural or semirural districts, bicycle messengers are used in the residential sections of towns and cities and in the business sections of small communities, and foot messengers predominate in the business sections of large cities, where vehicular traffic is heavy. For example, in the New York metropolitan area, the Western Union reported the proportion of bicycle messengers to be considerably smaller than in the country as a whole—21 percent as compared with 66 percent; in the city of New York itself it is said to be probably not more than 10 percent, since no bicycle messengers are allowed by this company to operate south of 197th Street on the West Side and of 125th Street on the East Side. The practice of the Postal Telegraph Co. is much the same; 83 percent of this company's messengers in New York City are reported to be oot messengers who serve all Manhattan south of 57th Street except for two district offices outside the congested area.

TABLE 2.—LOST-TIME INJURIES SUSTAINED BY MESSENGERS IN SPECIFIED TYPES OF SERVICE, EMPLOYED IN SPECIFIED DISTRICTS BY THE WESTERN UNION AND POSTAL TELEGRAPH COMPANIES DURING 1931

Company and district	Lost-time injuries								
	Type of service								Total
	Bicycle		Foot		Motorcycle		Automobile		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Western Union Co.:									
Eastern (including Metropolitan District)	274	75	73	20	10	3	8	2	365
Southern	139	97	3	2	1	1			143
Lake	199	85	26	11	2	1	8	3	235
Central	71	92	6	8					77
Gulf	90	97	1	1	1	1	1	1	93
Mountain	29	[1]	1	[1]					30
Pacific	79	64	4	3	40	32	1	1	124
Total	881	83	[2] 114	11	54	5	18	2	1,067
Postal Telegraph Co.:									
Eastern (including Metropolitan District)	73	69	21	20	11	10	1	1	106
Southern	83	77	6	6	17	16	2	2	108
Central	72	77	16	17	2	2	4	4	94
Western	43	84	4	8	3	6	1	2	51
Southwestern	30	[1]	1	[1]	3	[1]	1	[1]	35
Pacific	60	55	1	1	47	43	1	1	109
Total	361	72	49	10	83	17	10	2	503
Grand total	1,242	79	163	10	137	9	28	2	1,570

[1] Percent not shown because number of messengers was less than 50.
[2] Includes 2 messengers serving on trains, 1 in eastern and 1 in central district, employed by Western Union Co.

If one may judge from the statistics of lost-time injuries to messengers obtained by the Children's Bureau, there is also some variation in different parts of the country in the extent to which messengers of different types are employed. Motorcycle messengers are more common on the Pacific Coast, whereas in the Southern and Gulf

States almost all (97 percent) of the injured Western Union messengers were mounted on bicycles. A large proportion of the Postal messengers injured, in each district except the Pacific, were similarly mounted. As might be expected, foot messengers are most common in the Eastern and Lake or Central districts where population is most congested (table 2).

Although the companies do not collect and tabulate statistics of the ages of messengers employed throughout the country, they keep a record of the ages of all those who are injured. The information as to messengers' accidents occurring in 1931, obtained by the Children's Bureau from these records, showed that 13 percent of the total injuries in that year were to messengers under 16, and 63 percent were to those under 18, the majority being sustained by those between 16 and 18 years of age (table 3). In normal times, according to the statements of both companies, the average age of messengers is considerably younger. Officials of the Western Union Co. stated that in normal times boys over 16 are not likely to enter messenger service, and that usually they do not stay with the company long after they have reached the age of 17, or after they have been employed for more than 6 months. In these times, however, many remain with the company a year or more because of the difficulty of finding other work, the company keeping them although preferring younger boys. A random sample taken by the Children's Bureau of approximately 100 records of accidents occurring in each of the years 1926 to 1931 to Western Union messengers in five States corroborates the statements of the companies that the average age of messengers is older than formerly. Although the sample is small, it shows, particularly since 1928, a decrease in the number of injuries to messengers under 16, dropping from 25 percent in 1926 to 8 percent in 1931, and an increase from 25 percent to 36 percent, respectively, in the proportion 18 or over. Even in the earlier years of this 5-year period a large proportion of the telegraph messengers injured were 17 or older, although 16 was the usual age of the messengers injured in each of the five years.

There appears to be a difference in the local practice also with regard to age. According to the Children's Bureau statistics of accidents to bicycle messengers, the Gulf and the Eastern districts appear to employ a larger proportion of minors under 16 than any other sections. Twenty percent and 19 percent, respectively, of the accidents to Western Union bicycle messengers in the Eastern and the Gulf districts in 1931 were to boys under 16; the corresponding proportion for the Southern district was 12 percent, for the Lake and Central districts, 9 and 10 percent, and for the Pacific district, 5 percent (table 4).

TABLE 3.—LOST-TIME INJURIES SUSTAINED BY MESSENGERS OF SPECIFIED AGES EMPLOYED IN SPECIFIED TYPES OF SERVICE BY THE WESTERN UNION AND POSTAL TELEGRAPH COMPANIES DURING 1931

Company and type of service	Lost-time injuries												
	Age of messenger reported as—												
	Under 16 years		16 years		17 years		18 and under 21 years		21 years and over		Total	Age not reported	Grand total
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent			
Western Union Co.:													
Bicycle	121	14	248	28	242	28	227	26	40	5	878	3	881
Foot	27	24	31	28	21	19	19	17	13	12	111	3	[1] 114
Motorcycle	------	------	2	4	7	13	30	56	15	28	54	------	54
Automobile	------	------	------	------	------	------	4	[2]	14	[2]	18	------	18
Total	148	14	281	26	270	25	280	26	82	8	1,061	6	1,067
Postal Telegraph Co.:													
Bicycle	51	14	88	24	95	26	114	32	13	4	361	------	361
Foot	6	[2]	15	[2]	13	[2]	10	[2]	5	[2]	49	------	49
Motorcycle	------	------	5	6	4	4	47	57	27	33	83	------	83
Automobile	------	------	2	[2]	------	------	5	[2]	3	[2]	10	------	10
Total	57	11	110	22	112	22	176	35	48	10	503	------	503
Grand total	205	13	391	25	382	24	456	29	130	8	1,564	6	1,570

[1] Includes 2 messengers serving on trains, 1, 20 years, and 1, 22 years of age.
[2] Percent not shown because number of messengers was less than 50.

TABLE 4.—LOST-TIME INJURIES SUSTAINED BY BICYCLE MESSENGERS OF SPECIFIED AGES EMPLOYED IN SPECIFIED DISTRICTS BY THE WESTERN UNION AND POSTAL TELEGRAPH COMPANIES DURING 1931

Company and district	Lost-time injuries												
	Age of messenger reported as—												
	Under 16 years		16 years		17 years		18 and under 21 years		21 years and over		Total	Age not reported	Grand total
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent			
Western Union Co.:													
Eastern (including Metropolitan District)	55	20	94	34	67	25	38	14	19	7	273	1	274
Southern	17	12	31	22	36	26	52	37	3	2	139	------	139
Lake	18	9	51	26	63	32	64	32	2	1	198	1	199
Central	7	10	32	46	16	23	14	20	1	1	70	1	71
Gulf	17	19	23	26	28	31	17	19	5	6	90	------	90
Mountain	3	[1]	6	[1]	14	[1]	6	[1]	------	------	29	------	29
Pacific	4	5	11	14	18	23	36	46	10	13	79	------	79
Total	121	14	248	28	242	28	227	26	40	5	878	3	881
Postal Telegraph Co.:													
Eastern (including Metropolitan District)	13	18	22	30	22	30	15	21	1	1	73	------	73
Southern	20	24	22	27	20	24	20	24	1	1	83	------	83
Central	6	8	17	24	21	29	27	38	1	1	72	------	72
Western	5	[1]	12	[1]	11	[1]	15	[1]	------	------	43	------	43
Southwestern	5	[1]	6	[1]	12	[1]	5	[1]	2	[1]	30	------	30
Pacific	2	3	9	15	9	15	32	53	8	13	60	------	60
Total	51	14	88	24	95	26	114	32	13	4	361	------	361
Grand total	172	14	336	27	337	27	341	27	53	4	1,239	3	1,242

[1] Percent not shown because number of messengers was less than 50.

Injured foot messengers are in general younger than the other groups (24 percent of the injuries in 1931 to foot messengers employed by the Western Union were to boys under 16). Motorcycle and automobile messengers are the oldest.[3] However, approximately 10 percent of the injuries to foot messengers of each of the companies were sustained by messengers 21 years old or older, some of them much older (tables 3 and 5).

TABLE 5.—LOST-TIME INJURIES SUSTAINED BY MESSENGERS OF SPECIFIED AGES EMPLOYED IN SPECIFIED TYPES OF SERVICE BY THE WESTERN UNION AND POSTAL TELEGRAPH COMPANIES DURING 1931

Age of messenger	Lost-time injuries										
	Western Union Co.					Postal Telegraph Co.					Grand total
	Type of service				Total	Type of service				Total	
	Bicycle	Foot	Motorcycle	Automobile		Bicycle	Foot	Motorcycle	Automobile		
12 years						1				1	1
14 years	25	6			31	11	1			12	43
15 years	96	21			117	39	5			44	161
16 years	248	31	2		281	88	15	5	2	110	391
17 years	242	21	7		270	95	13	4		112	382
18 years	139	12	9	1	161	72	7	15		94	255
19 years	68	2	8	2	80	33	1	21	4	59	139
20 years	20	5	13	1	39	9	2	11	1	23	62
21 years	12		6	3	21	6	1	7	1	15	36
22 years	8	1	1	1	11	1	2	3		6	17
23 years	6		4	1	11	3		4	1	8	19
24 years	1	1	2		4	1		2		3	7
25 and under 30 years	9	4	1	6	20	2		6	1	9	29
30 and under 40 years	4	3	1		8		2	5		7	15
40 and under 50 years				2	2						2
50 and under 60 years		2		1	3						3
60 years and over		2			2						[1] 2
Not reported	3	3			6						6
Total	881	[2] 114	54	18	1,067	361	49	83	10	503	1,570

[1] 1 aged 64 years, 1 aged 72 years.
[2] Includes 2 messengers serving on trains.

Lost-Time Accidents to Telegraph Messengers in 1931

Number of Injuries and Extent of Disability

ACCORDING to the analysis of the records of the companies made by the Children's Bureau, 1,570 lost-time accidents occurred to telegraph messengers during 1931—1,067 to Western Union messengers and 503 to Postal Telegraph messengers. A little more than half of the injuries resulted in disability of 7 days or less; the rest—735—involved longer and more serious disabilities. These included 6 deaths, at least 12 permanent injuries, and 192 disabilities of at least 1 month's duration (table 6).

[3] Special legal protection is afforded this group by regulations in a few States prohibiting the employment in the operation of motor vehicles of young persons below a specified age which is higher than the minimum age for general employment, and by laws prohibiting the licensing of minors (usually under 16 or under 18) as operators of motor vehicles. No such special legal protection is afforded messengers on other types of service.

TABLE 6.—EXTENT AND DURATION OF DISABILITY FROM LOST-TIME INJURIES SUSTAINED BY MESSENGERS EMPLOYED BY THE WESTERN UNION AND POSTAL TELEGRAPH COMPANIES DURING 1931

Extent and duration of disability	Lost-time injuries					
	Western Union Co.		Postal Telegraph Co.		Total	
	Number	Percent	Number	Percent	Number	Percent
Extent and duration reported	1,044	100	500	100	1,544	100
Disability of 7 days or less	541	52	268	54	809	52
Disability of 8 days or more	503	48	232	46	735	48
Fatal	4	(1)	2	(1)	6	(1)
Permanent partial disability	8	1	4	1	12	1
Disfigurement	2	(1)	3	1	5	(1)
Other	6	1	1	(1)	7	1
Temporary disability	491	47	226	45	717	46
8 days and under 1 month	361	35	164	33	525	34
1 month and under 3 months	114	11	56	11	170	11
3 months or more	16	2	6	1	22	1
Extent and duration not reported	23		3		26	
Total	1,067		503		1,570	

[1] Less than 1 percent.

Injuries and Types of Service

Foot messengers suffered the fewest accidents in proportion to the number employed; motorcycle messengers, the most (table 7). The ratio of lost-time accidents to Western Union messengers in 1931 was 4 per 100 for foot messengers, 11 per 100 for bicycle messengers, and 44 per 100 for motorcycle messengers. Such information as is available for the Postal Telegraph Co. indicates the same trend. According to officials of the latter company, the accident rate for motorcycle messengers (based on all accidents, including those in which no time was lost) had been found to be as high as 75 per 100, in consequence of which the use of motorcycles was being eliminated as fast as possible and automobiles substituted.

TABLE 7.—NUMBER OF LOST-TIME INJURIES IN 1931, AVERAGE NUMBER OF MESSENGERS EMPLOYED DAILY IN SPECIFIED TYPES OF SERVICE, AND INJURY RATE PER 100 MESSENGERS EMPLOYED BY WESTERN UNION AND POSTAL TELEGRAPH COMPANIES

Company and type of service	Estimated average number of messengers employed	Lost-time injuries		Company and type of service	Estimated average number of messengers employed	Lost-time injuries	
		Number	Rate per 100 messengers employed			Number	Rate per 100 messengers employed
Western Union Co.:				Postal Telegraph Co.:			
Bicycle	8,168	881	11	Bicycle	3,374	361	11
Foot	3,713	114	4	Foot	1,589	49	3
Motorcycle	124	54	44	Motorcycle	286	83	33
Automobile	371	18	5	Automobile		10	
Total	[1] 12,376	1,067	9	Total	[2] 5,249	503	10

[1] Number is average reported on Jan. 1, 1931 and on Jan. 1, 1932. Totals in each group are estimated on basis of average.
[2] Number reported Mar. 2, 1932.

Not only in frequency, but also in severity, accidents to foot messengers are the least serious. All the six fatalities shown in the Children's Bureau analysis occurred either to bicycle messengers (4) or to motorcycle messengers (2). These groups were the worst sufferers also in the length of time the messengers were disabled following their accidents (table 8).

TABLE 8.—EXTENT AND DURATION OF DISABILITY FROM LOST-TIME INJURIES SUSTAINED BY MESSENGERS EMPLOYED IN SPECIFIED TYPES OF SERVICE DURING 1931

Extent and duration of disability	Lost-time injuries								
	Type of service							Total	
	Bicycle		Foot		Motorcycle		Automobile [1]		
	Number	Percent	Number	Percent	Number	Percent		Number	Percent
Extent and duration reported	1,220	100	161	100	136	100	27	1,544	100
Disability of 7 days or less	669	55	82	51	47	35	11	809	52
Disability, partial, of 8 days or more	551	45	79	49	89	65	16	735	48
Fatal	4	(3)	------	------	2	1	------	6	(3)
Permanent partial disability	8	1	3	2	1	1	------	12	1
Disfigurement	3	(3)	1	1	1	1	------	5	(3)
Other	5	(3)	2	1	------	------	------	7	(3)
Temporary disability	539	44	76	47	86	63	16	717	46
8 days and under 1 month	398	33	62	39	55	40	10	525	34
1 month and under 3 months	125	10	14	9	25	18	6	170	11
3 months or more	16	1	------	------	6	4	------	22	1
Extent and duration not reported	22	------	2	------	1	------	1	26	------
Total	1,242	------	[2] 163	------	137	------	28	1,570	------

[1] Percent distribution not shown because number of messengers was less than 50.
[2] Includes 2 messengers serving on trains.
[3] Less than 1 percent.

Causes of Accidents

Motor vehicles were the most frequent causes of accidents to messengers in general, and also to all groups of mounted messengers. All the fatalities, half of the permanent injuries, and all but 2 of the 22 temporary injuries lasting 3 months or more were caused by automobiles or trucks. Falls caused the largest number of accidents to foot messengers. Fifty-five percent of the injuries to bicycle messengers, the largest occupational group, resulted from the bicycle's being struck by or colliding with an automobile or truck, and 38 percent resulted from the messenger's being thrown from his bicycle through some accident occurring to the bicycle itself, such as skidding on a wet pavement, catching in car tracks, or breaking of some part of the machine. However, where the bicycle itself was reported as the cause of accident, motor vehicles were at times indirectly responsible, as the accidents occurred as a result of the messenger being forced out of his course or having to change his course quickly in order to get out of the way of a larger and faster moving vehicle. (Tables 9, 10, and 11.)

TABLE 9.—CAUSE OF LOST-TIME INJURIES SUSTAINED BY MESSENGERS EMPLOYED IN SPECIFIED TYPES OF SERVICE DURING 1931

Cause of injury	Lost-time injuries								
	Type of service							Total	
	Bicycle		Foot		Motorcycle		Automobile [1]		
	Number	Percent	Number	Percent	Number	Percent		Number	Percent
Cause reported	1,238	100	162	100	137	100	27	1,564	100
Machinery (elevators)	1	[3]	3	2	------	------	------	4	[3]
Vehicles	1,149	93	46	28	132	96	22	1,349	86
Automobiles and trucks	677	55	41	25	87	64	22	827	53
Bicycles	466	38	1	1	------	------	------	467	30
Motorcycles	3	[3]	1	1	45	33	------	49	3
Trains	------	------	1	1	------	------	------	1	[3]
Street railways	3	[3]	2	1	------	------	------	5	[3]
Explosives, fires, etc	1	[3]	1	1	------	------	1	3	[3]
Falls of persons	29	2	66	41	1	1	3	99	6
Stepping on or striking against objects	5	[3]	10	6	1	1	------	16	1
Falling objects	------	------	6	4	------	------	------	6	[3]
Handling objects	2	[3]	2	1	1	1	------	5	[3]
Hand tools	2	[3]	1	1	------	------	------	3	[3]
Animals (dogs)	17	1	6	4	1	1	------	24	2
Bites	12	1	6	4	------	------	------	18	1
Other	5	[3]	------	------	1	1	------	6	[3]
Miscellaneous	32	3	21	13	1	1	1	55	4
Flying particles	12	1	2	1	1	1	------	15	1
Assaults, fights, horseplay, etc	5	[3]	3	2	------	------	------	8	1
Rubbing puttees or shoes	9	1	12	7	------	------	------	21	1
Other	6	[3]	4	2	------	------	1	11	1
Cause not reported	4	------	1	------	------	------	1	6	------
Total	1,242	------	[2] 163	------	137	------	28	1,570	------

[1] Percent distribution not shown because number of messengers was less than 50.
[2] Includes 2 messengers serving on trains.
[3] Less than 1 percent.

TABLE 10.—CAUSE, EXTENT, AND DURATION OF LOST-TIME INJURIES SUSTAINED BY BICYCLE MESSENGERS DURING 1931

Cause of injury	Lost-time injuries							
	Extent and duration of disability							Total
	Fatal	Permanent partial	Temporary				Not reported	
			Under 1 month	1 month and under 3 months	3 months or more	Total		
Machinery (elevators)	------	------	------	1	------	1	------	1
Vehicles	4	8	981	118	16	1,115	22	1,149
Automobiles and trucks	4	5	557	75	14	646	22	677
Bicycles	------	3	418	43	2	463	------	466
Motorcycles	------	------	3	------	------	3	------	3
Street railways	------	------	3	------	------	3	------	3
Explosives, fires, etc	------	------	1	------	------	1	------	1
Falls of persons	------	------	25	4	------	29	------	29
Stepping on or striking against objects	------	------	5	------	------	5	------	5
Handling objects	------	------	2	------	------	2	------	2
Hand tools	------	------	2	------	------	2	------	2
Animals (dogs)	------	------	16	1	------	17	------	17
Bites	------	------	12	------	------	12	------	12
Other	------	------	4	1	------	5	------	5
Miscellaneous	------	------	31	1	------	32	------	32
Flying particles	------	------	12	------	------	12	------	12
Assaults, fights, horseplay, etc	------	------	4	1	------	5	------	5
Rubbing puttees or shoes	------	------	9	------	------	9	------	9
Other	------	------	6	------	------	6	------	6
Not reported	------	------	4	------	------	4	------	4
Total	4	8	1,067	125	16	1,208	22	1,242

TABLE 11.—CAUSE OF LOST-TIME INJURIES SUSTAINED BY MESSENGERS EMPLOYED IN SPECIFIED TYPES OF SERVICE BY WESTERN UNION AND POSTAL TELEGRAPH COMPANIES DURING 1931

Cause of injury	Lost-time injuries										
	Western Union Co.					Postal Telegraph Co.					Grand total
	Type of service				Total	Type of service				Total	
	Bicycle	Foot	Motorcycle	Auto		Bicycle	Foot	Motorcycle	Auto		
Machinery (elevators)	1	3			4						4
Vehicles	795	35	53	13	896	354	11	79	9	453	1,349
Autos and trucks	472	32	37	13	554	205	9	50	9	273	827
Bicycles	321	1			322	145				145	467
Motorcycles	1	1	16		18	2		29		31	49
Trains		1			1						1
Street railways	1				1	2	2			4	5
Explosives, fires, etc	1	1		1	3						3
Falls of persons	28	40	1	3	72	1	26			27	99
Stepping on or striking against objects	5	6			11		4	1		5	16
Falling objects		6			6						6
Handling objects	2				2		2	1		3	5
Hand tools	1	1			2	1				1	3
Animals (dogs)	17	4			21		2	1		3	24
Bites	12	4			16		2			2	18
Other	5				5			1		1	6
Miscellaneous	27	18		1	46	5	3	1		9	55
Flying particles	8	2			10	4		1		5	15
Assaults, fights, horse-play, etc	5	2			7		1			1	8
Rubbing puttees or shoes	9	12			21						21
Other	5	2		1	8	1	2			3	11
Not reported	4				4		1		1	2	6
Total	881	[1]114	54	18	1,067	361	49	83	10	503	1,570

[1] Includes 2 messengers serving on trains.

Hour of Accident

Information as to the hour at which the accident occurred is available for a large majority of the injured messengers employed by the Western Union Co., but could not readily be obtained for the Postal Telegraph Co. Twenty-one percent of the injuries to Western Union messengers occurred at night; that is, between 7 p.m. and 7 a.m. Only 11 percent of the accidents to Western Union foot messengers occurred between these hours, doubtless because of the fact that foot messengers, employed chiefly in business sections, work as a rule only during regular business hours; on the other hand, 40 percent of the accidents to messengers mounted on motorcycles or driving automobiles, who operate practically entirely in residential districts, where the population is scattered, occurred at night (table 12).

Of the injuries occurring to Western Union messengers at night, 117 were to boys under 18 years of age; 14 of these were to boys under 16 years. Of the 5 injuries to foot messengers under 18 occurring after 7 p.m., 1 was to a boy of 15, 3 to boys of 16, and 1 to a boy of 17. One injury, to a boy of 16, occurred at 2 a.m. Almost two thirds (62 percent) of the injuries to bicycle messengers occur-

ring at night were to boys under 18, the accidents occurring in 21 percent of these cases at 10 p.m. or later. Two injuries to 16-year-old bicycle messengers occurred at 1:40 a.m. and 2:45 a.m., respectively, and one accident occurred to a 17-year-old messenger at 2 a.m. The accidents to motorcycle and automobile messengers injured at night were all to older boys and men, except for one motorcycle accident to a 16-year-old messenger at 8:30 p.m.

In most States messenger service is regulated for children up to 16 in the same way as factory and other general employment, with a minimum age of 14 and a prohibition of night work under 16. The laws of a number of States also prohibit the employment of minors up to 18 years, or even older, as night messengers, at least between the hours of 10 p.m. and 6 a.m.,[4] and the general adoption of such regulation for minors under 21 has been recommended by the National Conference of Commissioners on Uniform State Laws in their Uniform Child Labor Acts adopted in 1911 and 1930.[5] Some States also entirely prohibit the employment of girls as messengers at any time.[4]

[4] Thirty States and the District of Columbia prohibit night employment of messengers up to at least 18 years of age, as follows:

Alabama: Under 18, between 10 p.m. and 6 a.m.

Arizona: Under 21, between 10 p.m. and 5 a.m. in incorporated cities or towns.

Arkansas: Under 18, between 10 p.m. and 6 a.m.

California: In cities of more than 15,000 inhabitants, boys 16 and 17, between 9 p.m. and 6 a.m., and girls under 18, at any time.

Connecticut: Under 18, between 10 p.m. and 5 a.m. in cities having a population of 20,000 or more.

Delaware: Under 21, between 10 p.m. and 6 a.m. in places of more than 20,000 population.

District of Columbia: Boys 16 and 17, between 10 p.m. and 6 a.m.; boys between 18 and 21, from 12 midnight to 5 a.m.; girls under 18, at any time; girls between 18 and 21, from 7 p.m. to 6 a.m.

Florida: Under 18, between 10 p.m. and 5 a.m.

Indiana: Boys under 18, between 10 p.m. and 6 a.m.; girls under 18, between 7 p.m. and 6 a.m.

Iowa: Under 18, between 10 p.m. and 5 a.m. in cities having a population of 10,000 or more.

Kentucky: Under 21, between 9 p.m. and 6 a.m. in cities of the first, second, or third class.

Maryland: Under 18, between 10 p.m. and 6 a.m. in cities having a population of 20,000 or more.

Massachusetts: Under 21, between 10 p.m. and 5 a.m., with certain exemptions; girls under 18, at any time.

Michigan: Under 18, between 10 p.m. and 5 a.m.

Minnesota: Boys under 18, between 9 p.m. and 5 a.m.; girls under 21, at any time.

Missouri: Girls under 18, at any time.

Nevada: Under 18, between 10 p.m. and 5 a.m. in incorporated cities and towns.

New Hampshire: Under 18, between 10 p.m. and 5 a.m.

New Jersey: Under 21 in cities of first class, and under 18 in other municipalities, between 10 p.m. and 5 a.m., with certain exemptions.

New Mexico: Girls under 21, at any time.

New York: Boys under 21, between 10 p.m. and 5 a.m. in cities of the first or second class; girls under 21, at any time.

Ohio: Boys under 18, between 9 p.m. and 6 a.m.; girls under 21, at any time, in the personal delivery of messages.

Oregon: Under 18, between 10 p.m. and 5 a.m.; girls under 21, at any time.

Pennsylvania: Under 21, between 8 p.m. and 6 a.m.; girls under 18, at any time.

Rhode Island: Under 21, between 10 p.m. and 5 a.m.

South Carolina: Under 18, between 10 p.m. and 5 a.m. in cities of 5,000 population or more.

Tennessee: Under 18, between 10 p.m. and 5 a.m.

Utah: Girls under 18, at any time.

Virginia: Girls between 18 and 21 and boys 16 and 17, between 10 p.m. and 5 a.m.; girls under 18, at any time.

Washington: Boys under 18, between 7 p.m. and 6 a.m. in cities of 3,000 or more, and between 10 p.m. and 6 a.m. in cities of less than 3,000; girls under 18, at any time.

Wisconsin: Under 21, between 8 p.m. and 6 a.m. in cities of first, second, and third class; girls of any age, at any time.

[5] The first uniform child labor law proposed in 1911 prohibited the employment of minors under 21 in messenger service in cities of specified population or class between 10 p.m. and 5 a.m.; the act recommended in 1930 contained a similar provision, the prohibited hours being between 8 p.m. and 6 a.m.

TABLE 12.—TIME OF DAY IN WHICH LOST-TIME INJURIES WERE SUSTAINED BY MESSENGERS EMPLOYED IN SPECIFIED TYPE OF SERVICE BY WESTERN UNION CO. DURING 1931

Time of day	Lost-time injuries								
	Type of service							Total	
	Bicycle		Foot		Motorcycle		Automobile [1]		
	Number	Percent	Number	Percent	Number	Percent		Number	Percent
Time reported	865	100	103	100	54	100	18	1,040	100
7 a.m. to noon	240	28	31	30	17	31	4	292	28
Noon to 7 p.m.	447	52	61	59	18	33	4	530	51
7 p.m. to midnight	170	20	8	8	16	30	7	201	19
Midnight to 7 a.m.	8	1	3	3	3	6	3	17	2
Time not reported	16	-------	11	-------	-------	-------	-------	27	-------
Total	881	-------	[2] 114	-------	54	-------	18	1,067	-------

[1] Percent distribution not shown because number of messengers was less than 50.
[2] Includes 2 messengers serving on trains.

The extent of protection afforded to boys in the messenger service by existing night-work laws is shown by the fact that in only 12 of the 117 cases of injury to Western Union messengers under 18 years of age occurring at night in 1931 was there a violation of the night-work laws of the States in which the injury occurred. Even of the 24 injuries caused by accidents occurring between 10 p.m. and 5 a.m., the hours most commonly specified in prohibitions, only 7 were to boys working in violation of State laws.

Indemnification of Injured Messengers

BOTH the Western Union Co. and the Postal Telegraph Co. are self-insured wherever this is possible under the State workmen's compensation laws, and both pay accident disability benefits out of an employee's benefit fund. Payments are also made from this fund to employees disabled by ill health or retired from the service, or in the event of death, to their dependent relatives.

Policy of the Western Union Telegraph Co.

For accidental injuries arising out of and in the course of employment, under the plan of benefits in effect since 1913 in the Western Union Co.,[6] injured messengers receive in cases of total disability full pay during the first 13 weeks of disability, and half pay for any subsequent period, provided that after the expiration of 6 years of disability payments, benefits shall not exceed $20 a week. In addition they receive medical and hospital expenses approved by the company. For partial disability, the difference between the wages the injured person is judged to be capable of earning and his wages at the time

[6] Western Union Telegraph Co. Form 3900 (8-8-29): Plan for employees' pensions, disability benefits, and death benefits, pp. 6-7.

of the injury is paid him out of the benefit fund. Special benefits in lieu of all other benefits are paid in cases in which the injury results in the permanent loss of a bodily member or the loss of its use. If accidents are caused by a third party, as is frequently the case in vehicular accidents, benefits are not paid by the company in cases in which the injured is indemnified by the third party, and in general it is the practice of the company not to pay benefits while a third-party action is pending. In addition, the company sometimes refuses to pay full benefits if the accident appears to have been due to negligence on the part of the injured; in such cases it pays only the amount due under the workmen's compensation law of the State in which the accident occurred.

TABLE 13.—INDEMNIFICATION FOR LOST-TIME INJURIES SUSTAINED BY MESSENGERS EMPLOYED IN SPECIFIED DISTRICTS BY THE WESTERN UNION AND POSTAL TELEGRAPH COMPANIES DURING 1931

Company and district	Lost-time injuries						
	Indemnification by company		Indemnification sought from third party		Indemnification by both company and third party	No indemnification	Total
	Benefits	Compensation only	Settlement	Not reported as to settlement			
Western Union Co.	626	129	130	85	26	71	1,067
Eastern (including Metropolitan District)	151	59	60	50	5	40	365
Southern	112	6	14	5	4	2	143
Lake	156	18	20	20	7	14	235
Central	41	16	9	8		3	77
Gulf	74	2	12	1	1	3	93
Mountain	26	4					30
Pacific	66	24	15	1	9	9	124
Postal Telegraph Co.	70	132	59	4	4	234	503
Eastern (including Metropolitan District)	10	25	21	3	1	46	106
Southern	23	27	15			43	108
Central	12	24	7	1		50	94
Western	7	21	2		2	19	51
Southwestern	12	4	1			18	35
Pacific	6	31	13		1	58	109
Total	696	261	189	89	30	305	1,570

Although 52 percent of the injuries to Western Union messengers in 1931 were temporary, lasting 7 days or less (table 6) and therefore not compensable under the laws of most States, in only 71 cases in which redress was not sought from a third party was it reported that no benefits or compensation had been paid. In the majority of all cases (59 percent) regular wages had been paid during the time the messenger was incapacitated, in 23 percent of the cases indemnification was sought from a third party and in 12 percent of the cases compensation had been paid in accordance with the workmen's compensation law (table 13). In the case of injuries not compensated under the company plan full benefits were denied chiefly as a disciplinary action—because the accident had been due to carelessness, or the

messenger had violated the rules of the company or had been dismissed or for some other reason had not returned to work after the accident. The comparatively few instances in which the injured messengers had been denied all benefits had also been for the most part disciplinary in character. In all such cases the disability had been of such short duration that the injured messenger was not entitled to workmen's compensation, and the amount of wages lost was relatively small.

Policy of Postal Telegraph Co.

Benefits are paid to Postal Telegraph employees only in cases in which disability extends for more than 7 days, and generally the benefit does not exceed the amount for which the company is liable under the State workmen's compensation law. Full wages were paid during disability to only 14 percent of the Postal Telegraph messengers losing time because of injuries who were included in the Children's Bureau analysis (table 13). According to the statement of officials of the company, it is their custom to pay only the amount due under the workmen's compensation law in cases in which the messenger has been with the company only a short time or in which he is unable to return to work for a long time after the accident.

Amounts Received by Injured Messengers

The average sum paid in accident benefits or compensation by the Western Union Co. was $19.30. The compensation for 37 percent of the injuries was less than $5; for 80 percent, less than $25; and for only 3 percent, $100 or more. In considering these figures it should be borne in mind that a large proportion of the injured messengers receiving benefits from this company had not been incapacitated for more than 7 days. The average payments made to Postal Telegraph messengers were somewhat larger because the company paid benefits only to those whose disability lasted 7 days or longer (table 14).

The benefits paid reflect of course the low wages paid immature workers in an occupation requiring no skill, special training, or previous experience. A weekly wage of less than $10 was received by 61 percent of the Western Union messengers and by 53 percent of the Postal Telegraph messengers injured in 1931. However, the relatively small amounts paid out in compensation as benefits to injured individuals are also due in large part to the fact that in many of the serious cases the messenger had been injured by an automobile or truck operated by a third party and had preferred to hold the third party liable rather than to accept benefits under the company's plan. If such action was successful the messenger appears to have

fared reasonably well. In the 116 cases in which the amount of the settlement was known the average was $286 (table 15). In 41 percent of these cases the amount of the settlement was $100 or more, the amounts running up to $3,000 and more—in one case to $8,000. Although the amounts obtained from third parties are undoubtedly in many cases more than the injured messenger would obtain under the workmen's compensation law or in benefits from the company, they are of course subject to deductions for lawyers' fees and medical and hospital expenses. Moreover, a long period of time may elapse before such cases are settled. In a large number of the third-party cases included in the present inquiry no payment at all had been made a year or more after the accident.

TABLE 14.—AMOUNT PAID ON ACCOUNT OF LOST-TIME INJURIES SUSTAINED BY MESSENGERS EMPLOYED BY THE WESTERN UNION AND POSTAL TELEGRAPH COMPANIES DURING 1931

Company and amount paid for indemnification	Lost-time injuries							
	Benefits or compensation paid by company		Indemnification sought from third party			Indemnification by both company and third party	No indemnification	Total
			Settlement by third party		No report as to settlement			
	Number	Percent	Number	Percent				
Western Union Co	755		130		85	26	71	1,067
Total indemnified	755		130			26		996
Amount reported	755	100	73	100		19		847
Less than $5	277	37	3	4				280
$5, less than $25	324	43	14	19		4		342
$25, less than $50	84	11	11	15				95
$50, less than $75	30	4	9	12		2		41
$75, less than $100	18	2	4	5		2		24
$100 or more	22	3	32	44		11		65
Amount not reported			57			7		149
No indemnification							71	71
No report on indemnification					85			85
Postal Telegraph Co	202		59		4	4	234	503
Total indemnified	202		59			4		269
Amount reported	202	100	43			3		248
Less than $5	34	17						34
$5, less than $25	102	50	4					106
$25, less than $50	38	19	10					48
$50, less than $75	13	6	5					18
$75, less than $100	2	1	8			1		11
$100 or more	13	6	16			2		31
Amount not reported			16			1		21
No indemnification							234	234
No report on indemnification					4			4
Total	957		189		89	30	305	1,570

The rights and liabilities of employer and employee in third-party cases under the workmen's compensation laws vary in the different States. The provision most commonly found allows the employee to choose whether to claim compensation from the employer or to sue the third party; a number, however, give the employee the right to proceed against both; a few have no provisions at all regarding third-party cases; in one, the employee is left to his remedy at law; in another, compensation is his only remedy. Of the injured messengers

in this inquiry who tried to obtain recourse from third parties, only a very small proportion received any compensation or benefits while settlement with the third party was pending.

TABLE 15.—CAUSE OF LOST-TIME INJURIES SUSTAINED AND AVERAGE AMOUNT PAID ON ACCOUNT OF INJURIES TO ALL MESSENGERS AND TO BICYCLE MESSENGERS DURING 1931

All messengers

Cause of injury	Lost-time injuries								
	Benefits or compensation paid by company		Indemnification sought from third party				Indemnification by both company and third party	No indemnification	Total
			Settlement by third party			No report as to settlement by third party			
			Amount known		Amount unknown				
	Number	Average amount	Number	Average amount					
Machinery (elevators)	4	$13.85							4
Vehicles	789	23.31	112	$292.80	72	82	29	265	1,349
Autos and trucks	391	27.46	107	301.15	71	82	29	147	827
Bicycles	364	16.02	3	148.33				100	467
Motorcycles	28	51.99	2	62.50	1			18	49
Trains	1	262.81							1
Street railways	5	20.40							5
Explosives, fires, etc	2	2.89						1	3
Falls of persons	82	17.14	1	85.00	1		1	14	99
Stepping on or striking against objects	13	13.20	1	100.00		1		1	16
Falling objects	3	8.74	1	129.00		2			6
Handling objects	4	6.78						1	5
Hand tools	2	11.00						1	3
Animals (dogs)	14	14.70	1	14.38		4		5	24
Bites	9	6.87	1	14.38		4		4	18
Other	5	28.80						1	6
Miscellaneous	41	18.67						14	55
Flying particles	9	4.46						6	15
Assault, fights, horseplay, etc	7	12.93						1	8
Rubbing puttees or shoes	16	26.04						5	21
Other	9	24.25						2	11
Not reported	3	32.42						3	6
Total	957	22.12	116	285.53	73	89	30	305	1,570

Bicycle messengers

Machinery (elevators)	1	$28.80							1
Vehicles	684	19.17	94	$293.29	60	65	21	225	1,149
Autos and trucks	317	22.79	90	300.79	60	65	21	124	677
Bicycles	363	16.02	3	148.33				100	466
Motorcycles	1	9.70	1	53.12				1	3
Street railways	3	19.98							3
Explosives, fires, etc	1	1.34							1
Falls of persons	25	15.74						4	29
Stepping on or striking against objects	5	13.16							5
Handling objects	2	3.75							2
Hand tools	2	11.00							2
Animals (dogs)	11	16.08	1	14.38		4		1	17
Bites	6	5.48	1	14.38		4		1	12
Other	5	28.80							5
Miscellaneous	25	8.52						7	32
Flying particles	7	4.81						5	12
Assault, fights, horseplay, etc	5	17.05							5
Rubbing puttees or shoes	8	8.38						1	9
Other	5	5.41						1	6
Not reported	1	10.21						3	4
Total	757	18.53	95	290.35	60	69	21	240	1,242

Summary

To SUM up briefly:

1. In normal times the Western Union Co. and the Postal Telegraph Co. employ in the United States between 18,000 and 20,000 messengers.

2. The occupation of telegraph messenger is primarily a boy's job, and is held chiefly by boys under 17. Available information indicates that before the present depression about one fourth of the messengers employed by the telegraph companies were under 16 years of age, and about one fourth were 18 or older. Since 1929 the tendency has been not to employ so large a proportion of younger boys.

3. Approximately two thirds of the messengers use bicycles in their work, 30 percent deliver and call for telegrams on foot, and 4 percent use motorcycles or automobiles.

4. Foot messengers suffer the fewest accidents in proportion to the number employed; motorcycle messengers, the most. The ratio of lost-time injuries of Western Union messengers in 1931 was 4 per 100 for foot messengers, 11 per 100 for bicycle messengers (the largest group), and 44 per 100 for motorcycle messengers. Information for the Postal Telegraph Co. indicates the same trend.

5. Because of their exposure to injuries from motor vehicles, which are among the most serious causes of occupational accidents, the occupation of telegraph messenger, especially of the mounted messenger, is a hazardous one. Falls were the chief type of accident to foot messengers. Motor vehicles were found to cause the largest number of accidents to messengers in general and also to bicycle, to motorcycle, and to automobile messengers. Fifty-five percent of the injuries to bicycle messengers had resulted from the bicycle's being struck by or colliding with an automobile or truck and 38 percent had resulted from some accident to the messenger's bicycle, frequently indirectly caused by motor traffic. The comparatively small group of motorcycle and automobile messengers are afforded some protection by regulations in effect in a few States prohibiting the employment in the operation of motor vehicles of young persons below a specified age which is higher than the minimum age for general employment, and by laws prohibiting the licensing of minors (usually under 16 or under 18) as operators of motor vehicles. Bicycle messengers, the largest group of telegraph messengers, and one whose ratio of vehicular accidents is high, receive no special legal protection against the hazards of their occupation.

6. Night work for telegraph messengers is common. Although a few States prohibit the employment of minors as night messengers, in general, messengers are afforded less protection against night work than are minors in manufacturing and mercantile employment. Few

of the messenger boys who had been injured at night were employed in violation of the child-labor laws of their States.

7. Under the employees' benefit plans of the Western Union Telegraph Co., injured employees may fare better as to accident compensation than do other persons injured in industrial accidents; these plans provide that, except in cases in which the accident is due to the employee's negligence, he receives full pay from the time of accident, at least for a considerable period, and not merely the amount of compensation to which he is legally entitled under the State workmen's compensation laws. In the case of a considerable number of messengers, however, indemnification is not so speedy and not so certain. Large numbers of messengers are injured as a result of accidents caused by, or at least involving a third party and many of these elect to hold the third party liable rather than accept the legal compensation or company benefits. In most of these cases no payments are made them pending settlement of the claim against the third party, although if the minor sues the case may be in the courts for years.

NATIONAL RECOVERY ADMINISTRATION

Executive Order Regarding Submission of Information Under Codes

ON December 7, 1933, President Roosevelt issued the following order relative to the furnishing of information required under the industrial codes:

Pursuant to the authority vested in me by Title I of the National Recovery Act, upon due consideration of the facts, and upon the report and recommendation of the Administrator for Industrial Recovery,

I, Franklin D. Roosevelt, President, of the United States, do hereby order that every code of fair competition, agreement, and license heretofore approved be, and hereby is, modified to provide that, and every code of fair competition, agreement, and license hereafter approved be upon condition that, in addition to information required to be submitted to any code authority, all or any of the persons subject to such code, agreement, or license furnish such statistical information as the Administrator may deem necessary for the purposes recited in section 3 (a) of said act to such Federal and State agencies as the Administrator may designate; nor shall anything in any code, agreement, or license relieve any person of any existing obligation to furnish reports to Government agencies.

President's Reemployment Agreement Extended for Four Months

PENDING adoption of codes in industries not as yet so covered the President on December 19, 1933, invited employers to enter into further agreement with him, for the period from January 1, 1934, to April 30, 1934, under the terms established in the President's Reemployment Agreement governing wages, hours, etc. Employers thus continuing under the agreement are to be allowed the same substitutions and exemptions approved and all exceptions granted under the President's Reemployment Agreement prior to January 1, 1934. Display of the Blue Eagle after the close of the year 1933 shall be deemed an acceptance of this offer of extension.

Administrative Duties of Code Authorities

GENERAL Johnson, on November 5, 1933, clarified the position and duties of code authorities, trade associations, and other agencies of industrial self-government under the National Industrial Recovery Act as follows:

The function of code administration lies primarily with the code authority provided for in each code. Nevertheless, it is the responsibility of the National Recovery Administration that the code be administered. Whenever, as in the bituminous coal code, an industry is organized for self-discipline that function will be accorded it. But in many instances industries are not so organized that they have machinery appropriate to the adjustment of complaints of violations of the trade practice, and other provisions of their codes.

The organization of very few industries is at this time appropriate for the adjustment of complaints of violations of the labor provisions of codes. While, in every case, where the authority is organized, adjustment of fair trade practices will be left to the code authorities, as a general rule the code provides no plan for the adjustment of their labor provisions. The code authority will be permitted to function on labor disputes when provision is made for adequate representation of labor on all committees, boards or other agencies set up to entertain and adjust complaints by employees against their employers for violations of labor provisions.

Continuance of Iron and Steel Code

EXPRESSING general satisfaction with the iron and steel industry code the American Iron and Steel Institute adopted a resolution to continue operation under the code until May 31, 1934, at the conclusion of the 90-day trial period expiring November 19, 1933.

A report submitted with the petition for extension of the code provisions shows that monthly increases aggregating $9,000,000 in pay rolls and 92,000 in workers added, took place between June 17 and October 14, 1933.

Amendment to Lumber Code

ON December 7, 1933, President Roosevelt approved amendments to the code for the lumber and timber products industries, bringing within that code the manufacturers of broom and mop handles. Under the amendment a broom and mop handle division is created within the code and the National Handle Manufacturers' Association is designated as the agency of the lumber code authority to administer the code provisions for the new division.

The amendment establishes a maximum 40-hour work week for the division and applies regional minimum wages ranging from 24 to 40 cents an hour as follows:

	Rate per hour
Southern hardwood area	$0. 24
Appalachian hardwood area, and Delaware	.28½
Northern hardwood area: Mills and factories	.30
Northeast hardwood area: Mills and factories	.30
North central hardwood area, and Iowa, Nebraska, and Kansas: Mills and factories	.32½
Western pine:	
All except Arizona, New Mexico, and Colorado south of 38° north latitude, but including all of California: Factories	.40
Arizona, New Mexico, and Colorado south of 38° north latitude	.24
West coast lumber and logging area: Factories	.40

Board of Labor Review Organized by Federal Emergency Administration of Public Works

THE first meeting of the newly organized Board of Labor Review under the Federal Emergency Administration of Public Works was held on December 18, 1933.

As established the duties of the board will be to hear all cases arising under the operation of all contracts financed from public works funds and all decisions made will be binding upon the parties affected. It is planned that the Board will have representatives in different sections of the country. The duties and functions of the Board are outlined by the special board for public works as follows:

> That there shall be created a Board of Labor Review which shall hear all issues arising under the operation of all contracts financed from funds appropriated by the Administrator of Public Works under the authority of the National Industrial Recovery Act and from such problems as may result from fundamental changes in economic conditions during the life of these contracts. The Board of Labor Review to be created shall consist of three members; one to represent labor; one to represent contractors and a chairman who shall represent the Federal Emergency Administrator of Public Works. The members of this Board shall be appointed by the President of the United States but no member shall be connected in any way with any organization of building workers or directly connected with, or have any interest in, contracting. The chairman shall not be in any way connected with the Federal Emergency Administration of Public Works. Decisions of the Board of Labor Review shall be binding upon all parties.

The board is made up of Lindsay Rogers (New York), chairman, James Wilson (Cincinnati), and Ernest John Russell (St. Louis).

Creation of Labor Policy Board Under Petroleum Code

ESTABLISHMENT of a Labor Policy Board to advise the Secretary of the Interior, Harold L. Ickes, who is the Oil Administrator, on matters affecting workers in the oil industry was announced on November 24 by the Secretary.

The board was to turn its attention immediately to studying and recommending to the Administrator differentials between wages for skilled and unskilled labor, with the hope that an early report could be made. In accordance with a recommendation of the planning and coordination committee representing the industry under the N.R.A. oil code, Secretary Ickes has approved a provision that the differentials, when established, shall be retroactive to September 2.

He pointed out that one of the duties of the board would be to look into any employee-employer difficulties that might arise.

A board of three impartial public representatives has been named as follows: William M. Leiserson, chairman, James Mullenbach, and George W. Stocking.

Summary of Permanent Codes Adopted Under National Industrial Recovery Act, November 8 to 30, 1933

CONTINUING the practice established in the December 1933 issue of the Monthly Labor Review, the principal labor provisions of codes adopted under the National Industrial Recovery Act are here analyzed in tabular form, the present statement covering codes approved by the President of the United States between November 8, 1933, and the end of the month.

In analyzing the labor provisions in tabular form it is not the intention to show exhaustively what provisions are made as to wages, hours, and rates of overtime pay, but rather to give in readily usable form those clauses that affect the great majority of workers engaged in the respective industries. Thus, to secure detailed information as to classes exempted under the various minimums and maximums the original codes and Executive orders touching upon them should be consulted.

Industry and date effective	Minimum wages (excluding apprentices and learners)	Maximum hours	Provisions for overtime pay	Minors excluded from employment
Air transport (Nov. 27)	$15 per week	40 per week, 6-day week, general. 40 per week averaged over 4 weeks (maximum 48 in 1 week), shop mechanics and helpers. 48 per week averaged over 8 weeks (maximum 54 in 1 week), service mechanics and helpers. 48 per week, ground radio operators and field clerks. 54 per week, watchmen. 48 per week averaged over 6 weeks (maximum 54 in 1 week), chauffeurs.	1⅓ regular rate, shop mechanics and helpers and service mechanics and helpers, also all others on emergency maintenance or repair work.	Under 16, general. Under 18, hazardous occupations.
All-metal insect screen (Nov. 27).	40 cents per hour, general. 60 cents per hour, installation work not falling under construction code. $15 per week, office.	40 per week averaged over 4 weeks (maximum 48 in 1 week), 8 per day, general. 40 per week (maximum 48 per week during 1 month), office.	No general provision. 1½ regular rate after 8 hours, emergency maintenance or repair work.	Do.
Antifriction bearing (Dec. 7).	35 cents per hour, light repetitive work, 40 cents per hour, other work (all adult males included), factory employees. $14–$15 per week, according to population, accounting, clerical, service, or sales employees.	40 per week, 8 per day (of 24 hours) (in peak periods, 48 per week for 6 weeks in 6 months), factory employees, mechanical workers or artisans. 10 percent tolerance over 40 per week and 8 per day, preparation, maintenance, etc. 56 per week, watchmen. 40 per week averaged over 1 month (maximum 48 in 1 week), accounting, clerical, service, or sales employees.	1½ regular rate after 8 hours per day and 40 per week, factory and mechanical workers or artisans, employees on emergency repair, etc.	Do.
Cement (Dec. 7)	30–40 cents per hour, according to geographical area.[1]	36 per week averaged over one-half calendar year (maximum 42 per week, 8 per day), general. 36 per week averaged over half year (maximum 10 per day), employees in packing and shipping departments. 40 per week, clerical or office employees.	1⅓ regular rate after 36 hours per week averaged over one-half calendar year, employees on hourly basis.	Do.
Chinaware and porcelain manufacturing (Dec. 7).	32 cents per hour, females; 40 cents per hour, males.	40 per week averaged over 3 months (maximum 44 per week, 8 per day), general. 42 per week averaged over 2 weeks (36 and 48 per week alternately), watchmen and engineers, and kiln firemen other than tunnel. 42 per week, tunnel kiln firemen.	1⅓ regular rate after 40 hours, general. 1⅓ regular rate after 42 hours per week averaged over 2 weeks, kiln firemen.	Under 16.
Cigar container (Dec. 11)	30–40 cents per hour, according to geographical area.	40 per week, 8 per day (in peak periods, Sept. 10 to Dec. 10, not to exceed 48 in 1 week, 9½ per day, provided 6-month average does not exceed 40 per week), general. 8 per day (in peak periods, 9½ per day), machine operation.	1½ regular rate after 40 hours, watchmen, firemen, delivery, or repair crews.	Under 16, general. Under 18 in hazardous occupations.

Cleaning and dyeing (Nov. 20).	27–33 cents per hour, according to population, in North, 20 cents per hour in South, plant employees. $13–$14 per week in North, $12–$13 per week in South, according to population, others.	48 per week averaged over 6 months (maximum 53 per week for 9 weeks), engineers, firemen and/or maintenance employees. 48 per week, clerks employed by retailers. 48 per week in cities of 25,000 or over, 54 per week in cities of less than 25,000, route salesmen. 40 per week averaged over 6 months (maximum 45 per week for 9 weeks), others. 6-day week for all employees.	No general provision. 1½ regular rate, emergency maintenance and repair work.	Under 17.
Concrete masonry (Dec. 11).	30 cents per hour in 13 Southern States, 40 cents per hour elsewhere, factory or mechanical workers or artisans. $15 per week, accounting, clerical, office, or sales employees.	40 per week, 8 per day (48 per week for 15 weeks in calendar year), general. 48 per week averaged over 15 weeks, employees engaged in emergency work. 64 per week, watchmen. 52 per week, shipping clerks. 6-day week for all employees.	1⅓ regular rate after 40 hours per week or 8 per day (of 24 hours).	Under 18.
Cotton garment (Nov. 27)	30 cents per hour in South, 32½ cents per hour in North, general. 35 cents per hour, manufacturing; 45 cents per hour, operators; 75 cents per hour, cutters; sheep-lined and leather garments.	40 per week, 8 per day, manufacturing. 40 per week averaged over 3 months, office. Operation limited to 1 shift.	No provision	Under 16.
Crushed stone, sand and gravel, and slag (Nov. 20).	25 cents per hour in Alabama, Florida, Georgia, Mississippi, South Carolina, 30 cents per hour in other Southern States, 40 cents per hour in North, general. $12–$15 per week, according to population, office employees. $13 per week in South, $14 per week in North, watchmen.	40 per week, general. 42 per week averaged over 3 months in any 6 months, 6-day week, office. 48 per week, outside delivery and employees engaged in emergency repair. 60 per week, watchmen.	1½ regular rate, employees on hourly rate.	Under 16, general. Under 18, hazardous occupations.
Gas appliances and apparatus (Dec. 7).	33½ cents per hour for 60 days and 35 cents per hour thereafter, females, and 40 cents per hour, males, common labor, Northern district; 30 cents per hour, females, and 35 cents per hour, males, common labor, Southern district.[2] $15 per week, others.	40 per week (in peak periods 48 in 1 week, but additional excess hours in 6 months not to exceed 32 for processing employees and 48 for others), general. 56 per week, watchmen.	1½ regular rate after 8 hours in 24 and weekly hours established, general. 1½ regular rate after 56 hours, watchmen.	Do.
Gear manufacturing (Nov. 25).	40 cents per hour, general. $15 per week, clerical employees.	40 per week, general. 48 per week, 6-day week, watchmen and firemen. 40 per week, plus not over 64 in 6 months (maximum 48 per week), in seasonal or peak demand.	1½ regular rate	Do.
Hardwood distillation (Nov. 13).	30 cents per hour in eastern and western divisions, 25 cents per hour in southern division, general. $14 per week, chemists and clerical employees.	40 per week averaged over 6 months (maximum 48 in 1 week), 8 per day, general. 48 per week averaged over 6 months, teamsters. 44 per week averaged over 6 months (maximum 48 in 1 week), truck drivers. 48 per week, continuous processes. 48 per week, chemists and clerical employees in isolated communities of less than 1,500 population.	1⅓ regular rate after 8 hours, except maintenance and repair workers who have a tolerance of 10 percent above 8 hours per day.	Under 16.

[1] When hourly rate for same class of work was less than 40 cents per hour on July 15, 1929, not less than rate on that date shall be paid and in no case less than 30 cents per hour.
[2] When hourly rate for same class of work was less on July 15, 1929, not less than rate on that date shall be paid and in no case less than 27 cents per hour for females and 32 cents per hour for males

TABULAR ANALYSIS OF LABOR PROVISIONS IN CODES ADOPTED UNDER NATIONAL INDUSTRIAL RECOVERY ACT, NOV. 8 TO 30, 1933—Continued

Industry and date effective	Minimum wages (excluding apprentices and learners)	Maximum hours	Provisions for overtime pay	Minors excluded from employment
Hotel (Nov. 27)	Range from present rate plus 20 percent (but wage not to exceed $10 per week) to $15 per week, according to population, clerical and operating. Rate of June 15, 1933, plus 20 percent (but increase not less than $1 per week), service employees. Wage to be not more than 15 percent less than above rates in South and 10 percent in Kansas and Missouri.	54 per week, 10 per day, 6-day week (in peak periods, 60 per week, 11 per day, during 3 weeks in first and in second half of year), general. 60 per week, night auditors.	No general provision. 1⅓ regular rate, maintenance employees for hours in excess of 54 per week.	Under 16.
Investment bankers (Dec. 11).	Range from present rate plus 20 percent (but wage not to exceed $12 per week) to $16 per week, according to population.	40 per week (in peak periods, 44 per week averaged over 4 months). Guards and watchmen, 6 days per week.	1⅓ regular rate after 44 hours per week averaged over 4 months, and after 48 hours in 1 week.	Do.
Limestone (Nov. 24)	38 cents per hour in North, and rate of July 15, 1929, but not less than 30 cents per hour in South, general. $14 per week, office.	40 per week averaged over 3 months (maximum 48 in 1 week), 8 per day (of 24 hours), 6-day week, general. 64 per week, 12 per day (of 24 hours), watchmen. 2 per day in excess of general maximum, firemen and plant engineers. 48 per week, 6-day week, truckmen, shipping clerks, etc.	No general provision. 1½ regular rate after 8 hours (in any 24), truckmen, shipping clerks, etc.	Under 16, general. Under 18, hazardous occupations.
Machine tool and equipment distributing (Dec. 8).	$14–$15 per week, according to population	40 per week averaged over 6 months, 8 per day, 6-day week (48 per week for 3 weeks in 6 months), general. 48 per week, outside delivery, repair employees, etc.	1½ regular rate after 40 hours, outside delivery, repair, etc.	Do.
Malleable iron (Dec. 7)	32½ cents per hour in South (7 States), 40 cents per hour elsewhere, plant labor. 30 cents per hour in South (7 States), 35 cents per hour elsewhere, female labor. $15 per week, clerical and office employees.	40 per week (in peak periods, 48 per week for 4 weeks in 6 months), 6 days per week, general. 10 percent tolerance, melters, firemen, and repair-work employees. 56 per week, watchmen. 8-hour day insofar as reasonable.	No provision	Do.
Mopstick (Nov. 24)	35 cents per hour	40 per week, 8 per day (of 24 hours), general. 48 per week, 9½ per day (of 24 hours), firemen and engineers. 48 per week, shipping clerks and men engaged in repair and maintenance. 56 per week, 6-day week, watchmen.	No general provision. 1½ regular rate after 40 hours, shipping clerks and repair and maintenance work.	Do.
Motion picture (Dec. 7): Production	40 cents per hour, general. 50 cents per hour, office, clerical, and service employees. $0.60–$2.25 per hour (for distant locations, $6.50–$27.25 per day (for less than 1 week)), $37.75–$161.75 per week, studio mechanics. $7.50–$15 per day, according to character of performance and wardrobe required, extras. $25 per day, bit players. $5 per day, atmosphere people, crowds.	40 per week, general. 36 per week, studio mechanics. 320 in 8 weeks, employees engaged directly on newsreel production. 44 per week, employees of producers of animated cartoons. 8-hour day, with overtime as provided by California statutes, for extras.	Regular rate after 36 cumulative hours, assistant cutters, chauffeurs, and laboratory workers. 1½ regular rate after 6 hours, studio mechanics. Day off without pay for each 6 hours over 36 per week (weekly average) at end of any production, emergency and repair work (with over-	Under 16, except in child parts.

			time pay). Day off without pay for each 6 hours over 36 per week (weekly average), but with 1 full day's pay for each 6 hours or fraction thereof above 54 per week at end of any production, art directors, etc., receiving $70 per week or less (without overtime pay). Day off with pay for every 4 cumulative days (24 hours per day) away from base of operations except if on roving assignments, news-reel cameramen.	
Distribution	$14–$15 per week, according to population, general. Employees other than actors: Range from present rate plus 20 percent (but wage not to exceed 25 cents per hour) to 35 cents per hour, according to population, ticket-sellers, doormen, office help, etc.; 25 cents per hour, ushers; 40 cents per hour, others. Vaudeville and presentation motion-picture theaters: $7.50 per day, $25–$40 per week, according to experience, performers; $25–35 per week, according to theater, chorus.	40 per week	No provision	Under 16, except in child parts in connection with exhibition of motion pictures.
Newsprint (Nov. 27)	33 cents per hour for females, 38 cents per hour for males, laborers, mechanical workers, artisans. $12–$15 per week, according to population, others.	40 per week averaged over 13 weeks (maximum 48 in 1 week), laborers, mechanical workers, artisans. 56 per week, 8 per day, watchmen. 48 per week, 10 per day, 168 in 4 weeks, chauffeurs, firemen, etc. 40 per week averaged over 13 weeks, 8 per day, tour workers in continuous operations. 40 per week averaged over 1 year (maximum 48 in 13 weeks), others. Operation of paper machines limited to 144 per week.	1½ regular rate after 8 hours, laborers, mechanical workers, artisans.	Under 16, general. Under 18, hazardous occupations.
Paper and pulp (Nov. 27)	33 cents per hour for females, 38 cents per hour for males in Northern Zone; 30 cents per hour for females, 35 cents per hour for males in Central Zone; 30 cents per hour in Southern Zone; laborers, mechanical workers, artisans.[3] $12–$15 per week, according to population, others.	56 per week, 8 per day, watchmen. 168 in 4 weeks (maximum 48 per week, 10 per day), chauffeurs, firemen, etc. 40 per week averaged over 13 weeks (maximum 8 per day), tour workers in continuous processes. 40 per week averaged over 13 weeks (maximum 48 in 1 week), laborers, mechanical workers, artisans, and others.	do	Under 16 general. Under 18, hazardous and unhealthful occupations.
Pipe-nipple manufacturing (Dec. 11).	40 cents per hour, general. $14 per week, clerical and office employees.	35 per week (7 days), 8 per day (of 24 hours), general. 40 per week (7 days), 9 per day (of 24 hours), clerical and office employees.	1½ regular rate after daily and weekly hours established (not over 6 hours per week of overtime).	Under 16, general. Under 18, hazardous occupations.

[3] Unless rate was lower on July 15, 1929, but in no case less than 90 percent of minimum.

TABULAR ANALYSIS OF LABOR PROVISIONS IN CODES ADOPTED UNDER NATIONAL INDUSTRIAL RECOVERY ACT, NOV. 8 TO 30, 1933—Continued

Industry and date effective	Minimum wages (excluding apprentices and learners)	Maximum hours	Provisions for overtime pay	Minors excluded from employment
Precious jewelry production (Nov. 30).	40 cents per hour	40 per week, general. 40 per week (in peak periods not to exceed 144 additional per year and 40 per week averaged over 3 months, with maximum of 48 in 1 week, 8 per day), employees other than office.	1⅓ regular rate after 40 hours, employees other than office, etc.	Under 16, general. Under 18, hazardous occupations.
Radio broadcasting (Dec. 11).	$12–$15 per week, according to population, general. $20–$40 per week, according to classification of broadcasting station, broadcast operators and control men. $15–$20 per week, according to number of employees, announcers, and program production employees.	40 per week, general. 48 per week, broadcast technicians. 40 per week averaged over 6 weeks, persons on special-event programs.	1½ regular rate after 40 hours, employees on emergency maintenance and emergency repair work.	Under 16; younger persons, as talent on programs, during 3 hours per day.
Reinforcing materials fabricating (Dec. 11).	25–40 cents per hour, according to geographical area.	40 per week averaged over 6 months (maximum 48 in 1 week), 6-day week.	No provision	Under 16, general. Under 18, hazardous occupations.
Retail jewelry (Dec. 11)	Present rate plus 20 percent (but wage not to exceed $9) to $14 per week in South, and present rate plus 20 percent (but wage not to exceed $10) to $15 elsewhere, according to store hours and population.	According to store hours, 40 per week, 8 per day, 6-day week, or 44 per week, 9 per day, 6-day week, or 48 per week, 10 per day, 6-day week (in peak periods of not over 5 weeks per year, 48 per week, 9 per day, or 52 per week, 9½ per day, or 56 per week, 10 per day, respectively), employees of stores. 40 per week, 8 per day, 6-day week, others. 6-hour tolerance, maintenance and outside service employees.	1⅓ regular rate after 6-hour tolerance, maintenance and outside service employees.	Under 16; except that minors 14 and 15 may be employed 3 hours per day, 6 days per week, or for 1 day of 8 hours per week.
Scientific apparatus (Nov. 27).	37½ cents per hour, general. 40 cents per hour,[1] factory, mechanical workers, and artisans.	40 per week (48 per week for 6 weeks in 6-month period), factory, office, etc. 48 per week, employees on emergency repair and maintenance work. 42 per week averaged over 2 weeks (36 and 48 per week alternately), watchmen, janitors, and elevator operators.	1½ regular rate after 40 hours, factory, etc., and emergency repair and maintenance work.	Under 16, general. Under 18, hazardous occupations.
Structural clay products (Dec. 7).	24–37½ cents per hour, according to geographical locality, factory or mechanical workers or artisans. $12–$15, according to population, accounting, clerical, office, service, or sales employees. $15 per week, employees on floating equipment and watchmen in manufacturing plants.	36 per week averaged over 6 months, January–June and July–December (maximum 48 in 1 week), 8 per day (of 24 hours), general. 48 per week averaged over 4 weeks (tolerance of 8 per week if sufficient number of employees not available), employees in continuous kiln-drying and burning processes. 15 percent tolerance above 8 per day and 48 per week, foremen. 6 days per week, watchmen in manufacturing plants. 40 per week, accounting, clerical, office, service, or sales employees.	1⅓ regular rate after 8 hours per day and 48 per week, employees on emergency maintenance or emergency repair work. 1⅓ regular rate after 48 hours per week, employees in kiln drying and burning processes.	Under 16, general. Under 18, hazardous and unhealthful occupations.

Tool, die and machine shop special (Nov. 22).	40 cents per hour, general. $15 per week, office.	40 per week (48 for 8 weeks in 6-month period), general. 56 per week, 6-day week, watchmen and firemen. 40 per week averaged over 5 weeks (maximum 48 in 1 week), office.	1½ regular rate after 48 per week and 8 per day, except salaried employees.	Under 16, general. Under 18, hazardous occupations.
Upholstery and drapery textile (Dec. 11).	30 cents per hour, South; 32½ cents per hour, elsewhere.	40 per week (with 10 percent tolerance), engineers, electricians, repair-shop and watching crews. 40 per week averaged over 12 weeks (maximum 48 in 1 week), office employees. 40 per week, others. Operation of looms limited to 2 shifts.	1⅓ regular rate after 40 hours, engineers, electricians, repair-shop, and watching crews.	Under 16.
Vitrified clay sewer pipe manufacturing (Dec. 11).	27 cents per hour in South and 37 cents per hour in North, general. $14–$16 per week, according to population, accounting, clerical or office employees. $15 per week, watchmen in plant or office.	40 per week averaged over 30 days, 8 per day, general. 40 per week averaged over 30 days (maximum 44 in 1 week in emergencies), accounting, clerical, office, service or sales employees. 144 in 2 weeks, 12 per day, watchmen. 48 per week, employees needed before and after hours, whose work depends on climatic conditions, those engaged in continuous processes on emergency repair work, etc.	1⅓ regular rate after 48 hours per week averaged over 30 days, employees on emergency repair work, etc.	Under 16, general. Under 18, hazardous occupations.
Warm air furnace manufacturing (Dec. 11).	40 cents per hour, not over 10 cents per hour less for South (8 States), employees other than office. $15 per week, office.	40 per week, 8 per day (of 24 hours), (maximum 48 per week for 12 weeks in 12 months), employees other than office. 10 percent tolerance, maintenance and repair work, shipping crews, firemen, engineers, and electricians. 56 per week, watchmen. 40 per week averaged over 12 months (maximum 48 per week for 12 weeks in 12 months), 8 per day (of 24 hours), office.	1½ regular rate after 8 hours per day and 40 per week, employees other than office.	Do.
Waterproofing, dampproofing, calking compounds, and concrete floor treatments manufacturing (Dec. 4).	40 cents per hour, general. $15 per week, accounting, clerical, office, or delivery employees in offices.	40 per week, 8 per day (of 24 hours), (maximum 48 per week for 6 weeks in 6 months), 5-day week (6-day week for 6 weeks in 6 months), general.	1½ regular rate after 8 hours per day or 40 per week, overtime not to exceed 8 hours per week.	Under 16, general. Under 18, hazardous and unhealthful occupations.
Wood plug (Nov. 24)	27 cents per hour for 1 year and 30 cents per hour thereafter in South; 32½ cents per hour for 1 year and 35 cents thereafter in North, general. $12–15 per week, according to population, clerical, etc.	40 per week, 8 per day (of 24 hours), general. 48 per week, 9½ per day (of 24 hours), shipping clerks, firemen and engineers. 48 per week, 8 per day (of 24 hours), watchmen. 48 per week, maintenance or repair work.	No general provision. 1⅓ regular rate after 48 hours, watchmen. 1⅓ regular rate after 40 hours, maintenance or repair work.	Under 16, general. Under 18, hazardous occupations.
Wool felt manufacturing (Dec. 11).	35 cents per hour	40 per week, 8 per day (of 24 hours), general. 10 percent tolerance, repair crews, electricians, etc. 2 hours per day tolerance (but additional hours not to exceed 10 percent of total man-hours, excluding such excess, of productive employees), hardeners, fullers, etc.	1⅓ regular rate after 40 per week and 8 per day, repair crews, electricians, etc., emergency workers, hardeners, fullers, etc.	Do.

[1] When hourly rate for same class of work was less than 40 cents per hour on July 15, 1929, not less than rate on that date shall be paid and in no case less than 30 cents per hour.

TABULAR ANALYSIS OF LABOR PROVISIONS IN CODES ADOPTED UNDER NATIONAL INDUSTRIAL RECOVERY ACT, NOV. 8 TO 30, 1933—Continued

Industry and date effective	Minimum wages (excluding apprentices and learners)	Maximum hours	Provisions for overtime pay	Minors excluded from employment
Agriculture				
Date packing (Nov. 20)----	30 cents per hour for females, 40 cents per hour for males, general. $16 per week, office employees and watchmen.	40 per week (44 per week, September to December), general. 56 per week, watchmen. 44 per week, engineers, foremen, etc.	1⅓ regular rate after 8 hours per day and 40 per week, general. 1⅓ regular rate after 9 hours per day, engineers, foremen, etc. Any time on Sundays and legal holidays worked by above groups to be paid for at overtime rate.	Under 16.
Retail food and grocery trade (Nov. 22).	Range from present rate plus 20 percent (but wage not to exceed $10 per week) to $15 per week, according to population, North; present rate plus 20 percent (but wage not to exceed $9 per week) to $14 per week, according to population, South.	48 per week, 10 per day, 6-day week, general. No limit on hours, 6-day week, watchmen and outside salesmen. 54 per week, maintenance and outside service. ½ hour daily above store hours, executives. 8 per week additional (maximum 10 per day) in peak periods, 2 weeks in first half of year and 3 weeks in second, all employees.	No general provision. 1⅓ regular rate after 54 hours, maintenance and outside service employees.	Under 16, except that those 14 and 15 may work not to exceed 3 hours per day, 6 days per week, or one day of 8 hours, per week.
Wholesale food and grocery trade (Nov. 27).	$10–$15 per week in North; $9–$14 per week in South, according to population and store hours.	44 per week, 9 per day, 6-day week, general. No limit on hours, 6-day week, outside salesmen, collectors, watchmen. 48 per week, outside service and sales department employees, and maintenance men. 52 per week (10 per day) in peak periods during 2 weeks in first half of year and 3 weeks in second; 8 additional during 1 week for inventory, all employees.	No general provision. 1⅓ regular rate after 48 hours, outside service and sales department, and maintenance employees.	Under 16.

PRODUCTIVITY OF LABOR AND INDUSTRY

Productivity, Hours, and Compensation of Railroad Labor

Part 2. Classes Other Than Transportation Employees

By WITT BOWDEN, OF THE UNITED STATES BUREAU OF LABOR STATISTICS

IN AN earlier article, information was given regarding the revenue traffic, the maintenance of facilities for traffic, and the changing status of all employees of class I railroads. In the present article, the principal groups of employees other than those connected directly with transportation are discussed, and a later article will deal with train, engine, and yard crews, dispatchers, and other employees classified by the Interstate Commerce Commission under the general heading of "transportation."

The data in the previous article relating to all classes of employees covered the period from 1916 to 1933. The reclassification of employees by the Interstate Commerce Commission on July 1, 1921, makes impossible a detailed analysis of many groups for the period before the reclassification on the same basis as for the later period. For the most part the information in the present article is therefore restricted to the period since 1921.

The reclassification adopted July 1, 1921, includes six main groups: (1) Executives, officials, and staff assistants, which includes the more highly salaried classes in charge of general headquarters and division offices, but do not include such important salaried groups as roadmasters and general foremen, chief dispatchers, and supervising traffic agents. (2) Professional, clerical, and general employees, with clerks and stenographers forming the largest groups. (3) Maintenance of way and structures employees, the principal subdivision consisting of track and roadway section laborers. Among the skilled workers are signalmen and signal maintainers, though the operation of signals is by employees classified under "transportation." Such salaried officials as roadmasters and general foremen are also included under this heading. (4) Maintenance of equipment and stores employees, the largest subdivisions being skilled-trades helpers, carmen, and common laborers. Salaried officials under this heading include general foremen.

The present article deals with these four main groups of employees. The other principal groups, to be discussed in a later article, include:

(5) Transportation other than train, engine, and yard; (6a) Transportation (yardmasters, switch tenders and hostlers); and (6b) Transportation, train and engine.

Revenue Traffic and Facilities for Maintaining Traffic

CHANGES in the amount of revenue passenger and freight traffic and in various kinds of services required for maintaining traffic facilities are compared in table 1, the second section consisting of index numbers indicating concisely the divergence between units of revenue traffic and other units involving the maintenance of traffic facilities.

TABLE 1.—COMPARISON OF REVENUE TRAFFIC WITH SPECIFIED TYPES OF WORK DONE BY EMPLOYEES, CLASS I RAILROADS, 1916 TO 1932

[Based on reports to the Interstate Commerce Commission]

Year	Revenue traffic (millions)			Car-miles, transportation service (millions)			Transportation traffic units [2] (millions)	Rails laid (tons)	Cross-ties laid in replacements (thousands)	Bridge and switch ties laid in replacements (thousands)	Train-miles (thousands)	
	Passenger miles	Ton-miles	Revenue traffic units [1]	Passenger service	Freight service	Total					Passenger trains	Freight trains
1916	34,586	362,444	452,368	3,426	23,265	26,691	.....	.....	.....	.....	576,094	617,606
1917	39,477	394,465	497,105	3,507	23,334	26,840	.....	2,046,575	79,070	208,526	575,500	631,188
1918	42,677	405,379	516,338	3,307	22,808	26,115	.....	1,883,393	76,139	222,927	529,444	616,151
1919	46,358	364,293	484,825	3,469	21,404	24,873	.....	2,335,300	80,903	248,440	539,803	549,657
1920	46,849	410,306	532,113	3,637	23,246	26,883	.....	2,506,961	86,829	246,196	561,633	607,508
1921	37,313	306,840	403,853	3,520	20,358	23,877	1,484,933	2,588,313	86,522	256,288	554,805	510,292
1922	35,470	339,285	431,507	3,466	21,358	24,823	1,543,379	2,618,566	86,642	258,186	541,275	534,655
1923	37,957	412,727	511,414	3,635	25,618	29,253	1,783,994	3,138,972	84,435	277,615	560,980	620,330
1924	36,091	388,415	482,252	3,696	25,032	28,728	1,749,879	3,184,536	83,073	291,288	566,013	579,571
1925	35,950	413,814	507,285	3,795	26,833	30,628	1,846,853	3,484,641	82,717	282,630	569,765	591,582
1926	35,478	443,746	535,988	3,886	28,603	32,488	1,953,620	3,818,127	80,746	275,972	573,627	610,980
1927	33,650	428,737	516,226	3,881	28,396	32,277	1,936,401	4,235,041	78,340	259,996	568,538	588,081
1928	31,601	432,915	515,079	3,849	28,973	32,822	1,952,670	4,175,627	77,371	269,149	561,600	579,809
1929	31,074	447,322	528,114	3,906	29,745	33,651	2,009,039	4,018,570	74,679	250,063	560,692	589,319
1930	26,815	383,450	453,168	3,727	26,335	30,062	1,816,053	3,002,131	63,354	235,315	538,709	515,131
1931	21,894	309,225	366,150	3,318	22,223	25,541	1,557,218	1,879,200	51,502	208,985	480,367	439,381
1932	16,975	234,320	278,454	2,800	17,516	20,316	1,261,738	852,742	39,190	140,566	414,383	362,798
Index numbers (1926=100)												
1916	97.5	81.7	84.4	88.2	81.3	82.2	.....	.....	.....	.....	100.4	101.4
1917	111.3	88.9	92.7	90.2	81.6	82.6	.....	53.6	97.9	75.6	100.3	103.3
1918	120.3	91.4	96.3	85.1	79.7	80.4	.....	49.3	94.3	80.8	92.3	100.8
1919	130.7	82.1	90.5	89.3	74.8	76.6	.....	61.2	100.2	90.0	94.1	90.0
1920	132.0	92.5	99.3	93.6	81.3	82.7	.....	65.7	107.5	89.2	97.9	99.4
1921	105.2	69.1	75.3	90.6	71.2	73.5	76.0	67.8	107.2	92.9	96.7	83.5
1922	100.0	76.5	80.5	89.2	74.7	76.4	79.0	68.6	107.3	93.6	94.4	87.5
1923	107.0	93.0	95.4	93.5	89.6	90.0	91.3	82.2	104.6	100.6	97.8	101.5
1924	101.7	87.5	90.0	95.1	87.5	88.4	89.6	83.4	102.9	105.5	98.7	94.9
1925	101.3	93.3	94.6	97.7	93.8	94.3	94.5	91.3	102.4	102.4	99.3	96.8
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927	94.8	96.6	96.3	99.9	99.3	99.3	99.1	110.9	97.0	94.2	99.1	96.3
1928	89.1	97.6	96.1	99.1	101.3	101.0	100.0	109.4	95.8	97.5	97.9	94.9
1929	87.6	100.8	98.5	100.5	104.0	103.6	102.8	105.2	92.5	90.6	97.7	96.5
1930	75.6	86.4	84.5	95.9	92.1	92.5	93.0	78.6	78.5	85.3	93.9	84.3
1931	61.7	69.7	68.3	85.4	77.7	78.6	79.7	49.2	63.8	75.7	83.7	71.9
1932	47.8	52.8	52.0	72.1	61.2	62.5	64.6	22.3	48.5	50.9	72.2	59.4

[1] Revenue passenger-miles weighted by 2.6 plus revenue ton-miles.

[2] The formula for transportation traffic units or equated gross ton-miles was developed by the American Railway Engineering Association, and in its simplest form consists of freight ton-miles (including cars) × 1; freight locomotive ton-miles × 2; and passenger car-miles × 144. See American Railway Engineering Association, Proceedings, vol. 31, pp. 1144–1145; and American Railway Engineering Association, Manual 1929, pp. 1421–1435. See also testimony of Otto Beyer, in Interstate Commerce Commission, *Ex parte 106*, vol. 6, p. 2070, and *passim* (hearings on proposed 6-hour day).

In the ultimate analysis, the product of railroad labor, and therefore its productivity, must be measured in terms of revenue traffic. But the services which many classes of employees are required to perform cannot be increased or decreased in proportion to changes in the amount of revenue traffic, for trains must be run and other facilities for handling freight and passengers must be maintained whether traffic is heavy or light. Table 1 gives figures not only of revenue traffic but also figures of car-miles, transportation traffic units, ties laid, and other indications of services normally required or actually rendered to employers in maintaining traffic facilities as distinguished from services rendered to patrons in the form of revenue traffic.[2]

Executives, Officials, and Staff Assistants

THE groups described by the Interstate Commerce Commission since July 1, 1921, as executives, officials, and staff assistants are not identical with the "executive groups" of the first article in this series on railroad labor.[3] This is due to the reclassification of 1921, which did not include under "executives, officials, and staff assistants" various officials associated with particular functions other than those connected with general and division headquarters. General foremen, for example, were classed with executive groups in the former article, while these employees, since 1921, have been classified as either maintenance of way and structures or as maintenance of equipment and stores employees.

Important changes affecting executives, officials, and staff assistants at general and division offices are shown in table 2.

TABLE 2.—EMPLOYMENT, RATIOS OF REVENUE TRAFFIC TO MAN-HOURS, AND COMPENSATION OF EXECUTIVES, OFFICIALS, AND STAFF ASSISTANTS, CLASS I RAILROADS, 1922 TO 1932

[Based on reports to the Interstate Commerce Commission]

Year	Employees		Total hours paid for		Average number of hours per employee per week	Indexed ratios of output [a] to man-hours (1926=100)	Average compensation per employee per year	Percentage ratios—	
	Average number	Index numbers (1926=100)	Number (thousands)	Index numbers (1926=100)				Of group hours to total hours [b]	Of group compensation to total compensation [b]
1922	15,502	92.0	39,216	91.5	48.7	88.0	$5,029	0.90	2.92
1923	16,334	96.9	41,434	96.7	48.8	98.7	5,120	.83	2.75
1924	16,283	96.6	41,428	96.6	48.9	93.1	5,227	.90	2.97
1925	16,510	98.0	42,007	98.0	48.9	96.6	5,296	.92	3.01
1926	16,848	100.0	42,864	100.0	48.9	100.0	5,344	.90	3.01
1927	17,006	100.9	43,292	101.0	49.0	95.4	5,469	.94	3.15
1928	16,890	100.2	43,009	100.3	49.0	95.8	5,564	.98	3.28
1929	16,995	100.9	43,312	101.0	49.0	97.5	5,652	.98	3.27
1930	16,599	98.5	42,159	98.4	48.8	86.0	5,747	1.10	3.68
1931	15,399	91.4	38,821	90.6	48.5	75.4	5,741	1.26	4.16
1932	13,616	80.8	34,310	80.0	48.5	64.9	5,234	1.42	4.64

[a] In terms of revenue traffic units. See table 1.
[b] For total hours and compensation, see part 1, tables, 4, 6.

[2] For further comment on the data of table 1, see part 1, table 1.
[3] See part 1, table 6.

There has been a comparatively small decline in the average number of officials. The number increased from 15,502 in 1922 to 17,006 in 1927 and declined to 13,616 in 1932. The method used by the Interstate Commerce Commission to estimate the number of hours is to multiply the number of days by 8. The index numbers of man-hours show the same trend as those of the average number of employees.

The average annual compensation was $5,029 in 1922, $5,747 in 1930, and $5,234 in 1932. The group's proportion of total time paid for increased, with slight exceptions, from 0.90 percent of the total time of all employees in 1922 to 1.42 percent in 1932. Its proportion of the total compensation increased even more, from 2.92 percent in 1922 to 4.64 percent in 1932—a 58.9 percent increase in the group's proportion of total compensation, and a 57.8 percent increase in its proportion of total hours.

The indexed ratios of revenue traffic units to man-hours fell from 100 in 1926 (the base year) to 64.9 in 1932, and reflect the comparatively stable tenure of supervisory employees, the comparatively slight effect of technological changes on the amount of employment, and the divergence, especially during periods of depression, of the amount of revenue traffic from the amount of work required in contributing to the maintenance of traffic facilities.

From January to July 1933, there was a continuous but slight decline in the average number of employees in the executive groups, from 12,901 in January to 12,355 in July. This decline is in contrast with the upward trend of total employment. The proportion the hours of these groups formed of total hours declined 11 percent, while their proportion of total compensation declined to virtually the same extent.

Professional, Clerical, and General Employees

Of employees classed as professional, clerical, and general, about 22 percent were on a daily basis in 1922, and 78 percent on an hourly basis. In general, those on a daily basis have more regular employment, a more stable tenure, and larger compensation than those on an hourly basis. The average annual compensation of employees on an hourly basis was only two thirds that of employees on a daily basis.

In table 3, information is given regarding the changes in employment, ratios of output (in terms of revenue traffic) to hours, and compensation of all professional, clerical, and general employees, and of employees classed as clerks, stenographers, and mechanical device operators, chief clerks being excluded from the clerical groups in the second section of the table.

TABLE 3.—EMPLOYMENT, RATIOS OF REVENUE TRAFFIC TO MAN-HOURS, AND COMPENSATION OF ALL PROFESSIONAL, CLERICAL, AND GENERAL EMPLOYEES, AND OF CLERKS AND STENOGRAPHERS, CLASS I RAILROADS, 1922 TO 1932

[Based on reports to the Interstate Commerce Commission]

Year	Employees		Total hours paid for		Average number of hours per employee per week	Indexed ratios of output[1] to man-hours (1926=100)	Average compensation per employee per year	Percentage ratios—	
	Average number	Index numbers (1926=100)	Number (thousands)	Index numbers (1926=100)				Of group hours to total hours[2]	Of group compensation to total compensation[2]
All employees classed as professional, clerical, and general									
1922	281,254	98.6	728,406	100.3	49.8	80.3	$1,586	16.72	16.71
1923	286,460	100.4	733,818	101.0	49.3	94.5	1,583	14.72	14.90
1924	282,331	98.9	718,950	99.0	49.0	90.9	1,613	15.64	15.88
1925	282,145	98.9	717,384	98.7	48.9	95.8	1,627	15.64	15.82
1926	285,339	100.0	726,512	100.0	49.0	100.0	1,645	15.33	15.70
1927	280,973	98.5	713,715	98.2	48.8	98.0	1,687	15.56	16.05
1928	271,388	95.1	688,731	94.8	48.8	101.4	1,732	15.75	16.42
1929	270,566	94.8	687,063	94.6	48.8	104.2	1,754	15.57	16.14
1930	254,093	89.0	638,172	87.8	48.3	96.3	1,766	16.73	17.33
1931	222,733	78.1	549,629	75.7	47.5	90.3	1,760	17.82	18.42
[illegible]	185,165	64.9	453,138	62.4	47.1	83.3	1,604	18.77	19.33
Clerks and stenographers									
[illegible]	192,373	95.5	485,573	95.3	48.5	84.5	$1,476	11.14	10.64
[illegible]	205,144	101.8	521,345	102.3	48.9	93.2	1,483	10.46	10.00
[illegible]	201,177	99.8	507,679	99.7	48.5	90.3	1,510	11.04	10.59
[illegible]	200,104	99.3	504,773	99.1	48.5	95.5	1,521	11.00	10.49
[illegible]	201,522	100.0	509,438	100.0	48.6	100.0	1,537	10.75	10.36
[illegible]	196,779	97.6	496,037	97.4	48.5	98.9	1,574	10.81	10.49
[illegible]	188,233	93.4	474,283	93.1	48.5	103.2	1,619	10.85	10.65
[illegible]	186,295	92.5	470,283	92.3	48.5	106.7	1,639	10.66	10.39
[illegible]	172,749	85.7	430,266	84.5	47.9	100.1	1,642	11.28	10.95
[illegible]	148,768	73.8	363,463	71.3	47.0	95.7	1,630	11.78	11.40
[illegible]	121,741	60.4	294,852	57.9	46.6	89.8	1,489	12.21	11.80

[1] In terms of revenue traffic units. See table 1.
[2] For total hours and compensation, see part 1, tables 4, 6.

The average number of employees classed as professional, clerical, and general was highest in 1923 (286,460), and by 1932 was somewhat less than two thirds of the number in 1923. In general, there was a decline, even during years of comparatively large amount of traffic. Reduction in average number of hours per day affected these groups less than some others, and the index numbers of man-hours do not diverge extensively from those of the average number of employees.

During the period as a whole, the amount of employment in man-hours declined more than the amount of revenue traffic. The indexed ratio of revenue traffic units to man-hours, with 1926 as the base year, was 80.3 in 1922, 104.2 in 1929, and 83.3 in 1932. The productivity of these employees, even in terms of revenue traffic, was thus higher in 1932 than in 1922, despite the fact that revenue traffic in 1932 was less than two thirds as large as in 1922. The comparatively small increase in productivity expressed in terms of revenue traffic was due to the fact that the services rendered by these groups in contributing to the maintenance of traffic facilities could not be curtailed in proportion to the falling off of business. Comparative stability of tenure

also tended to maintain the amount of employment and to depress the average productivity of these groups. Their productivity would have been much lower had it not been for important technological changes affecting the work of various subdivisions of the group. Among these are mechanical office appliances, dial switchboards, and managerial changes. It is probably true, also, that mergers and consolidations have tended to reduce the numbers in this group more largely than in some of the other classifications.

The average annual compensation of different subdivisions of professional, clerical, and general employees ranged widely, from less than $1,000 to more than $3,000, and individual salaries ranged very much more widely. The average compensation of all employees in these groups, ranging from messengers and office boys and janitors and cleaners to supervising traffic agents and chief clerks of major departments, rose from a minimum of $1,583 in 1923 to $1,766 in 1930, declining to $1,604 in 1932.

The hours of these groups totaled 16.72 percent of the hou[illegible] employees in 1922, fell to 14.72 percent in 1923, and rose to [illegible] percent in 1932. These figures represent an increase of 12.3 [illegible] in the group's proportion of total time in 1932 as compared wi[illegible] The proportion of compensation in 1922 was virtually the sam[illegible] proportion of time—16.71 percent as compared with 16.72 pe[illegible] but by 1932 the proportion of compensation had risen to 19.33 p[illegible] as compared with 18.77 percent of total time, thus indicating, [illegible] average, a comparatively improved status in regard to compen[illegible]

By far the largest number, about two thirds of the profes[illegible] clerical, and general employees, consisted of clerks and stenogra[illegible] Operators of mechanical devices are included in this classificatio[illegible] chief clerks are excluded. The largest number, 205,144, was in 1923. After a continuous decline except for 1926, the number fell by 1932 to 121,741. The number of hours paid for declined somewhat more than the average number of employees. The index of employees fell from 100 in 1926 to 60.4 in 1932, and the index of hours fell to 57.9. The average number of hours per week was 48.9 in 1923 and 46.6 in 1932.

The productivity of clerks and stenographers in terms of revenue traffic increased from 84.5 (1926 being the base year) in 1922 to 106.7 in 1929. This was an increase of 26.3 percent. From 1929 to 1932 it declined from 106.7 to 89.8, or 15.8 percent, although revenue traffic during the same period was virtually cut in half by a decline of 47.3 percent.

If there were an adequate unit for measuring the specific contributions of clerks, stenographers, and other subdivisions of their group to the maintenance of traffic facilities, their efficiency in terms of such a unit would show a ratio to hours much higher than their productivity in terms of revenue traffic.

The average annual compensation of clerks and stenographers increased gradually from $1,476 in 1922 to $1,642 in 1930, and by 1932 had fallen to $1,489, still slightly above the 1922 level. The hours of these groups aggregated about one ninth, or 11.14 percent, of the total hours of all employees in 1922, and 12.21 percent in 1932, an increase of 9.6 percent in the group proportion of total hours. Group compensation was somewhat below the average, being 10.64 percent of the total as compared with 11.14 percent as the group's proportion of hours. But the disadvantage was in part adjusted by 1932, as the group's proportion of the total compensation was 11.80 percent in 1932 as compared with 10.64 in 1922—an increase of 10.9 percent, whereas the proportion of hours increased from 11.14 to 12.21 or only 9.6 percent.

The smallest amount of revenue traffic from January to July 1933, was 19,759,000,000 traffic units in March, as compared with 28,352,000,000 in July—a rise of 43.5 percent. And yet the number of all professional, clerical, and general employees, as well as the number of man-hours, was somewhat smaller in July than in March.

In July 1933 the productivity of professional, clerical, and general employees, in terms of revenue traffic, had risen to 105.1 as compared with 100 in July 1926, although revenue traffic in July 1933 was only 60.3 as compared with 100 in July 1926.

From these facts a number of conclusions are apparent. In the first place, the amount of employment classed as professional, clerical, and general in a period of sharply reduced revenue traffic is sufficient to maintain traffic facilities for a much larger amount of traffic. In the second place, vital changes have occurred in the efficiency of railroad employees since 1926 as well as earlier. This is indicated by the fact that by July 1933 the productivity of employees, even in terms of revenue traffic as contrasted with services rendered in maintaining traffic facilities, had risen 5 percent above the level of July 1926 in spite of the fact that the amount of revenue traffic was still 40 percent below the level of July 1926. In the third place, the amount of revenue traffic would have to expand far beyond that of 1926, the peak year, before there could be a return to an amount of employment equal to that of July 1926, even in this comparatively inelastic field of railroad labor.

Maintenance of Way and Structures

THE trends of employment in the maintenance of way and structures are analyzed in table 4. Two particularly important subdivisions of labor engaged in the maintenance of way and structures are included in the last two sections of table 4. These are track and roadway section laborers and maintenance-of-way laborers other than track and roadway. These two subdivisions combined form nearly three fifths of the total.

TABLE 4.—EMPLOYMENT, RATIOS OF REVENUE TRAFFIC TO MAN-HOURS, AND COMPENSATION OF ALL MAINTENANCE-OF-WAY AND STRUCTURES EMPLOYEES AND OF SPECIFIED SUBGROUPS, CLASS I RAILROADS, 1922 TO 1932

[Based on reports to the Interstate Commerce Commission]

Year	Employees		Total hours paid for		Average number of hours per employee per week	Indexed ratios of output [1] to man-hours (1926=100)	Average compensation per employee per year	Percentage ratios—	
	Average number	Index numbers (1926=100)	Number (thousands)	Index numbers (1926=100)				Of group hours to total hours [2]	Of group compensation to total compensation [2]
All maintenance-of-way and structures employees									
1922	362,788	86.8	901,077	86.0	47.8	93.6	$1,061	20.68	14.42
1923	401,723	96.1	1,023,938	97.7	49.0	97.6	1,106	20.54	14.60
1924	389,069	93.0	962,810	91.9	47.6	97.9	1,090	20.94	14.79
1925	390,494	93.4	973,842	93.0	48.0	101.8	1,106	21.23	14.89
1926	418,168	100.0	1,047,574	100.0	48.2	100.0	1,113	22.10	15.57
1927	421,535	100.8	1,050,742	100.3	47.9	96.0	1,117	22.91	15.94
1928	400,198	95.7	994,966	95.0	47.8	101.2	1,123	22.76	15.70
1929	411,210	98.3	1,026,482	98.0	48.0	100.6	1,138	23.27	15.91
1930	349,202	83.5	838,236	80.0	46.2	105.7	1,128	21.97	15.21
1931	275,486	65.9	618,517	59.0	43.2	115.7	1,080	20.05	13.98
1932	215,887	51.6	441,738	42.2	39.3	123.2	908	18.30	12.76
Track and roadway section laborers									
1922	200,993	94.2	493,547	93.6	47.2	86.0	$849	11.33	6.39
1923	210,913	98.8	530,309	100.6	48.3	94.9	886	10.64	6.14
1924	202,967	95.1	496,222	94.1	47.0	95.6	870	10.79	6.16
1925	202,920	95.1	499,667	94.8	47.3	99.9	877	10.89	6.14
1926	213,389	100.0	527,290	100.0	47.5	100.0	884	11.13	6.31
1927	215,932	101.2	530,576	100.6	47.2	95.7	880	11.57	6.43
1928	207,174	97.1	506,622	96.1	47.0	100.0	875	11.59	6.33
1929	210,084	98.5	514,830	97.6	47.1	100.9	883	11.67	6.30
1930	179,691	84.2	421,293	79.9	45.1	105.8	850	11.04	5.90
1931	146,120	68.5	315,203	59.8	41.5	114.3	781	10.22	5.37
1932	119,141	55.8	226,363	42.9	36.5	121.0	621	9.38	4.81
Maintenance-of-way laborers (other than track and roadway)									
1922	8,655	94.3	21,213	94.4	47.1	85.2	$887	0.49	0.29
1923	8,401	91.5	20,636	91.9	47.2	103.9	890	.41	.25
1924	8,120	88.5	19,856	88.4	47.0	101.8	896	.43	.25
1925	8,170	89.0	20,109	89.5	47.3	105.7	911	.44	.26
1926	9,180	100.0	22,463	100.0	47.1	100.0	918	.47	.28
1927	8,462	92.2	20,784	92.5	47.2	104.1	924	.45	.26
1928	8,053	87.7	19,654	87.5	46.9	109.8	929	.45	.26
1929	8,217	89.5	20,005	89.1	46.8	110.6	936	.45	.26
1930	6,803	74.1	16,316	72.6	46.1	116.4	919	.43	.24
1931	5,135	55.9	11,873	52.9	44.5	129.2	872	.38	.21
1932	4,075	44.4	8,907	39.7	42.0	131.0	745	.37	.20

[1] In terms of revenue traffic units. See table 1.
[2] For total hours and compensation, see part 1, tables 4, 6.

The number of all employees in this general group in 1922 was 362,788. The largest number employed during the period was 421,535, in 1927, and the smallest was 215,887, in 1932. The index numbers of man-hours declined much more extensively after 1929 than did the index numbers of employees, the latter being 51.6 in 1932, while the index number of man-hours fell to 42.2. This difference finds expression also in the average number of hours per week, which fell from 48.0 in 1929 to 39.3 in 1932.

The indexed ratios of revenue traffic to man-hours, with 1926 as the base year, rose continuous, with minor exceptions, from 93.6 in 1922 to 123.2 in 1932. The amount of service required of employees in the maintenance of way and structures has not diverged so widely from the amount of revenue traffic as has been the case with various other groups. A unit which measures approximately the services normally required of these employees has been devised by the American Railway Engineering Association and is termed the transportation traffic unit. It is computed, in its simplest form, by combining freight ton-miles, including cars, freight locomotive ton-miles times 2, and passenger car-miles times 144.[4]

The comparative ratios of revenue traffic units and of transportation traffic units to man-hours of maintenance of way and structures employees are presented in table 5.

TABLE 5.—COMPARATIVE INDEXED RATIOS OF REVENUE TRAFFIC UNITS AND OF TRANSPORTATION TRAFFIC UNITS TO MAN-HOURS OF MAINTENANCE-OF-WAY AND STRUCTURES EMPLOYEES, CLASS I RAILROADS, 1922 TO 1932

[Based on reports to the Interstate Commerce Commission]

Year	Ratio of revenue traffic units to man-hours	Ratio of transportation traffic units to man-hours	Year	Ratio of revenue traffic units to man-hours	Ratio of transportation traffic units to man-hours
1922	93.6	91.9	1928	101.2	105 3
1923	97.6	93.4	1929	100.6	104.9
1924	97.9	97.5	1930	105.7	116.3
1925	101.8	101.6	1931	115.7	135.1
1926	100.0	100.0	1932	123.2	153.1
1927	96.0	98.8			

While the index numbers of productivity in terms of revenue traffic units continued to rise even when revenue traffic declined, and reached a high point of 123.2 in 1932, the ratios of transportation traffic units to man-hours reached the much higher point of 153.1 by 1932.

The use of the ratios of transportation traffic units to man-hours as indicating changes in the amount of services rendered by these employees must be qualified by the fact that in some years there is a tendency to defer maintenance work. This is indicated by the data relating to number of ties and of rails laid as presented in table 1. The extreme decline in the number of ties and especially in the number of rails laid in 1932 is undoubtedly due in part to deferment, but a considerable decline in the index numbers of rails and ties laid as compared with the index numbers of revenue traffic is naturally to be expected as a result of various technological improvements, such as the chemical treating of ties.

The decline in the number of rails laid is undoubtedly in considerable part due to the cumulative effect of technological changes

[4] See part 1, table 1, and comments on table.

reducing the amount of needed replacement. The weight of rails and their resistance to impact have been greatly increased. Many improvements in the quality of the high-tensile steel used have been made, giving to the steel a toughness and elasticity which prolong the life of rails. The use of manganese steel for frogs and crossings has reduced the amount of replacement necessary. The development of scientific methods of inspecting and testing rails in the rolling mill has greatly reduced the number of defective rails. Roadbeds have been extensively reconstructed to give greater sturdiness and this also has reduced the amount of rail replacement otherwise necessary.

Instead of worn rails being replaced, they are now in larger numbers repaired by means of recent welding processes. Heat treating of rail ends diminishes wear and danger of breakage. New methods have been devised for discovering defects after rails are laid. The Sperry detector reveals not only transverse fissures but other defects, and makes possible the removal of individual rails before an actual break entails extensive damage and replacement. Improved fasteners afford better alinement and sturdier resistance to the impact of trains. Recent methods of controlling train movements, such as centralized traffic control, reduce the amount of trackage laid by greatly increasing the amount of traffic possible on existing tracks. It has been claimed that the traffic capacity of tracks is almost doubled by centralized traffic control in strategic centers of high traffic density, thus indefinitely postponing the need for additional track construction. These changes are cumulative in their effects in reducing the amount of needed rail replacement.

Many of these changes, such as centralized traffic control, improved fasteners, and better roadbeds with modernized drainage facilities, lengthen the life of ties as well as rails. Probably more important, however, in connection with the longer life of ties is chemical treatment. Crossties, bridge and switch ties, and other timbers which are subjected to conditions inducing decay have been scientifically studied with respect to chemical treatment, as by creosoting, and specifications have been formulated by the American Railway Engineering Association. Various incidental precautions, such as branding of ties indicating date of treatment, inspection for removing timbers which show signs of decay, and the careful draining of seasoning yards, still further tend to prolong the life of ties and other timbers. The proportion of treated crossties laid in replacements increased from 42.3 percent in 1921 to 78.5 percent in 1930, declining slightly to 75.1 percent in 1932.

In connection with the laying of rails and ties and the performance of most of the other work connected with the maintenance of way and structures, recent methods have very greatly increased the average efficiency of employees. Machines are now being utilized for ditching

and shoveling, ballasting, tie laying and tamping, rail laying, driving and pulling of spikes, sawing, boring and adzing of timbers, intertrack, border, and intertie cleaning of roadbed, mowing and burning of the right of way, and practically all other related activities. In connection with the mowing and burning of the right of way it has been estimated that 300 to 800 man-hours per mile were formerly required where now 2 or 3 hours suffice.

The recent extension of mechanical methods to work in the maintenance of way and structures has been made possible by means of mobile power units, dependent upon internal combustion engines, compressed air, and electricity. The former source of power was the steam engine. This required a boiler, fuel, and water supply, which ill adapted it to the demands for mobility for maintenance-of-way work and which limited its use to large projects in a particular location. The mobility of internal combustion power units has been increased by crawler mountings. Power used for the operation of the machines comes directly from the engine or is in the form of compressed air or electricity.

Undoubtedly some deferment of normal work in the maintenance of way and structures has resulted from the decline of revenue traffic, but the ratios of transportation traffic units to man-hours of labor actually employed in this work seem to involve no serious overestimate of the increase in the efficiency of labor.

The man-hours of all employees engaged in maintenance of way and structures were approximately one fifth (20.68 percent) of the total man-hours of all railroad labor in 1922 (table 4). The highest proportion was 23.27 percent in 1929, and the lowest, 18.30 percent in 1932. As already intimated, the proportion of this type of employment has been reduced by the deferment of maintenance work, but another factor of great importance is the cumulative effect of recent technological changes in reducing the amount of maintenance work required and in facilitating the carrying on of necessary maintenance operations.

The average annual compensation of all employees connected with maintenance of way and structures ranged around $1,000—$1,061 in 1922, $1,138 in 1929, and $908 in 1932. The group's proportion of total compensation was much lower than its proportion of total man-hours—14.42 percent of total compensation as compared with 20.68 percent of hours in 1922, and 12.76 percent of total compensation as compared with 18.30 percent of man-hours in 1932.

The status of maintenance-of-way employees as indicated by the comparative trends of hours and compensation remained substantially the same. In 1926, the proportion of hours was 6.9 percent above 1922; and of compensation, 8 percent above 1922. In 1932, the proportion of both hours and compensation was 11.5 percent below 1922.

The monthly trend of employment in maintenance of way and structures during 1933 is complicated by the seasonal nature of much of this work. Employment rises sharply during the summer months. The difference in number of employees between the low and high points from 1922 to 1931 ranged from 28.2 per cent in 1924 to 49.4 per cent in 1930. The average for the 10-year period was 40.2 percent.[5]

From January to July, 1933, the average number of employees ranged from a low point of 177,446 in March (a decline not entirely seasonal) to 213,061 in July, or a difference of 20.1 percent. The comparative figures of employment for January to July 1926 and 1933 are given in table 6.

TABLE 6.—AVERAGE NUMBER OF EMPLOYEES AND TOTAL MAN-HOURS FOR MAINTENANCE OF WAY AND STRUCTURES, CLASS I RAILROADS (INCLUDING PRINCIPAL SWITCHING AND TERMINAL COMPANIES), JANUARY TO JULY 1926 AND 1933

[Based on reports to the Interstate Commerce Commission]

Month and year	Employees		Total hours paid for—	
	Average number	Index numbers (monthly figures for 1926=100)	Number (thousands)	Index numbers (monthly figures for 1926=100)
January 1926	347,362	100.0	69,888	100.0
January 1933	182,857	52.6	29,424	42.1
February 1926	351,713	100.0	67,222	100.0
February 1933	181,954	51.7	27,332	40.7
March 1926	359,751	100.0	77,949	100.0
March 1933	177,446	49.3	29,771	38.2
April 1926	403,858	100.0	84,506	100.0
April 1933	186,884	46.3	30,379	35.9
May 1926	436,542	100.0	91,027	100.0
May 1933	199,126	45.6	34,883	38.3
June 1926	458,306	100.0	97,798	100.0
June 1933	206,785	45.1	36,468	37.3
July 1926	473,517	100.0	100,588	100.0
July 1933	213,061	45.0	37,657	37.4

Although there was an increase of 20.1 percent in the total number of maintenance-of-way employees in July as compared with March 1933, and an increase of 38 percent in man-hours in July as compared with February, the seasonal increases in 1933, as shown in table 6, were not so great as in 1926.

Maintenance of Equipment and Stores

THE trend of employment, ratios of output (in terms of revenue traffic) to hours, and compensation of all employees classed under the maintenance of equipment and stores are shown in table 7. The most important work of this group is connected with the upkeep of locomotives and cars.

Maintenance of equipment and stores accounted for the employment of 455,313 workers in 1922. An unusually large increase occurred the next year, the number rising to 589,879. Thereafter there was a

[5] See Interstate Commerce Commission, *Ex parte 106*, vol. 7, exhibit 111 (hearings on proposed 6-hour day).

continuous decline until in 1932 the number was 282,971. The number of man-hours increased from an index of 92.8 in 1922 to 117.1 in 1923 (1926 being the base year), and thereafter declined until in 1932 it had fallen to 44.1. Approximately one fourth of the man-hours of all railroad labor is spent in maintenance of equipment and stores, the proportion in 1922 being 27.85 percent, rising in 1923 to 30.72 percent and thereafter declining to 23.87 percent. The average number of hours per week declined from 51.2 in 1922 to 39.2 in 1932.

TABLE 7.—EMPLOYMENT, RATIOS OF REVENUE TRAFFIC TO MAN-HOURS, AND COMPENSATION OF ALL MAINTENANCE OF EQUIPMENT AND STORES, CLASS I RAILROADS, 1922 TO 1932

[Based on reports to the Interstate Commerce Commission]

Year	Employees		Total hours paid for		Average number of hours per employee per week	Indexed ratios of output [1] to man-hours (1926=100)	Average compensation per employee per year	Percentage ratios	
	Average number	Index numbers (1926=100)	Number (thousands)	Index numbers (1926=100)				Of group hours to total hours [2]	Of group compensation to total compensation [2]
1922	455,313	87.6	1,213,448	92.8	51.2	86.7	1,648	27.85	28.12
1923	589,879	113.5	1,531,593	117.1	49.9	81.5	1,555	30.72	30.14
1924	534,981	102.9	1,335,726	102.2	48.0	88.1	1,518	29.05	28.31
1925	524,512	100.9	1,310,907	100.3	48.1	94.4	1,535	28.58	27.76
1926	519,852	100.0	1,307,513	100.0	48.4	100.0	1,564	27.59	27.19
1927	490,730	94.4	1,225,425	93.7	48.0	102.8	1,585	26.72	26.34
1928	461,285	88.7	1,151,436	88.1	48.0	109.1	1,592	26.33	25.66
1929	455,858	87.7	1,147,839	87.8	48.4	112.2	1,668	26.02	25.86
1930	405,900	78.1	965,119	73.8	45.7	114.5	1,592	25.29	24.94
1931	344,033	66.2	756,810	57.9	42.3	118.0	1,472	24.54	23.80
1932	282,971	54.4	576,287	44.1	39.2	117.9	1,237	23.87	22.78

[1] In terms of revenue traffic units. See table 1.
[2] For total hours and compensation, see part 1, tables 4, 6.

The changes in the indexed ratios of total revenue traffic units to the man-hours of this group are indicated by the index numbers in the sixth column of table 7. The only year in which there was a material decline in the ratios was 1923. The numbers ranged from 86.7 in 1922 and 81.5 in 1923 (with 1926 as the base year) to 117.9 in 1932.

As in the case of railroad labor as a whole, the number of employees engaged in the maintenance of equipment and stores tends to vary with the amount of work required to maintain traffic facilities; and this in turn is affected vitally by technological improvements of the quality of equipment and stores and of the methods of maintenance work. The services required for the maintenance of equipment and stores are measured more adequately by transportation traffic units than by revenue traffic units. The number of transportation traffic units indicates the extent to which facilities for traffic are being maintained by the railroad companies, and is computed, as already

stated, by combining freight ton-miles, including cars, freight locomotive ton-miles multiplied by 2, and passenger car-miles times 144.

The comparative ratios of revenue traffic units and of transportation traffic units to man-hours of maintenance of equipment and stores employees are given in table 8.

TABLE 8.—COMPARATIVE INDEXED RATIOS OF REVENUE TRAFFIC UNITS AND OF TRANSPORTATION TRAFFIC UNITS TO MAN-HOURS, OF MAINTENANCE OF EQUIPMENT AND STORES WORKERS, CLASS I RAILROADS, 1922 TO 1932 [1]

Year	Ratio of revenue traffic units to man-hours	Ratio of transportation traffic units to man-hours	Year	Ratio of revenue traffic units to man-hours	Ratio of transportation traffic units to man-hours
1922	86.7	85.1	1928	109.1	113.5
1923	81.5	78.0	1929	112.2	117.1
1924	88.1	87.7	1930	114.5	126.0
1925	94.4	94.2	1931	118.0	137.7
1926	100.0	100.0	1932	117.9	146.5
1927	102.8	105.8			

[1] For basic data, see tables 1, 7.

Productivity of labor in terms of revenue traffic increased materially, as previously stated, reaching an index number of 117.9 in 1932, as compared with 100 in 1926, in spite of a reduction of nearly 50 percent in the amount of revenue traffic. But the ratios of transportation traffic units to man-hours increased much more rapidly, and continued to rise sharply even in 1932, the index numbers (based on 1926) being 137.7 in 1931 and 146.5 in 1932.

Total revenue traffic units and total figures of other units, such as transportation traffic units, intended to measure the normal requirements for maintaining traffic facilities must both be used with qualifications for estimating the productivity or the efficiency of particular groups of employees. In the case of many groups, however, serviceable approximations are obtainable. Machinists, connected with the maintenance of equipment and stores, for example, perform a definite and only slightly variable function. Transportation authorities have agreed that the ratios of total transportation traffic units to machinists' man-hours may be used to indicate normal changes in the work and volume of employment of machinists as affected by technological changes. In table 9 these ratios and also the ratios of revenue traffic units to machinists' man-hours are given in the form of index numbers for 1922 to 1932.

The indexed ratios of revenue traffic units to machinists' man-hours were not markedly different from the ratios based on transportation traffic units from 1922 to 1929, although there was a divergence after 1926. Beginning in 1930, with the sharp decline in revenue traffic, the ratios based on revenue traffic units declined from 109.6 (1926 equaling 100) to 104.3 in 1932; while the ratios based on transportation traffic units continued to rise from 100 in 1926 to 129.7 in 1932.

TABLE 9.—COMPARATIVE INDEXED RATIOS OF REVENUE TRAFFIC UNITS AND OF TRANSPORTATION TRAFFIC UNITS TO MAN-HOURS OF MACHINISTS, CLASS I RAILROADS, 1922 TO 1932

[Based on reports to the Interstate Commerce Commission]

Year	Ratio of revenue traffic units to man-hours	Ratio of transportation traffic units to man-hours	Year	Ratio of revenue traffic units to man-hours	Ratio of transportation traffic units to man-hours
1922	90.8	89.2	1928	106.4	110.7
1923	80.9	77.4	1929	109.6	114.3
1924	88.5	88.1	1930	109.4	120.3
1925	95.0	94.9	1931	108.9	127.1
1926	100.0	100.0	1932	104.3	129.7
1927	101.2	104.1			

In the case of carmen, changes in the number of car-miles are probably a better indication of the normal maintenance requirements than are changes in the number of transportation traffic units. In table 10 are given the indexed ratios of revenue traffic units and of car-miles to carmen's man-hours.

TABLE 10.—COMPARATIVE INDEXED RATIOS OF REVENUE TRAFFIC UNITS AND OF CAR-MILES TO MAN-HOURS OF CARMEN, CLASS I RAILROADS, 1922 TO 1932

[Based on reports to the Interstate Commerce Commission]

Year	Ratio of revenue traffic units to man-hours	Ratio of car-miles to man-hours	Year	Ratio of revenue traffic units to man-hours	Ratio of car-miles to man-hours
1922	83.3	81.7	1928	109.3	113.8
1923	77.9	74.5	1929	111.6	116.4
1924	87.0	86.6	1930	118.0	129.9
1925	93.1	92.9	1931	124.9	145.7
1926	100.0	100.0	1932	126.8	157.6
1927	104.3	107.3			

The indexed ratios of revenue traffic units to carmen's man-hours increased continuously after 1923 from 77.9 in 1923 (1926 being the base year) to 126.8 in 1932. The ratios based on car-miles showed only a slight divergence from those based on revenue traffic units before 1929, but rose rapidly thereafter from 116.4 in 1929 to 157.6 in 1932.

The remarkable rise in the ratios of transportation traffic units and of car-miles to man-hours during years of declining revenue traffic, as shown in tables 8 to 10, must not be regarded as exact measures of changes in the efficiency of labor, for the figures are based on the assumption that maintenance work is carried on as needed, in years of depression as well as in years when revenue traffic is increasing. The assumption must be qualified by recognition of a tendency to postpone some normal maintenance work when business declines. But, as in the case of maintenance of way and structures, already discussed, much apparent postponement has in reality been a reduction

in the amount of needed maintenance work by means of technological improvements. These have recently had a cumulative effect in a progressive resistance of equipment to the wear and tear of use, as well as in a progressive reduction of the amount of labor required for maintenance still found to be necessary.

Among the more important technological changes are those connected with the improvement of the equipment used. The average tractive power of steam locomotives increased from 37,441 pounds in 1922 to 46,299 in 1932, while the number of locomotives was reduced from 64,140 to 52,492. The newer types of engines are characterized by longer life and fewer repairs. It has been estimated that the typical mileage between heavy repairs has virtually doubled since 1920. There have been numerous improvements also in the types of cars. One important change affecting the amount of replacement and upkeep has been the increasing use of steel. In 1922 freight cars and passenger-train cars of steel, or with steel underframe, were 68.3 percent of all cars. The proportion had increased in 1932 to 89 percent. Brake-beam supports and various other improvements have also contributed to the length of life and to the lessening of maintenance and replacement.

A recent development of great importance with which the general public is, perhaps, not particularly familiar is the chemical treatment of the water supply of locomotives. Many kinds of untreated water injuriously affect locomotives. The amount of water used for locomotives has been estimated as averaging about 350,000,000,000 gallons a year. About 135,000,000,000 gallons, or nearly 40 percent of the water consumed by locomotives, is now treated chemically. The result may be illustrated by the report of one railroad to the effect that locomotive failures due to leaking flues have been reduced, mainly by water treatment, from 787 in 1911, or 1 failure per 100,000 locomotive miles, to 11, or 1 failure per 4,340,000 locomotive miles in 1929. It has been estimated that in the case of railroads with scientific water treatment the washing out of boilers has been reduced to such an extent as very greatly to reduce the amount of maintenance work. Before treatment of the water, washing out of boilers was necessary after 500 or 600 miles or less. After treatment of the water, washing out was not necessary until after locomotives had run from 2,000 to 3,000 miles, with longer engine runs than formerly. It is further reported that in bad-water areas, "with present forces, operations would have been paralyzed." [6]

Other improvements in the work of maintenance of equipment and stores have been concerned with the methods of handling supplies. In the case of water, more efficient pumps have been installed,

[6] Railway Age, July 1, 1933, pp. 44–46

remote electrical control of the operation of water-supply plants has been extended, and the size of reservoirs and locomotive tenders has increased. As a result, it is evident that "pumping costs and maintenance costs have been reduced from one third to one half on some railroads." [7]

The handling of coal, sand, cinders, and other materials has been extensively mechanized. These changes affect the labor, not only of maintenance of equipment and stores workers, but also of transportation employees, by increasing the speed and efficiency of rolling stock. Vitally important, also, in economizing the labor of both maintenance and transportation employees is the standardization and interchangeability of equipment.

Among the other technological changes affecting the maintenance of equipment and stores, perhaps the most important are concerned with the modernizing of roundhouses, machine shops, and car shops. These changes include drop pits for handling engines, hydraulic wheel hoists for the removing and replacing of wheels, and power-hoist trucks for handling engine parts and moving them to and from machine shops. There has also been a rapid introduction of portable power units and a great increase in the utilization of compressed air and electric power, while facilities for the utilization of hot water and steam have been improved. The more recent welding processes are utilized for the stripping of equipment, the repairing and replacing of parts, and the salvaging of parts of obsolete and worn-out equipment. There is now a continuous unified process in preparing engines for service. The process includes operations commonly described as blowdown, washout, and refilling, and engines after being renovated are supplied with direct steam pressure without firing, the firing being started later at a separate fire-lighting plant.

In the maintenance of equipment and stores, the proportion of skilled workers is much higher than in the case of maintenance of way and structures. Table 11 contains comparative data as to numbers, hours, and compensation of carmen and electrical workers and machinists, who form particularly important groups of skilled workers, of skilled-trades helpers, and of laborers in shops, engine houses, and power plants. The man-hours of these subgroups combined are more than three fourths of all man-hours of maintenance of equipment and stores workers, and in 1922 were more than one fifth of the man-hours of all railroad workers.

[7] Railway Age, July 1, 1933, p. 46.

TABLE 11.—EMPLOYMENT AND COMPENSATION OF SPECIFIED GROUPS OF EMPLOYEES CONNECTED WITH MAINTENANCE OF EQUIPMENT AND STORES, CLASS I RAILROADS, 1922 TO 1932

Year	Employees		Average number of hours per employee per week	Average compensation per employee per year	Percentage ratios—	
	Average number	Index numbers (1926=100)			Of group hours to total hours [1]	Of group compensation to total compensation [1]
Carmen						
1922	105,053	92.9	49.6	$1,845	6.22	7.26
1923	136,707	120.8	48.3	1,713	6.89	7.69
1924	119,130	105.3	46.8	1,687	6.31	7.01
1925	116,256	102.8	47.2	1,716	6.22	6.88
1926	113,123	100.0	47.7	1,760	5.92	6.66
1927	105,119	92.9	47.4	1,795	5.65	6.39
1928	99,912	88.3	47.4	1,802	5.64	6.29
1929	99,430	87.9	47.9	1,910	5.61	6.46
1930	86,106	76.1	44.8	1,801	5.26	5.99
1931	71,448	63.2	41.3	1,645	4.97	5.52
1932	57,702	51.0	38.3	1,381	4.76	5.19
Electrical workers						
1922	7,995	77.8	53.5	$2,095	0.51	0.63
1923	9,651	93.9	51.6	1,952	.52	.62
1924	9,491	92.4	49.9	1,898	.54	.63
1925	9,800	95.4	50.0	1,904	.56	.64
1926	10,273	100.0	50.4	1,945	.57	.67
1927	10,515	102.4	49.7	1,965	.59	.70
1928	10,331	100 6	49.7	1,966	.61	.71
1929	10,403	101.3	50.1	2,073	.61	.73
1930	10,139	98.7	47.5	1,978	.66	.77
1931	9,393	91.4	44.4	1,844	.70	.81
1932	8,458	82.3	41.3	1,563	.75	.86
Machinists						
1922	49,573	81.4	51.3	$2,092	3.03	3.89
1923	68,140	111.9	49.7	1,951	3.53	4.37
1924	62,800	103.2	46.4	1,833	3.30	4.01
1925	61,265	100.6	46.6	1,854	3.24	3.92
1926	60,874	100.0	47.1	1,898	3.15	3.86
1927	58,792	96.6	46.4	1,903	3.09	3.79
1928	55,792	91.7	46.4	1,899	3.08	3.70
1929	54,714	89.9	47.1	2,019	3.04	3.76
1930	50,723	83.3	43.7	1,890	3.02	3.70
1931	45,425	74.6	39.6	1,706	3.03	3.64
1932	39,413	64.7	36.2	1,417	3.08	3.64
Skilled-trades helpers						
1922	98,518	86.0	51.8	$1,449	6.09	5.35
1923	135,236	118.0	49.4	1,312	6.96	5.83
1924	117,550	102.6	47.0	1,273	6.25	5.22
1925	114,743	100.1	47.1	1,292	6.13	5.11
1926	114,574	100.0	47.4	1,322	5.96	5.07
1927	108,050	94.3	47.0	1,344	5.76	4.92
1928	101,122	88.3	47.0	1,348	5.65	4.76
1929	101,208	88.3	47.4	1,437	5.65	4.95
1930	89,276	77.9	44.1	1,351	5.36	4.66
1931	75,275	65.7	40.1	1,224	5.09	4.33
1932	61,364	53.6	36.4	1,005	4.82	4.01

[1] For total hours and compensation, see part 1, tables 4, 6.

TABLE 11.—EMPLOYMENT AND COMPENSATION OF SPECIFIED GROUPS OF EMPLOYEES CONNECTED WITH MAINTENANCE OF EQUIPMENT AND STORES, CLASS I RAILROADS, 1922 TO 1932—Continued

Year	Employees		Average number of hours per employee per week	Average compensation per employee per year	Percentage ratios—	
	Average number	Index numbers (1926=100)			Of group hours to total hours	Of group compensation to total compensation
Laborers (shops, engine houses, and power plants)						
1922	93,983	90.7	52.2	$1,062	5.86	3.74
1923	115,567	111.5	51.8	1,059	6.25	4.02
1924	105,836	102.2	50.3	1,043	6.02	3.85
1925	103,317	99.7	49.8	1,037	5.84	3.69
1926	103,605	100.0	49.7	1,041	5.66	3.61
1927	97,545	94.2	49.7	1,047	5.49	3.46
1928	90,748	87.6	49.5	1,046	5.34	3.31
1929	89,786	86.7	49.7	1,059	5.26	3.23
1930	78,856	76.1	47.9	1,023	5.15	3.12
1931	65,057	62.8	45.3	961	4.97	2.94
1932	52,664	50.8	42.0	804	4.77	2.76

With the exception of electrical workers, the largest number of employees of each group shown in table 11 was in 1923. The continued increase in the number of electrical workers up to 1927, together with the comparatively small decline thereafter, is an indication of the increasing importance of electrical equipment in railroad work. In all groups there was a slight decline in the average number of hours per week from 1922 to 1929 and a sharp decline thereafter, indicating an increase in part-time work during the depression.

The average number of hours per week in 1922 ranged from 53.5 in the case of electrical workers to 49.6 in the case of carmen; and in 1932, from 42 for laborers in shops, engine houses, and power plants to 36.2 for machinists.

For all groups except carmen, average annual compensation was highest in 1922, the average for carmen rising slightly above the 1922 figure in 1929; and for all groups, the lowest average was in 1932, when the average number of hours per week also was lowest. With the exception of electrical workers and machinists in 1922 and 1929, the average annual compensation of all workers in these groups was below $2,000. The largest sum for carmen was $1,910 in 1929; for electrical workers, $2,095 in 1922; and for machinists, $2,092 in 1922. The average compensation of skilled-trades helpers ranged from $1,449 in 1922 to $1,005 in 1932; and of laborers, from $1,062 in 1922 to $804 in 1932. The range of individual compensations within each group means, of course, that many employees received much less than the averages.

Changes in the status of each group as compared with all railroad labor are shown in the last two columns of table 11. In the case of carmen, their combined man-hours were 6.22 percent of all

man-hours in 1922, and their compensation was relatively large—7.26 percent of the total compensation. The proportions of both man-hours and compensation declined by 1932; in the case of man-hours, to 4.76 percent, and of compensation, to 5.19 percent. They thus suffered a relatively large decline in their proportion of compensation—28.5 percent as compared with a 23.5 percent decline in man-hours.

The status of electrical workers and of machinists also reveals, throughout the period, a higher proportion of compensation than of man-hours, indicating an average compensation for these groups as well as for carmen above the general average, but, as in the case of carmen, by 1932 their advantage was materially reduced. Man-hours of electrical workers increased by 1932 from 0.51 to 0.75 percent of the total, a 47.1 percent increase in the proportion of man-hours; but their proportion of compensation increased only 36.5 percent. The proportion of machinists' man-hours increased 1.7 percent by 1932 as compared with 1922; while their proportion of compensation was 6.4 percent smaller than in 1922.

The compensation of skilled-trades helpers and, more markedly, of laborers in shops, engine houses, and power plants, throughout the period, was smaller than their proportion of total man-hours; and their disadvantage was materially increased by 1932 as compared with 1922. Skilled-trades helpers' proportion of man-hours declined 20.9 percent, and their proportion of compensation declined 25 percent. Laborers' proportion of man-hours decreased 18.6 percent, and their proportion of compensation decreased 26.2 percent.

Employment in maintenance of equipment and stores from January to July 1933 in comparison with 1926, is shown in table 12.

TABLE 12.—AVERAGE NUMBER OF EMPLOYEES AND TOTAL MAN-HOURS IN MAINTENANCE OF EQUIPMENT AND STORES, CLASS I RAILROADS (INCLUDING PRINCIPAL SWITCHING AND TERMINAL COMPANIES), JANUARY TO JULY 1926 AND 1933

[Based on reports to the Interstate Commerce Commission]

Month and year	Employees		Total hours paid for	
	Average number	Index numbers (monthly figures for 1926=100)	Number (thousands)	Index numbers (monthly figures for 1926=100)
January 1926	526,639	100.0	108,002	100.0
January 1933	265,663	50.4	45,372	42.0
February 1926	524,702	100.0	99,761	100.0
February 1933	259,377	49.4	40,463	40.6
March 1926	525,554	100.0	114,017	100.0
March 1933	251,798	47.9	43,186	37.9
April 1926	522,613	100.0	108,418	100.0
April 1933	251,945	48.2	40,983	37.8
May 1926	516,302	100.0	106,741	100.0
May 1933	249,519	48.3	43,688	40.9
June 1926	516,753	100.0	106,952	100.0
June 1933	254,379	49.2	44,379	41.5
July 1926	517,189	100.0	107,499	100.0
July 1933	266,526	51.5	47,404	44.1

There was a comparatively slight change alike in number of employees and in man-hours, and the changes from month to month in 1933 were not radically different from those of 1926. From March, when revenue traffic was lowest, to July, the number of employees increased only 5.8 percent, although traffic in terms of revenue ton-miles plus weighted revenue passenger-miles increased 43.5 percent.

Effects of Depression Conditions Upon Farm-Labor Productivity

DEVELOPMENTS in agricultural industry in the United States since 1928–29 afford striking illustrations of the operation of two different sets of factors determining the rate of labor productivity. Studies by the Bureau of Labor Statistics showing developments in other industries have disclosed the fact that output per worker continues to increase in many cases during depression years, and sometimes even at an accelerated rate. Moreover, the gains made during depression years are likely to be more nearly net gains, owing to the fact that limited markets necessitate the elimination of every possible production cost.

While such data as are available are insufficient to justify any very definite conclusion as to the rate of increase or decrease in agricultural labor productivity during the last 5 years, investigations made by the several agricultural field services indicate that many of the factors making for increased labor efficiency that were operative during prosperous years continued to be more or less effective. But the data available indicate that such increases in labor productivity as have taken place are due chiefly to factors characteristic of depression years.

In a discussion of farm efficiency during the period in question, the United States Year Book of Agriculture for the year 1933 (p. 381), distinguishes between the two sets of factors indicated above:

> Progress in farming methods may be classified into two types. The first is that stimulated by good prices that induce farmers to expand their output and reach out to "make a killing." An example of this is the rapid expansion in the use of combines and tractors in the Great Plains area of the Wheat Belt, when prices were so high as to make extensive wheat production unquestionably profitable. Such improvements are characterized by a substantial increase in the amount of agricultural-capital requirements per laborer. This increase carries with it an increase in the amount of land that can best be handled per worker, and hence a very substantial increase in the output of product per man. Within limits, a fall in price probably stimulates the use of this type of improvement, since large output means lower cost per unit of produce and hence a greater opportunity to make profit. However, when prices go extremely low this method is ineffective because it involves a high proportion of cash costs which cannot be covered in the price of the product.
>
> The second type of farm improvement making toward efficiency includes those which probably receive the greater stimulus in such a situation as the present. They are the improvements that make men more effective with a minimum increase in cash outlay. Such improvements come, for example, from the improvement of crop varieties through plant breeding, from better strains of livestock,

better feeding methods, better care of product in an effort to get higher quality, and the like. One field man states that on his project nearly all of the farmers from whom he is obtaining data have increased their emphasis upon alfalfa. They are growing more of it; they are feeding it to all types of livestock, including poultry. One of the immediate motives for this was the avoidance of cash outlay for high-protein feeds, but its secondary effect is to incorporate in the cropping system an excellent hay crop that probably will become a permanent part of the rotation. To be sure, these measures do, incidentally, increase output by increasing the rate of yield. That is the essence of efficiency; more product from the same or from less investment of labor and the other means of production. But the important thing is that such measures avoid the increase of cash outlay and that is what is most desirable just now. Probably this latter type of farm improvement will figure more largely in heightening farm efficiency in this country during the next 10 years than will the type that so greatly increases the scope of operations.

Elsewhere in the 1933 year book the several factors affecting labor efficiency are indicated. Chief among the factors making for increased productivity are the following: Improved management; better selection of livestock breeds or of seed varieties, and better adaptation of crops to land and marketing conditions; more efficient use of machinery and equipment; better feed crops, looking not only to increased feeding efficiency but also to the conservation of soil fertility; greater care of products to improve quality and secure higher prices.

At the same time it is pointed out that other factors are operative that tend to decrease labor efficiency. Among these are: Inadequate upkeep and replacement of machinery and equipment; the planting of seed of poor quality or of the wrong variety; the retention or selection of poor breeds of animals. In all these cases the chief motive is to reduce cash expenditures.

Under the same necessity for keeping cash expenditures down to the lowest possible level, farm animals may be poorly fed or sheltered, often reducing their efficiency in greater ratio than the saving of feed costs. Obviously the same may be true with regard to the maintenance of the working members of the farm family.

Owing to the fact that there are no available data showing just how much labor is put into the growing of crops, no definite computation can be made of actual increases or decreases in labor productivity. Data showing gross income and major expenditure from 1928 to 1932 inclusive, supplied by the Bureau of Agricultural Economics, indicate that there were, over the depression years included in this period, far greater reductions in all cash expenditures than in gross income. In 1932, the index of gross income on the 1928 base was 77, while the index of wages paid to hired labor was only 40. Expenditures for feed declined 60 percent between 1928 and 1931, and expenditures for fertilizer 65 percent. Expenditures for farm implements, not including trucks and tractors, declined 79 percent between 1928 and 1932, while expenditures for trucks and tractors, including cost of operation, declined only 25 percent between 1928 and 1931. It may be remarked

that the comparison of these figures indicates that the shift from mechanized to animal-operated equipment may not have been so great as some have supposed.

When the figures representing purchases of feed are compared with the data showing the increase or decrease in the number of farm animals, it appears that in some manner a considerable increase in animal husbandry efficiency must have been achieved. Either farm production of feeds must have been very greatly increased or feed must have been used to much greater advantage; this is assuming, of course, no considerable deterioration of the livestock.

These data are summarized in the following table, which has been adapted from table 454, Year Book of Agriculture, 1933 (p. 703):

CURRENT VALUE OF AGRICULTURAL CAPITAL, GROSS INCOME, AND SELECTED EXPENDITURES ON FARMS OF THE UNITED STATES, 1928, 1929, 1930, 1931, AND 1932

[Values in millions of dollars]

Year	Current value of agricultural capital	Gross income	Wages (including board)	Feed	Fertilizer	Farm implements, not including trucks and tractors	Other farm machinery, including cost of operation	Number of farm animals
1928	$56,561	$11,741	$1,183	$897	$273	$508	$918	56,701
1929	57,600	11,918	1,194	840	256	578	885	57,878
1930	57,672	9,414	1,011	497	174	480	786	59,730
1931	52,276	6,911	734	359	96	267	691	60,987
1932	43,316	5,143	475			110		62,656
Index numbers (1928=100)								
1929	102	102	102	94	95	114	96	102
1930	102	81	86	55	64	84	85	105
1931	92	59	62	40	35	52	75	107
1932	77	49	40			21		111

By way of summary, it would appear from the data contained in the 1933 Year Book of Agriculture that depression effects, both advantageous and detrimental to labor productivity, will be carried over. It is to be expected that net gains somewhat comparable to gains that have been noted in other principal industries will be maintained and consolidated, the causes being on the whole the same in agriculture as in other industries. On the other hand, detrimental effects are likely to be far greater in agriculture than in some of the other industries. When prices are falling and the farmer has all he can do to make receipts equal expenditures, to say nothing of making a profit, the temptation is always great to give all of his time to the production of marketable products, neglecting the care of equipment or animals not presently in use, or making excessive drafts upon his fertility reserves. Furthermore, facilities for taking care of idle equipment are far less ample on the farms than in the factories. On the whole, it appears likely that losses in efficiency due to these and other causes may balance or even overbalance gains due to operation of the favorable factors.

EMPLOYMENT CONDITIONS AND UNEMPLOYMENT RELIEF

Study of Unemployment in Buffalo, N. Y., in 1933 [1]

PRELIMINARY results of the fifth annual study of unemployment in selected areas of Buffalo, N.Y., were announced December 10, 1933, by the New York State industrial commissioner. These data indicate that in November 1933, 282 workers per thousand were unemployed as compared with 312 per thousand in 1932. Since studies of a like nature for the same areas have been made each November beginning with 1929, comparable data are now available for the past 5 years.[2] This work is sponsored by the Buffalo Foundation, in cooperation with the State department of labor. Students of the State teachers' college at Buffalo and of the University of Buffalo made about 10,000 house-to-house visits to enumerate the unemployed.

In November 1933, of the 15,729 usually employed persons able and willing to work, 9,157 or 58.2 percent were employed full time, 4,428 or 28.2 percent were unemployed, and 2,144 or 13.6 percent were employed part time.

Summarizing the data for men and women able and willing to work in 1933 shows that 62.7 percent of the men and 16.8 percent of the women were employed full time; 12.2 percent of the men and 27 percent of the women were employed part time; and 25.1 percent of the men and 56.2 percent of the women were unable to find work. The percentage of men fully employed and on part time is approximately 75 percent of all males able and willing to work, in contrast to only 44 percent of the women.

Comparing the results of the five studies of November unemployment, it was found that among persons who were able and willing to work those who could not find employment constituted the following percentages:

Men:	*Percent*	Women:	*Percent*
1929	6. 2	1929	3. 5
1930	17. 2	1930	14. 6
1931	24. 3	1931	21. 1
1932	32. 6	1932	25. 4
1933	25. 1	1933	56. 2

[1] New York. Department of Labor. Division of Statistics and Information. Press release, Dec. 10, 1933.

[2] For data regarding these studies see Monthly Labor Review, December 1929 (p. 192), December 1930 (p. 68), February 1932 (p. 262), and January 1933 (p. 77).

The employment status of men shows a considerable improvement over 1932 but among women unemployment has risen from 25.4 percent in 1932 to 56.2 percent in 1933.

Of men and women able and willing to work, those who were employed part time in November were as follows:

Men:	*Percent*	Women:	*Percent*
1929	7. 1	1929	5. 4
1930	18. 6	1930	12. 2
1931	23. 2	1931	16. 3
1932	23. 4	1932	19. 0
1933	12. 2	1933	27. 0

The proportion of men on part-time employment is only about half that of 1932 but among women part-time employment increased from 19 percent in 1932 to 27 percent in 1933.

Although the percentage of unemployment among men able and willing to work has fallen 7.5 percent since November 1932, the proportion of idle men who have been unemployed more than 52 weeks is higher, being 68 percent in 1933 and 60 percent in 1932. About four-fifths of this group have been unemployed more than 2 years. It appears that the men who are being put back to work are from those groups who had been unemployed less than 52 weeks. Unemployment had lasted less than 10 weeks for 18 percent of the men, more than 10 but less than 52 weeks for 13.8 percent, and 52 weeks and over for 68.2 percent.

TABLE 1.—EMPLOYMENT STATUS OF ALL PERSONS ABLE AND WILLING TO WORK, BY SEX, 1933

Employment status	Number			Percent		
	Males	Females	Both sexes	Males	Females	Both sexes
Employed full time	8, 899	258	9, 157	62. 7	16. 8	58. 2
Employed part time	1, 729	415	2, 144	12. 2	27. 0	13. 6
Two thirds but less than full time	503	87	590	3. 5	5. 7	3. 8
One half but less than two thirds	692	163	855	4. 9	10. 6	5. 4
One third but less than one half	319	69	388	2. 3	4. 5	2. 5
Less than one third	212	94	306	1. 5	6. 1	1. 9
Fraction not reported	3	2	5	(1)	. 1	(1)
Unemployed, able and willing to work	3, 564	864	4, 428	25. 1	56. 2	28. 2
Total	14, 192	1, 537	15, 729	100. 0	100. 0	100. 0

[1] Less than one tenth of 1 percent.

TABLE 2.—DURATION OF UNEMPLOYMENT OF ALL MALES ABLE AND WILLING TO WORK BUT UNABLE TO FIND JOBS, 1929 TO 1933

Duration of unemployment	Number		Percent				
	1932	1933	1929	1930	1931	1932	1933
Under 2 weeks	55	95	15.8	4.3	2.6	1.4	2.7
2 and under 4 weeks	104	185	22.2	7.9	5.0	2.7	5.2
4 and under 10 weeks	245	359	30.4	21.0	12.7	6.3	10.1
10 and under 20 weeks	305	204	12.3	17.9	13.4	7.8	5.7
20 and under 30 weeks	419	156	6.2	14.3	11.7	10.7	4.4
30 and under 40 weeks	230	81	3.1	7.9	6.4	5.9	2.3
40 and under 52 weeks	199	52	.7	5.6	5.2	5.1	1.4
52 weeks and over	[1] 2,343	[1] 2,432	9.3	21.1	43.0	60.1	68.2
Total	3,900	3,564	100.0	100.0	100.0	100.0	100.0

[1] Includes 1,425 persons in 1932 and 1,929 persons in 1933 who were unemployed 104 weeks and over.

Changes in Occupational Distribution of Insured Persons in Great Britain, 1923 to 1933

IN ITS issue for November 1933 the Ministry of Labor Gazette publishes a detailed study of the insured population of Great Britain, based on information derived from the exchange of unemployment books in July. Insured persons, it is explained, are persons in respect of whom unemployment books have been issued by the Ministry of Labor, and "who are either in insured employment, or, if unemployed, are maintaining contact with employment exchanges or have ceased to do so within a limited period."

At the beginning of July 1933 the total number of insured persons in Great Britain was 12,620,000 (including 147,000 persons insured under special schemes for the banking and insurance industries). If Northern Ireland is included, the total is 12,883,000, showing an increase of 1,397,200 since 1923. The movement has been uneven as between different industries.

The depressed industries attract comparatively few new entrants, while the expanding industries as a rule show proportions well above the average. Among the latter the more important, in the case of men, are the electrical trades, hosiery and clothing manufacture, the bread, biscuit, etc., and woodworking industries, printing, publishing, and bookbinding, the distributive trades, commerce and finance, and the hotel, public house, restaurant, boarding-house, and laundry services. Among women the electrical, musical instrument, and food manufacturing industries, with hotel, boarding-house, and restaurant service, the distributive trades, and commerce and finance show high proportions of new entrants. The exitant figures show that the movement of men out of the depressed trades has continued. This is particularly the case with general and marine engineering, shipbuilding, and ship repairing; while a similar movement is shown by the figures for pottery and earthenwear manufacture, the cotton industry, artificial silk yarn manufacture, musical-instrument manufacture, and public-works contracting.

To show the general trend during the decade, the industries covered by unemployment insurance are classified into nine groups, the num-

ber of insured persons in each in 1923 is taken as the base, and the percentage of increase or decrease calculated for each of the last 3 years, giving the following figures:

PERCENTAGE CHANGE IN NUMBER OF INSURED PERSONS IN SPECIFIED INDUSTRY GROUPS

Industry group	Estimated number insured, July 1933	Percent increase (+) or decrease (−) since 1923		
		July 1931	July 1932	July 1933
Fishing	32,190	+28.4	+30.0	+34.4
Mining and quarrying	1,126,090	−11.6	−12.0	−13.8
Manufacturing	6,016,030	+6.6	+5.3	+5.3
Building and contracting	1,161,360	+40.3	+42.6	+44.4
Gas, water, and electricity supply	[1] 182,780	+5.4	+5.6	+10.8
Transport, communication, storage, and distribution	[1] 2,850,840	+37.4	+41.3	+42.6
Commerce, banking, insurance, and finance	245,530	+4.5	+7.8	+9.0
Miscellaneous services	801,670	+44.8	+46.0	+52.9
National and local government	466,510	+14.3	+16.4	+17.6

[1] The figures are exclusive of persons exempted from unemployment insurance under certificates of exception. The total number of employees covered by such certificates in Great Britain is now about 530,000, of which the greater number are employees of railway companies (384,600). A precise industrial analysis of these excepted workers is not available for 1923, but it is estimated that if they were included in the respective industrial groups to which they belong, the increases in the totals between 1923 and each of the years 1931, 1932, and 1933 would be: Gas, water, and electricity supply, 14, 15, and 18 percent, respectively; transport and distribution, 29, 33, and 34 percent, respectively.

The table brings out the striking fact that while the insured population as a whole has increased by 15.4 percent in the 10-year period, the numbers in building, contracting, transport, and distribution have increased by over 40 percent, and those in the miscellaneous services by over 50 percent. These groups together now include over 37 percent of all insured workers. The numbers in manufacturing industries, however, have increased by only 5.3 percent, while the numbers in mining and quarrying have declined by 13.8 percent.

The decrease among those employed in mining and quarrying is confined to the mining of coal, which shows a falling off of 15.1 percent, and to the mining of iron ore and ironstone, in which the numbers have declined by 40 percent.

The increase in the building and contracting group is mainly due to the increase in the public works contracting branch. In the period July 1929 to July 1931, "large numbers of men from the coal-mining, iron and steel, shipbuilding, and ship-repairing industries of the depressed areas were transferred into this industry." The rate of expansion slowed down in 1931–32, and was followed by an actual contraction in the next year. Nevertheless, in July 1933 the index figure for this branch stood at 226.3, while that for building was only 129.6.

In the transport and distributive trades, the greatest increase is shown in the tramway and bus services, for which the index is 173.7, while for the distributive trades it is 161.8, and for road transport not separately specified it is 145.1. The insured persons in the railway services (only certain groups of railway employees being eligible for insurance) sank from 190,210 in 1923 to 124,340 in 1933, and the

dock, harbor, river, and canal services also showed a decrease, though not so marked, their index being 91.3 in 1933 against 67.4 for the railway services.

The national and the local government services show a striking difference in trend, the index for employment in the National Government standing at 65.2 in 1933, while that for the local government stood at 157.4.

The figures for local government, which show an increase of 57.4 percent, have probably been inflated by the inclusion of a number of workers engaged on works specially undertaken for the relief of unemployment. The heaviest increases in this service occurred between 1929 and 1931 at the same time as the large increase in public works contracting.

The largest percentage increase shown in the table occurs in the group of miscellaneous services, and in this, again, there is considerable variation between its constituent parts. The various services included, and the index for each in 1933, are as follows: Professional service, 134; laundries, dyeing, and dry cleaning, 145.5; hotel, public house, restaurant, boarding house, club, and similar services, 157; while for entertainments and sports it rose to 182.8.

New Unemployment Bill in Great Britain

ON NOVEMBER 8, 1933, an unemployment bill backed by the Government was introduced in Parliament, the terms of which are thus summarized in a financial memorandum prefixed to its text:

Part I of the bill amends the unemployment insurance acts. Part II makes provision outside unemployment insurance for assisting and promoting the welfare of able-bodied persons, within the definitions in the bill, who are unemployed and in need. Part III contains transitory provisions relating in the main to the period between the coming into force of part I and the full operation of part II.

Changes in the Unemployment Insurance System

THE present rates of contribution and benefit remain unchanged, but the possible duration of the benefit period is increased. At present, benefits may not be drawn for more than 26 weeks in 1 benefit year, and if the worker at the end of that period is still unemployed, he receives further help only if transferred to the list receiving transitional payments. A communication from the United States consul in London gives the following summary of the rather involved provisions dealing with this matter:

Persons who have paid 30 contributions in the preceding 2 years will be entitled, as at present, to draw benefit for 26 weeks in a benefit year; but this period is to be extended for those who have been in the insurance scheme for 5 years. Broadly, it is proposed that they should be allowed 6 additional days of benefit for every 10 contributions paid in the 5 preceding years; thus a man who has during that period made the full number of 260 contributions and received

no benefit can claim 52 weeks' benefit as a right. This concession is made possible by the fact that the insurance fund is now showing a weekly balance on the credit side. It will result in the transfer of a substantial number of persons from transitional payments to insurance benefit.

Lower Age of Entrance into Insurance

THE minimum age for entering insurance is changed from 16 years to whatever may be the school-leaving age at any given time. At present, it is 14 years. For employed persons between 14 and 16, contributions of 2d. weekly are to be paid by employer, employee, and the Government. Until he reaches the age of 16 no benefit is to be paid to the child, but the dependent's benefit will be allowed his parents if he is unemployed or if he is kept in full-time attendance at a day school or training center. However, contributions will be credited to him, so that he may become eligible for unemployment benefit as soon as he reaches 16. Under the present plan, he must make a certain number of contributions after reaching that age before he can draw benefit. If he remains in full-time attendance at school after reaching 14, the Government will credit him with contributions, up to a maximum of 20, according to the length of time he continues his school attendance.

In general, all unemployed juveniles under 18 will be required to attend juvenile instruction centers, and provision is made for increasing the number of these.

Financial Provisions

DUE TO the recent fall in unemployment, the insurance fund is now showing a surplus for the current year on insurance account of about £5,250,000, and it is believed that the present rates of contribution and benefit will keep it on a solvent and self-supporting basis for the future. The bill provides for a statutory committee, not to exceed six in number, whose duty it will be to examine the state of the fund at the end of each calendar year, and to report to the Minister of Labor thereon not later than the end of February. The committee is also to keep a close watch over the working of the system, and if at any time the fund is threatened with a prospective deficiency or seems likely to have a greater surplus than is required for working conditions, the committee is to report at once with appropriate recommendations for restoring the balance between receipts and obligations.

The debt at present standing against the fund—£115,000,000—is to be discharged, with interest at the existing rates for unexpired periods of current advances and thereafter at 3½ percent, by half yearly installments of £2,750,000. It is estimated that at this rate the debt will be discharged in approximately 40 years.

Unemployment Assistance

THE Government proposes to take over the administration of relief to the able-bodied unemployed who have not been engaged in insurable occupations, or who, having been so employed, have exhausted their insurance rights. Henceforth, therefore, the able-bodied unemployed will fall into two distinct classes, those with a legal claim to insurance benefit and those without such right, and the central Government assumes responsibility for the care of both. This responsibility, however, is modified by the requirement that for 5 years to come the local authorities must contribute to the general Government for this purpose three fifths of the estimated amount which the care of the able-bodied unemployed would have cost them had the central authorities not taken over the duty. The local authorities object to this provision, and the financial arrangements respecting it are still under discussion.

The administration of this part of the bill is to be in the hands of a new central authority, the Unemployment Assistance Board, with a membership of not more than six, which is to have its own local officials and committees. The Minister of Labor is responsible to Parliament for the general policy of the board, and must submit to Parliament for approval the regulations which it adopts for the determination and the relief of need. The application of these regulations to individual cases will be a matter for the board's own determination.

In order to maintain or to restore the employability of the able-bodied unemployed, the board is given power to establish training courses for those aged 18 and over, attendance at which may be made a condition of receiving relief. To make these courses more practical, the board is empowered to make arrangements with local authorities for the employment of trainees for periods of not more than 3 months "upon work for the authority of such a character as to render them more fit for entry into or return to regular employment." Such work is to be paid for at the rates customary in the district.

Emergency Relief Work in New South Wales

IN MAY 1933 the Government of New South Wales announced a scheme under which unemployed men in receipt of food relief might be employed by municipal and shire councils on special relief works at rates of wages which would yield them a cash payment of higher value than the food orders they had been receiving. It was required that the works be approved by the Minister of Labor and Industry, that the men be engaged through the State employment exchanges, and that the councils taking advantage of the plan guarantee

that none of their regular workers would be displaced as a result of employing these men.

The Government would provide payment for a weekly period of employment for each man, varying according to his family responsibilities, but the councils might, if they chose, give an additional period from their own funds. The cash payment assumed by the Government ranged from 9s. 5d. ($2.29) [1] weekly for single men to £2 3s. 8d. ($10.63) for a married man with nine children. (The food relief scale which these payments were to supersede had ranged from 5s. 4½d. [$1.31] to £1 13s. 5½d. [$8.14].) The period to be worked ranged from 6 hours weekly for the man receiving the lowest amount to 28 hours for the man with nine children. The scheme was adopted as an experiment for 3 months only, but it was stated that at the end of that time a survey of its results would be made, and, if it were succeeding, its extension might be considered. (New South Wales Industrial Gazette, May 1933, p. 794.)

The Gazette for August 1933 states that at the beginning of that month a review of the work of the scheme showed that it had been completely successful, and that because of its results "in alleviating the effects of unemployment, its ready acceptance by the unemployed, and the permanent improvements effected in the municipalities and shires", the Government had decided to continue its operation for 12 months. The following table is presented, showing the rapid extension of work under the scheme:

GROWTH OF EMERGENCY WORK RELIEF SCHEME IN NEW SOUTH WALES

[Conversions into United States currency on basis of pound at par=$4.8665. Average exchange rate in May 1933=$3.93; in June 1933=$4.14; in July 1933=$4.65]

Date	Number of councils using scheme	Number of persons employed	Expenditure on scheme			
			English currency			United States currency
1933			£	s.	d.	
May 12	8	3,044	2,720	3	11	$13,237.83
May 19	8	5,634	5,126	0	3	24,945.74
May 26	10	6,144	5,608	17	9	27,295.65
June 2	18	8,638	7,909	1	6	38,489.51
June 9	37	14,527	12,999	18	4	63,264.09
June 16	65	17,468	15,500	16	10	75,434.85
June 23	82	20,044	17,596	11	9	85,633.79
June 30	95	22,280	19,783	11	9	96,276.83
July 7	119	23,718	21,114	8	1	102,753.25
July 14	139	25,665	22,827	19	8	111,092.38
July 21	150	27,088	23,866	17	4	116,148.11
Total			[a] 155,083	19	6	754,716.16

[a] Not exact sum of items, but as given in report.

[1] Conversions into United States currency on basis of pound at par=$4.8665. Exchange rate in May 1933 was $3.9324.

It is estimated that if the scheme had not been in operation the persons employed under it would have received food relief involving an expenditure of £107,003 ($520,730), so that the workers have received £48,080 ($233,981) more than they would have had under the direct relief scheme, and in addition have been able to give service in return for what they got. At the time the above figures were gathered, the scheme was still expanding rapidly.

In addition to the councils included in the above table, 40 other municipal and shire councils had accepted the scheme at the beginning of August 1933, and it was estimated that 2,448 persons would be employed by these councils, the wages expenditure amounting to £2,000 [$9,733] per week.

Altogether 36,500 men will be employed by councils which have already adopted the scheme and by other councils which, it is anticipated, will come under it, and the weekly expenditure on wages will amount to £32,089 [$156,161].

In addition to the employment directly provided by the scheme, account should also be taken of the employment brought about by the expenditure of the municipalities and shires on materials and supervision, amounting to about £300,000 [$1,459,950] per annum.

INDUSTRIAL AND LABOR CONDITIONS

Negro Work and Welfare in West Virginia

THE Bureau of Negro Welfare and Statistics of West Virginia has recently issued a report covering the period 1929–32. During the decade 1920–30, the Negro population of the State rose from 86,345 to 114 913, an increase of 33.1 percent.

Occupational Distribution

IN 1930 THE colored population of the State aged 10 years and over numbered 89,921, of whom 52.5 percent were gainfully employed. "This exceeds the native white population's percentage by a little more than 10 percent and is behind the foreign-born whites' percentage" by 10 percent. Considering only the male workers, by far the largest group was found to be in the coal-mining industry, which employed 22,300. Next came the group engaged in transportation, numbering 3,451, most of whom were employed by the railroads. Domestic and personal service, with 3,354, employed almost the same number as transportation. Professional service accounted for 1,296, trade for 1,031, and agriculture for 1,655. The building trades employed 826, chemical and allied industries 502, blast furnaces and steel rolling mills, 391, and other iron and steel industries, 545. The remainder were scattered, hardly any industry or trade being without a few representatives. For women, domestic and personal service was the principal line of industry, employing 7,062, of whom 1,053 were in hotels, restaurants, and the like. The next largest group, 996, was found in professional and semiprofessional service, 105 carried on independent hand trades, and 103 were in wholesale and retail trades.

In the coal mines the Negro has proved a valuable worker, adjusting himself easily to an amicable relationship with employees of other racial groups within the industry, and being regarded as a "dependable worker and a contented member of society in the coal-mining communities". Among the railway systems in the State, the Norfolk & Western is the largest employer of Negro labor.

In this company's shop at Bluefield as hostlers, helpers, and on the yards as brakemen, freight handlers, baggagemen, commissary workers, and train porters, the Negro represents an appreciable percentage of that company's labor personnel. Officials of the Norfolk & Western system give favorable testimony to the efficiency, promptness, and dependability of their Negro employees.

There are very few Negroes in business for themselves in West Virginia, and as employers they are a negligible factor. Negro businesses are confined largely to the operation of restaurants, hotels, cleaning and pressing shops, drug stores, billiard rooms, barber shops, and an occasional grocery.

Our survey shows that the number of Negro-operated businesses has largely decreased during the period covered by this report. This has been due largely to the depression that has also affected all other business. But as most Negro-operated business is operated by only a few people, this decrease has had no appreciable effect upon the question of unemployment. His commercial and financial poverty preclude the possibility of employment of any appreciable numbers within his own group.

A study of the individual business concerns which have disappeared during the depression shows, naturally enough, that they were in the main the smaller enterprises, the larger enterprises being better able to weather the storm. The vicissitudes of the last few years have shown that if in the future the race is to bear a proportional part in the industrial and commercial life of the country, there must be sympathetic and intelligent cooperation from all its parts. The economic position of the poorer groups must be improved, and they must bear a part in financing business enterprises.

The foundation of our economic structure is represented by the day laborer in which bracket falls more than 80 percent of our Negro population. This foundation must be strengthened. The average purchasing power of this group must be raised. The new era must provide for them continuous employment at a satisfactory wage. Such a wage should guarantee the American standard of living for his class. It should be large enough to make possible a saving account for the provident and thrifty. Business is affected by the ability to purchase of its possible or probable patrons. Capital for financing commercial enterprises is directly or indirectly produced from savings. Facts indicate that the Negro corporation of the near future must depend upon its capital from the small savings of a large number of small investors rather than the subscriptions of a few large ones, as heretofore.

Home Ownership in 1930

In 1930 the census showed that of 26,274 Negro families in West Virginia 4,900, or 18.7 percent, owned their own homes. The desire to own a home is strong among the colored people, and many who are not yet able to accomplish it have bought or are buying lots on which to build as soon as their means permit. Unfortunately, this desire has been taken advantage of by unscrupulous real estate promoters and salesmen, who have sold the Negroes property "which was often grossly misrepresented as to topography, location, and value."

Effects of the Depression

THE colored people of West Virginia suffered severely from unemployment during the depression, but at the time this report was prepared (December 1932) the director of the bureau believed that they had not suffered disproportionately. Apparently they had not been discharged in favor of workers of another race or color.

Reports reached this bureau from time to time of organized efforts to induce employers to replace their colored employees with those of the other group. In every case where a specific instance was named the office investigated. The charge was not substantiated in a single case. A certain veterans' organization making a drive for the unemployed was so accused. A State-wide investigation failed to support the accusation. These charges, no doubt, were but the product of a hysteria of fear peculiar to the stress of the times.

Lack of employment led among the Negroes, as among those of other races, to the familiar evils of overcrowding, insufficient nourishment, and bad living conditions generally, with the accompanying risks of increased susceptibility to tuberculosis, a growth in juvenile delinquency, and similar unfortunate developments. This will leave the race with an increased handicap, even when the depression is over. Moreover, even in that period the Negro, like other workers, will have to face the increased competition of machinery, which will be the more severe, in his case, because so much of his activity is along the lines of unskilled labor in which the machine becomes a more dangerous rival year by year. To cope effectively with the situation which is likely to develop, the colored population must organize and work together cooperatively.

This bureau, recognizing the facts stated herein, and the keen competition that does and must necessarily face the colored worker in the immediate future, has developed a plan of assistance. This plan calls for the organization in the more populous centers of a group of the most intelligent and public-spirited Negroes whose mission among other things will be as follows:

To cooperate with employers of labor by furnishing upon request the names of competent and efficient Negro workers.

To find new jobs for Negroes, wherever possible, in fields where he is at present barred solely on account of race.

To instruct the Negro, already employed, by means of lectures, etc., that "the job is the thing", to the end that his increased efficiency will make him a more valuable investment to his employer and thus safeguard himself against displacement.

The bureau has found, it is stated, that work along these lines can be handled more successfully by local groups than by means of a central office. A group of the kind contemplated has already been formed in Charleston, and others are to be developed.

The report contains also a general survey of the position of the Negro in West Virginia, including educational opportunities, religious and cultural facilities, welfare and correctional institutions, and other particulars bearing upon his status and the possibilities open to him.

Economic Condition of Natives in South Africa

THE International Labor Office, according to Industrial and Labor Information for November 6, 1933 (p. 185), has received the findings of a European-Bantu conference organized by the South African Institute of Race Relations and held at Bloemfontein July 5–7, 1933. The conference was attended by nearly 300 delegates, including leaders of native thought throughout the Union and the native territories, together with students, sociologists, Government officials, and other public men.

Unemployment among Natives

THE conference recorded the existence of widespread and increasing unemployment among natives in urban areas, and attributed it to a number of causes, among which were the overpopulation of native areas, the Government's white labor policy, the special disabilities imposed on natives by pass laws and other restrictions, and the unattractive conditions of work and wages of recruited labor in the Rand mines and the Natal sugar plantations.

Among the recommendations made by the conference were the release of additional land for native farming, the development of agricultural education and cooperation among natives, the elimination of labor service contracts (whereby the tenant binds himself to perform so many days' labor) in favor of wages, the abolition of restrictions on the movement of natives and the provision of an adequate system of employment exchanges.

General Economic Conditions

SIMILAR conclusions were recorded in connection with the examination of the report of the Native Economic Commission. The conference urged that more land be released for native occupation and that the economic development of the native reserves be undertaken as an important step toward the stabilization of urban conditions. It expressed its conviction that an advance in the reserves on a scale sufficient to exercise a material influence on the urban wage and unemployment problem could only take place as part of a national plan involving a considerable expenditure of capital funds. In this connection, it pointed out that as the labor of native workers was essential to the success of the gold mines, the natives had a special right to consideration by the State at a time when so many other classes were benefiting from the gold premium and the 6,000,000 pounds extra revenue resulting therefrom.

As a means of providing economic security for the native rural population and of solving the problem of seasonal demand for native labor on farms, the conference recommended the establishment of a form of leasehold tenure on a cash rent basis under the direction of a land development board.

For the promotion of native welfare in urban areas, attention was drawn to arguments in favor of the removal of the color bar and the application of the machinery of the conciliation and wage board acts to the regulation of native wage conditions.

OLD-AGE PENSIONS

Old-Age Pensions in California

THE third biennial report of the California Department of Social Welfare, covering the period July 1, 1930, to June 30, 1932, devotes a section to the working of the old-age pension law, which was enacted in 1929 and became effective January 1, 1930. This provided for the payment of an allowance to those who could meet the basic requirements of "70 years of age, 15 years United States citizenship, 15 years residence in California, no relatives able to support, an income of less than $1 a day, and property not exceeding $3,000 in value." Application is made to the county, which pays the pension but is reimbursed by the State up to half the amount given. The legislature of 1931 made some minor changes in the act, but left the principal features unchanged.

Number Receiving Pensions

AS STATED, the act became effective January 1, 1930. By June 30, 1932, the number of applications submitted was 15,196, the number approved was 13,719, and the number denied was 1,477. This does not include a large number of tentative applications, which did not get beyond the first stage because it was evident that eligibility, principally on the basis of need, could not be established. Preliminary estimates had placed the number of probable applications at a lower figure, but the financial crisis, occurring only a few months before the act went into operation, probably accounts for the excess. In times of depression, the report notes, aged persons are among the first to lose any employment they may have; the unemployment of children or other relatives cuts off natural sources of help, and the failures of banks and other corporations and the depreciation of securities sweep away the savings which they had expected to carry them through old age.

The number receiving pensions varies according to local conditions, ranging from 3 in Mono County to 2,708 in Los Angeles County; the number per 1,000 population ranges from 0.6 in Imperial County to 17.5 in Trinity County.

Recipients of Pensions

On June 30, 1932, there were 11,057 recipients of pensions, 6,944 men and 4,113 women. The overwhelming majority, 10,754, were white, 83 were Indians, 185 were Negroes, 1 was an Oriental, and for 34 the race was not stated. The majority, 56.5 percent, were aged 70 and under 75, 28.8 percent were 75 and under 80, 10.9 percent were 80 and under 85, and 3.9 percent were 85 years and over. A table giving the marital status of the pensioners shows 22.3 percent married, 54.2 percent widowed, divorced, separated, or deserted, and 23.3 percent single. "Compared with earlier studies of smaller groups, a larger number of couples is found, showing that the act is accomplishing one of its main purposes, that of enabling old couples to remain together in their own homes."

Of the men 94.3 percent and of the women 54 percent had been formerly employed in the trades, or domestic and personal service. Professional and semiprofessional occupations accounted for 392 of the men and 233 of the women, while 7 of the men and 1,660 (40.3 percent) of the women had never been gainfully employed. Something over one half (55 percent) of the group had no property and no financial resources. Practically 15 percent owned a home, 2.3 percent owned other real estate, 13.9 had cash in bank, 10.4 percent had insurance, and 3.5 percent had other assets. If the value of the home had exceeded $3,000 the applicant would not have been eligible, but in the majority of cases it was well below that figure. "Other real estate" generally consisted of vacant lots or other investment property which could not be sold during the depression. The cash and insurance usually represented small savings, designed to provide for the pensioner's funeral expenses. Under the law the county supervisors may require that any property an applicant possesses shall be transferred to the county with a life tenure secured to the pensioner and to the surviving spouse, if any. The counties vary as to the extent and the manner of enforcing this ruling.

In some counties deeds only are taken, in others liens, in others simply an agreement to reimburse, while in others various combinations of these methods are in effect. In approximately one third of the counties no procedure has been established for reimbursement from property or resources, though the matter is under consideration in several instances. In 23 counties taxes are canceled on property involved, and 15 counties assume the responsibility of keeping property in repair.

Discontinued Cases

In all, 2,662 cases have been discontinued. Of these 1,671 cases (12 percent of all cases approved) represent deaths. "Nineteen percent of all cases originally approved are now discontinued."

Of the 991 cases discontinued for reasons other than death, the most noteworthy and the largest number are those representing admissions to State hospitals, county hospitals, old people's homes, or private institutions. This is a

forceful reminder that a properly rounded program for the aged cannot ignore the importance of suitable institutional provision for that group who, as the infirmities of age progress, become in need of hospital, infirmary, or custodial care. While the Old-Age Security Act provides outrelief to thousands of old people in their own homes, advancing age will later bring a large number of this group to the doors of an institution, to receive the special care demanded by disabilities and feebleness. Especially will this be true of those who are without relatives.

Cost of the System

For the year 1930–31, the total amount paid out by State and counties in allowances was $2,133,704; for 1931–32, it was $2,873,365. The amount of the monthly allowance to the individual varied, according to needs and local circumstances, from $5 up to the maximum of $30. The largest single group, numbering 3,533, received the $30 allowance, the next largest, 2,425, received $20, while those receiving $25 (1,585) and those receiving $15 (1,559) were almost equal.

In the counties with the greatest urban population, Alameda, Los Angeles, San Francisco, are found the largest number of cases receiving the maximum of $30 per month. In many rural agricultural counties, where low rents prevail, and foodstuffs are produced in abundance, the lowered cost of living results in correspondingly smaller grants. There are, however, a few rural counties in mountainous districts, in which high transportation costs increase food prices, and cold winters necessitate warm clothing and ample fuel, making the maximum amount necessary for those persons whose aid constitutes the only income.

It was not found possible to give accurately the cost of administering the act, "as expenses cannot be entirely segregated from the general cost of administering the other types of State aid, to orphans and needy blind, and the other responsibilities laid upon the State department of social welfare."

HEALTH AND INDUSTRIAL HYGIENE

Effect of the Economic Depression Upon Health

THE continued decline in mortality rates throughout the several years of severe economic distress has led to the impression among many that the depression either has not adversely affected the health of the American people, or that any ill effects from it have been prevented by an efficient public-health system and program of social relief. In order to determine, therefore, the actual conditions among the depression poor, a study was made by the United States Public Health Service and the Division of Research of the Milbank Memorial Fund, covering income, employment, and illness among about 12,000 families in 10 cities. In addition a study of diet and housing conditions was made among a small group of families in each surveyed city, and school children in enumerated families were examined in two of the cities. The report under review includes only provisional sickness data in three of the canvassed cities—Birmingham, Detroit, and Pittsburgh.[1]

In general, large cities were selected for the survey, as unemployment and the privations resulting therefrom were known to be greater in large cities. The cities which were selected for study were Detroit, Cleveland, Pittsburgh, Syracuse, New York, Brooklyn, Baltimore, and Birmingham; in addition a survey was made in a number of coal-mining camps near Morgantown, W.Va., and in cotton-mill villages near Greenville, S.C.

The districts selected for the survey were in the poorer sections of the cities, both well-to-do and slum areas being avoided as not containing a large enough representation of persons able and willing to work but having a high rate of unemployment at the time of the canvass. As even in these poorer districts there were families still in reasonably comfortable circumstances (i.e., with adequate food, clothing, and shelter), such families served as a control group whose illness record could be compared with that of families which had been in a state of comparative poverty for one or more years preceding the survey. In the selected districts every family was included unless information was refused, which was rarely the case.

[1] United States Public Health Service. Public Health Reports, Oct. 13, 1933. Sickness and the Economic Depression; Preliminary Report on Illness in Families of Wage Earners in Birmingham, Detroit, and Pittsburgh, by G. St. J. Perrott, Selwyn D. Collins, and Edgar Sydenstricker.

The information was secured by house-to-house visits and included data regarding the occupation, income, and regularity of employment of each wage earner for each year from 1929 to 1932; the nationality, racial stock, and education of husband and wife; birth date, sex, and marital status; and illness of each member of the family during the 3 months prior to the enumeration visit, together with the extent of medical, hospital, nursing, and dental care received.

In the three cities covered in the present report schedules were secured from about 3,500 white families, and the data for 2,566 of these families including 11,330 individuals were found to be sufficiently complete to permit of their use. The persons included in the study were largely of the wage-earning class, the occupation of the chief wage earner in 1929 being that of skilled laborer in 59 percent of the families; unskilled, 19 percent; clerical and salesmen, 13 percent; dealers, merchants, etc., 7 percent; professional, 2 percent. In 1932 in 18 percent of the families the chief wage earner was without employment throughout the year. Taking into consideration all the wage earners in the family, however, in 1929 only 1 percent of the families had no employed workers, 16 percent had only part-time workers, and 83 percent had one or more full-time workers (including 2 percent in which the wage earner was living on income or pension). In 1932 the corresponding percentages were 12, 40, and 48, the per capita and family income, of course, following the same downward trend as the employment rates.

For the purpose of the inquiry, income included all receipts from any source—salary, royalties, interest, pension, earnings, borrowed funds, gifts, and public and private relief, in which was included the value of weekly food tickets from welfare institutions in cases where these were given. Among the group surveyed it was found that 25.2 percent had a total family income of less than $1,200 in 1929, while in 1932, 69.3 percent of the families were in this class; only 9.1 percent had incomes in excess of $2,000 in 1932 as compared with 40.3 percent in 1929.

Income Changes

In the study, classification of the households was made on the basis of family income per capita rather than total family income, since the latter figure takes no account of the size of the family. The surveyed group was divided into three parts—families having an income under $150 per capita per year being designated as "poor"; those with from $150 to $424 as "moderate"; and those with $425 and over as "comfortable." In 1929 the "poor" group constituted only 10.3 percent of the total, but in 1932 it accounted for 45.1 percent, while the "comfortable" group dropped from 47.1 percent of the total in 1929 to 13.3 percent in 1932. There was no great change in the percentage in the "moderate" class in 1932, but this is accounted

for by the fact that as some dropped to the low income group others from the higher income group took their places.

The following table shows the changes in the per capita income of 11,330 persons in Birmingham, Detroit, and Pittsburgh each year from 1929 to 1932.

TABLE 1.—DISTRIBUTION OF SURVEYED POPULATION ACCORDING TO ANNUAL FAMILY INCOME PER CAPITA, 1929 TO 1932, IN BIRMINGHAM, DETROIT, AND PITTSBURGH

Annual family income per capita	1929		1930		1931		1932	
	Number of persons	Percent	Number of persons	Percent	Number of persons	Percent	Number of persons	Percent
"Poor" group:								
Under $50	123	1.1	338	3.0	657	5.8	1,366	12.1
$50 to $99	401	3.5	925	8.2	1,426	12.6	2,236	19.7
$100 to $149	645	5.7	912	8.0	1,197	10.6	1,506	13.3
Total	1,169	10.3	2,175	19.2	3,280	29.0	5,108	45.1
"Moderate" group:								
$150 to $199	726	6.4	1,052	9.3	1,442	12.7	1,312	11.6
$200 to $249	882	7.8	861	7.6	1,121	9.9	1,178	10.4
$250 to $299	917	8.1	1,027	9.2	926	8.2	815	7.2
$300 to $349	1,068	9.4	1,062	9.3	901	7.9	717	6.3
$350 to $424	1,230	10.9	1,241	10.9	949	8.4	693	6.1
Total	4,823	42.6	5,243	46.3	5,339	47.1	4,715	41.6
"Comfortable" group:								
$425 to $499	1,200	10.6	880	7.8	708	6.3	506	4.5
$500 to $749	2,390	21.1	1,876	16.5	1,363	12.0	709	6.2
$750 and over	1,748	15.4	1,156	10.2	640	5.6	292	2.6
Total	5,338	47.1	3,912	34.5	2,711	23.9	1,507	13.3
Grand total	11,330	100.0	11,330	100.0	11,330	100.0	11,330	100.0

It appears from the table that only about one fourth of the individuals in families economically "comfortable" in 1929 remained so in 1932, and nearly an equal number had become "poor". More than half of those in moderate circumstances in 1929 had fallen into the "poor" class by 1932 and 9 out of 10 persons who were classified as "poor" in 1929 remained in that class throughout the 4 years. It is apparent, therefore, that very few persons had any increase in income during the depression and a very large proportion of the group suffered a drop in income.

Illness Rates and 1932 Income

THESE classifications of the families into groups having different types of economic history during the depression were used as the basis for comparing illness rates. While a large number of groups defined by an economic status might be used, the present report, because of the relatively small number of individuals included, limits the division to six categories depending upon whether or not the economic status had changed during the period.

The first group included individuals experiencing lowered family income per capita between 1929 and 1932, and was divided as follows:

1. Comfortable in 1929 and poor in 1932.
2. Moderate in 1929 and poor in 1932.
3. Comfortable in 1929 and moderate in 1932.

The second group included individuals who had not experienced lowered family income between 1929 and 1932 and were classified as comfortable, moderate, or poor in both 1929 and 1932.

Inquiry was made as to illness from all diseases and accidents, including mild as well as severe cases, covering the 3-month period prior to the enumerator's visit. As the sickness reports depended upon the memory of the informant, usually the housewife, it is considered that the records of disabling cases are probably better measures of real sickness than are the total cases, since the cases causing disability are more likely to be accurately and completely reported.

The illness cases were grouped according as their onset was prior to the survey period or within that period, and in each group the total number of cases is shown; the number of disabling cases, consisting of those which prevented the carrying on of usual activities; and the number of cases in which the patient was confined to bed for one or more days. All bed cases were included in the disabling class.

The illness rates are for the 3-month period of the survey, and were not reduced to an annual basis. The canvass in each of the 3 cities required from 3 to 4 weeks and the dates of the canvass were between March 20 and May 15, 1933, for all 3 cities.

The following table shows the incidence of illness for four groups of the surveyed population in the three cities, the groups being classified according to annual per capita income in 1932 in order to show the relation between economic status and illness as it was found in 1933.

TABLE 2.—INCIDENCE OF ILLNESS AS RELATED TO 1932 FAMILY INCOME PER CAPITA IN 2,566 WHITE FAMILIES IN BIRMINGHAM, DETROIT, AND PITTSBURGH

Annual family income per capita	Illness rate per 1,000 persons for 3 months' survey period						Population observed
	Onset within period			Onset prior to period			
	Total	Disabling	Bed	Total	Disabling	Bed	
Under $150	151	103	94	75	44	32	5,108
$150 to $249	143	104	94	66	38	31	2,490
$250 to $424	136	84	74	70	43	33	2,225
$425 and over	127	77	64	85	46	32	1,507

The table shows a lower illness rate for the higher-income groups in the illnesses which had their onset within the survey period, but the group of illnesses that had their onset prior to the survey period shows no relation to income, being largely chronic cases. The disabling-case rate for illnesses within the survey period among the two lower-income groups (under $250) was 35 percent higher and the bed-case

rate 47 percent higher than among the group having an annual family income per capita of $425 and over. Thus it appears evident that the persons in the poor group were more subject to illness than those who were in more comfortable circumstances.

A comparison of the illness rates of persons with diminishing incomes and those with unchanged income during the period 1929–32 showed an incidence of disabling illness 60 percent higher among persons who were comfortable in 1929 but poor in 1932 than among the group of persons who were comfortable throughout the period. The group which had dropped from comfortable to moderate showed a 15 percent higher disabling-illness rate than the comfortable group which had experienced no drop in income during the 4 years, while those families which had dropped from moderate to poor showed about the same illness rate as the group which had remained in moderate circumstances. When total illness rates are considered, these same trends are apparent and even the addition of the group of largely chronic cases bears out the fact that a relatively large drop in economic status appears to be connected with a high illness rate.

Unemployment and Illness

THE following table shows the relation between unemployment and illness, the families being divided into those having no employed workers in 1932, one or more part-time workers but no full-time workers, and one or more full-time workers with or without additional part-time workers.

TABLE 3.—INCIDENCE OF ILLNESS ACCORDING TO THE NUMBER OF EMPLOYED WORKERS DURING 1932 IN WHITE FAMILIES IN BIRMINGHAM, DETROIT, AND PITTSBURGH

Employment situation of family	Case rate per 1,000 persons for 3 months' survey period						Population observed
	Onset within period			Onset prior to period			
	Total	Disabling	Bed	Total	Disabling	Bed	
No employed workers	160	122	114	91	55	40	1,402
Part-time workers (1 or more; no full-time)	157	98	89	70	40	30	4,561
Full-time workers (1 or more; none or some part-time)	127	88	77	72	42	32	5,367

This table confirms the already established relationship between the incidence of illness and unemployment, as the table shows that the illness rate is highest in the families having no employed workers (122 disabling cases per 1,000) and lowest in the households having full-time workers (88 per 1,000). The group with no employed workers has a higher illness rate than the group with annual per capita income under $150; that is, 122 as against 103 disabling cases per 1,000 persons (table 2).

Conclusion

IN CONCLUSION it is pointed out that the authors have purposely refrained from drawing general conclusions from the findings of the study, as it is obvious that from the experience recorded in the samples surveyed in three cities only, no estimate can be made as to how large a proportion of the entire wage-earning population in urban areas in the United States has suffered increased illness. However, for the localities surveyed it is shown that the highest rate of illness occurred in the group which was in reasonably comfortable circumstances in 1929 but which had dropped to comparative poverty in 1932, while the group of individuals who might be described as "chronically poor," that is, persons who were poor even in 1929, showed a relatively low sickness rate as compared with those who had become poor as a result of the economic depression. The rate of disabling illness reported from families of the unemployed was 39 percent higher than that of the group having full-time wage earners and 25 percent higher than that of the group containing part-time but no full-time workers.

Dust Diseases of Underground Miners as an Engineering Problem

ANY or all dusts may be injurious to health, and the principal factor in dust disease is the quantity breathed, so that, while some damage may be caused by solution or chemical processes, the main cause is physical rather than chemical. These conclusions were expressed in a paper presented before the construction section of the National Safety Council at Chicago, Ill., on October 2, 1933, by Daniel Harrington, chief, Health and Safety Branch, United States Bureau of Mines.[1]

It is asserted that the solution of this serious and wide-spread industrial health problem is consequently an engineering problem and should be readily accomplished through cooperative efforts of the engineer, the worker, and the employer.

The paper discusses both quality and quantity of dusts in corroboration of the possible injury from any kind of dust if present in the air in minute form and breathed in large quantity over long periods of time, though it is admitted that hard, sharp, and insoluble material, such as flint or silica, may be more harmful than coal, limestone, or shale dust, if present in similar quantities. Reference is made to examinations of coal miners, disclosing nasal, throat, or bronchial trouble, and even miners' consumption.

[1] Occupational disease hazard of silicosis in construction operations, and its prevention. Published by permission of the Director, United States Bureau of Mines. Washington, 1933. [Mimeographed.]

Attention is also called to the attitude of some employers, who deny the existence of any dust diseases among their employees, and of the miners themselves, who frequently oppose all attempts at physical examinations or the use of any remedial equipment or methods. It is claimed that there appears in many instances a concerted effort to hide the facts.

Essential measures to prevent dust diseases are advised, such as: Use of water in drilling, or in sprinkling surfaces, or in connection with processes; adequate ventilation to remove fine dust particles in the air; installation of best available equipment for the prevention of dust formation; physical examination of workers and transfer of affected persons to nondusty operations; and disinterested investigations to obtain dependable data for use in the regulation of conditions.

INDUSTRIAL ACCIDENTS AND SAFETY

Demonstration of Dust Explosions in Industry

THE possibility of minimizing the effect of dust explosions in factories and the further possibility of practically preventing the explosions themselves were effectively demonstrated on November 15, 1933, through a series of explosion tests. The tests were conducted in a miniature factory at the Arlington Farm of the Department of Agriculture under the supervision of Dr. David J. Price, principal engineer in charge, chemical engineering division of the Bureau of Chemistry and Soils, and chairman of the dust explosion hazards committee of the National Fire Protection Association.

The structure in which the dust explosions were produced consists of a room, connected with a gallery, which in turn connects with a tower, all provided with hinged doors, pivoted sash, or adjustable roof vents, which permit regulation of the venting area, and cups for holding the dusts. The explosions were produced by blowing the contents of the cups in the room into the air, creating a dust cloud which was ignited from a heated electrical coil, conditions very similar to those which have caused disastrous dust explosions in many factories.

Grain dust, wood-flour dust, and powdered milk were used for the demonstrations. Some of these explosions, made with the swinging panels fastened down, resulted in broken glass flying from the windows and flames jumping from the point of origin through the entire miniature factory. Sufficient venting area was provided in other demonstrations to release the explosion pressure without damage to the structure, showing that adjusted ventilation will effectively reduce the explosion hazards and even confine it to certain parts of a factory, thereby minimizing the dangers to human life and limb as well as the damage to property.

In one test, which was confined to the room, inert gas (carbon dioxide and nitrogen) was first introduced into the room, to reduce the oxygen percentage of the atmosphere. The dust cloud was created and brought in contact with the heated coil, as in the other demonstrations, but no ignition followed. This proved definitely that, where it is possible to reduce the oxygen contents of the atmosphere by the use of carbon dioxide or other inert gases, the explosion

is entirely averted, although external sources of heat or flame may be present, such as a spark produced by electrical or mechanical means. This practice naturally cannot be followed in the workrooms, but can easily be applied in ovens, driers, grinders, pulverizers, enclosed conveyors, tanks, bins, or vaults, ordinarily points of origin of dust explosions, except those following fires.

The research work of the Bureau of Chemistry and Soils indicates that practically all types of combustible dusts are explosive. In addition to the dusts used in the demonstration described, tests have also proved the destructive force of aluminum, chocolate, cork, fertilizer, flour and feed, magnesium, paper, pulverized fuel, rosin, rubber, soap, spices, starch, sugar, and sulphur.

According to the chemical engineering division there are at least 28,000 industrial establishments in the United States subject to the dust-explosion hazard. These plants employ approximately 1,325,000 persons and manufacture products valued at more than $10,000,000,000 annually.

In its work on dust explosions the chemical engineering division has obtained records of 578 explosions of this character in the United States. In 192 of these explosions 441 persons were killed and 896 injured. In 446 cases the property loss amounted to approximately $47,000,000. Large losses of life, property, and material occur annually through dust explosions, and the introduction of new manufacturing processes or new types of mechanical equipment adds constantly to the dangers. It is, however, gratifying to note that both the number of workers killed and the amount of property lost due to this cause are growing smaller each year. This is, no doubt, due in a very large measure to the splendid work of the chemical engineering division and to the development of the safety codes for the prevention of dust explosions [1] as the result of such research work.

National Safety Code for Electric Wiring and Apparatus

FORMAL approval as an "American standard" was given by the American Standards Association on September 1, 1933, to the 1933 revision of the National Electrical Code, recently published by the National Board of Fire Underwriters.[2]

The National Electrical Code, which was originally completed in 1897 and has been an approved "American standard" since 1920, forms the basic regulations for official electrical wiring installations

[1] U.S. Bureau of Labor Statistics Bul. No. 562: Safety codes for the prevention of dust explosions. Washington, 1932.

[2] National Board of Fire Underwriters. National Electrical Code. Regulations for electric wiring and apparatus as recommended by the National Fire Protection Association. American Standard, approved Sept. 1, 1933, by American Standards Association. Effective Nov. 1, 1933. New York.

in more than 2,200 communities. When first developed it covered principally the fire hazard. During later years the personal-injury hazard was given increased consideration, so that the 1933 code includes substantially all safeguards to wiring that are generally advocated or recognized for both fire and shock hazards, according to the scope approved by the American Standards Association:

> Requirements for the installation of electric wiring and equipment for light, heat, and power, as they affect the fire hazard, and for signaling systems, so far as they may involve such hazard. The code also includes equipments affecting the life hazards in numerous applications and uses.

New material on wiring installation design, on emergency lighting, and on X-ray and high-frequency apparatus, and other changes from the 1931 edition reflect the developments in practices during the intervening two years.

Industrial Accidents in New Jersey in 1932

THE industrial accident report of the Bureau of Statistics and Records of the New Jersey Department of Labor contains a series of tables giving detailed statistics of industrial injuries in the State for 1932.

The tables cover a total of 20,198 compensated cases, occurring and closed during the year, consisting of 268 fatal cases, 22 permanent total disability cases, 6,860 permanent partial disability cases, and 13,048 temporary disability cases. As compared with the report for the previous year [1], these figures show decreases for 1932 of 15 fatal and permanent total disability cases, 439 permanent partial disability cases, and 2,556 temporary disability cases. The total number of days lost (weighted for deaths and permanent disability cases, and actual for temporary disability cases) was 4,823,305, making the average disability loss per case 239 days in 1932 as against 223 in 1931. The total compensation cost was $6,510,886, an average of $322, and medical aid at a total cost of $556,166 was reported for 6,682 cases, an average per case of $83 as against $84 in 1931.

A summary of the number of cases and compensation costs is shown in table 1 by industry and in table 2 by cause.

[1] See Monthly Labor Review, March 1933, p. 549.

TABLE 1.—NUMBER AND COMPENSATION COST OF COMPENSATED CASES IN NEW JERSEY, OCCURRING AND CLOSED DURING 1932, BY INDUSTRY

Industry	Death and permanent total disability		Permanent partial disability		Temporary disability		All cases	
	Number of cases	Compensation	Number of cases	Compensation	Number of cases	Compensation	Number of cases	Compensation
Agriculture	9	$19,914	91	$58,981	399	$20,655	499	$99,550
Clerical and professional service, care and custody of buildings and grounds	12	66,553	281	166,236	753	41,228	1,046	274,017
Construction (includes shipbuilding)	67	337,459	1,519	1,214,536	2,014	171,285	3,600	1,723,280
Manufacturing	80	315,514	2,739	1,584,443	4,661	258,948	7,480	2,158,905
Mining, metallurgy, and quarrying	4	13,738	129	135,780	131	8,484	264	158,002
Trade	23	74,926	615	331,540	1,478	76,519	2,116	482,985
Transportation and public utilities	60	256,185	780	553,876	1,910	150,547	2,750	960,608
Miscellaneous occupations	35	118,625	706	441,630	1,702	93,284	2,443	653,539
Total	290	1,202,914	6,860	4,487,022	13,048	820,950	20,198	6,510,886

TABLE 2.—NUMBER AND COMPENSATON AND MEDICAL COSTS OF COMPENSATED CASES IN NEW JERSEY, OCCURRING AND CLOSED DURING 1932, BY CAUSE

Cause	Number of cases				Total days' disability (weighted)	Total compensation	Cases reporting medical cost	Total medical cost
	Death and permanent total disability	Permanent partial disability	Temporary disability	Total				
Machinery	25	1,263	1,039	2,327	665,324	$911,607	803	$63,587
Boilers and steam-pressure apparatus		4	12	16	4,578	6,377	5	853
Explosions, electricity, hot substances, and flames	47	149	684	880	377,304	373,539	308	32,943
Falls of persons	52	1,349	2,391	3,792	1,068,976	1,542,595	1,207	125,313
Falling objects not being handled by injured	23	442	527	992	352,132	465,174	302	27,555
Objects and tools being handled	19	2,073	4,714	6,806	841,219	1,321,146	2,239	146,049
Stepping on or striking against objects	5	179	1,043	1,227	101,617	141,220	420	20,732
Vehicles	77	698	1,203	1,978	848,616	1,049,147	673	85,151
Poisonous and corrosive substances and occupational diseases	13	256	336	605	196,370	265,025	169	9,581
Miscellaneous	29	447	1,099	1,575	367,169	435,056	556	44,402
Total	290	6,860	13,048	20,198	4,823,305	6,510,886	6,682	556,166

Railway Accidents in Great Britain in 1932

THE British Ministry of Transport has recently issued a report dealing with accidents on the railways of Great Britain during 1932.[1] This report shows that the total number of passengers, employees, and other persons killed during the year was 354, as compared with 339 killed during 1931 and 380 killed during 1930. The total number injured during the year was 21,033, as against 22,888 injured during 1931 and 24,311 injured during 1930. Both fatalities and injuries were considerably below the average annual records for the period 1925–29 (429 and 24,983, respectively).

[1] Great Britain. Ministry of Transport. Report upon the accidents which occurred on the railways of Great Britain during the year 1932. London, 1933.

The figures stated do not include accidents to trespassers, suicides, and attempted suicides, of which 331 were killed and 116 injured during 1932 and 399 were killed and 110 injured during 1931, nor accidents reported for railroads owned by dock and harbor authorities, which were responsible for 51 injuries in 1932.

The total number of employees shows a steady decline. Figures, as of March each year, give 599,290 in 1932, as against 616,919 in 1931 and 657,981 in 1930, and an annual average of 680,197 for the period 1925–29. The total number of passenger and freight train miles also shows a reduction, from 424,200,000 in 1930 to 411,700,000 in 1931 and to 405,200,000 in 1932, but the latter year presents an increase over the annual average for the period 1925–29, which was 401,300,000.

The accidents are classified in three principal groups: Train accidents (accidents to trains, rolling stock, permanent way, etc.); movement accidents (accidents caused by or connected with the movement of railway vehicles, exclusive of train accidents); and nonmovement accidents (accidents on railway premises not due to train accidents or to the movement of railway vehicles). The above classification corresponds with the classification used by the United States Interstate Commerce Commission for steam railway accidents in this country: Train accidents, train-service accidents, and nontrain accidents.

A distribution of accidents in each group is made according to the persons affected, classified as passengers, servants (equal to United States classification of employees), and other persons. The latter group consists mainly of persons killed or injured through collisions of trains with road vehicles, or gates, at level crossings, or while traveling on business in trains, such as postal employees.

Train accidents were responsible for 16 deaths and 308 injuries in 1932, and movement accidents for 291 deaths and 6,251 injuries. Rates given in the report show that there were consequently 0.8 train and movement casualty per 1,000,000 passenger and freight train miles in 1932, as against 0.7 in 1931, 0.8 in 1930, and an annual average of 0.9 for the period 1925–29, while 16 train and movement injuries per 1,000,000 passenger and freight train miles occurred in 1932, as compared with 17 in 1931 and in 1930, and an annual average of 18 for the period 1925–29.

The following table shows the number of persons killed or injured, by years, from 1930 to 1932 and annual average for the period 1925–29, distributed by class of accident and by group of persons.

NUMBER OF PERSONS KILLED AND INJURED ON RAILWAYS OF GREAT BRITAIN, ANNUAL AVERAGE, 1925–29, AND BY YEARS, 1930–32

Class of accidents and group of persons	Annual average, 1925–29		1930		1931		1932	
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
Train accidents:								
Passengers	18	579	1	552	8	414	4	214
Servants	9	105	4	103	13	81	3	59
Other persons	11	52	9	49	13	40	9	35
Movement accidents:								
Passengers	73	3,154	65	3,664	63	3,697	73	3,830
Servants	201	3,162	204	2,874	146	2,633	167	2,326
Other persons	56	106	46	100	46	121	51	95
Nonmovement accidents:								
Passengers	6	1,085	10	1,233	3	1,323	3	1,399
Servants	42	16,185	33	15,108	35	14,016	41	12,615
Other persons	13	555	8	628	12	563	3	460
Total:								
Passengers	97	4,818	76	5,449	74	5,434	80	5,443
Servants	252	19,452	241	18,085	194	16,730	211	15,000
Other persons	80	713	63	777	71	724	63	590
Grand total	429	24,983	380	24,311	339	22,888	354	21,033
Trespassers, suicides, or attempted suicides:								
Movement accidents	335	58	357	43	386	41	309	59
Nonmovement accidents	16	61	32	70	13	69	22	57
Total	351	119	389	113	399	110	331	116

LABOR LEGISLATION

Southeastern Interstate Conference on Social Legislation, December 1933

A CONFERENCE of business, industrial, political, and labor leaders of the five Southeastern States was held in Atlanta, Ga., on December 13, 1933.

Labor problems of Alabama, Florida, Georgia, South Carolina, and Tennessee were discussed, the progress in industrial relations was traced, and remedial legislation was proposed by the delegates. A total registration of nearly 300 was recorded. Mr. Hal M. Stanley, chairman, Department of Industrial Relations, Georgia, presided at the session. Interest was shown in the meeting by the presence of Governor Talmadge of Georgia and Governor Sholtz of Florida as well as Congressman Ramspeck of the Fifth District of Georgia and Congressman Cox of the Second District of Georgia.

Leading the discussion were many prominent persons, including Prof. Mercer Evans, Emory University; Mr. A. Steve Nance, president of the Atlanta Federation of Trades; Miss Allie Mann, Teachers' Association of Atlanta; Mr. W. L. Mitchell, district N.R.A. compliance director; Mr. O. E. Petry, secretary, Georgia Federation of Labor; Mr. George Googe, southeastern representative, American Federation of Labor; and Mr. Frank Neely, general manager, Rich's, Inc.

Reports of industrial and labor conditions in addition to those outlined by Mr. Hal M. Stanley of Georgia were received from Mr. Algernon Blair, chairman, Alabama Relief Administration, Alabama; Mr. W. C. Heaton, president, Florida Federation of Labor, Florida; Mr. J. Roy Jones, commissioner, Department of Agriculture, Commerce and Industries, South Carolina; and Mr. G. Croft Williams, professor at the University of South Carolina; Mr. W. E. Jacobs, commissioner, Department of Labor, Tennessee; as well as Mr. Rutledge Smith, assistant to the president of the Tennessee Central Railway; and Mr. Paul J. Aymon, president, Tennessee Federation of Labor.

The Secretary of Labor, Frances Perkins, outlined the purposes and aims of the conference at the opening session, and, after hearing all of the statements presented by the various delegates, summed up nine definite objectives which would provide permanent improvements in labor conditions. These objectives included: (1) Permanent limitation of hours of labor, (2) prohibition of child labor, (3)

fixing of standard minimum wages for women, (4) safe and healthful working conditions, (5) provision for the aged, (6) some form of unemployment reserves, (7) adequate workmen's compensation laws, (8) free public employment exchanges, and (9) adequate administration of labor laws and improved labor conditions.

The conference at the closing session unanimously approved the nine objectives, passed a resolution pledging support to the program, and appointed a committee as a permanent organization "to devise and propose harmonious standards of labor legislation for presentation to the legislatures of the States represented in this conference." The resolution is as follows:

Whereas the Interstate Conference on Social Legislation, composed of representatives duly appointed by the Governors of the States of Georgia, Alabama, Florida, Tennessee, and South Carolina, has been deeply concerned with and appreciative of the problem of the establishment of appropriate labor legislation in line with the principles of the National Recovery Administration, and

Whereas the conference is of the opinion that it is highly desirable that the work of the conference shall not be lost, and

Whereas it is considered mutually helpful that the States shall cooperate in the development of harmonious standards of social legislation, and

Whereas it is essential that the momentum of this conference shall be put immediately into action: Therefore be it

Resolved, That the Interstate Conference on Social Legislation hereby creates a committee, composed of one delegate from each State, to be appointed by the chair for the purpose of organizing a steering committee of the five States involved, to devise and propose harmonious standards of labor legislation for presentation to the legislatures of the States represented in this conference. Further be it

Resolved, That the steering committee shall be composed of 5 persons, representing for each State the following interests: One for labor, 1 for the labor division of the government of the State, 1 for the social agencies of the State, 1 for the research or social science divisions of the universities of the State, and 1 outstanding citizen-at-large. The secretary of this committee to be a representative of the United States Secretary of Labor. Be it further

Resolved, That the chairman of the committee of five is hereby authorized to call such committee to meet at any early time for the purpose of effecting organization of the steering committee. Be it further

Resolved, That the steering committee shall call together interstate conferences of the character of the one held today, from time to time, for the purpose of interpreting the needs and discussing the standards of social legislation for these five States, and for the further purpose of promoting the enactment of such legislation.

A complete report of the proceedings of this meeting will be published in bulletin form by the United States Department of Labor.

WORKMEN'S COMPENSATION

Medical Problems in Connection with Workmen's Compensation

HONEST and fair medical testimony at workmen's compensation hearings and adequate and competent medical treatment for injured workers were discussed by Howard S. Cullman, commissioner of The Port of New York Authority and president of the Beekman Street Hospital in New York City, in an address before the Connecticut Medical Society at New Haven, Conn., on September 20, 1933.

Referring to the investigation by the committee appointed in 1931 to review medical and hospital problems in connection with the workmen's compensation law in New York State, of which he was chairman, Mr. Cullman stated that the study of medical testimony in controverted cases illustrated "the insidious and demoralizing effect of having medical testimony paid for" by either party to a suit.

In a cross section of litigated cases each claimant had for a period of months or years been under the treatment of a physician chosen by the insurance company or at a commercial clinic and, in a majority of cases, had also been under the care of a physician of his own selection. Medical evidence from both the carrier's and the claimant's physicians was heard. The cases were then referred to an impartial specialist, chosen by the State department of labor.

In every case where the attending physician had been chosen by the injured worker and this physician testified, he alleged that the existing disability was due to the accident. In 75 percent of the cases in which reports were furnished by physicians chosen by employers or carriers, it was denied that the existing condition was caused by the accident. The impartial specialist reported that in 68 percent of the cases the condition was due to the industrial accidents, in 13 percent the relationship could not be determined, and in 18 percent the condition was not caused by the accident.

An analysis was also made of the commonly controversial question of ability to return to work. In a group of which the carrier's physician found 90 percent able to return to work, the impartial specialist found only 25 percent fully able to resume their labors, unmistakably establishing the influence of a desire to limit claims and payments. On the other hand, an equally obvious tendency was

shown by physicians chosen by claimants to voice opinions most conducive to the payment of maximum awards.

The inquiries of the committee also disclosed an "astonishingly complicated and far-reaching racketeering outfit," which consisted of a brokerage business that wrote compensation insurance and that had organized an employers' association in certain industries. A chain of commercial clinics was established and employers whose insurance was placed with or who belonged to the association were requested to send all injured workers to these clinics. Patients were sent to a special attorney, creating a "corrupt and unscrupulous machine" where "it was easy to prolong periods of disability, pad medical bills, and even create cases out of whole cloth." In addition, the clinics were manned by incompetent and inexperienced physicians and nurses of negligible or no training.

As a result of the disclosures the committee recommended that all commercial clinics be discontinued, and also advocated discontinuance of insurance-company clinics. It proposed, in place of these, that a medical panel be created, comprising able and experienced physicians licensed to treat compensation cases, and that the injured worker be permitted to select his physician from this panel.

Mr. Cullman explained that when the report was drawn up, it was recommended that the advantages and disadvantages of an exclusive State fund in New York should be studied further, but that, during the year since the report was made, "the march of events has shown that a State monopoly of the writing of workmen's compensation is essential to the sound administration of the law." He pointed out that if high and uniform standards are to be enforced in the administration of the law, it would be necessary to centralize responsibility and that this could be done only through the establishment of an exclusive State fund, which he strongly advocated.

Operation of Motor Vehicle Without License Does Not Bar Recovery for Injury

AN EMPLOYEE injured while operating a motor vehicle for which he had no license is not a trespasser on the highway, and he may recover for the injury if his illegality is not a contributing cause to the injury. (*Kimball's case*, 168 Atl. 871.)

John A. Kimball, who was employed by the Ham Realty Co. as a collector and salesman, was fatally injured on the highway while traveling across the State to collect a bill. He was riding a motorcycle for which he had no operator's license. The workmen's compensation commissioner dismissed the widow's petition for compensation, holding that Kimball was not in the place where his duties required him to be and was not in the course of his employment. The lower court sustained the ruling.

The widow appealed the case to the Supreme Judicial Court of Maine, where the appeal was sustained and the opinion reversed. The court held that the right of recovery for the injury was not barred by the fact that the plaintiff was operating the motorcycle illegally, unless such operation was a direct cause contributing to the injury, saying that—

> Where the employment requires the employee to travel on the highway, and accident causes injury to the latter when he is using the highway in pursuance of his employment, or in doing some act incidental to his employment, with knowledge and approval of his employer, such injury is compensable.

Continuing, the court said:

> We think that the operation of a car without a license, while it is a punishable act, does not render the operator a trespasser on the highway, but that the illegal element in the act is only the failure to have a license while operating it, so that if the operation and movement contributed to the accident with which the want of a license had no connection, except as a mere condition, they would not preclude the operator as a plaintiff from recovery.
>
> If the illegal quality of the act had no tendency to cause the accident, the fact that the act is punishable because of the illegality, ought not to preclude one from recovery for harmful results to which, without negligence, the innocent features of the act alone contributed.

State Workmen's Compensation Act Held Applicable to Local Maritime Matter

AT THE nineteenth annual meeting of the International Association of Industrial Accident Boards and Commissions, held at Columbus, Ohio, in 1932, Samuel B. Horovitz, of Boston, Mass., delivered an address on the application of workmen's compensation acts to maritime law.[1]

In the course of the discussion which followed his address, Mr. Horovitz referred to a case pending in the Massachusetts Supreme Court which was of vital interest to all administrators of workmen's compensation laws.

The question in the case was whether an employee, engaged in sweeping the deck of a scow used in scavenger service, who was drowned in navigable waters, was under the jurisdiction of the maritime law, or whether the work the employee was doing was a matter of local concern and hence claim for the death should be prosecuted under the Massachusetts workmen's compensation law. The Massachusetts Supreme Court has recently rendered its decision in this case, upholding the finding of the Massachusetts Industrial Accident Board that the death was compensable under the workmen's compensation law of Massachusetts, against the contention of the employer and insurer. (*In re Herbert's case*, 186 N.E. 554.)

[1] See U.S. Bureau of Labor Statistics Bul. No. 577, pp. 119–146.

The main facts in this case showed that the scow on which the injured employee, William Herbert, worked, was towed back and forth between Boston and Spectacle Island. This was a distance of about 2 miles over navigable waters, but was within Boston Harbor, even within the Boston city limits.

It was not disputed that all parties concerned chose to become subject to the workmen's compensation statute, so the only question to be decided was whether "it is permissible to grant relief by that act [the State workmen's compensation act] under the decisions of the United States Supreme Court as to the exclusiveness of admiralty jurisdiction."

Two well-known cases were cited as authoritative decisions laying down the principle that—

> Where facts disclose a situation of mere local concern where regulation by State statutes will not materially prejudice essential features of general maritime law, local compensation acts may be operative.

In *Grant Smith-Porter Ship Co.* v. *Rohde*[2] (257 U.S. 469), the case of a carpenter injured while working upon a ship which was nearly completed, it was held that as both parties had accepted and proceeded under a workmen's compensation statute—

> Regulation of the rights, obligations, and consequent liabilities of the parties as between themselves, by a local rule would not necessarily work material prejudice to any characteristic feature of the general maritime law, or interfere with the proper harmony or uniformity of that law in its international or interstate relations.

Again in *Millers' Indemnity Underwriters* v. *Braud*[3] (270 U.S. 59), where the State workmen's compensation law was held to apply in the death of a diver, who had, in the course of his employment, submerged himself from a floating barge anchored in a navigable river, the court said:

> In the cause now under consideration the record discloses facts sufficient to show a maritime tort to which the general admiralty jurisdiction would extend save for the provisions of the State compensation act; but the matter is of mere local concern and its regulation by the State will work no material prejudice to any characteristic feature of the general maritime law. The act prescribes the only remedy; its exclusive features abrogate the right to resort to the admiralty court which otherwise would exist.

Affirming the decision of the industrial accident board and the Superior Court of Suffolk County holding the local workmen's compensation act applicable in such cases of merely local concern, the court said:

> We are of opinion, therefore, that the facts in the case at bar bring it within the principle declared in the decisions of the United States already quoted, to the effect that the decedent was engaged in a matter of mere local concern and that its regulation by the compensation act "will work no material prejudice to any characteristic feature of the general maritime law."

[2] See U.S. Bureau of Labor Statistics Bul. No. 344, p. 280.
[3] See U.S. Bureau of Labor Statistics Bul. No. 444, p. 135.

Worry Over Injury Held No Excuse for Delay in Filing Claim

IN A case recently decided by the Court of Civil Appeals of Texas it was held that worry by an injured employee over having lost the sight of his eye did not cause sufficient physical and mental incapacity as to constitute a good reason for delaying filing compensation claim beyond the statutory period. It was held, however, that the employer's erroneous statement that his insurance had lapsed was sufficient to support the jury's finding of good cause for the injured employee's delay in filing his claim (*New Amsterdam Casualty Co.* v. *Chamness*, 63 S.W. (2d) 1058).

A. L. Chamness, an employee of George Christie, received an injury to his eye which caused the removal of the eyeball a few days later. While the law required that the claim for compensation be filed within 6 months after the accident, Chamness did not take this action until approximately 19 months afterwards. The industrial accident board made an award of compensation and an appeal was taken to the district court. After trial before a jury, judgment was entered for $2,159.30 for the loss of the eye and $2 per week for 401 weeks for permanent partial incapacity resulting therefrom. The case was then carried to the Court of Civil Appeals of Texas for review.

That court examined the evidence and discussed the two grounds claimed by the employee as constituting good cause for the delay in filing his claim. The court held that the worried condition of the employee was a normal result of any serious injury, and that it did not establish mental and physical incapacity to file a claim; if this were recognized as a good cause for delay in not filing a claim within the statutory period of 6 months, it would abrogate the statute.

The court next discussed the second excuse made by the employee, i. e., that the employer's statement that he carried no insurance was sufficient cause for delay in filing employee's claim. It was held that the standard to be applied to the employee in determining whether good cause existed is the conduct of an ordinary prudent man, and the ordinary prudent man would place greater reliance in his employer's statement about this matter than in the statement of the industrial accident board itself. Therefore the statement of the employer and the fact of employee's reliance thereon were properly admitted in evidence to be considered by the jury, and supported the jury's finding that good cause existed.

The decision of the lower court was therefore reversed and the case was returned for a new trial.

Recommendations of Actuary Regarding Workmen's Compensation in Puerto Rico

THE first annual report of the Commissioner of Labor of Puerto Rico, for the fiscal year 1931–32 [1] covers the various activities during the year of the Department of Labor, previously a division of the Department of Agriculture and Labor, which with the separation has been changed to the Department of Agriculture and Commerce.

Part of the report is devoted to the recent actuarial survey of the Workmen's Compensation Service by Emile E. Watson of Ohio, who recommended the adoption of the following plan for a possible solution of the workmen's compensation problems of the island:

1. Concentrate to the fullest possible extent the complete management and administration of the exclusive workmen's compensation fund plan of Puerto Rico in the hands of a workmen's compensation insurance manager, vesting in him full authority and fixing upon him full responsibility for the administration of the fund.
2. Provide for the appointment of an industrial commission comprising three members, the sole and restricted duties of which commission being to pass upon claims.
3. Vest the manager of the fund with authority to contest the decisions of the industrial commission.
4. Provide statutory requirements in the law to establish a merit-rating system, safety engineering, and a statutory surplus fund predicated upon a given percentage of the premium income of the fund.
5. Prohibit, by statutory enactment, the making of any lump-sum awards to the claimants or beneficiaries of the fund.
6. Prohibit, by statutory enactment, any attorney, agent, or any other representative charging any claimants or beneficiaries of the fund any fee for services in connection with their workmen's compensation claims or awards.

Mention is made of the educational accident-prevention campaign undertaken by the industrial commission during the year, which has aroused a great deal of interest among both employers and workers.

The total number of injuries reported as sustained in 1931–32 was 42,751, as compared with 41,223 reported for 1930–31.

[1] Puerto Rico. Department of Labor. Annual report of the Commissioner of Labor, submitted to the Governor of Puerto Rico, 1931–32. San Juan, 1933.

LABOR ORGANIZATIONS

Meeting of Canadian Trades and Labor Congress, 1933

THE Trades and Labor Congress of Canada held its forty-ninth annual convention at Windsor, Ontario, September 18–23, 1933. The registered accredited delegates numbered 218. The proceedings are reviewed in brief below: [1]

Many major problems now confronting labor in Canada were touched upon by Mr. Tom Moore, president of the congress, who also referred to some of the significant economic, social, and political changes taking place in other countries.

Among the matters dealt with in the report of the executive council were: The legislative program presented to the Federal Government before the opening of the 1933 Parliament and the legislation enacted by that Parliament, considerable progress toward the attainment of labor's ideals being recorded despite the industrial depression; representation of labor on the Canadian delegation attending the World Monetary and Economic Conference; disarmament and world peace; the establishment of a radio broadcasting commission and the conducting of radio broadcasting as a public utility; unemployment and underemployment; international cooperation; conference on unemployment relief; and progress made toward securing unemployment insurance legislation.

Resolutions

THE action of the congress as manifested in the approval of various resolutions is here reviewed:

Creation and stimulation of employment.—Endorsement was given to the efforts of the National Construction Council of Canada to have municipalities and governments initiate extensive construction programs, including public buildings. It was emphasized, however, that such programs should not be used to relieve normal industry from reducing working hours to the extent of providing opportunity of work for all. The inauguration of a Canadian recovery program by the Dominion Government was demanded, it being stipulated in this connection that organized labor be represented on all committees to be appointed to put such program into effect.

[1] Data are from report by Marshall M. Vance, American consul at Windsor, Ontario, Sept. 27, 1933; and Canadian Congress Journal, Ottawa, October 1933, pp. 9–14.

Relief camps.—The Government's relief camp policy was condemned, and it was declared that such undertakings should be carried on free of anything which seemed like military control; that the workers involved should be paid on the basis of the Federal Fair Wages Act; that in applying the provision of that act on "prevailing rates" such rates should be based on the current rates in the largest industrial center in the Province in which the works of these relief camps were being carried on, and that where private interests would profit by these undertakings, such interests should bear a share of the cost.

Unemployment insurance.—The convention reiterated a previous decision that the congress "continue to press for the enactment of unemployment insurance legislation, controlled and administered by the Federal Government."

Hours of labor and working conditions.—The adoption of the 6-hour day and the 5-day week by the Federal and Provincial Governments on all public works was called for, as was also the enactment of legislation providing for such a day and week in all industries without a reduction in wages. The congress also urged that the Federal Government take the initiative in raising buying power by restoring the salaries of Federal employees, which were in effect before the 10 percent reduction 2 years ago.

An amendment to the present Quebec legislation was called for in order that workers employed in amusement places in that Province might be assured of at least 1 day's rest in 7. An amendment was asked to the Ontario Factory Act, which would provide for a maximum 40-hour week.

Banking and credits.—A resolution, referred to the executive council, urged the establishment in each Province of a commission empowered to borrow on the credit of the Province and extend loans to home owners menaced with foreclosure, with amortization facilities, making for home ownership by every family.

Interest rates and taxation.—The reduction of interest rates on Government bonds, preferred stocks, mortgages, etc., was favored. Another resolution dealing with deflation, public indebtedness, and the establishment of an investment banking system was referred to the executive council.

Fair wages acts.—The convention called for the inclusion under the Federal Fair Wages Act of all building-trades workers employed in the fabrication of materials in shops and factories, for use on Government jobs.

Railways.—The congress reaffirmed its policy regarding motor transportation and resultant unfair competition with the railroads and asked for regulation in this connection under the board of railway commissioners.

Health and safety.—The convention favored the adoption of the report of the National Research Council concerning "the number of qualified motion-picture operators which should be employed during public performances in theaters." Other action called for by resolution included legislation to reduce the hazard from poisonous materials used in the making of lacquers, paints, etc.; and the regulations of rooms in which food is prepared in hotels, restaurants, etc.

Social legislation.—The Federal Government was called upon to assume full charge of old-age pension legislation throughout the Dominion and have the same applied in all Provinces. Pending such action the Province of Quebec was asked to adopt the existing legislation. It was also urged that the qualifying age under the Ontario old-age pension act be reduced from 70 to 65 years.

The enactment of mothers' allowance legislation in the Province of Quebec was favored and the immediate enactment of legislation providing sickness and invalidity insurance in all Provinces was urged.

Foreign trade and international relations.—The delgates unanimously adopted a resolution in favor of Canada's "trading with all countries, provided that the standard of living of Canadian workers will not be demoralized thereby."

Immigration.—Proposals to revive immigration to Canada at the present time were strongly opposed.

Miscellaneous.—Among other resolutions was one in favor of action to prohibit the replacement of male workers by married women at lower wage rates and another in favor of cooperative ownership of the machinery of production and distribution.

Membership

NOTWITHSTANDING the effects of unemployment on the number of members on which per capita tax was paid, the membership was reported to the convention as 105,546 which was still above that of 1926, the year terminating the preceding depression.

Election of Officers

PRESIDENT Tom Moore was reelected. Toronto will be the convention city in 1934.

INDUSTRIAL DISPUTES

Strikes and Lockouts in the United States in November 1933

DATA regarding industrial disputes in the United States for November 1933 with comparable data for preceding months are presented below. Disputes involving fewer than six workers and lasting less than one day have been omitted.

Table 1 shows the number of disputes beginning in each year from 1927 to 1932, the number of workers involved and man-days lost for these years and for each of the months January 1932 to November 1933, inclusive, as well as the number of disputes in effect at the end of each month and the number of workers involved. The number of man-days lost as given in the last column of the table refers to the estimated number of working days lost by workers involved in disputes which were in progress during the month or year specified.

TABLE 1.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF EACH MONTH, JANUARY 1932 TO NOVEMBER 1933, AND TOTAL NUMBER OF DISPUTES, WORKERS, AND MAN-DAYS LOST IN THE YEARS 1927 TO 1932

Month and year	Number of disputes		Number of workers involved in disputes		Number of man-days lost in disputes existing in month or year
	Beginning in month or year	In effect at end of month	Beginning in month or year	In effect at end of month	
1927	734		349,434		37,799,394
1928	629		357,145		31,556,947
1929	903		230,463		9,975,213
1930	653		158,114		2,730,368
1931	894		279,299		6,386,183
1932	808		242,826		6,462,973
1932					
January	87	37	12,091	4,993	132,873
February	56	34	33,713	31,103	460,701
March	64	30	33,087	13,937	736,782
April	89	44	19,187	21,513	620,866
May	87	52	44,357	49,777	1,251,455
June	69	46	15,858	24,138	943,338
July	66	40	20,890	33,216	740,785
August	85	38	28,492	27,717	754,423
September	85	33	17,824	7,456	566,045
October	47	23	10,442	2,324	147,059
November	38	21	3,460	1,896	68,154
December	35	12	3,425	997	40,492
1933					
January	67	29	19,616	8,790	240,912
February	63	32	10,909	6,706	109,860
March	91	41	39,913	12,794	445,771
April	72	46	23,077	19,867	535,039
May	133	49	41,652	16,584	603,723
June	131	45	40,903	24,593	504,362
July	219	68	108,350	49,058	1,404,850
August	198	73	145,635	101,041	1,401,532
September	180	92	235,071	150,210	3,642,431
October [1]	105	81	54,872	100,705	3,145,500
November [1]	43	61	36,327	30,825	1,365,362

[1] Preliminary figures subject to change.

Table 2 shows in detail by city, State, and industry the number of strikes in November 1933, the number of workers involved, and the man-days lost.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF NOVEMBER 1933, AND MAN-DAYS LOST, BY CITY AND INDUSTRY OR OCCUPATION

Industry or occupation and city	Number of disputes		Number of workers involved in disputes		Number of man-days lost in November
	Beginning in November	In effect at end of November	Beginning in November	In effect at end of November	
Auto, carriage, and wagon workers:					
Michigan:					
Detroit					[1] 10,000
Flint					[1] 5,560
New Jersey, Edgewater		1		400	8,400
Pennsylvania:					
Chester		1		200	4,200
Philadelphia	1	1	600	600	8,400
Wisconsin, Kenosha	1		98		980
Total	2	3	698	1,200	37,540
Bakers:					
Massachusetts, Boston		1		250	6,250
New York:					
Brooklyn	1	1	250	250	2,000
New York City					[1] 2,205
Do	1	1	1,200	1,200	8,400
Ohio, Toledo	1	1	63	63	441
Pennsylvania, Pittsburgh	1		205		1,230
Total	4	4	1,718	1,763	20,526
Brewery and soft-drink workers:					
Washington, Seattle					[1] 960
Building trades:					
California, Santa Barbara					[1] 160
Kentucky, Lexington					[1] 2,250
New Jersey, Newark					[1] 40
New York, New York City		1		48	1,200
Pennsylvania, Pittsburgh	1	1	200	200	2,200
Total	1	2	200	248	5,850
Chauffeurs and teamsters:					
New Jersey, Cliffside					[1] 1,275
New York, New York City		1		60	1,500
Ohio, Toledo	1		30		60
Pennsylvania, Philadelphia	2	2	1,041	1,041	4,782
Total	3	3	1,071	1,101	7,617
Clothing trades:					
California, Los Angeles					[1] 10,000
Illinois, Quincy					[1] 7,552
Iowa, Clinton	1	1	68	68	748
Maryland, Baltimore					[1] 585
Massachusetts, Stoughton	1	1	167	167	3,006
New Hampshire, Nashua		1		657	13,797
New York:					
Long Island City					[1] 35,130
New York City					[1] 36,400
Do		1		500	12,500
Ohio, New Philadelphia					[1] 1,320
Pennsylvania, Philadelphia		1		300	7,500
Total	2	5	235	1,692	128,538
Fishermen:					
Florida, Fernandino	1		50		250

[1] I.e., in strikes which began prior to November and continued into that month, but were not in effect at the end of the month.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF NOVEMBER 1933, AND MAN-DAYS LOST, BY CITY AND INDUSTRY OR OCCUPATION—Continued

Industry or occupation and city	Number of disputes		Number of workers involved in disputes		Number of man-days lost in November
	Beginning in November	In effect at end of November	Beginning in November	In effect at end of November	
Furniture:					
Illinois, Chicago					[1] 6,690
Massachusetts, Boston					[1] 2,000
Minnesota, Minneapolis		1		500	12,500
Missouri, Kansas City		1		50	1,250
Total		2		550	22,440
Iron and steel:					
New York, Buffalo		1		650	19,500
Jewelry:					
New Jersey, Newark		1		500	12,500
Laundry:					
Missouri, St. Louis					[1] 2,250
Leather:					
New York, Gloversville and Johnstown					[1] 46,200
Longshoremen:					
Pennsylvania, Philadelphia	1		1,500		21,000
Metal:					
Arkansas, Fort Smith					[1] 702
Connecticut, Stratford	1	1	88	88	1,232
Illinois, Canton	1	1	8	8	120
Michigan, Detroit					[1] 4,000
New Jersey, Bayonne		1		1,000	21,000
Ohio, Toledo	1		23		322
Pennsylvania:					
Monaca		1		350	8,750
Uniontown		1		500	12,500
Wisconsin, Racine		1		174	4,350
Total	3	6	119	2,120	52,976
Miners:					
Alabama, Dogwood		1		140	3,500
New Mexico:					
Dawson		1		251	6,275
Gallup					[1] 3,759
Pennsylvania:					
Coaldale and vicinity	1		5,200		41,600
Lackawanna County	1		15,000		105,000
South and west section					[1] 180,000
Wilkes-Barre		1		1,200	30,000
Virginia, St. Charles					[1] 650
Total	2	3	20,200	1,591	370,784
Motion-picture operators and theatrical workers:					
Missouri, St. Louis	1	1	10	10	80
New York, New York City	1		18		18
Total	2	1	28	10	98
Oil and chemical workers:					
Illinois, Cairo		1		600	15,000
Rubber:					
New Jersey, Trenton	1		400		4,800
Shipbuilding:					
New York, Brooklyn					[1] 63,000
Slaughtering and meat packing:					
California:					
Los Angeles		1		100	2,500
Do	1		1,000		10,000
Illinois, Chicago	2	1	1,300	500	2,900

[1] I.e., in strikes which began prior to November and continued into that month, but were not in effect at the end of the month.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF NOVEMBER 1933, AND MAN-DAYS LOST, BY CITY AND INDUSTRY OR OCCUPATION—Continued

Industry or occupation and city	Number of disputes		Number of workers involved in disputes		Number of man-days lost in November
	Beginning in November	In effect at end of November	Beginning in November	In effect at end of November	
Slaughtering and meat packing—Continued.					
Minnesota:					
Austin	1		2,680		5,360
South St. Paul	1	1	300	300	3,300
Pennsylvania, Philadelphia		1		60	1,500
Total	5	4	5,280	960	25,560
Municipal:					
Illinois:					
Chicago		1		100	2,500
Taylorville	1	1	150	150	150
Ohio, Oregon township	1		63		63
Total	2	2	213	250	2,713
Teachers:					
Pennsylvania:					
Jessup borough		1		67	1,407
Old Forge		1		117	2,457
Total		2		184	3,864
Textiles:					
Alabama:					
Blue Mountain		1		180	4,500
Jacksonville		1		350	8,750
Piedmont		1		700	14,700
Connecticut, Bethel					[1] 216
Georgia, Augusta					[1] 5,891
Mississippi, McComb	1	1	200	200	800
New Jersey:					
Bayonne					[1] 4,220
Belvidere, Philipsburg, and Milford					[1] 4,736
Paterson		2		10,105	252,625
North Carolina:					
Asheboro		1		200	5,000
Winston-Salem	1		150		450
Pennsylvania:					
Allentown					[1] 35,000
Do	1		200		200
Easton					[1] 3,384
Do		1		75	1,875
Hawley					[1] 3,600
Laureldale	1	1	759	759	11,385
Pen Argyl					[1] 2,145
Reading	1		121		484
Stroudsburg					[1] 4,550
White Mills					[1] 549
Rhode Island:					
Central Falls and Pawtucket		1		2,000	42,000
Pawtucket		2		72	1,712
Do	1	1	498	498	10,458
Woonsocket, Pawtucket, and Central Falls		1		60	1,500
South Carolina:					
Bennettsville	1	1	22	22	418
Lyman	1	1	28	28	560
Warrensville					[1] 741
Tennessee:					
Harriman					[1] 4,750
Knoxville	1	1	200	200	1,800
Total	9	17	2,178	15,449	428,999
Other occupations:					
Cotton seed workers:					
Alabama, Troy	1		20		40
Doll and toy workers:					
Pennsylvania, Philadelphia	1		50		200
Filling station workers:					
Missouri, St. Louis	1		2,000		12,000
Molders (plastic):					
Ohio, Dayton	1	1	117	117	351
Paint workers:					
Pennsylvania, Philadelphia	1		250		2,000
Pipe workers:					
New York, Brooklyn and Bronx					[1] 11,200

[1] I.e., in strikes which began prior to November and continued into that month, but were not in effect at the end of the month.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF NOVEMBER 1933, AND MAN-DAYS LOST, BY CITY AND INDUSTRY OR OCCUPATION—Continued

Industry or occupation and city	Number of disputes		Number of workers involved in disputes		Number of man-days lost in November
	Beginning in November	In effect at end of November	Beginning in November	In effect at end of November	
Other occupations—Continued.					
Tin-can workers:					
Pennsylvania, Philadelphia		1		250	6,250
Turkish bath workers:					
New Jersey, Newark					[1] 456
Window cleaners:					
New York, Brooklyn and Queens		1		1,500	37,500
Pennsylvania, Pittsburgh					[1] 150
Wooden box workers:					
Washington, Raymond		1		90	2,250
Total	5	4	2,437	1,957	72,397
Grand total	43	61	36,327	30,825	1,365,362

[1] I.e., in strikes which began prior to November and continued into that month, but were not in effect at the end of the month.

Occurrence of Disputes

TABLE 3 gives, by industry or occupation, the number of strikes beginning in September, October, and November 1933, and the number of workers directly involved.

TABLE 3.—INDUSTRIAL DISPUTES BEGINNING IN SEPTEMBER, OCTOBER, AND NOVEMBER 1933

Industry or occupation	Number of disputes beginning in—			Number of workers involved in disputes beginning in—		
	September	October	November	September	October	November
Auto, carriage, and wagon workers	4		2	3,712		698
Bakers	5	3	4	654	5,565	1,718
Brewery and soft-drink workers		1			40	
Brick and tile workers	1			45		
Broom and brush workers	1			46		
Building trades	9	8	1	13,207	803	200
Chauffeurs and teamsters	7	6	3	13,619	4,895	1,071
Clothing	41	14	2	53,320	9,805	235
Coopers	1			20		
Electric and gas appliance workers	3	1		3,377	200	
Farm labor	6	2		2,145	2,550	
Fishermen	1		1	60		50
Food workers	4	2		2,225	157	
Furniture	9	3		1,652	570	
Glassworkers	1			225		
Hotel and restaurant workers	1			26		
Iron and steel	3	1		2,510	650	
Jewelry		2			3,550	
Laundry workers	1	1		8	90	
Leather	5	2		1,563	2,117	
Longshoremen		2	1		300	1,500
Metal trades	22	6	3	6,379	1,297	119
Miners	4	14	2	76,120	6,956	20,200
Motion-picture operators and theatrical workers			2			28
Oil and chemical workers	1	1		50	600	
Paper and paper-goods workers	1	1		4,000	550	
Rubber	1	2	1	392	1,736	400
Shipbuilding		1			3,000	
Slaughtering and meat packing	1	3	5	96	253	5,280
Stone	2			82		
Municipal workers		1	2		100	213
Teachers	1	2		117	184	
Textiles	24	16	9	32,511	5,334	2,178
Tobacco	1			55		
Other occupations	19	10	5	6,855	3,570	2,437
Total	180	105	43	235,071	54,872	36,327

Size and Duration of Disputes

TABLE 4 gives the number of industrial disputes beginning in November 1933, classified by number of workers and by industry or occupation.

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN NOVEMBER 1933, CLASSIFIED BY NUMBER OF WORKERS AND BY INDUSTRY OR OCCUPATION

Industry or occupation	Number of disputes beginning in November 1933 involving—						
	6 and under 20 workers	20 and under 100 workers	100 and under 500 workers	500 and under 1,000 workers	1,000 and under 5,000 workers	5,000 and under 10,000 workers	Over 10,000 workers
Auto, carriage, and wagon workers		1		1			
Bakers		1	2		1		
Building trades			1				
Chauffeurs and teamsters		1	1	1			
Clothing		1	1				
Fishermen		1					
Longshoremen					1		
Metal trades	1	2					
Miners						1	1
Motion-picture operators and theatrical workers	2						
Rubber			1				
Slaughtering and meat packing			1	2	2		
Municipal workers		1	1				
Textiles		2	6	1			
Other occupations		2	2		1		
Total	3	12	16	5	5	1	1

In Table 5 are shown the number of industrial disputes ending in November 1933, by industry or occupation and classified duration.

TABLE 5.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN NOVEMBER 1933, BY INDUSTRY OR OCCUPATION AND CLASSIFIED DURATION

Industry or occupation	Classified duration of strikes ending in November 1933			
	One-half month or less	Over one half and less than 1 month	1 month and less than 2 months	2 and less than 3 months
Auto, carriage, and wagon workers	1		2	
Bakers	1	1		
Brewery and soft-drink workers			1	
Building trades	1		2	
Chauffeurs and teamsters	1			1
Clothing		1	3	4
Fishermen	1			
Furniture			2	
Laundry workers			1	
Leather			1	
Longshoremen	1			
Metal trades	1		2	
Miners	3		1	1
Motion-picture operators and theatrical workers	1			
Rubber	1			
Shipbuilding			1	
Slaughtering and meat packing	3			
Municipal workers	1			
Textiles	5	2	3	6
Other occupations	5	1		1
Total	26	5	19	13

Table 6 gives the number of disputes beginning in November 1933, by States and classified number of workers.

TABLE 6.—TOTAL NUMBER OF STRIKES AND WORKERS INVOLVED IN NOVEMBER 1933, BY STATES AND CLASSIFIED NUMBER OF WORKERS

State	Total number of strikes	Total number of workers involved	Number of disputes beginning in November, involving—						
			6 and under 20 workers	20 and under 100 workers	100 and under 500 workers	500 and under 1,000 workers	1,000 and under 5,000 workers	5,000 and under 10,000 workers	Over 10,000 workers
Alabama	1	20		1					
California	1	1,000					1		
Connecticut	1	88		1					
Florida	1	50		1					
Illinois	4	1,458	1		1	2			
Iowa	1	68		1					
Massachusetts	1	167			1				
Minnesota	2	2,980			1		1		
Mississippi	2	2,200			1		1		
Missouri	1	10	1						
New Jersey	1	400			1				
New York	3	1,468	1		1		1		
North Carolina	1	150			1				
Ohio	5	296		4	1				
Pennsylvania	13	25,126		1	6	3	1	1	1
Rhode Island	1	498			1				
South Carolina	2	50		2					
Tennessee	1	200			1				
Wisconsin	1	98		1					
Total	43	36,327	3	12	16	5	5	1	1

Conciliation Work of the Department of Labor in November 1933

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Conciliation Service, exercised her good offices in connection with 72 labor disputes during November 1933. These disputes affected a known total of 32,154 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached the strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workers directly and indirectly involved.

There were five cases involving the law on the prevailing rate of wages. In these cases it is not always possible to show the number involved, due to lack of information as to total number required before completion of construction. There were 140 disputes which involved violations of the National Industrial Recovery Act.

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning	Ending	Directly	Indirectly
					1933	1933		
Hohn, Hall & Marx, Northampton, Pa.	Strike	Clothing workers	Recognition and working conditions.	Adjusted. Returned; agreement signed.	Oct. 23	Nov. 16	100	
Bender Body Co., Cleveland, Ohio.	do	Automobile-body workers.	Discharges and working conditions.	Adjusted. Workers reinstated; union recognition and collective bargaining. Wage scale to be fixed by committee.	Oct. 31	Nov. 2	250	
William Tolen, Philadelphia, Pa.	Threatened strike.	Metal polishers; lamp makers.	Refusal to abide by agreement	Unclassified. Dispute settled before arrival of commissioner.	do	Nov. 4		
Building, Ravenna, Ohio	Controversy	Plasterers	Dispute relative to wage scale	Adjusted. Agreed on wage scale	Nov. 8	Nov. 13	1	19
Cornell Dubilier Co., New York City.	Strike	Radio workers	Asked 40 cents per hour increase and union recognition.	Pending	Nov. 3		163	206
Central Breweries, Inc., East St. Louis, Ill.	Controversy	Boilermakers and structural-iron workers.	Jurisdiction of placing steel tanks	Adjusted. Satisfactory settlement.	Nov. 1	Nov. 15	15	75
Black Diamond Coal Co., Johns, Ala.	Threatened strike.	Coal miners	Working conditions	Adjusted. Agreement concluded.	Oct. 15	Nov. 3	250	
Garfield Dry Cleaners, Cincinnati, Ohio.	do	Cleaners	Discharges and working conditions.	Adjusted. Reinstated those discharged.	Nov. 2	Nov. 6	7	17
Textile workers, Blue Mountain, Ala.	Strike	Textile workers	Working conditions	Pending	do		500	
Rochester Button Co., Rochester, N.Y.	Lockout	Button workers	Plant closed, termed lockout by employees.	do	Nov. 4		100	
Street-car men, Peoria, Ill	Threatened strike.	Traction workers	Violation of arbitration award	Adjusted. Agreed to arbitrate differences.	Nov. 3	Nov. 16	200	
R. W. Griswold Green Houses, Ashtabula, Ohio.	do	Greenhouse workers	Wages and recognition of union	Adjusted. Reinstated all workers; await adoption of industrial code to fix wages.	Oct. 15	Nov. 1	125	50
Ashtabula Fish Co., Ashtabula, Ohio.	Strike	Fishermen	Wages	Pending	Oct. 10		16	5
Pioneer Pipe Co., Union City, N.J.	Lockout	Pipe makers	Recognition of union	Adjusted. Satisfactory settlement.	Oct. 3	Nov. 6	450	
Street-car men, Portland, Oreg.	Strike	Traction workers	Asked restoration of wages and further negotiation by National Labor Board.	Pending	Nov. 6		1,450	
Harrall Lumber Co. and Roper Lumber Co., Shelby County, Ala.	Lockout	Lumber workers	Wages and working conditions	Adjusted. Agreed to work for minimum of 24 cents per hour.	Nov. 7	Nov. 11	4	6

LABOR DISPUTES HANDLED BY CONCILIATION SERVICE DURING THE MONTH OF NOVEMBER 1933—Continued

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning	Ending	Directly	Indirectly
Yellow Cab Co., Oklahoma City, Okla.	Controversy	Taxicab drivers	Working conditions	Unclassified. Referred to National Labor Board.	1933 Nov. 1	1933 Nov. 15	(1)	
Radio technicians, Seattle, Wash.	Threatened strike.	Radio workers	Hours of labor and discharges	Adjusted. Satisfactory settlement.	do	Nov. 4	15	
Dressmakers, Los Angeles, Calif.	Strike	Dressmakers	Working conditions	Adjusted. Agreed on arbitration.	do	Nov. 7	3,000	
Belle Mead Sweets Candy Co., Trenton, N.J.	do	Candy makers	Piecework rates insufficient to make minimum wage; alleged discrimination.	Pending. Settlement expected.	Oct. 27		80	
Federal grant work, Cedar Rapids, Iowa.	Controversy	Building workers	Wages	Adjusted. Satisfactory settlement of wage scale.	Nov. 2	Nov. 12	12	
National Electric Porcelain Co., Trenton, N.J.	Strike	Pottery workers	Discrimination for union affiliation.	Pending	Nov. 1		500	
Edwin & Louis Bry, Inc., Norristown, Pa.	Controversy	Textile workers	Violation of agreement	do	Nov. 8		450	
General Cable Co., Buffalo, N.Y.	Strike	Employees	Working conditions	do	Oct. 4		250	
Loft Candy Co., New York City	do	Candy workers	Discharge of 26 workers	Adjusted. Reinstated workers; conditions as before strike.	Sept. 22	Nov. 9	26	
New Jersey Garment Works, Trenton, N.J.	do	Garment workers	Proposed wage reduction	Adjusted. Satisfactory adjustment of wage scale.	Nov. 9	Nov. 10	77	
Building operations, Lewiston, Maine.	Controversy	Mechanics	Hourly wage; asked that local workmen be employed.	Adjusted. Agreed to employ local workers.	Nov. 8	Nov. 29	1,200	
Blockton Chemical Co., Joliet, Ill.	Threatened strike.	Chemical workers	Wages, union-shop agreement, and working conditions.	Adjusted. Union-shop agreement, with collective bargaining.	Oct. 22	Nov. 9	100	
Dairy workers, Los Angeles, Calif.	Controversy	Dairy workers	Wages and union recognition	Unclassified. Regional board to make final settlement.	Oct. 26	Nov. 5	2,000	
Susquehanna Silk Works, Lewiston, Pa.	Strike	Silk workers	do	Pending	do		(1)	
Press Bros. Manufacturing Co., Harrisburg, Pa.	Controversy	Girl employees	do	do	Nov. 2		175	
Krouse Pretzel Co., Reading Pa.	Strike	Pretzel makers	do	Adjusted. Returned; to be settled by committee.	Oct. 31	Dec. 2	50	
Reddy Quality Pretzel Co., Reading, Pa.	do	do	do	do	do	do	50	
Rath Packing Co., Waterloo, Iowa	Threatened strike.	Packing-house workers.	Discharges for union affiliation	Adjusted. All reinstated	Nov. 10	Nov. 17	700	1,800
Fried Reineman Co., William Zoller Co., Oswald Hess Co., Pittsburgh, Pa.	Strike	do	Asked 20 percent increase and recognition.	Pending	do		700	1,500

Anaconda Copper Mining Co., Anaconda, Mont.	do	Copper and zinc miners.	Plant shut down; 1,200 men thus placed on relief roll.	Adjusted. Welfare committee agreed to take care of workers.	Nov. 15	Nov. 23	325	4,650
LaSalle Shoe Co., Nashua, N.H.	do	Shoe workers	Wages and working conditions	Adjusted. Satisfactory agreement.	Oct. 21	Nov. 22	450	
Fleisher Shoe Co., Nashua, N.H.	do	do	Company refused to abide by arbitration award.	Adjusted. Agreed on further arbitration.	Oct. 7	do	350	
Crescent Shoe Co., Keene, N.H.	do	do	Dispute relative to agreement	Adjusted. New interpretation of agreement.	Nov. 1	Nov. 27	350	
Aircraft plant, Baltimore, Md.	Threatened strike.	Aircraft workers	Asked union recognition	Unable to adjust. Parties could not agree on terms.	Nov. 16	Nov. 24	500	
Employing Plasterers' Association, Chicago, Ill.	Strike	Plasterers	Wage rate per day	Adjusted. Agreed on $1.50 per hour.	Sept. 1	Nov. 6	500	
Cappel Upholstering Co., Dayton, Ohio.	do	Upholsterers	Working conditions	Pending	Nov. 16		(1)	
Given Manufacturing Co., East Chicago, Ind.	do	Employees	do	Adjusted. Returned; agreement concluded.	Oct. 1	Nov. 17	221	8
Avalon Restaurant, Hammond, Ind.	do	Waitresses	do	do	Nov. 1	Nov. 18	4	80
E. M. Holmes Transportation Co., Buffalo, N.Y.	do	Truck drivers	Asked 48-hour week and $30 per per week.	Pending	Nov. 16		800	
Lace Mills, Wilkes-Barre, Pa.	do	Lace makers	Wages	Adjusted. Agreed on wages; industrial board to settle other grievances.	Nov. 18	Nov. 21	750	
Clinton Shoe Co., Clinton, Iowa	do	Shoe workers	Violation of agreement	Unable to adjust. Company in bankruptcy.	Nov. 17	Nov. 23	70	
Judd & Detweiler, Inc., Washington, D.C.	Controversy	Printers	Employee discharged; asked reinstatement with pay for time lost.	Adjusted. Employee reinstated; not paid for time lost.	Sept. 13	Nov. 20	1	200
American Airways, Inc., Fort Worth, Tex.	do	Mechanics	Reduction of wages; personnel and other conditions.	Pending	Nov. 20		(1)	
Rome Hosiery Mill, Rome, Ga.	Strike	Hosiery workers	Hours, wages, and union recognition.	Unclassified. Regional board to make final settlement.	do	Nov. 23	(1)	
Parker Appliance Co., Cleveland, Ohio.	do	Metal workers	Recognition, collective bargaining, and other conditions.	Adjusted. All returned; union recognition with collective bargaining.	Oct. 25	Nov. 15	35	15
Portland Lumber Co., Portland, Oreg.	Controversy	Sawmill workers	Alleged violation of National Industrial Recovery Act.	Adjusted. Part reinstated; others said to be inefficient.	Oct. 15	Nov. 13	2	148
Euclid Reforestation Camp, Cleveland, Ohio.	do	Building trades	Alleged violation of agreement to employ.	Pending	Nov. 15		2	23
Madawaska Lumber Co., Churchill Lake District, Maine.	do	Lumber men	Wages, working conditions, grinding of axes, and transportation.	do	Nov. 14		360	1,150
Winslow Bros. Leather Co., Norwood, Mass.	Strike	Shoe workers	Asked increase and union recognition.	Unclassified	Nov. 16	Nov. 27	600	
Republic Stamping & Enamelling Co., Canton, Ohio.	do	Stamping and enamelling.	Discrimination and refusal to recognize union.	Adjusted. Allowed recognition and satisfactory agreement.	do	Nov. 25	450	25
War Memorial, Kansas City, Mo.	do	Cement finishers and terrazzo workers.	Jurisdiction of laying gravel pavements.	Adjusted. Work awarded to terrazzo workers.	Nov. 20	Nov. 28	60	
Coal miners, Coal Creek, Tenn.	do	Miners	Working conditions	Pending	Nov. 23		300	
J. Schoeneman & Co., Baltimore, Md.	Lockout	Garment makers	do	do	Nov. 25		900	

[1] Not reported.

LABOR DISPUTES HANDLED BY CONCILIATION SERVICE DURING THE MONTH OF NOVEMBER 1933—Continued

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning	Ending	Directly	Indirectly
					1933	1933		
Wilson Packing Co., Los Angeles, Calif.	Strike	Meat packers	Refusal to grant collective bargaining and union recognition.	Unclassified. Returned; regional board to fix final terms.	Nov. 20	Nov. 29	1,000	
Pelky Bros. Transfer Co., Kansas City, Mo.	do	Truck drivers	Objection to change from hourly scale of 40 cents per hour to commission basis.	Adjusted	do	Nov. 22	10	10
American Furniture Co., North Wilkes-Barre, Pa.	Controversy	Carpenters and joiners.	Asked closed-shop agreement	Pending	Nov. 7		120	
Aronsohn Works, Bayonne, N.J.	Strike	Silk workers	Asked increase and union recognition.	Adjusted. Allowed 15 percent increase and union recognition.	Sept. 13	Nov. 28	300	
Woodlawn Dairy Co., Glendale Milk Co., Stephens Bros. Dairy Co., Burschel Dairy, and North End Dairy, Scranton, Pa.	Controversy	Drivers, barn men, inside men, foremen, and milk handlers.	Asked restoration of wage cut of 10 percent made Aug. 15, 1932.	Adjusted. Granted 5 percent increase, effective Apr. 15, 1934; further increase if conditions permit.	Nov. 15	Nov. 29	215	85
Franc Laundry Co., Toledo, Ohio	Strike	Molders	Discrimination and refusal to recognize union.	Adjusted. Company agreed to recognize union.	Nov. 13	Nov. 28	30	
Government construction								
Construction of water works, Conneant, Ohio.	Controversy	Bricklayers	Prevailing wage and other questions.	Adjusted. Increase from 60 cents to $1 per hour.	Nov. 3	Nov. 6	6	
Building, Fort Lewis, Wash	do	Building mechanics	Prevailing rate of wages	Adjusted. Agreed to pay the rates established by Public Works Administration.	Nov. 1	Nov. 16	150	
Lighthouse Service, Wyandotte, Mich.	do	do	Alleged illegal contract	Pending	Nov. 10		2	60
Post offices:								
Columbus, Ga	do	Iron workers	Prevailing rate of wages	Adjusted. Rates agreed upon	Nov. 7	Nov. 26	54	72
Chehalis, Wash	do	Tile workers	Not receiving prevailing wage	Adjusted. Prevailing wage being paid. Charge unfounded.	Oct. 19	Nov. 7	2	
Pittsburgh, Pa	Strike	Building mechanics	Jurisdiction of installation of conveyor system.	Pending	May 22		(1)	
Omaha, Nebr	Controversy	Plumbers, steam fitters, electricians, and asbestos workers.	Prevailing rate of wages for these crafts and payment of claims.	Unclassified. Too much time had elapsed since completion of work for claims to be given consideration.	Nov. 22	Nov. 27	15	
Total							21,950	10,204

(1) Not reported.

Appointment of Presidential Emergency Boards for Disputes on Railroads

Southern Pacific Lines in Texas and Louisiana

THE President of the United States, on November 23, 1933, created an emergency board to investigate a dispute over a large number of grievances between the Southern Pacific Lines in Texas and Louisiana and its engineers, firemen, conductors, and trainmen. The membership of the board is as follows: Hon. Walter P. Stacy, chief justice of the North Carolina Supreme Court; Dr. L. W. Courtney, professor at Baylor University, Waco, Tex.; and Frank P. Douglas, Oklahoma City. The board convened on November 29 at Houston, Tex.

The brotherhoods claim that more than 300 grievances are now pending, and that decisions of grievances by adjustment boards are ignored by the company. When mediation failed, the employees proposed arbitration of all the disputes, but the company refused. A strike vote tabulated November 22 showed a majority in favor of a strike at noon November 25, 1933. About 3,000 employees are involved.

In accordance with the Railway Labor Act, the board must submit its findings within 30 days. During that period and for 30 days following announcement by the President of the board's report the strike is held in abeyance.

Supplementary note, January 2, 1934.—The emergency board after a session of 8 days induced the management of the Southern Pacific lines in Louisiana and Texas and the four transportation brotherhoods to agree on a method for settling their controversy over working conditions. By this agreement the emergency board will take testimony on three of the points at issue; five will be heard by the Southwestern Train Service Board for adjustment; three employees involved in discipline cases will be reinstated without prejudice, and the remaining questions in dispute will be submitted to arbitration.

Mobile & Ohio Railroad

ON November 25, 1933, the President of the United States created an emergency board to investigate a dispute over wage reductions and drastic changes in working conditions between the Mobile & Ohio R.R. and its train dispatchers, engineers, enginemen and firemen, conductors, trainmen, and shopmen. The membership of the board is as follows: Judge Homer B. Dibell, of the Minnesota Supreme Court; Dr. Davis R. Dewey, of the Massachusetts Institute of Technology; and Walter C. Clephane, an attorney of Washington, D.C. The board convened on November 29, 1933, at Mobile, Ala.

The employees involved in the dispute voted to strike several months ago, but postponed the strike date when the receivers of the road promised an adjustment of the difficulties. On the failure of the receivers to make such adjustment the strike was set for December 1, 1933.

On appointment of the board the strike is held in abeyance until 30 days after the announcement by the President of the findings of the board.

Supplementary note, January 2, 1934.—The emergency board made its report to the President of the United States in December 1933.

LABOR AGREEMENTS

Agreement in Bituminous-Coal Industry of Southern Colorado and New Mexico

AN agreement, effective from November 1, 1933, to April 1, 1934, between the coal operators of southern Colorado and New Mexico and District No. 15, United Mine Workers of America, was negotiated at a joint conference held in Denver, Colo.

Under the authority of the National Industrial Recovery Act and the bituminous-coal code, an election was called at which the employees of the Colorado Fuel & Iron Co., located in this district, were to vote on the question of whom they desired to represent them in dealing with their employer. The vote was by secret ballot. The result of the vote showed that 877 employees of the company voted to have the United Mine Workers of America represent them, and 273 employees voted in favor of the Rockefeller Plan, a company union established in 1915.

An 8-hour day and a basic wage scale of $4.70 a day is provided for. This wage scale is from 22 to 26 cents higher than the basic minimum rate established by the code in the bituminous-coal industry for southern Colorado and New Mexico.

Section 10 of the agreement, which provides for the "check-off" for union dues, initiation fees, fines, assessments, pay of checkweighman, death benefits, and the producer's deductions for rent, light, water, fuel, and mining expenses and supplies, covers the question of the check-off more fully than is usual. It is as follows:

> The dues of the United Mine Workers of America, not exceeding $1.50 per month, shall be checked off the wages of members of said organization by the producer and shall be remitted to the secretary-treasurer of District No. 15, United Mine Workers of America, not later than the first pay day of the month following, for distribution to the branches of the United Mine Workers of America, and no assessments shall be so checked off except upon the authorization of the international executive board of the United Mine Workers of America.
>
> The initiation fee of the United Mine Workers of America, in sums not to exceed $2.50 per man in any one month, shall be deducted by the producer and remitted to the secretary-treasurer of District No. 15, United Mine Workers of America, in the same manner as dues deductions. Under no circumstances shall the initiation fee for any one man exceed $10.
>
> Notice of such collections to be made shall be given to the producer at the mine or plant on or before the 8th day of the month for which deductions are to be made.

Fines, levied by a local union against members, not to exceed $5 in any one pay period, shall be checked off by the producer only on certification by the proper officers of such local union as to the occasion for and propriety of the fine. Fines so collected shall, in the absence of protest on the part of the man or men involved or on the part of the producer, be turned over to the secretary-treasurer of District No. 15, United Mine Workers of America, for remittance to the local union. If the fine is protested, then same shall be checked off by the producer and held pending settlement of the matter in the manner provided for settlement of disputes in section 5 of this contract.

Death benefits, for the benefit of families of deceased members of the local union, in the amount of $1 per man in any one case, shall, on proper certification of the action of the local union in authorizing the check-off of such benefit, be checked off by the producer and paid to the treasurer of the local union as soon as collections on such check-off have been made.

The producer shall furnish to the secretary-treasurer of District No. 15, United Mine Workers of America, accompanying the remittance of amounts checked off as provided above, a statement showing the amounts collected for each of the following items, respectively:

(*a*) Dues.

(*b*) Fines—giving name or names of man or men fined and amounts of each such fine.

(*c*) Assessments.

(*d*) Initiation fees.

The producers are hereby authorized to check off from the wages due employees and to deduct from the producer's account, proper charges against employees for rent, light, water, house coal, and mining expenses and supplies

On proper assignment by the employee, the producers are authorized to make deductions from wages due employees for store bills and all other legitimate accounts.

It is hereby agreed that deductions as provided above and elsewhere in this contract shall have precedence in the following order:

(1) Checkweighman.

(2) Death benefits.

(3) Producer's deductions for rent, light, water, house coal, and mining expenses and supplies.

(4) Union dues, initiation fees, fines, and assessments.

(5) Other deductions.

The provisions of this agreement in regard to working conditions follow closely those of the Appalachian agreement, which will be found in the Monthly Labor Review, November 1933 (p. 1074).

The wage rates specified below are for an 8-hour day. Fractional portions of an 8-hour day are to be paid for at hourly rates equal to one eighth of the day rate per hour.

In all classifications of labor inside the mine not specified the customary differentials above or below the $4.70 basic inside rate are to be maintained. Producers now paying $4.48 are to increase the rate in these classifications 22 cents per day, and producers paying $4.44 are to increase the rate in these classifications 26 cents per day. All rates for pick mining, machine loading, cutting, and other contract work are to be advanced by the same percentage as is the inside basic rate for skilled labor. All yardage and deadwork

rates are to be increased by the same percentage as is applied to the inside basic rate for skilled labor. At all mines where there are no established rates for yardage and deadwork, such rates are to be determined by local agreement.

DAILY AND HOURLY WAGE RATES OF WORKERS IN BITUMINOUS-COAL MINES IN SOUTHERN COLORADO AND NEW MEXICO, BY OCCUPATIONS

Occupation	Daily rate	Hourly rate	Occupation	Daily rate	Hourly rate
Outside labor:			Outside labor—Continued.		
Blacksmiths	$4.70	$0.583/4	Oilers	$3.75	$0.467/8
Blacksmiths' helpers	4.00	.50	Couplers	3.75	.467/8
Electricians and mechanics	4.70	.583/4	Teamsters	3.75	.467/8
Electricians and mechanics' helpers	4.50	.561/4	Outside mine labor (unclassified)	3.75	.467/8
Hoisting engineers	4.70	.583/4	Firemen	4.05	.505/8
Dinky and locomotive engineers	4.70	.583/4	Lampmen (to be settled locally)		
Linemen (inside or outside)	4.70	.583/4	Hoistmen and powerhouse engineers	4.70	.583/4
Drum runners	4.50	.561/4	Washer operators	4.00	.50
Knucklemen	3.90	.483/4	Inside:		
Carpenters	4.50	.561/4	Drivers (one or two animals)	4.70	.583/4
Car repairers (mine)	4.05	.505/8	Trackmen and timbermen	4.70	.583/4
Box-car loaders (lump)	4.00	.50	Motormen	4.70	.583/4
Dumpers	4.00	.50	Hoistmen	4.70	.583/4
Car droppers	4.00	.50	Wiremen	4.70	.583/4
Tipplemen	3.75	.467/8	Rope riders	4.70	.583/4
Slate pickers (able-bodied men)	3.75	.467/8	Masons	4.70	.583/4
Slate pickers (others)	3.30	.411/4	Drillers (daywork)	4.70	.583/4
			Sinkers (vertical shafts)	5.00	.621/2

WORKERS' EDUCATION AND TRAINING

Recommendations at Regional Conference on Vocational Guidance

UNDER the sponsorship of the National Occupational Conference a regional meeting on vocational guidance was held at Johnsonburg, N.Y., at the engineering camp of Stevens Institute of Technology, August 28 to September 2, 1933. Approximately 100 men and women were in attendance, among them working counselors in the public schools, teachers of guidance in colleges and universities, directors and supervisors of guidance, and a number of psychologists. An account of this meeting is published in the November 1933 issue of Occupations—the Vocational Guidance Magazine, from which the data here presented are taken.

Of 102 recommendations, the most outstanding were:

The publication in full of the National Occupational Conference bibliography of occupational information and the current maintenance of such bibliography.[1]

The development of ways and means to assemble and distribute current data on occupational trends, with particular reference to the absorptive capacity of different occupations.

The utilization of vocational-guidance and other agencies for follow-up studies to determine occupational trends in local communities and the paying of close attention to economic problems as well as to the description of vocational processes.

Research to develop working tools for the evaluation of individual differences and to ascertain "the patterns of measured characteristics that are typical of individuals who are happy and successful in important occupations."

The publication by the National Occupational Conference, for the purpose of assisting counselors in discovering personality and psychiatric difficulties, of the following:

(*a*) Reading lists on personality and psychiatric problems.
(*b*) Suggested courses of training for counselors in the above fields.
(*c*) Lists of psychiatric and psychological services available in various regions.
(*d*) Lists of universities and colleges offering these subjects in their relation to guidance.

[1] Described in Occupations—the Vocational Guidance Magazine, New York, October 1933, pp. 49–56.

The encouragement by the conference of a better articulation between high school and college personnel officers in regard to—

(*a*) Obtaining specific, useful information other than that from the strictly academic high school.

(*b*) Methods of furnishing the high school with information about its graduates in college.

(*c*) Accrediting or other recognition by colleges of excess work done during the high-school period, such as postgraduate study, travel, outside work, and study in technical fields.

The operation of the National Occupational Conference as a clearing house for follow-up and appraisal studies, and that these studies in turn be interpreted for the use of schools, colleges, and other agencies, that proposed studies be so appraised, and that a conference be held on the proper procedures for making such studies. The importance was emphasized of having a minimum list of books and other materials which would be particularly helpful to special groups; for example, small school libraries and rural counselors.

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HOUSING

Building Operations in Principal Cities of the United States, November 1933

REPORTS of building operations for the months of October and November 1933 were received by the Bureau of Labor Statistics from 760 identical cities having a population of 10,000 or over. These reports showed a decrease of 31.6 percent in number and a decrease of 8.8 percent in indicated expenditures for the buildings for which permits were issued in November as compared with October.

The cost figures as shown in the following tables are as estimated by the prospective builder on applying for his permit to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are shown. This excludes considerable building in the suburbs of some cities.

The States of Illinois, Massachusetts, New Jersey, New York, North Carolina, and Pennsylvania, through their departments of labor, are cooperating with the Federal Bureau in the collection of these data.

Comparisons, October and November, 1933

TABLE 1 shows the estimated cost of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 760 identical cities of the United States having a population of 10,000 or over, by geographic divisions.

TABLE 1.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 760 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN OCTOBER AND NOVEMBER 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings (estimated cost)			New nonresidential buildings (estimated cost)		
	October 1933	November 1933	Percent of change	October 1933	November 1933	Percent of change
New England	$1,652,645	$1,071,300	−35.2	$1,803,836	$1,872,530	+3.8
Middle Atlantic	2,351,790	9,576,425	+307.2	4,115,861	2,491,826	−39.5
East North Central	919,547	514,700	−40.6	2,341,424	911,659	−61.1
West North Central	598,965	410,442	−31.5	1,400,260	499,421	−64.3
South Atlantic	827,710	726,394	−12.2	2,071,330	968,543	−53.2
South Central	433,511	343,300	−20.8	1,622,087	2,390,036	+47.3
Mountain and Pacific	1,493,959	1,126,204	−24.6	3,588,380	4,144,048	+15.5
Total	8,278,127	13,768,765	+66.3	16,943,178	13,278,063	−21.6

TABLE 1.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 760 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN OCTOBER AND NOVEMBER 1933, BY GEOGRAPHIC DIVISIONS—Continued

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction (estimated cost)			Number of cities
	October 1933	November 1933	Per-cent of change	October 1933	November 1933	Per-cent of change	
New England	$1,652,524	$1,037,690	−37.2	$5,109,005	$3,981,520	−22.1	107
Middle Atlantic	4,684,936	2,682,253	−42.7	11,152,587	14,750,504	+32.3	173
East North Central	1,400,221	1,096,802	−21.7	4,661,192	2,523,161	−45.9	171
West North Central	601,423	341,616	−43.2	2,600,648	1,251,479	−51.9	68
South Atlantic	1,796,303	916,839	−49.0	4,695,343	2,611,776	−44.4	79
South Central	913,933	678,958	−25.7	2,969,531	3,412,294	+14.9	79
Mountain and Pacific	2,242,230	1,313,795	−41.4	7,324,569	6,584,047	−10.1	83
Total	13,291,570	8,067,953	−39.3	38,512,875	35,114,781	−8.8	760

There was an increase of 66.3 percent in indicated expenditures for new residential buildings, comparing November with October. This increase was caused wholly by permits issued for several large apartment houses, costing more than $7,000,000, in the Borough of the Bronx. All of the geographic divisions, excepting the Middle Atlantic, showed decreases in expenditures for residential buildings.

Indicated expenditures for new nonresidential buildings decreased 21.6 percent. Three of the seven geographic divisions showed increases in the expenditures for this type of structure, while four showed decreases. Included in the indicated expenditures for nonresidential buildings are expenditures for public buildings whenever a contract is awarded for such type of building to be erected in a city having a population of 10,000 or over. Contracts from Federal works funds, however, have not materially affected the totals. Most of the Federal building projects for which contracts have been awarded from these funds are located in Army posts, which are, for the most part, outside the city limits. So far contracts for non-Federal building projects have not been awarded in sufficient volume to give any great stimulus to the building program. Allotments for non-Federal buildings, however, have been so large that in the near future they will be reflected in the contract reports.

There was a decrease of 39.3 percent in indicated expenditures for additions, alterations, and repairs. All seven geographic divisions showed decreases for this type of building operation. The decreases ranged from 21.7 percent in the East North Central States to 49 percent in the South Atlantic States.

The estimated cost for building construction of all types decreased 8.8 percent, comparing November with October. This is less than the usual seasonal decrease. Two of the geographic divisions showed increases in the estimated cost of total construction and five showed decreases.

Table 2 shows the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 760 cities of the United States, by geographic division.

TABLE 2.—NUMBER OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 760 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN OCTOBER AND NOVEMBER 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings		New nonresidential buildings		Additions, alterations, and repairs		Total construction	
	October 1933	November 1933	October 1933	November 1933	October 1933	November 1933	October 1933	November 1933
New England	285	202	921	701	2,604	1,728	3,810	2,631
Middle Atlantic	419	344	1,482	859	6,059	3,602	7,960	4,805
East North Central	199	99	1,388	739	2,800	1,742	4,387	2,580
West North Central	178	131	862	444	1,417	715	2,457	1,290
South Atlantic	223	170	536	455	3,010	2,496	3,769	3,121
South Central	168	179	511	392	2,316	1,720	2,995	2,291
Mountain and Pacific	377	313	1,123	892	4,560	3,565	6,060	4,770
Total	1,849	1,438	6,823	4,482	22,766	15,568	31,438	21,488
Percent of change		−22.2		−34.3		−31.6		−31.6

The number of new residential buildings for which permits were issued in November, as compared with October, decreased in six of the seven geographic divisions. In the South Central States there was a slight increase in the number of residential buildings. The decrease for the country as a whole was 22.2 percent.

There was a decrease of 34.3 percent in the number of new nonresidential buildings, all of the seven geographic divisions registering decreases in this type of structure.

The number of additions, alterations, and repairs made to existing buildings showed a decrease in each geographic division, the decrease for the 760 cities being 31.6 percent.

The number of building projects of all types decreased 31.6 percent in these cities. The decrease was spread over all geographic divisions.

Table 3 shows the estimated cost and number of families provided for in the different types of housekeeping dwellings for which permits were issued in 760 identical cities in October and November, by geographic divisions.

The buildings for which permits were issued during November were to provide 3,957 new dwelling units. This is an increase of 86.3 percent as compared with October. Expenditures for these housekeeping dwellings totaled over $13,500,000, or an increase of 71.5 percent as compared with the estimated cost of housekeeping dwellings for which permits were issued during October. This large increase in expenditures for housekeeping dwellings and in the number of dwelling

units provided was caused entirely by large apartment buildings in the city of New York, as there was a decided decrease in the number of family-dwelling units provided in both 1-family dwellings and 2-family dwellings, comparing November with October. The South Central and the West North Central were the only geographic divisions showing increases in the number of families provided for in 1-family and 2-family dwellings. Permits were issued in the Borough of the Bronx for 39 apartment houses, to house 2,340 families.

TABLE 3.—ESTIMATED COST AND NUMBER OF FAMILIES PROVIDED FOR IN THE DIFFERENT KINDS OF HOUSEKEEPING DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 760 IDENTICAL CITIES IN OCTOBER AND NOVEMBER 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	1-family dwellings				2-family dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	October 1933	November 1933	October 1933	November 1933	October 1933	November 1933	October 1933	November 1933
New England	$1,237,090	$1,050,400	266	199	$97,055	$20,900	27	5
Middle Atlantic	1,872,240	1,451,525	370	265	280,750	239,100	74	62
East North Central	874,547	493,600	193	96	45,000	21,100	9	6
West North Central	585,665	382,742	175	125	13,300	22,700	5	7
South Atlantic	764,110	608,229	208	161	23,700	5,830	20	6
South Central	334,961	253,922	160	162	23,550	82,678	14	30
Mountain and Pacific	1,311,759	1,044,254	354	295	90,800	58,350	32	30
Total	6,980,372	5,284,672	1,726	1,303	574,155	450,658	181	146
Percent of change		−24.3		−24.5		−21.5		−19.3

Geographic division	Multifamily dwellings				Total, all kinds of housekeeping dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	October 1933	November 1933	October 1933	November 1933	October 1933	November 1933	October 1933	November 1933
New England	$21,500	0	12	0	$1,355,645	$1,071,300	305	204
Middle Atlantic	194,200	$7,884,000	71	2,477	2,347,190	9,574,625	515	2,804
East North Central	0	0	0	0	919,547	514,700	202	102
West North Central	0	5,000	0	4	598,965	410,442	180	136
South Atlantic	39,900	27,335	31	16	827,710	641,394	259	183
South Central	75,000	4,000	60	4	433,511	340,600	234	196
Mountain and Pacific	90,400	23,600	43	7	1,492,959	1,126,204	429	332
Total	421,000	7,943,935	217	2,508	7,975,527	13,679,265	2,124	3,957
Percent of change		+1,786.9		+1,055.8		+71.5		+86.3

Table 4 shows the index numbers of indicated expenditures for new residential buildings, for new nonresidential buildings, for additions, alterations, and repairs, and for total building operations.

TABLE 4.—INDEX NUMBERS OF FAMILIES PROVIDED FOR AND OF THE INDICATED EXPENDITURES FOR BUILDING OPERATIONS AS SHOWN BY PERMITS ISSUED IN PRINCIPAL CITIES OF THE UNITED STATES

[Monthly average, 1929=100]

Month	Families provided for	Indicated expenditures for—			
		New residential buildings	New nonresidential buildings	Additions, alterations, and repairs	Total building construction
1929					
October	64.4	61.6	107.9	115.2	85.7
November	51.7	44.8	89.6	95.2	68.1
1930					
October	58.3	44.9	53.5	58.1	49.7
November	52.9	42.5	54.4	37.8	46.3
1931					
October	33.7	25.4	34.8	39.8	30.8
November	23.8	19.0	32.7	33.6	26.2
1932					
October	9.5	6.6	12.6	22.8	11.0
November	6.4	4.9	21.8	14.9	13.0
1933					
October	6.5	5.2	13.1	30.1	12.1
November	12.1	8.6	10.3	18.3	11.0

The index number of families provided for and of indicated expenditures for new residential buildings was higher than for either October 1933 or for November 1932 and higher than for any month since June 1933.

The index number of expenditures for new nonresidential buildings and for total building operations was lower than for either October 1933 or November 1932.

The index number of expenditures for additions, alterations, and repairs showed a decrease as compared with October 1933, but an increase as compared with November 1932.

Construction from Public Funds

TABLE 5 shows the value of contracts awarded by the United States Government for construction projects of all kinds during October and November 1933. This includes building construction; public roads; river, harbor, and flood-control projects; streets and roads (other than public roads); naval vessels; reclamation projects; forest service; water and sewerage systems; and miscellaneous projects.

Whenever a contract is awarded for public buildings in a city having a population of 10,000 or over, the data are included in all the tables published in this pamphlet. Data for public construction other than building are not shown in the building-operations tables.

TABLE 5.—VALUE OF CONTRACTS AWARDED FOR ALL FEDERAL CONSTRUCTION PROJECTS BY THE UNITED STATES GOVERNMENT DURING OCTOBER AND NOVEMBER 1933, BY GEOGRAPHIC DIVISIONS [1]

Geographic divisions	Building construction		Public roads		River, harbor, and flood-control projects	
	October 1933	November 1933	October 1933	November 1933	October 1933	November 1933
New England	$753,381	$707,107	$2,551,100	$2,975,681	$759,061	$1,337,700
Middle Atlantic	2,292,948	2,483,438	4,934,839	7,114,333	3,545,755	1,511,038
East North Central	336,768	293,993	5,640,642	7,054,030	13,200,240	4,226,577
West North Central	741,882	205,804	8,151,255	5,709,449	6,904,804	3,803,792
South Atlantic	3,295,992	5,361,827	4,278,106	4,839,679	7,335,509	118,965
South Central	4,202,177	5,097,392	7,091,638	7,275,424	15,981,813	3,842,087
Mountain and Pacific	2,861,785	5,748,506	8,625,551	6,258,793	2,486,212	2,067,569
Total	[2] 14,489,933	19,898,067	41,273,131	41,227,389	50,213,394	16,907,728
Outside continental United States	1,047,282	254,192	----------	----------	273,884	4,565,115

Geographic division	Streets and roads [3]		Naval vessels		Reclamation projects		Forestry	
	October 1933	November 1933	October 1933	November 1933	October 1933	November 1933	October 1933	November 1933
New England	$199,203	$86,002	$1,505	$266,739	0	0	$27,585	$3,476
Middle Atlantic	734,778	146,004	258,645	1,091,955	0	0	0	0
East North Central	389,511	0	11,145	1,134,106	0	0	1,328,570	24,601
West North Central	323,733	172,933	0	0	$21,200	$12,000	748,330	236,603
South Atlantic	1,952,118	536,639	30,645	1,894,264	13,000	10,000	738,780	69,219
South Central	1,664,007	477,454	0	0	8,700	8,000	232,485	130,173
Mountain and Pacific	8,033,640	1,283,352	673,125	614,650	747,124	562,397	5,555,634	854,879
Total	13,296,990	2,702,384	975,065	5,001,714	[4] 806,968	[5] 596,397	[6] 8,696,054	1,318,951
Outside continental United States	1,585,854	89,794	193,572	126,140	----------	----------	----------	----------

Geographic division	Water and sewerage systems		Miscellaneous		Total	
	October 1933	November 1933	October 1933	November 1933	October 1933	November 1933
New England	0	0	$240,984	$453,470	$4,532,819	$5,830,175
Middle Atlantic	$13,831	$81,518	432,247	771,432	12,213,043	13,199,718
East North Central	5,000	0	90,444	509,574	21,002,320	13,242,881
West North Central	51,300	0	196,558	346,080	17,139,062	10,478,661
South Atlantic	182,146	193,113	1,274,962	837,942	19,101,258	13,861,648
South Central	107,190	224,308	294,165	751,649	29,582,175	17,806,487
Mountain and Pacific	357,333	224,600	1,189,486	803,832	30,529,890	18,418,578
Total	716,800	723,539	3,718,846	[7] 4,493,705	[8] 134,187,181	[8] 92,861,874
Outside continental United States	----------	20,920	247,807	374,952	3,348,399	5,431,113

[1] Subject to revision.
[2] Includes $5,000 not allocated by geographic divisions.
[3] Other than those reported by the Bureau of Public Roads.
[4] Includes $16,944 not allocated by geographic divisions.
[5] Includes $4,000 not allocated by geographic divisions.
[6] Includes $64,670 not allocated by geographic divisions.
[7] Includes $19,726 not allocated by geographic divisions.
[8] See notes to detail.

During November 1933 contracts were awarded or force account work was started on Government construction projects of all types to cost approximately $100,000,000. This compares with over

$137,000,000 in October. The decrease was caused by a falling off in contracts awarded for river, harbor, and flood-control projects.

A large increase was shown in the value of contracts awarded for building construction, comparing November with October.

The value of contracts awarded for total construction projects was greater in the Mountain and Pacific than in any of the other geographic divisions. The South Central division was a close second in value of awards. In each geographic division, except the New England, awards totaled more than $10,000,000.

Contracts awarded during November for public roads made up approximately 40 percent of the total awards for construction projects of all kinds. In all geographic divisions, except the South Atlantic, public roads accounted for a larger expenditure of money than any other type of construction projects. In the South Atlantic division, building construction accounted for the largest expenditure.

Table 6 shows the value of contracts awarded from public-works funds for all non-Federal construction projects, by geographic divisions.

TABLE 6.—VALUE OF CONTRACTS AWARDED FOR ALL NON-FEDERAL CONSTRUCTION PROJECTS BY THE UNITED STATES GOVERNMENT DURING OCTOBER AND NOVEMBER 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	Building construction		Streets and roads [1]		Water and sewerage systems	
	October 1933	November 1933	October 1933	November 1933	October 1933	November 1933
New England	$268,431	$862,665	$1,084,770	$128,654	$1,168,217	$207,828
Middle Atlantic	2,362,804	725,664	0	10,000	365,122	2,609,358
East North Central	1,590,689	2,095,051	76,310	4,189,607	3,269,608	10,521,566
West North Central	281,135	782,544	1,200,505	485,028	995,028	1,083,358
South Atlantic	200,208	1,758,598	190,000	0	124,048	278,227
South Central	479,058	72,515	85,709	191,547	60,117	1,258,849
Mountain and Pacific	640,378	418,355	204,779	137,441	35,115	682,455
Total	5,822,703	6,715,392	2,842,073	5,142,277	6,017,255	16,641,641

Geographic division	Miscellaneous		Total	
	October 1933	November 1933	October 1933	November 1933
New England	$173,000	$22,500	$2,694,418	$1,221,647
Middle Atlantic	52,500	0	2,780,426	3,345,022
East North Central	0	265,232	4,936,607	17,071,456
West North Central	43,961	0	2,520,629	2,350,930
South Atlantic	0	0	514,256	2,036,825
South Central	0	796	624,884	1,523,707
Mountain and Pacific	0	32,518	880,272	1,270,769
Total	269,461	321,046	14,951,492	28,820,356

[1] Other than those reported by the Bureau of Public Roads.

During November contracts were awarded for non-Federal construction projects to cost nearly $29,000,000. This is nearly twice as much as the value of awards made during October. Increases were shown in the value of contracts awarded for all types of non-Federal projects, comparing November with October. The largest increase was registered in the value of awards made for water and sewerage systems, although both building construction and street and road projects also showed decided increases.

The total value of awards in the New England division and the West North Central division showed decreases in November as compared with October. The other five geographic divisions, however, registered heavy increases in the value of non-Federal construction awards. In the East North Central division the increase was over $12,000,000.

Street and road paving as shown in this table does not include the road work done by the Bureau of Public Roads of the United States Department of Agriculture.

Table 7 shows the value of public buildings and highway construction awards as reported by the various State governments.

TABLE 7.—VALUE OF PUBLIC BUILDING AND HIGHWAY CONSTRUCTION AWARDS AS REPORTED BY THE STATE GOVERNMENTS, BY GEOGRAPHIC DIVISIONS

Geographic division	Value of awards for public buildings			Value of awards for highway construction	
	November 1932	October 1933	November 1933	October 1933	November 1933
New England	$46,539	$262,617	$141,665	$326,531	$21,844
Middle Atlantic	1,999,180	842,089	143,688	418,688	125,818
East North Central	1,160,757	528,032	48,573	1,929,455	566,883
West North Central	63,700	25,865	15,440	824,682	949,419
South Atlantic	177,022	215,545	159,513	181,780	156,129
South Central	170,944	492,865	597,230	333,280	23,282
Mountain and Pacific	16,973	211,899	805,435	1,166,609	2,761,577
Total	3,635,115	2,578,912	1,911,544	5,181,025	4,604,952

Data concerning building construction awards by State governments are received direct from the State officials. Information concerning highway construction is obtained from the Federal Bureau of Public Roads.

During November 1933 State awards for building construction totaled slightly less than $2,000,000. This was lower than the value of contracts awarded during either the month of October 1933 or the month of November 1932.

The value of awards for State highway construction was slightly less during November 1933 than during October 1933.

Comparisons, November 1933 with November 1932

TABLE 8 shows the estimated cost of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 342 identical cities of the United States having a population of 25,000 or over for the months of November 1932 and November 1933, by geographic divisions.

TABLE 8.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 342 IDENTICAL CITIES AS SHOWN BY PERMITS ISSUED IN NOVEMBER 1932 AND NOVEMBER 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings (estimated cost)			New nonresidential buildings (estimated cost)		
	November 1932	November 1933	Percent of change	November 1932	November 1933	Percent of change
New England	$773,550	$775,150	+0.2	$774,476	$1,697,819	+119.2
Middle Atlantic	1,632,761	9,113,150	+458.1	9,180,610	2,040,286	−77.8
East North Central	530,050	423,600	−20.1	4,998,256	842,346	−83.1
West North Central	526,574	348,572	−33.8	581,900	399,014	−31.4
South Atlantic	557,905	570,303	+2.2	4,051,057	858,626	−78.8
South Central	407,639	299,785	−26.5	1,219,677	2,344,401	+92.2
Mountain and Pacific	1,394,543	896,434	−35.7	5,244,559	3,889,808	−25.8
Total	5,823,022	12,426,994	+113.4	26,050,535	12,072,300	−53.7

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction (estimated cost)			Number of cities
	November 1932	November 1933	Percent of change	November 1932	November 1933	Percent of change	
New England	$614,331	$904,599	+47.2	$2,162,357	$3,377,568	+56.2	51
Middle Atlantic	2,268,444	2,548,763	+12.4	13,081,815	13,702,199	+4.7	67
East North Central	718,934	1,012,660	+40.9	6,247,240	2,278,606	−63.5	92
West North Central	246,803	281,579	+14.1	1,355,277	1,029,165	−24.1	25
South Atlantic	882,001	856,208	−2.9	5,490,963	2,285,137	−58.4	40
South Central	437,804	477,736	+9.1	2,065,120	3,121,922	+51.2	29
Mountain and Pacific	870,506	1,153,086	+32.5	7,509,608	5,939,328	−20.9	38
Total	6,038,823	7,234,631	+19.8	37,912,380	31,733,925	−16.3	342

Comparing permits issued in November 1933 with November 1932, there was an increase of 113.4 percent in indicated expenditures for new residential buildings. Three of the five geographic divisions showed increases in indicated expenditures for this type of construction. The increase, however, was nominal in the New England and the South Atlantic divisions. In the Middle Atlantic division, due to the large apartment buildings in New York City, the increase over the same month of the previous year was more than 400 percent.

New nonresidential buildings decreased more than 50 percent. However, the New England and the South Central divisions showed large increases in this type of structure.

There was an increase of 19.8 percent in indicated expenditures for additions, alterations, and repairs, six of the seven geographic divi-

sions showing a pick-up in expenditures for changes to existing buildings.

The estimated cost of total building construction in these 342 cities was 16.3 percent lower during November 1933 than during the same month of 1932, three geographic divisions showing increases and four decreases.

Table 9 shows the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building construction in 342 identical cities having a population of 25,000 or over for the months of November 1932 and November 1933, by geographic divisions.

TABLE 9.—NUMBER OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 342 IDENTICAL CITIES AS SHOWN BY PERMITS ISSUED IN NOVEMBER 1932 AND NOVEMBER 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings		New nonresidential buildings		Additions, alterations, and repairs		Total construction	
	November 1932	November 1933	November 1932	November 1933	November 1932	November 1933	November 1932	November 1933
New England	136	139	485	435	1,602	1,380	2,223	1,954
Middle Atlantic	322	268	967	660	3,787	3,304	5,076	4,232
East North Central	110	81	824	657	1,471	1,605	2,405	2,343
West North Central	139	107	392	373	537	608	1,068	1,088
South Atlantic	144	132	467	355	2,217	2,221	2,828	2,708
South Central	163	141	299	354	1,160	1,185	1,622	1,680
Mountain and Pacific	368	262	1,055	778	2,648	3,029	4,071	4,069
Total	1,382	1,130	4,489	3,612	13,422	13,332	19,293	18,074
Percent of change		−18.2		−19.5		−0.7		−6.3

All of the geographic divisions excepting the New England, showed decreases in the number of residential buildings comparing November 1933 with November 1932. The decrease for the 342 cities as a whole was 18.2 percent.

The number of new nonresidential buildings decreased 19.5 percent comparing the two months under discussion, six of the geographic divisions showing decreases. The South Central division, however, showed a marked increase.

The number of additions, alterations, and repairs decreased 0.7 of 1 percent, with five divisions showing increases and two decreases.

The total number of construction projects decreased 6.3 percent, five divisions showing decreases and one an increase.

Table 10 shows the number of families provided for in the different kinds of housekeeping dwellings, together with the estimated cost of such dwellings, for which permits were issued in 342 identical cities during November 1932 and November 1933, by geographic divisions.

TABLE 10.—ESTIMATED COST AND NUMBER OF FAMILIES PROVIDED FOR IN THE DIFFERENT KINDS OF HOUSEKEEPING DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 342 IDENTICAL CITIES IN NOVEMBER 1932 AND NOVEMBER 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	1-family dwellings				2-family dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	November 1932	November 1933	November 1932	November 1933	November 1932	November 1933	November 1932	November 1933
New England	$706,650	$762,750	123	137	$66,900	$12,400	26	4
Middle Atlantic	1,174,061	1,009,150	261	194	356,200	220,000	95	55
East North Central	477,850	402,500	101	78	44,700	21,100	13	6
West North Central	521,074	332,472	137	104	1,000	16,100	1	4
South Atlantic	554,905	549,473	141	128	3,000	5,830	4	6
South Central	374,339	216,107	155	126	18,600	79,678	10	28
Mountain and Pacific	1,186,043	830,234	334	246	139,500	57,600	53	28
Total	4,994,922	4,102,686	1,252	1,013	629,900	412,708	202	131
Percent of change		−17.9		−19.1		−34.5		−35.1

Geographic division	Multifamily dwellings				Total, all kinds of housekeeping dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	November 1932	November 1933	November 1932	November 1933	November 1932	November 1933	November 1932	November 1933
New England	0	0	0	0	$773,550	$775,150	149	141
Middle Atlantic	$84,500	$7,884,000	29	2,477	1,614,761	9,113,150	385	2,726
East North Central	7,500	0	3	0	530,050	423,600	117	84
West North Central	4,500	0	4	0	526,574	348,572	142	108
South Atlantic	0	15,000	0	6	557,905	570,303	145	140
South Central	9,500	4,000	8	4	402,439	299,785	173	158
Mountain and Pacific	50,500	8,600	29	3	1,376,043	896,434	416	277
Total	156,500	7,911,600	73	2,490	5,781,322	12,426,994	1,527	3,634
Percent of change		+4,955.3		+3,311.0		+115.0		+138.0

Indicated expenditures for 1-family dwellings decreased 17.9 percent, while the number of families provided therein decreased 19.1 percent, all geographic divisions, except the New England, registering decreases.

Indicated expenditures and families provided for in 2-family dwellings decreased in November 1933 as compared with the like month of last year. There was a very large increase in indicated expenditures for apartment houses comparing the two months under discussion. The number of family-dwelling units provided therein also increased many fold. As above explained, this increase is entirely due to the erection of 39 new apartment buildings in New York City.

Indicated expenditures for housekeeping dwellings of all kinds increased 115 percent, while the number of family-dwelling units provided therein increased 138 percent, comparing November 1933 with November 1932.

Details by Cities

TABLE 11 shows the estimated expenditures for new residential buildings, for new nonresidential buildings, and for total building operations, together with the number of families provided for in new dwellings, in each of the cities of the United States having a population of 10,000 or over from which reports were received for November 1933.

Permits were issued during November for the following important building projects: In Springfield, Mass., for school buildings to cost over $360,000; in New York City for apartment buildings to cost nearly $8,000,000; in Rockville Center, N.J., for a church to cost $205,000; and in Oklahoma City, Okla., for additions to school buildings to cost over $260,000. Contracts were awarded by the Federal Government for a post-office building in Cambridge, Mass., to cost $366,000; for a Federal office building in San Francisco, Calif., to cost over $2,500,000; and for officers' quarters and barracks in San Antonio, Tex., to cost nearly $1,000,000.

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER 1933

New England States

City and State	New residential buildings	Families provided for	New nonresidential buildings	Total including repairs	City and State	New residential buildings	Families provided for	New nonresidential buildings	Total including repairs
Connecticut:					Massachusetts:				
Ansonia	0	0	$1,125	$8,125	Arlington	$29,000	5	$37,925	$73,999
Bridgeport	$9,800	5	13,680	35,660	Attleboro	0	0	11,050	11,250
Bristol	0	0	1,570	12,521	Belmont	23,500	4	2,350	26,320
Danbury	0	0	0	0	Beverly	19,500	4	7,315	28,520
Derby	0	0	0	634	Boston [1]	121,400	24	505,620	871,691
East Hartford	3,500	1	85	4,175	Braintree	0	0	975	2,230
Enfield	1,000	1	500	2,250	Brockton	0	0	1,450	9,088
Fairfield	8,300	2	700	12,990	Brookline	105,000	10	800	112,175
Greenwich	49,000	5	900	58,500	Cambridge	0	0	380,000	395,175
Hamden	6,000	1	4,835	12,735	Chelsea	0	0	10,021	11,561
Hartford	7,800	1	2,456	112,086	Chicopee	0	0	2,000	5,800
Manchester	7,500	2	1,465	9,145	Dedham	0	0	25,150	28,175
Meriden	0	0	575	4,325	Easthampton	0	0	2,175	2,675
Middletown	9,300	3	4,190	16,290	Everett	0	0	1,250	1,325
Milford	2,300	1	2,715	7,791	Fall River	3,450	1	965	18,452
New Britain	13,000	3	5,840	24,186	Fitchburg	4,150	2	5,910	17,175
New Haven	15,500	3	3,375	34,100	Framingham	9,000	2	4,650	15,500
Norwalk	17,800	3	16,735	39,255	Gardner	0	0	40,715	42,415
Norwich	0	0	375	5,020	Gloucester	3,000	1	725	7,961
Stamford	10,600	2	1,525	42,225	Haverhill	2,100	1	290	4,605
Stratford	5,300	1	6,270	11,730	Holyoke	7,000	1	800	9,600
Torrington	5,000	2	23,680	30,620	Lawrence	0	0	1,850	15,295
Wallingford	0	0	300	5,925	Leominster	0	0	1,505	4,402
Waterbury	14,000	2	2,200	22,100	Lowell	4,800	2	1,225	15,425
West Hartford	68,000	10	1,660	80,102	Lynn	0	0	2,325	9,625
Willimantic	0	0	175	900	Malden	0	0	1,000	4,785
Maine:					Marlborough	0	0	1,150	1,200
Auburn	7,500	1	250	19,750	Medford	17,200	3	1,375	21,445
Biddeford	0	0	675	1,250	Melrose	9,500	2	3,290	28,867
Lewiston	0	0	159,700	159,700	Milton	31,700	7	4,050	38,450
Portland	24,200	5	2,145	32,520	Needham	19,000	4	1,800	23,200
South Portland	5,500	2	4,565	13,315	New Bedford	0	0	5,025	30,950
Westbrook	800	1	1,200	2,000	Newburyport	0	0	0	1,169
					Newton	85,500	10	13,045	119,885
					North Adams	7,500	2	400	8,965

[1] Applications filed.

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER 1933—Continued

New England States—Continued

City and State	New residential buildings	Families provided for	New nonresidential buildings	Total including repairs
Massachusetts—Continued.				
Northampton	0	0	$300	$975
North Attleboro	0	0	0	0
Norwood	$9,000	2	1,725	12,625
Peabody	20,350	4	650	21,250
Pittsfield	7,000	2	1,675	25,010
Quincy	0	0	6,675	17,326
Revere	0	0	600	3,100
Salem	6,000	1	22,100	43,305
Sangus [2]	900	1	1,705	3,205
Somerville	5,500	1	800	11,290
Southbridge	0	0	2,500	2,500
Springfield	0	0	396,735	402,600
Stoneham	0	0	675	2,250
Swampscott	0	0	1,500	2,200
Taunton	0	0	700	4,927
Waltham	17,500	3	2,070	37,535
Watertown	4,000	1	400	6,710
Wellesley	38,500	3	6,000	46,350
Westfield	0	0	3,500	3,500
West Springfield	0	0	8,595	9,320
Weymouth [2]	0	0	950	3,550
Winchester	13,000	2	1,150	15,875
Winthrop	0	0	800	1,250
Woburn	5,000	1	240	5,890
Worcester	29,500	5	7,008	123,207
New Hampshire:				
Berlin	0	0	$250	$250
Concord	$2,850	3	1,210	6,740
Manchester	17,300	6	4,490	24,154
Rhode Island:				
Central Falls	0	0	175	1,100
Cranston	37,500	10	5,275	46,075
East Providence	0	0	1,755	6,312
Newport	7,000	2	6,000	72,739
North Providence	12,700	4	550	13,850
Pawtucket	5,300	2	1,045	16,983
Providence	13,800	2	25,400	98,950
Warwick	8,500	3	2,800	15,900
Westerly	0	0	175	5,440
West Warwick	2,400	1	300	3,500
Woonsocket	1,600	1	10,265	14,856
Vermont:				
Bennington	4,500	1	0	4,500
Burlington	4,000	1	0	4,200
Rutland	4,500	1	800	5,700
Total	1,071,300	204	1,872,530	3,981,520

Middle Atlantic States

New Jersey:				
Atlantic City	0	0	$250	$17,116
Bayonne	0	0	0	7,940
Belleville	$3,000	1	750	12,450
Bloomfield	5,000	1	5,700	12,300
Bridgeton	0	0	5,350	5,950
Burlington	0	0	17	417
Camden	0	0	20,775	26,140
Clifton	3,000	1	9,000	15,387
Dover	4,400	1	0	4,400
East Orange	0	0	1,243	24,960
Elizabeth	17,000	3	13,000	42,000
Englewood	0	0	7,725	8,175
Garfield	5,000	1	600	6,750
Hackensack	0	0	0	4,950
Harrison	0	0	0	3,100
Hillside Twp.	13,000	2	1,725	16,950
Hoboken	0	0	3,000	10,461
Irvington	0	0	15,500	18,850
Jersey City	0	0	650	217,280
Kearny	0	0	4,000	6,350
Linden	0	0	9,240	9,240
Long Branch	1,500	1	0	1,500
Lyndhurst	8,000	2	1,100	9,850
Maplewood Township	10,000	1	900	12,850
Montclair	40,000	6	3,250	49,535
Morristown	0	0	500	2,010
Neptune Township	0	0	0	0
Newark	0	0	202,755	252,190
New Brunswick	0	0	3,110	7,130
Nutley	0	0	680	2,185
Orange	8,500	1	6,800	23,855
Passaic	0	0	650	7,530
Paterson	0	0	11,600	28,156
New Jersey—Continued.				
Perth Amboy	0	0	$3,600	$6,590
Phillipsburg	0	0	0	0
Plainfield	$7,000	1	398	10,773
Pleasantville	0	0	100	2,200
Rahway	0	0	26,075	27,075
Ridgefield Park	0	0	375	725
Ridgewood	12,050	1	1,290	16,879
Rutherford	0	0	15,900	18,880
South Orange	55,000	5	0	56,350
South River	0	0	3,350	4,300
Summit	32,000	4	1,460	36,485
Teaneck Township	71,600	11	2,700	76,515
Trenton	0	0	5,240	22,045
Union City	0	0	500	6,385
Union Twp.	13,625	3	3,825	18,850
Weehawken	0	0	1,500	3,010
Westfield	35,700	5	1,500	40,800
West New York	0	0	300	1,425
West Orange	9,100	3	700	18,495
New York:				
Albany	65,000	5	67,830	151,434
Amsterdam	0	0	450	1,650
Auburn	7,000	1	4,700	13,200
Batavia	0	0	200	200
Binghamton	700	1	13,738	52,171
Buffalo	2,700	1	64,950	108,620
Cohoes	0	0	100	475
Dunkirk	0	0	2,520	3,820
Elmira	0	0	3,273	8,907
Endicott	10,100	4	31,295	43,738
Floral Park	16,000	3	1,250	18,450
Freeport	10,800	6	750	13,250

[2] Not included in totals.

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER 1933—Continued

Middle Atlantic States—Continued

City and State	New residential buildings	Families provided for	New nonresidential buildings	Total including repairs
New York—Continued.				
Fulton	$7,200	2	$225	$7,475
Glen Cove	7,500	1	1,963	12,556
Glens Falls	0	0	800	1,960
Hornell	0	0	0	0
Irondequoit	2,800	1	1,600	4,600
Ithaca	0	0	3,450	3,675
Jamestown	0	0	350	2,355
Johnson City	3,800	1	200	4,400
Kenmore	0	0	4,300	4,300
Kingston	8,300	4	10,695	22,730
Lackawanna	0	0	200	200
Lockport	800	1	2,000	2,950
Lynbrook	0	0	125	7,200
Mamaroneck	0	0	1,050	9,470
Massena	0	0	0	0
Middletown	0	0	550	1,885
Mount Vernon	46,000	7	0	55,875
Newburgh	18,500	3	4,200	23,800
New Rochelle	63,000	5	9,100	94,150
New York City:				
The Bronx [1]	7,661,700	2,380	56,500	7,903,455
Brooklyn [1]	416,000	128	400,405	1,322,200
Manhattan [1]	0	0	128,200	639,923
Queens [1]	418,200	117	77,329	757,174
Richmond [1]	38,300	5	104,146	182,006
Niagara Falls	13,500	3	15,845	54,484
Ogdensburg	0	0	500	500
Olean	0	0	0	0
Ossining	8,000	1	350	8,350
Oswego	0	0	50,000	50,000
Peekskill	8,300	2	2,800	15,125
Plattsburg	11,300	3	0	11,800
Port Chester	0	0	713	1,813
Port Jervis	0	0	0	0
Poughkeepsie	10,000	1	25	12,472
Rensselaer	0	0	16,250	17,650
Rochester	0	0	66,456	86,036
Rockville Center	18,500	3	205,525	224,795
Saratoga Springs	17,800	1	0	17,800
Schenectady	2,200	1	197,549	211,021
Syracuse	10,000	2	32,175	65,450
Tonawanda	0	0	135	2,635
Troy	22,500	5	650	32,900
Utica	17,500	3	45,800	63,300
Valley Stream	0	0	400	1,550
Watertown	0	0	750	4,220
White Plains	0	0	725	7,375
Yonkers	50,000	7	100,625	162,750
Pennsylvania:				
Abington Township	0	0	1,197	6,178
Allentown	10,000	1	600	14,225
Altoona	0	0	385	4,566
Arnold	3,200	1	0	3,200
Bethlehem	0	0	300	6,300
Braddock	0	0	0	0
Bradford	0	0	3,500	5,020
Bristol	0	0	300	300
Canonsburg	4,000	1	0	4,000
Pennsylvania—Continued.				
Carlisle	$6,000	1	$1,000	$7,130
Chambersburg	0	0	0	0
Charleroi	0	0	125	125
Chester	0	0	250	250
Clairton	0	0	735	1,730
Coatesville	0	0	0	0
Connellsville	0	0	0	0
Coraopolis	0	0	0	0
Donora	0	0	0	0
Du Bois	0	0	0	200
Duquesne	0	0	290	505
Easton	0	0	400	21,998
Elwood City	0	0	0	0
Erie	0	0	2,165	10,788
Greensburg	0	0	0	0
Harrisburg	11,000	1	1,660	23,010
Haverford	0	0	6,125	12,881
Hazleton	5,000	1	600	8,100
Homestead	0	0	0	250
Jeannette	0	0	0	0
Johnstown	0	0	10	2,020
Kingston	10,500	3	325	11,125
Lancaster	0	0	4,300	5,700
Latrobe	4,000	1	0	4,000
Lower Merion	15,600	1	10,500	36,598
McKeesport	0	0	530	3,764
Meadville	0	0	4,000	5,135
Monessen	6,500	2	500	7,010
Mount Lebanon	29,500	2	0	30,000
New Kensington	0	0	0	0
Norristown	0	0	6,240	12,970
North Braddock	0	0	0	0
Oil City	0	0	175	195
Philadelphia	81,000	13	273,964	535,382
Phoenixville	0	0	0	0
Pittsburgh	9,650	3	16,900	71,290
Pittston	0	0	0	0
Plymouth	0	0	0	5,000
Pottstown	0	0	1,100	2,100
Pottsville	0	0	0	3,050
Scranton	10,500	3	1,400	26,275
Sharon	0	0	2,575	5,225
Steelton	0	0	0	150
Sunbury	2,000	1	300	2,475
Swissvale	0	0	0	0
Tamaqua	0	0	0	0
Uniontown	0	0	125	4,125
Upper Darby	0	0	4,305	8,730
Vandergrift	0	0	0	0
Warren	0	0	0	0
Washington	0	0	750	750
Waynesboro	0	0	0	0
West Chester	0	0	300	300
Wilkes-Barre	0	0	575	12,795
Wilkinsburg	0	0	6,750	7,656
Williamsport	6,000	1	820	14,404
York	13,500	6	1,350	33,505
Total	9,576,425	2,804	2,491,826	14,750,504

[1] Applications filed.

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER 1933—Continued

East North Central States

City and State	New residential buildings	Families provided for	New nonresidential buildings	Total including repairs
Illinois:				
Alton	0	0	0	$6,099
Aurora	0	0	$2,650	6,090
Belleville	0	0	150	300
Berwyn	0	0	240	590
Bloomington	0	0	1,300	6,300
Blue Island	0	0	1,910	5,205
Brookfield	0	0	350	690
Cairo	0	0	25	1,025
Calumet City	0	0	0	0
Canton	0	0	0	0
Centralia	0	0	0	0
Champaign	$5,000	1	75	8,875
Chicago	40,000	5	125,506	294,473
Chicago Heights	5,000	1	0	5,000
Cicero	0	0	290	1,190
Danville	0	0	220	2,925
Decatur	0	0	6,880	10,370
East St. Louis	3,000	1	3,625	48,495
Elgin	0	0	700	2,375
Elmhurst	3,000	1	0	3,000
Elmwood Park	0	0	300	1,300
Evanston	12,000	1	1,500	26,500
Forest Park	0	0	0	75
Freeport	0	0	35,220	54,281
Granite City	0	0	0	0
Harvey	0	0	475	925
Highland Park	0	0	5,765	10,175
Joliet	0	0	0	49,770
Kankakee	0	0	0	0
La Grange	0	0	0	1,300
Maywood	0	0	0	1,300
Melrose Park	0	0	0	175
Moline	3,000	1	150	4,723
Mount Vernon	2,000	1	1,800	3,800
Oak Park	0	0	1,770	3,475
Ottawa	0	0	0	3,000
Park Ridge	0	0	150	800
Peoria	2,800	1	1,405	89,570
Quincy	1,200	1	316	9,516
Rockford	0	0	350	1,900
Rock Island	0	0	0	4,088
Springfield	0	0	810	7,466
Sterling	0	0	300	1,071
Streator	0	0	0	200
Urbana	0	0	0	0
Waukegan	3,000	1	8,900	13,650
Wilmette	0	0	650	4,150
Winnetka	0	0	0	600
Indiana:				
Bedford	0	0	0	0
Connersville	0	0	0	0
Crawfordsville	0	0	800	925
East Chicago	0	0	0	1,600
Elkhart	0	0	100	11,642
Elwood	1,000	1	0	1,600
Evansville	0	0	1,187	9,654
Fort Wayne	0	0	1,695	6,785
Gary	0	0	6,430	9,130
Goshen	0	0	0	60
Hammond	6,500	1	651	7,961
Huntington	0	0	110	415
Indianapolis	3,500	1	3,386	43,469
Jeffersonville	0	0	0	1,300
Kokomo	0	0	850	950
Lafayette	2,500	1	0	2,500
La Porte	0	0	0	0
Logansport	0	0	375	625
Marion	0	0	250	1,650
Michigan City	2,500	1	275	14,858
Indiana—Con.				
Mishawaka	0	0	$350	$625
Muncie	0	0	325	2,015
New Castle	0	0	0	2,500
Richmond	0	0	25,500	35,750
Terre Haute	0	0	845	4,839
Vincennes	0	0	0	1,734
Michigan:				
Adrian	0	0	1,000	1,150
Ann Arbor	$9,000	1	860	15,159
Battle Creek	2,300	1	4,375	14,555
Bay City	0	0	1,285	2,485
Dearborn	7,600	1	2,000	10,923
Detroit	91,200	15	49,308	257,589
Ferndale	0	0	150	250
Flint	0	0	50,041	60,046
Grand Rapids	2,000	1	3,450	25,430
Grosse Pointe Park	0	0	0	200
Hamtramck	0	0	0	2,475
Highland Park	0	0	560	2,000
Holland	0	0	168	1,788
Ironwood	800	1	0	800
Jackson	0	0	880	1,030
Kalamazoo	2,000	1	1,340	6,768
Lansing	0	0	50	5,965
Lincoln Park	0	0	75	1,275
Marquette	0	0	0	0
Monroe	0	0	420	470
Muskegon	0	0	0	2,625
Muskegon Heights	0	0	470	705
Pontiac	0	0	485	3,400
Port Huron	0	0	0	3,300
River Rouge	0	0	130	5,365
Royal Oak	0	0	150	725
Saginaw	3,600	1	340	8,935
Sault Ste. Marie	0	0	615	990
Traverse City	0	0	215	215
Wyandotte	18,500	3	150	33,274
Ohio:				
Akron	1,500	1	22,335	34,975
Alliance	0	0	0	250
Ashtabula	0	0	250	1,760
Barberton	0	0	585	585
Bellaire	0	0	0	0
Cambridge	0	0	0	0
Canton	0	0	1,125	3,847
Cincinnati	111,500	20	249,970	410,310
Cleveland	4,500	1	98,175	161,000
Cleveland Heights	18,500	3	2,550	24,670
Columbus	8,500	1	7,600	33,950
Cuyahoga Falls	0	0	0	3,000
Dayton	0	0	17,080	43,033
East Cleveland	0	0	0	200
Elyria	0	0	685	2,410
Euclid	0	0	0	60
Findlay	3,500	1	0	3,700
Fostoria	0	0	0	0
Garfield Heights	4,500	1	335	4,835
Hamilton	2,500	1	50	8,500
Ironton	0	0	25	425
Lakewood	7,000	1	8,700	20,495
Lima	0	0	24,500	27,400
Lorain	0	0	220	995
Mansfield	5,800	1	545	8,881
Marietta	0	0	0	100
Marion	0	0	100	10,120

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER 1933—Continued

East North Central States—Continued

City and State	New residential buildings	Families provided for	New nonresidential buildings	Total including repairs
Ohio—Con.				
Massillon	0	0	$50	$155
Middletown	0	0	150	3,625
Newark	0	0	0	150
Parma	$3,500	1	175	3,675
Piqua	0	0	0	0
Portsmouth	0	0	50	295
Salem	0	0	200	200
Sandusky	0	0	50	465
Shaker Heights	37,000	2	90	38,090
Springfield	0	0	325	1,570
Steubenville	0	0	11,200	11,200
Struthers	0	0	2,300	2,300
Tiffin	3,000	1	5,500	8,500
Toledo	1,000	1	4,425	12,310
Warren	4,800	2	2,040	13,050
Wooster	0	0	125	125
Xenia	0	0	0	0
Youngstown	0	0	1,840	14,625
Wisconsin:				
Beloit	0	0	1,725	2,075
Cudahy	0	0	0	275
Eau Claire	1,500	2	17,750	21,050
Wisconsin—Continued.				
Fond du Lac	$500	1	$75	$1,405
Green Bay	12,300	3	3,685	19,555
Janesville	0	0	200	200
Kenosha	0	0	24,150	42,735
Madison	0	0	500	29,255
Manitowoc	7,800	2	320	13,155
Marinette	0	0	0	0
Milwaukee	12,000	3	23,731	87,940
Oshkosh	0	0	975	1,100
Racine	0	0	125	1,525
Sheboygan	15,500	4	70	18,248
Shorewood	0	0	250	250
South Milwaukee	0	0	0	0
Stevens Point	0	0	600	3,050
Superior	0	0	3,415	4,225
Waukesha	0	0	360	1,360
Wausau	5,500	2	0	13,466
Wauwatosa	9,500	2	4,925	16,400
West Allis	0	0	25	765
Total	514,700	102	911,659	2,523,161

West North Central States

City and State	New residential buildings	Families provided for	New nonresidential buildings	Total including repairs
Iowa:				
Boone	0	0	$775	$1,475
Burlington	0	0	175	725
Cedar Rapids	$2,790	2	2,086	13,711
Council Bluffs	3,510	2	474	11,667
Davenport	2,500	1	5,861	18,718
Des Moines	34,950	11	8,460	52,325
Dubuque	0	0	2,250	21,490
Fort Dodge	4,000	1	775	8,520
Iowa City	1,600	2	1,750	3,405
Marshalltown	1,600	1	3,400	11,600
Mason City	7,200	4	735	10,853
Muscatine	3,200	2	212	4,367
Ottumwa	8,500	2	500	11,500
Sioux City	11,100	5	1,275	14,925
Waterloo	3,700	2	5,371	13,893
Kansas:				
Arkansas City	0	0	300	1,460
Atchison	0	0	0	740
Dodge City	0	0	0	0
Eldorado	0	0	2,375	2,665
Emporia	1,600	1	0	1,600
Fort Scott	700	1	0	700
Hutchinson	0	0	480	2,255
Independence	0	0	0	3,000
Kansas City	6,600	3	12,565	28,390
Lawrence	0	0	475	2,675
Leavenworth	7,000	2	59,845	67,345
Manhattan	0	0	150	150
Newton	0	0	300	615
Pittsburg	0	0	0	435
Salina	0	0	2,475	3,825
Topeka	8,950	5	1,545	15,685
Wichita	1,100	2	1,915	12,791
Minnesota:				
Albert Lea	0	0	400	3,400
Duluth	7,000	2	2,125	17,331
Faribault	0	0	0	0
Hibbing	0	0	0	1,000
Minnesota—Continued.				
Mankato	$6,500	1	$450	$7,360
Minneapolis	55,300	14	46,855	138,870
Rochester	0	0	10,000	10,800
St. Cloud	0	0	0	10,790
St. Paul	35,160	9	52,654	88,474
South St. Paul	0	0	100	275
Winona	0	0	1,950	8,020
Missouri:				
Columbia	0	0	0	0
Hannibal	0	0	375	2,375
Independence	850	1	0	850
Jefferson City	12,000	6	810	18,155
Joplin	1,000	1	25,135	27,356
Kansas City	20,000	6	6,200	74,300
Maplewood	0	0	8,000	9,750
Moberly	4,500	1	500	5,000
St. Charles	0	0	0	0
St. Joseph	7,557	2	3,600	11,907
St. Louis	74,900	17	205,173	345,178
Springfield	9,100	5	900	21,162
Nebraska:				
Beatrice	3,500	1	250	3,750
Fremont	0	0	1,100	1,948
Grand Island	5,000	2	0	5,986
Hastings	0	0	2,150	2,150
Lincoln	0	0	9,135	19,777
North Platte	0	0	315	365
Omaha	35,200	9	3,520	44,170
North Dakota:				
Fargo	13,000	1	115	15,215
Grand Forks	0	0	0	400
South Dakota:				
Huron	0	0	0	0
Mitchell	0	0	0	0
Rapid City	2,620	2	440	4,510
Sioux Falls	6,655	7	645	7,350
Total	410,442	136	499,421	1,251,479

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER 1933—Continued

South Atlantic States

City and State	New residential buildings	Families provided for	New nonresidential buildings	Total including repairs
Delaware:				
Wilmington	$22,900	3	$8,800	$35,367
District of Columbia:				
Washington	341,300	55	269,094	738,204
Florida:				
Gainesville	0	0	6,285	9,060
Jacksonville	11,400	7	3,315	64,098
Miami	20,300	8	8,990	100,934
Orlando	1,100	2	425	12,581
Pensacola	9,460	7	2,856	22,282
Saint Augustine	0	0	0	4,720
Saint Petersburg	12,000	1	2,900	45,700
Sanford	800	1	0	1,050
Tallahassee	3,675	2	720	6,935
Tampa	0	0	6,555	21,790
West Palm Beach	11,000	2	1,470	15,735
Georgia:				
Athens	0	0	1,000	4,667
Atlanta	8,250	8	7,895	50,054
Augusta	1,673	1	0	5,741
Brunswick	0	0	0	1,455
Columbus	0	0	2,525	5,145
Lagrange	3,500	10	0	3,500
Macon	0	0	65,278	73,711
Rome	93,000	3	200	96,200
Savannah	0	0	180	4,750
Maryland:				
Annapolis	3,500	1	2,292	7,745
Baltimore	59,000	14	212,893	586,093
Cumberland	1,200	1	450	6,050
Frederick	0	0	57	1,107
Hagerstown	0	0	1,370	5,045
Salisbury	0	0	12,525	13,000
North Carolina:				
Asheville	0	0	145	655
Charlotte	2,700	1	6,085	15,122
Concord	8,600	4	1,100	11,850
Durham	25,465	11	3,000	30,750
Elizabeth City	950	1	0	1,250
Fayetteville	0	0	0	1,240
Gastonia	0	0	0	700
Goldsboro	0	0	0	185
Greensboro	2,500	1	5,417	15,824
High Point	0	0	4,100	9,150
Kinston	0	0	300	1,700
North Carolina—Continued.				
New Bern	0	0	$2,000	$2,000
Raleigh	0	0	525	1,375
Rocky Mount	0	0	600	1,195
Salisbury	$3,300	1	350	4,565
Shelby	3,335	6	1,413	4,748
Statesville	600	1	0	600
Thomasville	0	0	0	0
Wilmington	0	0	0	2,720
Wilson	0	0	0	60
Winston-Salem	4,400	3	7,055	19,164
South Carolina:				
Anderson	1,800	1	500	3,650
Charleston	0	0	116,020	120,995
Columbia	0	0	398	3,655
Florence	1,900	1	0	4,400
Greenville	750	1	2,060	7,535
Greenwood	2,000	1	0	3,635
Rock Hill	0	0	640	3,730
Spartanburg	0	0	25	2,935
Virginia:				
Alexandria	13,500	3	875	21,323
Charlottesville	2,500	1	10,120	15,180
Danville	0	0	515	1,630
Hopewell	0	0	50	1,120
Lynchburg	8,000	2	1,500	27,320
Newport News	11,000	2	510	16,522
Norfolk	3,680	5	3,100	36,635
Petersburg	0	0	30	290
Portsmouth	0	0	155	10,324
Richmond	10,725	4	41,220	80,420
Roanoke	0	0	4,525	8,405
Staunton	0	0	550	765
Suffolk	4,131	2	385	5,256
Winchester	0	0	50	50
West Virginia:				
Bluefield	9,000	4	375	0,085
Charleston	0	0	500	8,660
Clarksburg	0	0	50,445	53,145
Fairmont	0	0	315	345
Huntington	1,500	1	40,665	42,665
Martinsburg	0	0	0	280
Morgantown	0	0	1,750	5,275
Parkersburg [2]	0	0	328	3,328
Wheeling	0	0	41,100	47,974
Total	726,394	183	968,543	2,611,776

South Central States

Alabama:				
Anniston	0	0	$400	$3,060
Bessemer	0	0	0	0
Birmingham	$1,000	1	5,700	29,955
Decatur	0	0	1,230	1,230
Dothan	0	0	350	6,825
Fairfield	0	0	0	968
Gadsden	0	0	0	225
Huntsville	0	0	0	950
Mobile	2,000	3	58,654	67,626
Montgomery	0	0	187,630	196,125
Selma	7,930	3	1,040	9,516
Tuscaloosa	0	0	4,600	4,800
Arkansas:				
Blytheville	0	0	0	2,000
El Dorado	0	0	300	350
Fort Smith	0	0	2,000	9,829
Little Rock	500	1	683	8,944
North Little Rock	1,500	2	0	2,415
Texarkana	3,100	5	0	7,800
Kentucky:				
Ashland	0	0	$300	$3,500
Fort Thomas	0	0	800	800
Frankfort	0	0	0	0
Henderson	0	0	150	150
Lexington	$700	1	476	4,172
Louisville	16,000	5	10,250	61,775
Middlesboro	0	0	0	0
Newport	0	0	0	600
Paducah	500	1	0	500
Louisiana:				
Alexandria	660	1	100	6,614
Lafayette	0	0	0	897
Monroe	500	1	250	1,350
New Orleans	31,950	8	2,271	65,922
Shreveport	0	0	406,822	434,921
Mississippi:				
Columbus	0	0	0	0
Greenville [2]	1,200	2	5,350	6,550
Greenwood	0	0	0	0
Gulfport	0	0	0	0

[2] Not included in totals.

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER 1933—Continued

South Central States—Continued

City and State	New residential buildings	Families provided for	New nonresidential buildings	Total including repairs
Mississippi—Con.				
Hattiesburg	0	0	$50	$4,050
Jackson	$6,600	6	0	86,056
Laurel	0	0	0	0
Meridian	1,900	3	2,400	4,300
Vicksburg	0	0	950	2,433
Oklahoma:				
Ada	3,000	2	0	3,000
Ardmore	0	0	200	200
Bartlesville	0	0	0	75
Chickasha	0	0	0	542
Enid	0	0	0	4,175
McAlester	0	0	125	125
Oklahoma City	15,100	6	285,175	311,000
Sapulpa	0	0	0	0
Seminole	2,000	1	0	2,000
Shawnee	0	0	2,000	2,900
Tulsa	0	0	4,340	14,935
Tennessee:				
Chattanooga	1,000	2	4,200	18,760
Jackson	0	0	0	50
Johnson City [2]	0	0	500	500
Kingsport	1,500	3	0	1,500
Knoxville	4,500	7	2,400	17,460
Memphis	2,080	4	196,277	241,967
Nashville	4,950	5	1,487	17,697
Texas:				
Amarillo	0	0	$1,200	$3,327
Austin	$33,737	16	27,507	88,828
Beaumont	5,418	2	470	15,035
Big Spring	0	0	0	910
Brownwood	0	0	0	430
Cleburne	0	0	0	0
Corpus Christi [2]	10,354	6	250	12,163
Corsicana	1,000	1	0	2,400
Dallas	38,000	18	32,175	114,632
Del Rio	0	0	620	1,105
Denison	2,700	0	0	5,700
El Paso	0	0	35,665	53,553
Fort Worth	8,600	6	14,350	37,169
Galveston	22,150	12	17,325	53,543
Harlingen	625	1	900	133,125
Houston	81,360	35	33,073	128,703
Pampa	0	0	0	1,600
San Antonio	7,390	13	1,002,771	1,025,143
Sherman	0	0	0	961
Sweetwater	0	0	200	450
Tyler	16,600	14	22,720	41,827
Waco	13,750	6	17,450	33,099
Wichita Falls	3,000	1	0	3,710
Total	343,300	196	2,390,036	3,412,294

Mountain and Pacific States

City and State	New residential buildings	Families provided for	New nonresidential buildings	Total including repairs
Arizona:				
Phoenix	$12,000	2	$11,296	$27,711
Tucson	900	1	30,088	35,532
California:				
Alameda	5,000	1	450	20,942
Alhambra	10,000	3	375	16,290
Anaheim	0	0	0	4,013
Bakersfield	0	0	890	6,710
Berkeley	30,200	7	5,982	64,990
Beverly Hills	99,000	8	30,700	150,035
Burbank	4,900	3	1,250	12,675
Burlingame	4,000	1	0	4,250
Compton	3,600	2	2,775	8,678
Eureka	0	0	1,260	6,100
Fresno	4,200	2	1,625	23,433
Fullerton	0	0	500	2,192
Gardena	0	0	30	475
Glendale	16,500	8	3,784	24,782
Huntington Park	0	0	5,215	23,252
Inglewood	3,200	1	0	5,385
Long Beach	25,200	12	23,130	205,670
Los Angeles	408,817	123	133,658	805,710
Modesto	0	0	0	5,173
Monrovia	8,000	2	2,310	13,961
Oakland	40,743	11	19,995	150,132
Ontario	0	0	0	223
Palo Alto	29,500	3	6,325	38,025
Pasadena	10,400	3	4,862	46,048
Pomona	0	0	815	9,387
Richmond	750	1	3,600	10,248
Riverside	1,100	1	33,185	51,571
Sacramento	16,000	4	2,960	36,811
Salinas	7,540	4	850	11,767
San Bernardino	4,744	4	0	12,085
San Diego	29,900	13	8,205	59,630
San Francisco	91,050	22	3,344,574	3,535,068
San Jose	4,280	2	1,805	21,695
San Leandro	6,000	2	67,065	73,915
California—Con.				
San Mateo	$10,000	2	0	$11,025
Santa Ana	5,000	1	0	13,764
Santa Barbara	2,800	1	$3,165	8,925
Santa Cruz	3,600	3	170	7,215
Santa Monica	4,800	1	8,725	19,374
Santa Rosa	9,000	2	500	12,825
South Gate	5,000	2	0	9,460
South Pasadena	2,130	1	0	5,028
Stockton	3,850	1	1,190	45,062
Vallejo	16,000	7	3,335	24,298
Whittier	0	0	124,745	125,420
Colorado:				
Boulder	0	0	50	7,200
Colorado Springs	19,300	2	670	24,720
Denver	34,000	9	55,670	133,253
Fort Collins	0	0	150	1,393
Grand Junction	0	0	545	1,120
Greeley	500	1	435	2,335
Pueblo	1,500	1	6,928	10,707
Idaho:				
Boise	2,750	3	1,560	10,596
Pocatello	3,500	1	2,680	7,180
Montana:				
Billings	4,300	2	450	5,450
Butte	0	0	850	1,305
Great Falls	0	0	625	2,100
Helena	600	1	0	2,295
Missoula	5,200	2	450	5,650
Nevada:				
Reno	3,000	1	1,850	12,325
New Mexico:				
Albuquerque	0	0	2,950	19,260
Oregon:				
Astoria	3,500	1	275	5,333
Klamath Falls	0	0	630	5,298

[2] Not included in totals.

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER 1933—Continued

Mountain and Pacific States—Continued

City and State	New residential buildings	Families provided for	New nonresidential buildings	Total including repairs	City and State	New residential buildings	Families provided for	New nonresidential buildings	Total including repairs
Oregon—Con.					Washington—Continued.				
Portland	$45,350	10	$24,755	$124,730	Port Angeles	0	0	0	0
Salem	4,000	8	2,975	9,305	Seattle	$22,400	8	$12,950	$110,000
Utah:					Spokane	5,700	2	107,888	152,056
Ogden	0	0	300	4,500	Tacoma	4,600	4	17,850	27,420
Salt Lake City	15,600	2	5,453	37,226	Walla Walla	0	0	470	8,930
Washington:					Wenatchee	0	0	0	970
Aberdeen	0	0	175	3,818	Yakima	2,000	1	1,200	9,850
Bellingham	500	1	1,450	3,261	Wyoming:				
Bremerton	3,500	2	375	18,150	Cheyenne	0	0	35	3,231
Hoquiam	0	0	0	90					
Longview	4,200	2	15	4,250	Total	1,126,204	332	4,144,048	6,584,047
Olympia	500	1	0	1,780					

Hawaii

City	New residential buildings	Families provided for	New nonresidential buildings	Total (including repairs)
Honolulu	$51,154	31	$62,424	$156,621

WAGES AND HOURS OF LABOR

Average Wage and Salary Payments in Ohio, 1918 to 1932

By Fred C. Croxton, Columbus, Ohio, and Frederick E. Croxton, Columbia University

REPORTS from practically all establishments in Ohio employing three or more persons and falling within the general industry groups of manufactures, wholesale and retail trade, service, transportation and public utilities, construction, agriculture, and fisheries show an average wage and salary payment of $1,050 for the year 1932 as compared with $1,480 in 1929.

For the occupation group, "wage earners", the reports show an average wage and salary payment of $980 for the year 1932 and $1,457 for 1929. For the group, "bookkeepers, stenographers, and office clerks", the average was $1,390 for 1932 and $1,677 for 1929. The group, "salespeople (not traveling)", averaged $1,014 for 1932, $1,374 for 1929, and $1,417 for 1927.

Sources and Scope of Study

THE DATA which form the basis of these computations of average wage and salary payments in the three general occupation groups, "wage earners", "bookkeepers, stenographers, and office clerks", and "salespeople (not traveling)" were collected by the office of the State government of Ohio responsible for labor statistics. For the earlier years of the period covered, that office was the Department of Investigation and Statistics of the Industrial Commission, but since July 1, 1921, it has been known as the Division of Labor Statistics, Department of Industrial Relations of Ohio.

The statistical information collected each year was compiled by the Ohio department for all of the years except 1922. For that year it was compiled by the Women's Bureau of the United States Department of Labor. While the compilations were made promptly each year, the information has been published by the Ohio department for only 1914, 1915, 1923, 1928, and 1929, with a summary report for 1924 to 1927 accompanying the 1928 report.[1] The series of Ohio

[1] General summaries covering fluctuation of employment have been published in the Monthly Labor Review for April, August, and December, 1930, for March 1932, and for December 1933. Bulletin No. 553 of the United States Bureau of Labor Statistics shows summary and detailed information concerning fluctuation of employment in Ohio for 1914 to 1929.

reports bears the title, Rates of Wages, Fluctuation of Employment, Wage and Salary Payments in Ohio. A separate series of reports covers mining and quarrying, and that general industry group is not covered in the present article. This article, also, does not cover the years 1914 to 1917, owing to the considerable difference in numbers of establishments reporting data relative to number of employees and the number reporting data relative to wage and salary payments.

The statistical data covering employees, classified rates of wages, and wage and salary payments were furnished annually, as required by law, by the employers of Ohio. The information was requested during 1914 to 1923 of all employers of five or more persons and during 1924 to 1932 of all employers of three or more persons in all industry groups except interstate transportation and governmental activities.

The list of establishments reporting statistical information and the list of establishments carrying workmen's compensation insurance are carefully and continuously checked against each other. Compensation insurance was compulsory during 1914 to 1923 for all employers employing five or more, and since January 1, 1924, it has been compulsory for all employing three or more. Employers of fewer than the minimum number are permitted, but not required, to avail themselves of the provisions of the State workmen's compensation law. Employers are not required to carry insurance for employees in household or domestic service, but may do so.

Some employers with fewer than three employees (fewer than five prior to 1924) furnish statistical data each year and such reports are included in the tabulations. Comparatively few employing three or more (five or more prior to 1924) fail to report. The lists in the workmen's compensation insurance file and in the statistical file have been expanded from year to year, and therefore represent a more nearly complete coverage during the later years than during the earlier years of the period.

The approximate completeness of the material included in the Ohio reports, particularly during the period 1924 to 1932, in which information has been requested from all employers of three or more persons, can be seen from a comparison of the Ohio reports on the single industry group "manufactures", with the United States biennial Census of Manufactures. Census figures in table 1 include only those Ohio manufacturing concerns reporting "value of product" of $500 or more in 1919 and $5,000 or more in other years covered. The Ohio reports, on the other hand, include only a comparatively few establishments employing fewer than three persons (fewer than five persons for the years prior to 1924). The census figures therefore include a number of small manufacturing establishments not requested to furnish information to the Ohio Division of Labor Statistics. In

table 1 the census and the Ohio reports are compared for each of the years in which the census made its biennial report for the period covered by this article.

TABLE 1.—COMPARISON OF COVERAGE OF UNITED STATES CENSUS REPORTS ON MANUFACTURES IN OHIO, AND OF REPORTS (MANUFACTURES SECTION ONLY) OF OHIO DIVISION OF LABOR STATISTICS, 1919, 1921, 1923, 1925, 1927, and 1929

Year and report	Establishments	Wage earners (average of 12 months)	Amount paid in wages
1919			
United States Census of Manufactures	16,125	730,733	$944,651,734
Ohio report	9,011	678,525	[1] 872,014,593
Difference	7,114	52,208	72,637,141
1921			
United States Census of Manufactures	11,479	494,288	627,032,666
Ohio report	8,632	460,671	[1] 576,968,355
Difference	2,847	33,617	50,064,311
1923			
United States Census of Manufactures	11,195	669,132	979,659,869
Ohio report	8,701	654,142	[1] 933,989,207
Difference	2,494	14,990	45,670,662
1925			
United States Census of Manufactures	11,131	676,661	975,738,405
Ohio report	9,502	651,944	[1] 956,106,644
Difference	1,629	24,717	19,631,761
1927			
United States Census of Manufactures	10,961	669,097	968,181,165
Ohio report	9,880	649,111	[1] 950,200,395
Difference	1,081	19,986	17,980,770
1929			
United States Census of Manufactures	11,855	741,143	1,102,166,499
Ohio report	10,035	718,108	[1] 1,076,213,730
Difference	1,820	23,035	25,952,769
1931			
United States Census of Manufactures [2]	9,883	506,974	593,051,176
Ohio report	9,683	482,782	571,917,215
Difference	200	24,192	21,133,961

[1] Amount reported paid to wage earners, and does not include amounts paid to bookkeepers, stenographers, and office clerks, salespeople (not traveling), and superintendents and managers.
[2] Press release, Bureau of the Census, Apr. 1, 1933.

Even with the omission, prior to 1924, from the reports of the Ohio Division of Labor Statistics of practically all manufacturing plants employing fewer than five persons and the omission for 1924 to 1932 of practically all those employing fewer than three persons, the average number of wage earners and the total amount paid in wages are not far below the census figures for manufactures in Ohio. The per-

cent which the figures of the Ohio Division of Labor Statistics form of the figures of the census for each of those two items is as follows:

TABLE 2.—PERCENT WHICH FIGURES OF OHIO DIVISION OF LABOR STATISTICS FORM OF FIGURES OF THE CENSUS OF MANUFACTURES FOR WAGE EARNERS AND WAGE PAYMENTS

Year	Wage earners	Wage payments	Year	Wage earners	Wage payments
1919	92.9	92.3	1927	97.0	98.1
1921	93.2	92.0	1929	96.9	97.6
1923	97.8	95.3	1931	95.2	96.4
1925	96.3	98.0			

The industry groups included in this article on average wage and salary payments are manufactures, wholesale and retail trade, service, [2] transportation and public utilities, construction, and agriculture. The great majority of Ohio farmers who hire help employ fewer than three persons, and therefore this report does not give a complete picture of conditions in agriculture in general, as the information comes from the larger commercial farming undertakings, from the larger dairy farms, and from the larger florist, fruit-growing, and nursery establishments. The figures in the subgroup "domestic service", under the general industry group "service", also do not afford a complete report, as comparatively few would employ three or more in domestic service and furthermore workmen's compensation insurance is not compulsory for such employers. In all the other industry groups included, the Ohio reports and this article give practically a complete picture except for the very small establishments. Fisheries was carried as a separate industry group by the Ohio Division of Labor Statistics prior to 1932, in which year the returns were tabulated under "trade, wholesale and retail", as the establishments reporting were largely packing and sales houses. The present article shows average number of employees and total wage and salary payments for the industry group, "fisheries", but average wage and salary payments were not computed owing to the small number of persons involved.

Under each of the several general industry groups data are shown in this article for each of the three general occupation groups, "wage earners", "bookkeepers, stenographers, and office clerks", and "salespeople (not traveling)." The table showing total wage and salary payments also shows separately payments to superintendents and managers, but data for such employees do not enter into any of the other tables or computations.

[2] The principal businesses and activities classified under the industry group "service" are: Hotels, restaurants, clubs, theaters, bowling alleys, servants in private homes, garages, laundering and dry cleaning, barbers and hair dressers, banks, offices, office buildings, welfare agencies, hospitals, churches, schools and colleges, photographers, shoe repairing, undertakers, cemeteries, etc.

Average Number of Employees

TABLE 3 shows the average number of employees in each of the three general occupation groups under each industry group. The annual reports made by employers to the Ohio Division of Labor Statistics show the number of persons employed on the 15th of each month, and the averages shown in this table were computed by dividing the total of the monthly figures by 12. Employers are not requested in their annual reports to give information as to the number of employees on full time and the number on part time each month.

The number of establishments from which reports are secured varies from year to year, but within each year the establishments are identical throughout the 12 months. It should be borne in mind that reports were requested of employers of three or more persons each year from 1924 to 1932, and of employers of five or more during the earlier years of the period covered, and therefore any comparisons between years should be made separately within those two periods.

For the first of the two periods indicated, 1918 to 1923, the highest average number of employees occurred in 1920 for all industries combined, for construction, and for manufactures, and in 1923 for service, trade, and transportation and public utilities. For the second of the two periods, 1924 to 1932, the highest average number of employees occurred in 1929 for all industries combined, for manufactures, and for trade; in 1930 for service, and for transportation and public utilities; and in 1927 for construction. The lowest average during the first period occurred in 1921 for all industries combined and for construction, manufactures, and transportation and public utilities, and in 1918 for service and trade. The lowest averages during the second period occurred in 1932, except in service, where, with a very much smaller number of establishments reporting, it occurred in 1924.

TABLE 3.—AVERAGE NUMBER OF PERSONS (BOTH SEXES) REPORTED EMPLOYED EACH YEAR, 1918 TO 1932, BY INDUSTRY AND BY GENERAL OCCUPATION GROUPS

Year	All industries					Agriculture				
	Establishments	All employees	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	Establishments	All employees	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)
1918	22,709	1,041,993	895,726	104,264	42,002	520	4,776	4,511	217	48
1919	23,652	1,039,150	876,103	116,185	46,861	552	4,635	4,403	180	53
1920	27,241	1,123,955	942,925	130,857	50,173	586	4,895	4,592	247	57
1921	23,562	812,646	655,340	110,523	46,784	504	4,450	4,185	202	63
1922	24,124	912,160	750,403	112,283	49,474	519	4,413	4,138	215	60
1923	25,904	1,070,998	889,627	126,470	54,901	548	4,590	4,358	233	[1]
1924	30,439	1,055,721	860,379	133,235	62,106	732	5,772	5,433	271	68
1925	33,443	1,121,840	917,380	138,800	65,660	910	6,436	6,056	301	79
1926	36,004	1,175,950	959,800	146,255	69,895	1,052	7,144	6,714	334	96
1927	38,509	1,171,268	947,125	150,848	73,295	1,199	7,754	7,287	359	108
1928	39,979	1,197,885	966,125	154,287	77,473	1,329	8,545	8,016	422	108
1929	42,216	1,278,992	1,024,165	168,127	86,701	1,444	8,940	8,437	410	93
1930	43,348	1,133,846	888,527	174,099	71,220	1,639	8,989	8,471	431	87
1931	42,095	963,791	739,813	153,136	70,842	1,777	9,159	8,706	379	73
1932	39,109	817,862	619,044	134,296	64,523	1,736	7,915	7,528	317	69
	Construction					Manufactures				
1918	4,273	61,072	57,276	3,381	415	8,858	766,914	699,656	62,155	5,103
1919	4,747	57,194	53,506	3,177	511	9,011	752,121	678,525	68,249	5,346
1920	5,382	72,217	67,871	3,717	629	9,652	794,627	715,858	73,035	5,735
1921	4,890	50,985	47,411	2,972	602	8,632	524,316	460,671	57,965	5,680
1922	5,005	54,518	50,981	2,913	624	8,403	609,903	546,435	57,550	5,919
1923	5,883	69,202	65,077	3,461	663	8,701	726,043	654,142	65,538	6,363
1924	7,364	74,791	69,838	4,030	923	9,125	679,523	606,558	65,963	7,002
1925	8,407	77,670	72,574	4,104	992	9,502	727,988	651,944	68,387	7,657
1926	9,145	79,928	74,600	4,244	1,084	9,704	751,340	671,910	71,195	8,234
1927	9,724	83,535	77,944	4,485	1,106	9,880	729,250	649,111	71,769	8,371
1928	9,942	78,434	72,633	4,727	1,073	9,937	749,434	669,039	72,041	8,355
1929	10,183	78,631	72,670	4,844	1,117	10,035	806,607	718,108	79,197	9,302
1930	9,672	69,607	63,625	5,323	660	10,011	673,178	590,506	77,702	4,969
1931	8,272	45,601	41,066	3,630	904	9,683	552,905	482,782	65,011	5,112
1932	6,456	27,519	24,094	2,691	734	9,102	461,183	399,790	56,500	4,893
	Service					Trade, wholesale and retail				
1918	2,556	48,959	38,377	8,957	1,625	5,330	100,372	43,464	22,304	34,605
1919	2,563	52,454	40,175	10,255	2,024	5,657	111,136	45,754	26,638	38,745
1920	3,847	63,342	46,421	14,991	1,930	6,589	124,233	51,736	30,905	41,593
1921	2,823	62,260	46,163	14,188	1,910	5,638	111,410	45,286	27,778	38,346
1922	3,032	65,763	48,745	14,826	2,191	6,067	117,759	48,364	28,900	40,494
1923	3,341	75,722	56,224	16,652	2,847	6,276	129,173	52,663	31,839	44,671
1924	4,233	85,837	62,834	19,528	3,475	7,689	140,329	56,070	34,070	50,188
1925	[2] 5,971	[2] 113,046	[2] 73,399	[2] 34,124	[2] 5,523	[2] 7,277	[2] 126,928	[2] 53,759	[2] 22,263	[2] 50,907
1926	6,761	124,424	82,072	35,664	6,688	7,867	132,770	56,536	23,055	53,179
1927	7,598	130,525	87,132	37,934	5,459	8,526	139,720	58,368	23,721	57,631
1928	8,210	138,542	91,160	40,181	7,202	8,916	140,780	56,884	23,887	60,009
1929	9,335	153,109	100,805	44,374	7,930	9,524	149,224	56,971	24,973	67,280
1930	10,241	155,012	99,427	51,162	4,423	10,022	142,286	57,845	24,482	59,959
1931	10,452	150,122	97,184	48,590	4,348	10,111	137,304	55,482	22,267	59,555
1932	10,357	138,465	91,523	42,964	3,918	9,716	122,738	49,087	19,545	54,106

[1] Tabulations of the Division of Labor Statistics carry these employees under "Industries not otherwise classified."

[2] Tabulations of the Division of Labor Statistics change the classification of offices from "Trade" to "Service" beginning in 1925.

TABLE 3.—AVERAGE NUMBER OF PERSONS (BOTH SEXES) REPORTED EMPLOYED EACH YEAR, 1918 TO 1932, BY INDUSTRY AND BY GENERAL OCCUPATION GROUPS—Continued

Year	Transportation and public utilities					Fisheries					Industries, not otherwise classified		
	Establishments	All employees	Wage earners	Bookkeepers, stenographers, and office clerks	Sales people (not traveling)	Establishments	All employees	Wage earners	Bookkeepers, stenographers, and office clerks	Sales people (not traveling)	All employees	Bookkeepers, stenographers, and office clerks	Sales people (not traveling)
1918	1,134	59,448	52,037	7,205	205	38	452	406	46	-------	-------	-------	-------
1919	1,081	61,172	53,357	7,633	181	41	439	384	54	1	-------	-------	-------
1920	1,146	64,254	56,115	7,915	224	39	385	333	47	6	-------	-------	-------
1921	1,048	58,919	51,368	7,372	179	27	307	257	46	4	-------	-------	-------
1922	1,071	59,473	51,462	7,830	181	27	327	278	49	(1)	4	-------	4
1923	1,129	65,876	56,877	8,701	298	26	287	287	(1)	(1)	105	46	59
1924	1,271	69,096	59,320	9,331	446	25	325	325	(1)	(1)	46	42	4
1925	1,353	69,426	59,345	9,584	498	23	304	304	(1)	(1)	41	37	4
1926	1,453	80,008	67,671	11,728	609	22	296	296	(1)	(1)	40	35	5
1927	1,561	80,162	66,999	12,546	617	21	283	283	(1)	(1)	37	33	4
1928	1,625	81,849	68,126	12,999	725	20	268	268	(1)	(1)	33	31	2
1929	1,674	82,137	66,863	14,297	978	21	344	312	31	1	-------	-------	-------
1930	1,741	84,450	68,358	14,969	1,123	22	295	295	(1)	(1)	30	30	-------
1931	1,776	68,382	54,303	13,231	847	24	289	289	(1)	(1)	31	28	3
1932	1,742	60,103	47,021	12,279	803	(3)	(3)	(3)	(3)	(3)	-------	-------	-------

[1] Tabulations of the Division of Labor Statistics carry these employees under "Industries not otherwise classified."

[3] Tabulations of the Division of Labor Statistics carry fisheries under "Trade" in 1932, as the establishments reporting were largely packing and sales houses.

Total Wage and Salary Payments

TOTAL wage and salary payments reported paid in each of the 15 years 1918 to 1932 are shown in table 4. In supplying data for this table, employers were requested to report for the year total wage and salary payments in dollars, including bonuses and premiums and value of board and lodging furnished. Employers were also instructed not to include salaries of officials.

While payments to superintendents and managers are included in this table, that occupation group is not included in the other tables in this article, and the amounts paid to that group do not enter into the average payments shown in table 6.

Considering all industry groups combined, during the period 1918 to 1923 the highest payments occurred in 1920, and the lowest occurred in 1921, with a drop (omitting payments to superintendents and managers) of 39.1 percent. During the period 1924 to 1932 there was a gradual increase in payments each year until the highest point was reached in 1929. Each year since 1929 shows a marked decrease, until in 1932 the payments reported (omitting payments to superintendents and managers) show a decline from 1929 of $1,034,398,658 or 54.6 percent.

In construction the highest payments reported during the second period were in 1927 and the lowest in 1932, with a drop (omitting

payments to superintendents and managers) from the peak in 1927 of $107,878,101, or 79.3 percent. In manufactures the highest payments reported during the second period were in 1929 and the lowest in 1932, with a drop (omitting superintendents and managers) in 3 years of $760,773,503, or 61.4 percent.

TABLE 4.—TOTAL WAGE AND SALARY PAYMENTS, EACH YEAR 1918 TO 1932, BY INDUSTRY AND GENERAL OCCUPATION GROUPS

All industries

Year	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	Total	Superintendents and managers	Grand total
1918	22,709	$993,233,308	$113,268,144	$37,548,872	$1,144,050,324	$56,330,774	$1,200,381,098
1919	23,652	1,091,922,134	152,690,186	48,683,649	1,293,295,969	73,247,706	1,366,543,675
1920	27,241	1,454,725,511	195,573,486	62,713,758	1,713,012,755	87,328,956	1,800,341,711
1921	23,562	820,250,496	163,589,396	59,447,291	1,043,287,183	82,596,901	1,125,884,084
1922	24,025	937,666,389	191,696,182	60,165,261	1,189,527,832	82,884,097	1,272,411,929
1923	25,904	1,264,809,860	188,694,543	73,152,030	1,526,656,433	95,328,822	1,621,985,255
1924	30,439	1,209,620,128	207,015,167	81,728,091	1,498,363,386	103,035,637	1,601,399,023
1925	33,443	1,316,203,710	214,608,478	89,783,496	1,620,595,684	113,110,564	1,733,706,248
1926	36,004	1,360,927,636	230,689,854	97,523,735	1,689,141,225	117,637,539	1,806,778,764
1927	38,509	1,355,767,253	244,426,090	103,849,983	1,704,043,326	120,285,265	1,824,328,591
1928	39,979	1,398,706,201	252,050,747	109,017,515	1,759,774,463	131,366,774	1,891,141,237
1929	42,216	1,492,141,261	282,017,895	119,084,364	1,893,243,520	133,461,924	2,026,705,444
1930	43,348	1,193,333,662	291,736,043	88,972,655	1,574,042,360	137,112,137	1,711,154,497
1931	42,095	877,928,803	239,454,060	82,265,334	1,199,648,197	115,105,919	1,314,754,116
1932	39,109	606,713,513	186,710,032	65,421,317	858,844,862	88,841,093	947,685,955

Agriculture

1918	520	$3,356,920	$182,546	$41,880	$3,581,346	$212,913	$3,794,259
1919	552	3,625,412	186,241	52,845	3,864,498	255,093	4,119,591
1920	586	4,789,088	301,168	72,610	5,162,866	331,992	5,494,858
1921	504	3,788,157	236,724	82,391	4,107,272	331,291	4,438,563
1922	524	3,705,059	253,726	65,911	4,024,696	338,837	4,363,533
1923	548	4,236,632	263,927	[1] 65,366	4,565,925	420,316	4,986,241
1924	732	5,466,661	312,116	80,476	5,859,253	506,092	6,365,345
1925	910	6,116,041	348,940	108,879	6,573,860	542,439	7,116,299
1926	1,052	6,404,230	413,050	115,041	6,932,321	558,358	7,490,679
1927	1,199	7,030,170	431,662	155,052	7,616,884	593,543	8,210,427
1928	1,329	7,768,284	511,921	144,225	8,424,430	704,202	9,128,632
1929	1,444	8,074,741	483,350	123,893	8,681,984	712,565	9,394,549
1930	1,639	7,940,580	481,285	108,100	8,529,965	717,974	9,247,939
1931	1,777	6,999,893	419,193	80,587	7,499,673	649,410	8,149,083
1932	1,736	4,894,524	271,694	62,582	5,228,800	495,600	5,724,400

Construction

1918	4,273	$62,646,726	$3,629,209	$566,429	$66,842,364	$4,288,305	$71,130,669
1919	4,747	75,722,325	4,063,456	1,061,366	80,847,147	4,001,698	84,848,845
1920	5,382	115,574,650	5,856,206	1,228,550	122,659,406	5,474,355	128,133,761
1921	4,890	65,528,871	4,761,255	1,080,441	71,370,567	4,949,853	76,320,420
1922	5,007	69,408,474	4,327,049	1,141,497	74,877,020	4,751,917	79,628,937
1923	5,883	126,632,946	5,512,351	1,318,568	133,463,865	5,936,960	139,400,825
1924	7,364	114,334,620	6,631,822	1,808,800	122,775,242	6,339,353	129,114,595
1925	8,407	119,786,318	6,767,973	2,047,099	128,601,390	6,553,458	135,154,848
1926	9,145	120,158,128	7,191,240	2,266,407	129,615,775	7,003,830	136,619,605
1927	9,724	126,076,960	7,712,554	2,332,337	136,121,851	7,334,053	143,455,904
1928	9,942	117,922,441	8,275,667	2,161,140	128,359,248	7,535,688	135,894,936
1929	10,183	121,413,067	8,160,166	2,196,454	131,769,687	7,823,916	139,593,603
1930	9,672	98,314,644	9,367,262	1,449,083	109,130,989	7,992,681	117,123,670
1931	8,272	54,519,506	5,833,638	1,313,937	61,667,081	5,695,227	67,362,308
1932	6,456	23,657,092	3,636,039	950,619	28,243,750	3,270,559	31,514,309

[1] Tabulations of the Division of Labor Statistics carry these employees under "Industries, not otherwise classified."

TABLE 4.—TOTAL WAGE AND SALARY PAYMENTS, EACH YEAR 1918 TO 1932, BY INDUSTRY AND GENERAL OCCUPATION GROUPS—Continued

Fisheries

Year	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	Total	Superintendents and managers	Grand total
1918	38	$577,228	$49,004	----------	$626,232	$56,871	$683,103
1919	41	573,347	64,205	$1,250	638,802	63,082	701,884
1920	39	626,871	65,907	12,807	705,585	68,424	774,009
1921	27	378,476	68,460	9,744	456,680	58,750	515,430
1922	27	416,996	66,321	[1] 10,290	493,607	46,599	540,206
1923	26	408,462	[1] 58,783	[1] 9,820	477,065	59,975	537,040
1924	25	537,035	[1] 63,013	[1] 12,020	612,068	65,885	677,953
1925	23	489,088	[1] 52,100	[1] 5,673	546,861	68,920	615,781
1926	22	481,277	[1] 49,888	[1] 5,950	537,115	73,275	610,390
1927	21	479,939	[1] 49,218	[1] 10,358	539,515	62,620	602,135
1928	20	455,426	[1] 46,125	[1] 4,320	505,871	68,400	574,271
1929	21	511,443	46,515	1,744	559,702	72,822	632,524
1930	22	481,506	[1] 46,565	[1] 400	528,471	69,640	598,111
1931	24	434,362	[1] 47,323	[1] 6,095	487,780	61,153	548,933
1932	[2]	[2]	[2]	[2]	[2]	[2]	[2]

Manufactures

1918	8,858	$810,785,446	$72,401,476	$7,633,182	$890,820,104	$34,550,921	$925,371,025
1919	9,011	872,014,593	99,616,384	9,022,859	980,653,836	46,296,998	1,026,950,834
1920	9,652	1,143,662,785	118,045,344	11,363,308	1,273,071,437	51,667,818	1,324,739,255
1921	8,632	576,968,355	89,700,261	11,194,833	677,863,449	46,048,958	723,912,407
1922	8,330	693,948,886	118,786,876	10,629,989	823,365,751	45,706,009	869,071,760
1923	8,701	933,989,207	105,092,484	12,959,685	1,052,041,376	51,259,820	1,103,301,196
1924	9,125	867,024,674	108,441,736	13,865,043	989,331,453	51,142,061	1,040,473,514
1925	9,502	956,106,644	116,531,491	17,046,075	1,089,684,210	56,133,781	1,145,817,991
1926	9,704	973,197,214	121,169,678	17,225,427	1,111,592,319	58,268,417	1,169,860,736
1927	9,880	950,200,395	127,339,270	17,821,103	1,095,360,768	58,822,884	1,154,183,652
1928	9,937	1,000,676,770	126,630,061	18,073,918	1,145,380,749	59,420,091	1,204,800,840
1929	10,035	1,076,213,730	141,959,719	20,198,389	1,238,371,838	62,777,638	1,301,149,476
1930	10,011	806,211,539	141,830,517	10,326,936	958,368,992	60,396,459	1,018,765,451
1931	9,683	571,917,215	109,165,152	9,135,088	690,217,455	50,905,300	741,122,755
1932	9,102	383,603,906	85,497,253	8,497,176	477,598,335	38,432,348	516,030,683

Service

1918	2,556	$27,643,855	$9,703,779	$2,126,972	$39,474,606	$3,140,365	$42,614,971
1919	2,563	32,512,991	12,004,106	2,850,546	47,367,643	4,213,463	51,581,106
1920	3,847	47,803,545	20,394,826	3,630,925	71,829,296	6,513,125	78,342,421
1921	2,823	48,642,424	21,424,601	3,238,245	73,305,270	7,000,489	80,305,759
1922	3,034	50,008,110	19,645,610	3,504,463	73,158,183	7,589,873	80,748,056
1923	3,341	58,995,211	23,311,697	5,899,211	88,206,119	9,064,289	97,270,408
1924	4,233	69,480,045	26,343,143	6,412,273	102,235,461	11,482,566	113,718,027
1925	[3] 5,971	[3] 86,197,038	[3] 48,314,102	[3] 10,948,449	[3] 145,459,589	[3] 21,959,639	[3] 167,419,228
1926	6,761	94,622,091	53,930,013	13,078,376	161,630,480	21,849,163	183,479,643
1927	7,598	105,462,147	59,000,261	10,809,448	175,271,856	21,607,204	196,879,060
1928	8,210	102,061,685	65,040,343	13,801,649	180,903,677	25,058,030	205,961,707
1929	9,335	118,959,260	76,873,897	16,074,147	211,907,304	26,384,039	238,291,343
1930	10,241	111,692,103	83,742,536	6,998,762	202,433,401	27,932,230	230,365,631
1931	10,452	103,607,067	75,869,112	6,060,877	185,537,056	24,510,860	210,047,916
1932	10,357	85,957,730	58,630,191	4,093,525	148,681,446	19,735,297	168,416,743

[1] Tabulations of the Division of Labor Statistics carry these employees under "Industries, not otherwise classified."

[2] Tabulations of the Division of Labor Statistics carry fisheries under "Trade" in 1932, as the establishments reporting were largely packing and sales houses.

[3] Tabulations of the Division of Labor Statistics change the classification of offices from "trade" to "service" beginning in 1925.

TABLE 4.—TOTAL WAGE AND SALARY PAYMENTS, EACH YEAR 1918 TO 1932, BY INDUSTRY AND GENERAL OCCUPATION GROUPS—Continued

Trade, wholesale and retail

Year	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	Total	Superintendents and managers	Grand total
1918	5,330	$37,795,364	$20,967,763	$26,950,968	$85,714,095	$11,659,274	$97,373,369
1919	5,657	46,445,286	29,341,620	35,398,715	111,185,621	15,122,047	126,307,668
1920	6,589	63,635,703	41,543,768	45,420,232	150,599,703	19,702,421	170,302,124
1921	5,638	57,231,910	37,746,619	43,526,368	138,504,897	19,788,261	158,293,158
1922	6,031	55,724,935	37,310,729	44,403,951	137,439,615	20,162,319	157,601,934
1923	6,276	65,721,582	43,159,573	52,324,761	161,205,916	24,524,747	185,730,663
1924	7,689	72,693,100	48,432,073	58,482,902	179,608,075	28,729,683	208,337,758
1925	[3] 7,277	[3] 67,929,464	[3] 28,828,086	[3] 58,611,692	[3] 155,369,242	[3] 22,965,987	[3] 178,335,229
1926	7,867	72,366,350	31,231,010	63,490,776	167,088,136	24,120,423	191,208,559
1927	8,526	74,471,388	32,032,811	71,337,704	177,841,903	25,718,819	203,560,722
1928	8,916	73,571,115	31,704,191	73,229,892	178,505,198	31,854,439	210,359,637
1929	9,524	72,980,211	33,268,959	78,338,716	184,587,886	28,532,443	213,120,329
1930	10,022	72,844,362	34,396,203	67,848,122	175,088,687	32,256,244	207,344,931
1931	10,111	67,505,063	28,548,605	64,051,911	160,105,579	26,096,282	186,201,861
1932	9,716	52,243,081	21,934,553	50,317,419	124,495,053	20,821,876	145,316,929

Transportation and public utilities

1918	1,134	$50,427,769	$6,334,367	$229,441	$56,991,577	$2,422,125	$59,413,702
1919	1,081	61,028,180	7,414,174	296,068	68,738,422	3,295,325	72,033,747
1920	1,146	78,632,869	9,366,267	[4] 985,326	88,984,462	3,570,821	92,555,283
1921	1,048	67,712,303	9,651,476	315,269	77,679,048	4,419,299	82,098,347
1922	1,072	64,453,929	11,305,871	409,160	76,168,960	4,288,543	80,457,503
1923	1,129	74,825,820	11,295,728	574,619	86,696,167	4,062,715	90,758,882
1924	1,271	80,083,993	16,791,264	1,066,577	97,941,834	4,769,997	102,711,831
1925	1,353	79,579,117	13,765,786	1,015,629	94,360,532	4,886,340	99,246,872
1926	1,453	93,698,346	16,704,975	1,341,758	111,745,079	5,764,073	117,509,152
1927	1,561	92,046,254	17,860,314	1,383,981	111,290,549	6,146,142	117,436,691
1928	1,625	96,250,480	19,842,439	1,602,371	117,695,290	6,725,924	124,421,214
1929	1,674	93,988,809	21,225,289	2,151,021	117,365,119	7,158,501	124,523,620
1930	1,741	95,848,928	21,871,675	2,241,252	119,961,855	7,746,909	127,708,764
1931	1,776	72,945,697	19,571,037	1,616,839	94,133,573	7,187,687	101,321,260
1932	1,742	56,357,180	16,740,302	1,499,996	74,597,478	6,085,413	80,682,891

[3] Tabulations of the Division of Labor Statistics change the classification of offices from "trade" to "service" beginning in 1925.

[4] This amount is undoubtedly an error, but original schedules and work sheets have been destroyed and definite correction, therefore, cannot be made. The most likely error was mistaking a figure "1" in the left-hand column for a figure "7". If this assumption is correct, it involves a reduction of $600,000, which would make the following changes in averages for 1920 shown in table 6 of this article: Transportation and public utilities, "all employees," from $1,385 to $1,376; all industries combined, "salespeople," from $1,250 to $1,238.

Average Wage and Salary Payments

TABLE 6 shows average wage and salary payments for each year of the period, computed by dividing total wage and salary payments, as reported to and compiled by the Division of Labor Statistics and shown in table 4, by the average number of employees within the same group, as shown in table 3. Very little information concerning average annual wage and salary payments has been made available on any extensive basis. The United States Census Bureau does not compute average annual wage payments in compiling the biennial Census of Manufactures, and states in the 1929 report the reasons for not making such computations. When computations are made, however, from the census reports, for wage earners in manufactures

in Ohio, one finds the following comparisons with the average wage and salary payments to wage earners based on the Ohio Division of Labor Statistics data.

TABLE 5.—AVERAGE WAGE PAYMENTS TO WAGE EARNERS IN MANUFACTURES IN OHIO, IN SPECIFIED YEARS, 1919 TO 1929

Year	Average wage payment—		Year	Average wage payment—	
	Computed from United States census	Based on Ohio Division of Labor Statistics data		Computed from United States census	Based on Ohio Division of Labor Statistics data
1919	$1,293	$1,285	1927	$1,447	$1,464
1921	1,269	1,252	1929	1,487	1,499
1923	1,464	1,428	1931	1,170	1,185
1925	1,442	1,467			

The two series show a remarkable agreement. The average annual payments to wage earners in manufactures in Ohio computed from the Ohio reports as compared with those computed from the United States census reports, are 0.62 percent lower in 1919, 1.34 percent lower in 1921, 2.46 percent lower in 1923, 1.73 percent higher in 1925, 1.17 percent higher in 1927, 0.81 percent higher in 1929, and 1.28 percent higher in 1931.

It is not possible from the reports made to the Ohio Division of Labor Statistics to show wage and salary payments separately for males and for females, nor is it possible to classify occupations beyond the three general occupation groups shown in this article. Considering all industries combined, and all employees, the highest average wage and salary payment was in 1920, with the second highest in 1929. The lowest average was in 1932, with a drop in 3 years of $430, or 29.1 percent.

In construction the highest average payment was in 1923, with a drop to the lowest point in 1932 of $903, or 46.8 percent.

In manufactures the highest average payment was in 1920, and the second highest in 1929. The lowest was in 1932, with a drop of $461, or 30 percent, in 3 years. In service the highest average was in 1929 and the lowest in 1918. In wholesale and retail trade the highest average was in 1924 and the lowest in 1918; for salespeople (not traveling) under the general industry group "trade", the highest average payment was in 1927. In transportation and public utilities the highest average was in 1928 and the lowest in 1918.

Charts 1 to 6 show graphically average wage and salary payments from 1918 to 1932 for each of the industry groups numerically important and for all industry groups combined.

TABLE 6.—AVERAGE WAGE AND SALARY PAYMENTS EACH YEAR 1918 TO 1932, BY INDUSTRY AND GENERAL OCCUPATION GROUPS

Year	All industries					Agriculture				
	Establishments	All employees	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	Establishments	All employees	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)
1918	22,709	$1,098	$1,109	$1,086	$894	520	$750	$744	[1]	[1]
1919	23,652	1,245	1,246	1,314	1,039	552	834	823	[1]	[1]
1920	27,241	1,524	1,543	1,495	[2] 1,250	586	1,055	1,043	[1]	[1]
1921	23,562	1,284	1,252	1,480	1,271	504	923	905	[1]	[1]
1922	[3] 24,025	1,304	1,250	1,707	1,216	[3] 524	912	895	[1]	[1]
1923	25,904	1,425	1,422	1,492	1,332	548	[4] 981	972	[1]	[5]
1924	30,439	1,419	1,406	1,554	1,316	732	1,015	1,006	[1]	[1]
1925	33,443	1,445	1,435	1,546	1,367	910	1,021	1,010	[1]	[1]
1926	36,004	1,436	1,418	1,577	1,395	1,052	970	954	[1]	[1]
1927	38,509	1,455	1,431	1,620	1,417	1,199	982	965	[1]	[1]
1928	39,979	1,469	1,448	1,634	1,467	1,329	986	969	[1]	[1]
1929	42,216	1,480	1,457	1,677	1,374	1,444	971	957	[1]	[1]
1930	43,348	1,388	1,343	1,676	1,249	1,639	949	937	[1]	[1]
1931	42,095	1,245	1,187	1,564	1,161	1,777	819	804	[1]	[1]
1932	39,109	1,050	980	1,390	1,014	1,736	661	650	[1]	[1]
	Construction					Manufactures				
1918	4,273	$1,094	$1,094	$1,073	[1]	8,858	$1,162	$1,159	$1,165	$1,496
1919	4,747	1,414	1,415	1,279	$2,077	9,011	1,304	1,285	1,460	1,688
1920	5,382	1,698	1,703	1,576	1,953	9,652	1,602	1,598	1,616	1,981
1921	4,890	1,400	1,382	1,602	1,795	8,632	1,293	1,252	1,547	1,971
1922	[3] 5,007	1,373	1,361	1,485	1,829	[3] 8,330	1,350	1,270	2,064	1,796
1923	5,883	1,929	1,946	1,593	1,989	8,701	1,449	1,428	1,604	2,037
1924	7,364	1,642	1,637	1,646	1,960	9,125	1,456	1,429	1,644	1,980
1925	8,407	1,656	1,651	1,649	2,064	9,502	1,497	1,467	1,704	2,226
1926	9,145	1,622	1,611	1,694	2,091	9,704	1,479	1,448	1,702	2,092
1927	9,724	1,630	1,618	1,720	2,109	9,880	1,502	1,464	1,774	2,129
1928	9,942	1,637	1,624	1,751	2,014	9,937	1,528	1,496	1,758	2,163
1929	10,183	1,676	1,668	1,685	1,966	10,035	1,535	1,499	1,792	2,171
1930	9,672	1,568	1,545	1,760	2,196	10,011	1,424	1,365	1,825	2,078
1931	8,272	1,352	1,328	1,607	1,453	9,683	1,248	1,185	1,679	1,787
1932	6,456	1,026	982	1,351	1,295	9,102	1,036	960	1,513	1,737
	Service					Trade, wholesale and retail				
1918	2,556	$806	$720	$1,083	$1,369	5,330	$854	$870	$940	$779
1919	2,563	903	809	1,171	1,408	5,657	1,000	1,015	1,101	914
1920	3,847	1,134	1,030	1,360	1,881	6,589	1,212	1,230	1,344	1,092
1921	2,823	1,177	1,054	1,510	1,695	5,638	1,243	1,264	1,359	1,135
1922	[3] 3,034	1,112	1,026	1,325	1,599	[3] 6,031	1,167	1,152	1,291	1,097
1923	3,341	1,165	1,049	1,400	2,072	6,276	1,248	1,248	1,356	1,171
1924	4,233	1,191	1,106	1,349	1,845	7,689	1,280	1,296	1,422	1,165
1925	[6] 5,971	[6] 1,287	[6] 1,174	[6] 1,416	[6] 1,982	[6] 7,277	[6] 1,224	[6] 1,264	[6] 1,295	[6] 1,151
1926	6,761	1,299	1,153	1,512	1,955	7,867	1,258	1,280	1,355	1,194
1927	7,598	1,343	1,210	1,555	1,980	8,526	1,273	1,276	1,350	1,238
1928	8,210	1,306	1,120	1,619	1,916	8,916	1,268	1,293	1,327	1,220
1929	9,335	1,384	1,180	1,732	2,027	9,524	1,237	1,281	1,332	1,164
1930	10,241	1,306	1,123	1,637	1,582	10,022	1,231	1,259	1,405	1,132
1931	10,452	1,236	1,066	1,561	1,394	10,111	1,166	1,217	1,282	1,076
1932	10,357	1,074	939	1,365	1,045	9,716	1,014	1,064	1,122	930

[1] Not computed owing to small number involved.

[2] See note 4 to table 4.

[3] The number of establishments reporting employees was: Total, 24,124; agriculture, 519; construction, 5,005; fisheries, 27; manufactures, 8,403; service, 3,032; trade, wholesale and retail, 6,067; and transportation and public utilities, 1,071.

[4] Wage and salary payments to salespeople (not traveling) not included in this average, as number of such employees could not be determined.

[5] Combined with "industries not otherwise classified" in detailed tabulation by Division of Labor Statistics; number does not exceed 60.

[6] Tabulations of the Division of Labor Statistics change the classification of offices from "trade" to "service" beginning in 1925.

TABLE 6.—AVERAGE WAGE AND SALARY PAYMENTS EACH YEAR 1918 TO 1922 BY INDUSTRY AND GENERAL OCCUPATION GROUPS—Continued

Year	Transportation and public utilities				
	Establishments	All employees	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)
1918	1,134	$959	$969	$879	(1)
1919	1,081	1,124	1,144	971	(1)
1920	1,146	[2] 1,385	1,401	1,183	(1)
1921	1,048	1,318	1,318	1,309	(1)
1922	[3] 1,072	1,281	1,252	1,444	(1)
1923	1,129	1,316	1,316	1,298	(1)
1924	1,271	1,417	1,350	1,800	(1)
1925	1,353	1,359	1,341	1,436	(1)
1926	1,453	1,397	1,385	1,424	$2,203
1927	1,561	1,388	1,374	1,423	2,243
1928	1,625	1,438	1,413	1,526	2,210
1929	1,674	1,429	1,406	1,485	2,199
1930	1,741	1,420	1,402	1,461	1,997
1931	1,776	1,377	1,343	1,479	1,909
1932	1,742	1,241	1,199	1,363	1,868

[1] Not computed owing to small number involved.
[2] See note 4 to table 4.
[3] The number of establishments reporting employees was: Total, 24,124; agriculture, 519; construction, 5,005; fisheries, 27; manufactures, 8,403; service, 3,032; trade, wholesale and retail, 6,067; and transportation and public utilities, 1,071.

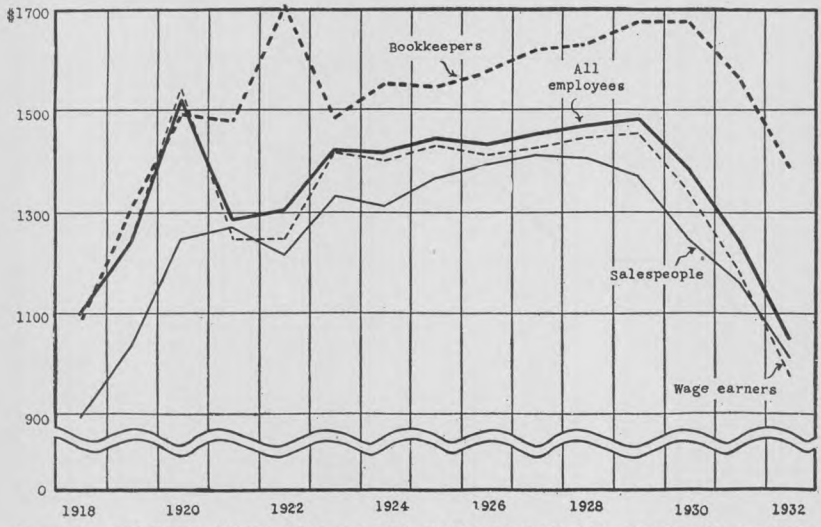

Figure 1. AVERAGE WAGE AND SALARY PAYMENTS IN ALL INDUSTRY GROUPS COMBINED, 1918 TO 1932, BY GENERAL OCCUPATION GROUPS

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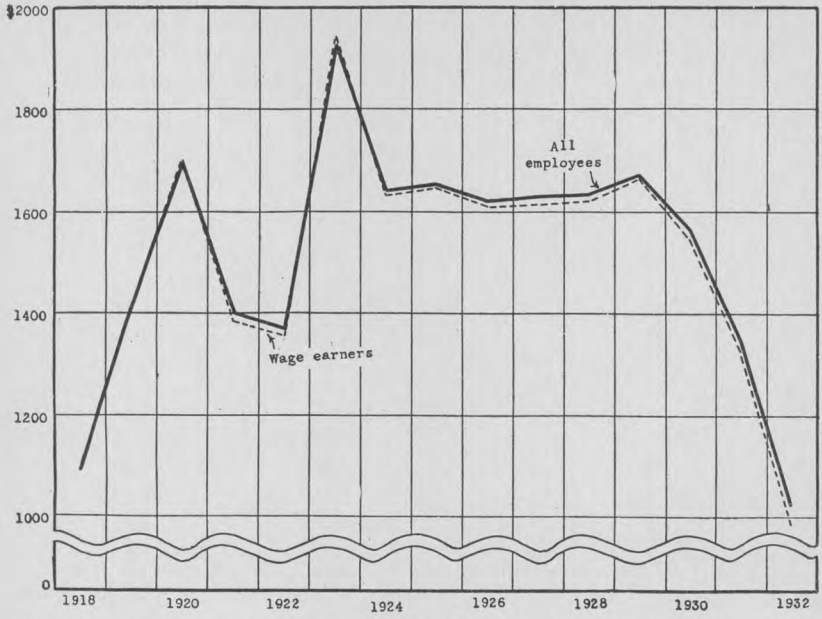

Figure 2. AVERAGE WAGE AND SALARY PAYMENTS TO WAGE EARNERS AND TO ALL EMPLOYEES IN THE CONSTRUCTION INDUSTRY, 1918 TO 1932

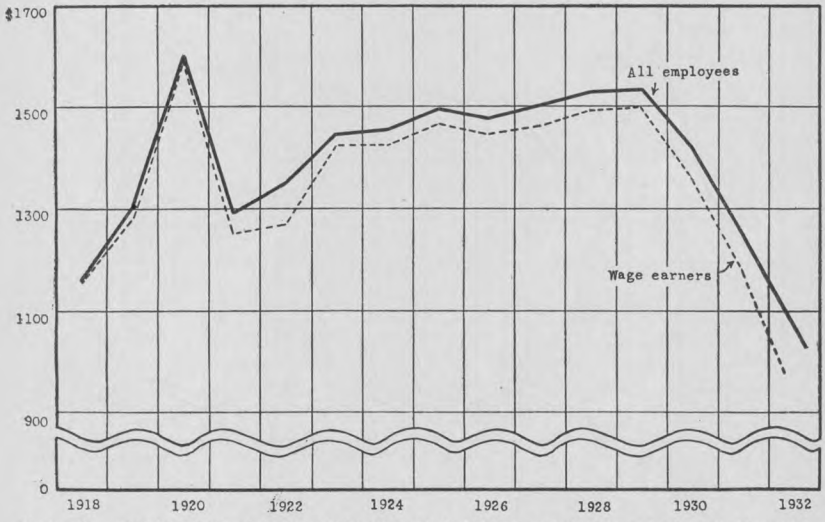

Figure 3. AVERAGE WAGE AND SALARY PAYMENTS TO WAGE EARNERS AND TO ALL EMPLOYEES IN MANUFACTURES, 1918 TO 1932

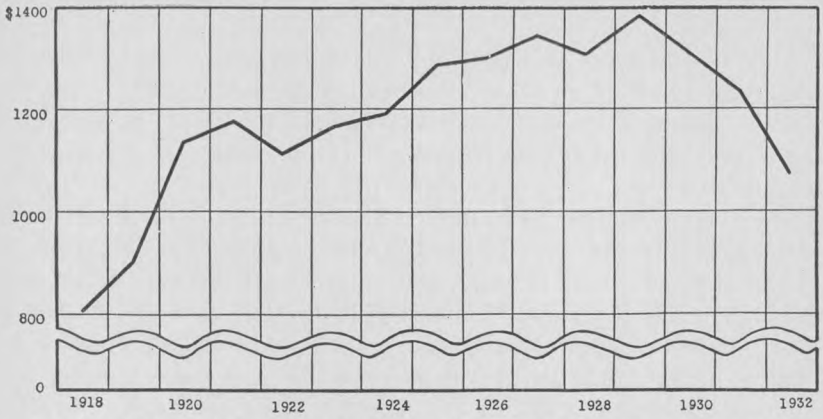

Figure 4. AVERAGE WAGE AND SALARY PAYMENTS TO ALL EMPLOYEES IN THE "SERVICE" GROUP, 1918 TO 1932

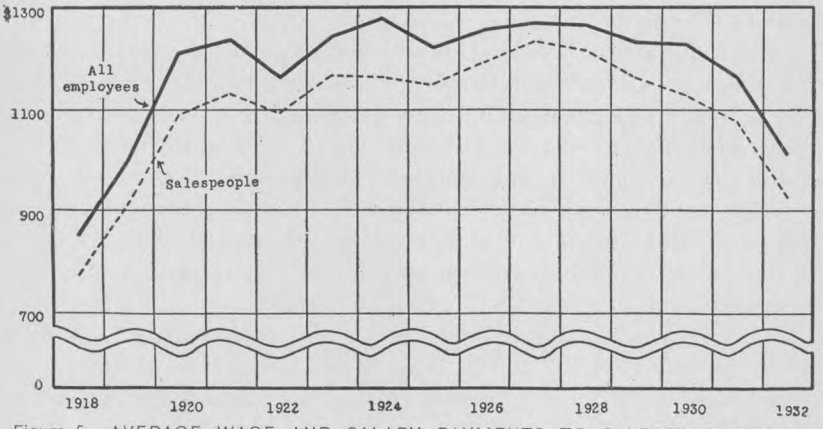

Figure 5. AVERAGE WAGE AND SALARY PAYMENTS TO SALESPEOPLE (NOT TRAVELING) AND TO ALL EMPLOYEES IN WHOLESALE AND RETAIL TRADE, 1918 TO 1932

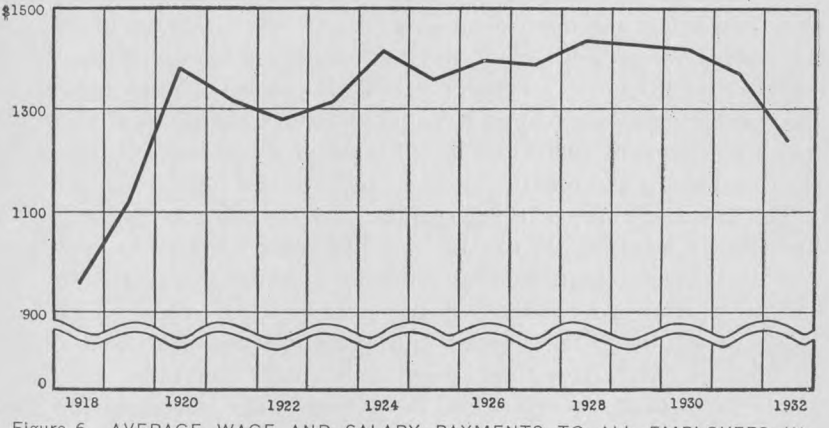

Figure 6. AVERAGE WAGE AND SALARY PAYMENTS TO ALL EMPLOYEES IN TRANSPORTATION AND PUBLIC UTILITIES, 1918 TO 1932

Conclusion

A CONSIDERATION of wage and salary payments and number of employees reported in Ohio affords some measure of the economic changes among wage earners, bookkeepers, stenographers, and office clerks, and salespeople (not traveling) in Ohio during the 3 years from 1929 to 1932.

The average number of employees reported in all industries covered in this article combined fell from 1,278,992 in 1929 to 817,862 in 1932. The total amount paid in wages and salaries (omitting superintendents and managers) fell from $1,893,243,520 in 1929 to $858,844,862 in 1932. The average wage and salary payment to those employed fell from $1,480 in 1929 to $1,050 in 1932. The average number employed decreased 461,130, or 36.1 percent, the total wage and salary payment decreased $1,034,398,658, or 54.6 percent, and the average wage and salary payment to those who were employed decreased $430, or 29.1 percent.

In all industries covered in this article combined, the average number of wage earners reported fell in the 3 years, 1929 to 1932, from 1,024,165 to 619,044. The total amount paid to wage earners in wages and salaries fell from $1,492,141,261 to $606,713,513 and the average wage and salary payment to those employed fell from $1,457 to $980. The average number employed decreased 405,121, or 39.6 percent, the total wage and salary payments to wage earners decreased $885,427,748, or 59.3 percent, and the average wage and salary payment to those who were employed decreased $477, or 32.7 percent.

The average number of bookkeepers, stenographers, and office clerks reported fell in the 3 years from 168,127 to 134,296. The total wage and salary payments to that occupation group fell from $282,017,895 to $186,710,032, and the average wage and salary payment to those who were employed fell from $1,677 to $1,390. The average number employed decreased 33,831, or 20.1 percent, the total wage and salary payment decreased $95,307,863, or 33.8 percent, and the average wage and salary payment to those who were employed decreased $287, or 17.1 percent. This general occupation group shows a higher average number employed and a higher total wage and salary payment in 1930 than in 1929, with only $1 less in the average wage and salary payment.

The average number of salespeople (not traveling) reported fell in the 3 years from 86,701 to 64,523. The total wage and salary payments to that occupation group fell from $119,084,364 to $65,421,317, and the average wage and salary payment to those employed fell from $1,374 to $1,014. The average number employed decreased 22,178, or 25.6 percent, the total wage and salary payment decreased $53,663,047, or 45.1 percent, and the average wage and salary payment to those who were employed decreased $360, or 26.2 percent. In this

occupation group the highest average wage and salary payment was reported in 1927 and a decline has been reported each year since that date.

The greatest decrease in average number employed, in total wage and salary payments, and in average wage and salary payments during the 3 years 1929 to 1932 was in the general occupation group "wage earners." The lowest decrease in each of the three items was in the general occupation group "bookkeepers, stenographers, and office clerks." A comparison of the general occupation groups showing the percent of decrease from 1929 to 1932 is shown in the following table.

TABLE 7.—PERCENT OF DECREASE IN AVERAGE NUMBER EMPLOYED, AND TOTAL AND AVERAGE WAGE AND SALARY PAYMENTS FROM 1929 TO 1932, BY GENERAL OCCUPATION GROUPS

General occupation group	Average number employed	Total wage and salary payments	Average wage and salary payments
All employees	36.1	54.6	29.1
Wage earners	39.6	59.3	32.7
Bookkeepers, stenographers, and office clerks	20.1	33.8	17.1
Salespeople (not traveling)	25.6	45.1	26.2

Comparing the decreases between 1929 and 1932 by industry groups, the construction industry shows the largest percent of decrease in average number employed, in total wage and salary payments, and in average wage and salary payments. The smallest percent of decrease is found in service for the first two items, and transportation and public utilities shows the smallest percent of decrease in average wage and salary payments. Table 8 shows the percent of decrease during the 3 years for wage earners, bookkeepers, stenographers, and office clerks, and salespeople (not traveling), combined. The figures are for both sexes.

TABLE 8.—PERCENT OF DECREASE IN AVERAGE NUMBER EMPLOYED, AND TOTAL AND AVERAGE WAGE AND SALARY PAYMENTS, 1932 COMPARED WITH 1929, BY INDUSTRY GROUPS

Industry group	Average number employed	Total wage and salary payments	Average wage and salary payments
All industries combined	36.1	54.6	29.1
Agriculture	11.5	39.8	31.9
Construction	65.0	78.6	38.8
Manufactures	42.8	61.4	30.0
Service	9.6	29.8	22.4
Trade, wholesale and retail	17.7	32.6	18.0
Transportation and public utilities	26.8	36.4	13.2

Wage-Rate Changes in American Industries

Manufacturing Industries

THE following table presents information concerning wage-rate adjustments occurring between October 15 and November 15, 1933, as shown by reports received from manufacturing establishments supplying employment data to this Bureau.

Increases in wage rates averaging 13.8 percent and affecting 42,657 employees were reported by 247 of the 18,047 manufacturing establishments surveyed in November. Eight establishments in the iron and steel industry reported wage-rate increases averaging 11.4 percent and affecting approximately 7,000 employees and a similar number of employees in 12 establishments in the dyeing and finishing industry also received increases in wage rates averaging 26.3 percent. The increases in rates in this last-named industry were due largely to adjustment of rates following the settlement of a strike. Twenty-five establishments in the paper and pulp industry reported increases in rates averaging 11.1 percent and affecting 6,492 workers. Increases affecting 2,870 employees were reported by 7 establishments in the beet-sugar industry. Approximately 2,000 employees in 4 establishments in the automobile industry and a similar number in 14 establishments in the foundry industry also received wage-rate increases. Eleven establishments in the silk industry reported increases in wage rates affecting 1,650 employees and the car-building and stamped-ware industries each reported slightly more than 1,000 employees affected by wage-rate increases.

Of the 18,047 manufacturing establishments included in the November survey, 17,785, establisments, or 98.5 percent of the total, reported no change in wage rates over the month interval. The 3,085,568 employees not affected by changes in wage rates constituted 98.6 percent of the total number of employees covered by the November trend-of-employment survey of manufacturing industries.

Fifteen manufacturing establishments in nine industries reported wage-rate decreases, affecting 683 employees between October and November.

TABLE 1.—WAGE-RATE CHANGES IN **MANUFACTURING** INDUSTRIES DURING MONTH ENDING NOV. 15, 1933

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
All manufacturing industries	18,047	3,128,908	17,785	247	15	3,085,568	42,657	683
Percent of total	100.0	100.0	98.5	1.4	0.1	98.6	1.4	(1)
Food and kindred products:								
Baking	1,006	69,650	1,004	1	1	69,626	16	8
Beverages	385	22,549	382	3		22,470	79	
Butter	273	4,680	272	1		4,638	42	
Confectionery	303	42,615	299	4		41,837	778	
Flour	395	16,626	394	1		16,564	62	
Ice cream	315	8,891	315			8,891		
Slaughtering and meat packing	221	99,973	218	3		99,859	114	
Sugar, beet	63	24,739	56	7		21,869	2,870	
Sugar refining, cane	12	8,948	12			8,948		
Textiles and their products:								
Fabrics:								
Carpets and rugs	26	16,765	26			16,765		
Cotton goods	668	286,295	666	2		285,670	625	
Cotton small wares	113	10,318	109	4		10,129	189	
Dyeing and finishing textiles	149	39,698	137	12		32,498	7,200	
Hats, fur-felt	31	5,492	31			5,492		
Knit goods	441	110,170	440		1	109,948		222
Silk and rayon goods	248	51,891	237	11		50,241	1,650	
Woolen and worsted goods	236	64,610	236			64,610		
Wearing apparel:								
Clothing, men's	401	66,322	400	1		66,252	70	
Clothing, women's	574	28,878	565	3	6	28,640	83	155
Corsets and allied garments	28	4,749	28			4,749		
Men's furnishings	75	7,723	74	1		7,708	15	
Millinery	133	7,334	133			7,334		
Shirts and collars	122	17,594	122			17,594		
Iron and steel and their products, not including machinery:								
Bolts, nuts, washers, and rivets	79	13,549	75	4		13,464	85	
Cast-iron pipe	45	6,454	45			6,454		
Cutlery (not including silver and plated cutlery) and edge tools	132	10,675	125	7		10,485	190	
Forgings, iron and steel	66	7,848	65	1		7,714	134	
Hardware	88	26,260	82	6		25,432	828	
Iron and steel	205	238,818	197	8		231,480	7,338	
Plumbers' supplies	70	8,306	69	1		8,263	43	
Steam and hot-water heating apparatus and steam fittings	97	16,851	96	1		16,746	105	
Stoves	154	22,779	152	1	1	22,614	115	50
Structural and ornamental metal work	196	16,295	195	1		16,270	25	
Tin cans and other tinware	61	10,107	53	8		8,963	1,144	
Tools (not including edge tools, machine tools, files, and saws)	122	8,619	117	5		8,449	170	
Wirework	71	7,515	68	3		7,481	34	
Machinery, not including transportation equipment:								
Agricultural implements	78	9,562	77	1		9,482	80	
Cash registers, adding machines, and calculating machines	32	15,541	32			15,541		
Electrical machinery, apparatus, and supplies	289	112,654	287	2		111,697	957	
Engines, turbines, tractors, and water wheels	88	22,093	86	2		22,089	4	
Foundry and machine-shop products	1,018	110,675	1,004	14		108,764	1,911	
Machine tools	143	16,454	138	5		16,101	353	
Radios and phonographs	41	40,978	40		1	40,970		8
Textile machinery and parts	51	10,235	51			10,235		
Typewriters and supplies	12	12,491	12			12,491		

[1] Less than one tenth of 1 percent.

TABLE 1.—WAGE-RATE CHANGES IN **MANUFACTURING** INDUSTRIES DURING MONTH ENDING NOV. 15, 1933—Continued

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
Nonferrous metals and their products:								
Aluminum manufactures	24	6,515	24			6,515		
Brass, bronze, and copper products	208	37,348	204	4		36,656	692	
Clocks and watches and time-recording devices	26	9,518	26			9,518		
Jewelry	118	7,571	113	5		7,240	331	
Lighting equipment	50	3,282	50			3,282		
Silverware and plated ware	56	9,359	55	1		9,282	77	
Smelting and refining—copper, lead, and zinc	40	13,819	40			13,819		
Stamped and enameled ware	87	16,339	79	8		15,287	1,052	
Transportation equipment:								
Aircraft	27	7,756	27			7,756		
Automobiles	226	181,809	222	4		179,850	1,959	
Cars, electric- and steam-railroad	51	8,628	43	8		7,531	1,097	
Locomotives	10	2,783	10			2,783		
Shipbuilding	100	27,829	98	2		27,807	22	
Railroad repair shops:								
Electric railroad	383	19,710	374	9		19,258	452	
Steam railroad	538	73,864	538			73,864		
Lumber and allied products:								
Furniture	468	55,296	465	3		55,017	279	
Lumber:								
Millwork	485	19,786	477	8		19,633	153	
Sawmills	595	76,878	595			76,878		
Turpentine and rosin	19	1,683	19			1,683		
Stone, clay, and glass products:								
Brick, tile, and terra cotta	655	18,880	647	7	1	18,658	208	14
Cement	113	10,071	113			10,071		
Glass	180	47,509	180			47,509		
Marble, granite, slate, and other products	218	5,140	218			5,140		
Pottery	117	18,541	114	3		18,224	317	
Leather and its manufactures:								
Boots and shoes	339	101,767	337	2		101,746	21	
Leather	153	30,614	150	3		30,396	218	
Paper and printing:								
Boxes, paper	326	26,163	326			26,163		
Paper and pulp	436	103,373	411	25		96,881	6,492	
Printing and publishing:								
Book and job	747	46,047	738	8	1	45,791	238	18
Newspapers and periodicals	435	59,105	434	1		59,065	40	
Chemicals and allied products:								
Chemicals	102	24,934	99	3		24,824	110	
Cottonseed—oil, cake, and meal	104	5,577	101	1	2	5,364	87	126
Druggists' preparations	55	8,798	55			8,798		
Explosives	31	4,528	31			4,528		
Fertilizers	172	8,709	165	7		8,555	154	
Paints and varnishes	349	16,226	345	4		15,736	490	
Petroleum refining	147	57,173	147			57,173		
Rayon and allied products	23	34,678	23			34,678		
Soap	102	15,582	99	3		15,261	321	
Rubber products:								
Rubber boots and shoes	8	9,847	7	1		9,457	390	
Rubber goods, other than boots, shoes, tires, and inner tubes	101	26,186	100	1		26,177	9	
Rubber tires and inner tubes	38	53,919	38			53,919		
Tobacco manufactures:								
Chewing and smoking tobacco and snuff	30	9,677	30			9,677		
Cigars and cigarettes	199	44,822	196	2	1	44,601	139	82

Nonmanufacturing Industries

DATA concerning wage-rate changes occurring between October 15 and November 15, 1933, reported by cooperating establishments in 15 nonmanufacturing industries are presented in the following table.

No changes in wage rates were reported in the anthracite-mining or telephone and telegraph industries. Increases were reported in each of the remaining 13 industries and decreases were reported in 4 industries over the month interval. Wage-rate increases averaging 18.1 percent and affecting 6,363 employees were reported in the bituminous-coal-mining industry and were due to some extent to the settlement of strikes in Pennsylvania. Increases averaging 4.9 percent and affecting 2,666 employees in electric-railroad and motor-bus operation and maintenance were due largely to the adoption of the N.R.A. motor-bus industry code. Increases were reported in the retail-trade industry averaging 12.1 percent and affecting 1,472 employees. The increases or decreases in rates in the remaining industries were not of especial significance.

TABLE 2.—WAGE-RATE CHANGES IN **NONMANUFACTURING** INDUSTRIES DURING MONTH ENDING NOV. 15, 1933

Industrial group	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No. wage-rate changes	Wage-rate increases	Wage-rate decreases	No. wage-rate changes	Wage-rate increases	Wage-rate decreases
Anthracite mining	160	84,729	160			84,729		
Percent of total	100.0	100.0	100.0			100.0		
Bituminous-coal mining	1,509	227,883	1,463	46		221,520	6,363	
Percent of total	100.0	100.0	97.0	3.0		97.2	2.8	
Metalliferous mining	294	27,784	290	4		27,288	496	
Percent of total	100.0	100.0	98.6	1.4		98.2	1.8	
Quarrying and nonmetallic mining	1,185	34,303	1,178	7		34,132	171	
Percent of total	100.0	100.0	99.4	.6		99.5	.5	
Crude-petroleum producing	264	28,610	256	8		28,083	527	
Percent of total	100.0	100.0	97.0	3.0		98.2	1.8	
Telephone and telegraph	8,234	247,820	8,234			247,820		
Percent of total	100.0	100.0	100.0			100.0		
Power and light	3,188	209,433	3,175	13		209,258	175	
Percent of total	100.0	100.0	99.6	.4		99.9	.1	
Electric-railroad and motor-bus operation and maintenance	524	132,975	515	9		130,309	2,666	
Percent of total	100.0	100.0	98.3	1.7		98.0	2.0	
Wholesale trade	3,019	86,591	3,004	14	1	86,471	118	2
Percent of total	100.0	100.0	99.5	.5	(1)	99.9	.1	(1)
Retail trade	18,666	438,484	18,652	8	6	436,981	1,472	31
Percent of total	100.0	100.0	99.9	(1)	(1)	99.7	.3	(1)
Hotels	2,483	132,647	2,475	8		132,442	205	
Percent of total	100.0	100.0	99.7	.3		99.8	.2	
Canning and preserving	906	56,145	901	3	2	55,813	283	49
Percent of total	100.0	100.0	99.4	.3	.2	99.4	.5	.1
Laundries	1,290	66,086	1,284	6		65,474	612	
Percent of total	100.0	100.0	99.5	.5		99.1	.9	
Dyeing and cleaning	338	10,187	336	2		10,094	93	
Percent of total	100.0	100.0	99.4	.6		99.1	.9	
Banks, brokerage, insurance, and real estate	4,599	179,403	4,567	28	4	179,167	212	24
Percent of total	100.0	100.0	99.3	.6	.1	99.9	.1	(1)

[1] Less than one tenth of 1 percent.

Wage Changes Reported by Trade Unions and Municipalities Since September 1933

RECENT union and municipal wage changes coming to the attention of the Bureau of Labor Statistics since September are shown in the table following. The tabulation covers 100,918 workers, of whom 53,687 were reported to have gone on the 5-day week.

Most of the changes shown represent substantial increases. No renewals of existing agreements were reported.

RECENT WAGE CHANGES BY INDUSTRY, OCCUPATION, AND LOCALITY, SEPTEMBER TO DECEMBER 1933

Industry or occupation and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Bakers:					
Greater New York:					
Jewish bakers:		*Per week*	*Per week*		
First hands	Oct. 16	$72.00	$60.00	48	48
Second hands	do	68.00	54.00	48	48
Helpers	do	50.00	36.00	48	48
Pottstown, Pa., pretzel bakers	Sept. 18	(1)	(2)	40	40
Building trades:		*Per hour*	*Per hour*		
Electrical workers, Denver, Colo	Nov. 17	.90	1.25	30	30
Plumbers and steamfitters, Amsterdam, N.Y.	Sept. 1	1.12½	1.15	44	35
Chauffeurs and teamsters:		*Per week*	*Per week*		
Brooklyn, N.Y., coal drivers	Sept. 26	18.00—35.00	40.00	60–70	40
Clothing trades:					
Boot and shoe workers:					
Carthage, Mo	Sept. 15	(3)	(4)	40	40
Greater New York	Oct. 16	(3)	(5)	44	40
Men's clothing workers:					
Chicago, Ill., bushelmen	Sept. 12	6 25.00	6 29.16	40	40
Millinery workers, St. Louis, Mo	Oct. 9	(1)	(5)	(1)	(1)
Women's clothing workers:					
Corset makers:		*Per hour*	*Per hour*		
Bridgeport, Conn	Sept. 20	.456	.57	(1)	(1)
New Haven, Conn.:					
Machine operators	Oct. 19	(1)	.40 – .45	40	40
Day workers	do	(1)	(7)	40	40
Cutters	do	(3)	1.00	40	40
		Per week	*Per week*		
Neckwear workers, New York, N.Y.	Oct. 3	8 14.00	8 15.00	40	37½
Furniture industry:					
Upholsterers:		*Per hour*	*Per hour*		
Seattle and Tacoma, Wash	Sept. 7	.20 – .70	.47½– .55	44	40
Wilkes-Barre, Pa	Oct. 10	(1)	(9)	40	40
Jewelry workers, New York, N.Y.	Oct. 23	.30 – .60	.85 – 1.50	(1)	35
Silver hollow-ware workers	Sept. 25	(1)	(7)	40	40
Longshoremen and freight handlers:					
Cairo, Ill	Oct. 16	.28	.33	(1)	(1)
North Atlantic ports, general longshoremen, checkers, and cargo repairmen	Nov. 4	.75	.85	44	44
Metal trades:					
Ball-bearing workers, Philadelphia, Pa	Sept. 28	(1)	(5)	(1)	40
Molders and coremakers, Erie, Pa	Sept. 1	.25 – .70	.70	54–60	40
Stove workers:					
Newark, Calif	Oct. 12	(1)	(9)	40	40
Oakland, Calif	Oct. 11	.40 – .52½	.44 – .58	40	40

[1] Not reported.
[2] 15 percent increase.
[3] Piecework.
[4] 17½ percent increase.
[5] 20 percent increase.
[6] Average.
[7] 25 percent increase.
[8] Minimum.
[9] 10 percent increase.

RECENT WAGE CHANGES BY INDUSTRY, OCCUPATION, AND LOCALITY, SEPTEMBER TO DECEMBER 1933—Continued

Industry or occupation and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Miners:					
Colorado—Louisville and Erie-Frederick districts:					
Day wages, outside:			*Per day*		
Basic top	Oct. 16	[10]	$4.25	48	40
First hoisting engineers	do	[10]	5.25	48	40
Second hoisting engineers	do	[10]	5.00	48	40
Third hoisting engineers and firemen	do	[10]	5.00	48	40
Firemen	do	[10]	5.00	48	40
Blacksmiths	do	[10]	5.35	48	40
Blacksmiths' helpers	do	[10]	4.20	48	40
Box-car loader operators	do	[10]	5.00	48	40
Car droppers	do	[10]	4.50	48	40
Car repairers	do	[10]	4.50	48	40
Tipplemen	do	[10]	4.50	48	40
Lamp men	do	[10]	4.25	48	40
Slate pickers, boys	do	[10]	3.14	48	40
Slate pickers, men	do	[10]	4.20	48	40
Unclassified labor	do	[10]	4.00	48	40
Day wages, inside:					
Basic bottom	do	[10]	5.25	48	40
Fire bosses	do	[10]	5.50	48	40
Shot firers	do	[10]	5.50	48	40
Machine runners	do	[10]	5.50	48	40
Machine runners' helpers	do	[10]	5.25	48	40
Nippers	do	[10]	4.50	48	40
Oilers and greasers	do	[10]	3.80	48	40
Trappers	do	[10]	3.40	48	40
Mining, Louisville district:			*Per ton*		
Undercutting:					
Shortwall machine	do	[10]	.13	48	40
Punchers	do	[10]	.20	48	40
Pick mining	do	[10]	.76	48	40
Contract machine loading	do	[10]	.58½	48	40
Shovelers (loading only)	do	[10]	.38	48	40
Shovelers (loading, laying straight track, and setting props only)	do	[10]	.42	48	40
Yardage work	do	[10]	[11].478	48	40
Pick mining, Black Diamond mine	do	[10]	.75	48	40
Shoveling, Crown mine	do	[10]	.45	48	40
Mining, Erie-Frederick district:					
Undercutting and shearing, C. L. U. machine:					
Wide places	do	[10]	[12]1.90	48	40
Narrow places	do	[10]	[12]1.70	48	40
Wide places	do	[10]	.06½	48	40
Narrow places	do	[10]	.06½	48	40
Undercutting, shortwall machine:					
Wide places	do	[10]	[12]2.10	48	40
Narrow places	do	[10]	[12]1.90	48	40
High coal	do	[10]	.09	48	40
Low coal	do	[10]	.097	48	40
Puncher machines	do	[10]	.15	48	40
Pick mining	do	[10]	.70	48	40
Contract machine loading	do	[10]	.55	48	40
Shovelers (loading only)	do	[10]	.38	48	40
Yardage, places 12 feet and under	do	[10]	[11].44	48	40
Loading rock	do	[10]	[13].52	48	40
Iowa—Appanoose and Wayne counties:					
Hand-picked coal	Oct. 2	[10]	1.30	48	40
Screened lump coal	do	[10]	1.30	48	40
8-foot entry	do	[10]	[14]1.79	48	40
12-foot entry	do	[10]	[14]1.39	48	40
14-foot entry	do	[10]	[14]1.35	48	40
Room turning, 12-14-foot doorway	do	[10]	[14]2.33	48	40
Machine runners	do	[10]	.07	48	40
Machine shovelers	do	[10]	.07	48	40
Machine helpers	do	[10]	.07	48	40
Machine loaders	do	[10]	.82	48	40
			Per day		
Machine runners	do	[10]	[15]5.11	48	40
Machine shovelers	do	[10]	[15]4.85	48	40
Machine helpers	do	[10]	[15]4.85	48	40

[10] Basic rate, $5 per day.
[11] Per foot.
[12] Per place.
[13] Based on a 2-ton capacity pit car.
[14] Per yard.
[15] Day rate to apply if mutually agreed.

RECENT WAGE CHANGES BY INDUSTRY, OCCUPATION, AND LOCALITY, SEPTEMBER TO DECEMBER 1933—Continued

Industry or occupation and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Miners—Continued.					
Iowa—Continued.					
Underground day labor:			*Per day*		
Head tracklayers	Oct. 2	[10]	$4.70	48	40
Pipe men	do	[10]	4.62	48	40
Drivers, trip riders, and cagers	do	[10]	4.56	48	40
Motormen	do	[10]	4.85	48	40
Couplers, boys	do	[10]	3.35	48	40
Oilers and trappers	do	[10]	3.00	48	40
Pushers and all other inside adult labor	do	[10]	4.45	48	40
Top labor:					
Dumpers, chunkers, screening-car men, box-car men, outside drivers, mine teamsters, and all other common top labor	do	[10]	3.86	48	40
Blacksmiths and machinists	do	[10]	[8] 4.70	48	40
Spraggers and couplers	do	[10]	3.35	48	40
Slate pickers and oilers, boys	do	[10]	3.00	48	40
Ohio—Division no. 1:					
Pick mining:			*Per ton*		
Run of mine (wide)	do	[16]	.70	48	40
In entries, breakthroughs between entries and rooms and room turnings	do	[16]	[17] .70	48	40
Inside day labor:			*Per day*		
Tracklayers	do	[16]	4.60	48	40
Tracklayers' helpers	do	[16]	4.36	48	40
Trappers	do	[16]	3.00	48	40
Trappers (where old men are employed)	do	[16]	3.25	48	40
Bottom cagers, drivers, trip riders	do	[16]	4.60	48	40
Water haulers, machine haulers	do	[16]	4.60	48	40
Snappers on gathering locomotives	do	[16]	4.60	48	40
Timbermen and bratticemen	do	[16]	4.60	48	40
Wiremen	do	[16]	4.60	48	40
Motormen and rock drillers	do	[16]	4.76	48	40
Other inside day labor	do	[16]	4.36	48	40
Spike team drivers	do	[16]	[a] .25	48	40
Machine cutting:			*Per ton*		
Breast machine (wide)	do	[16]	.09	48	40
Shortwall machine (wide)	do	[16]	.08	48	40
Arcwall machine (wide)	do	[16]	.065	48	40
In entries, breakthroughs between entries, breakthroughs between rooms and room turnings (wide)	do	[16]	[b]	48	40
Loading:					
In rooms with hand drilling	do	[16]	.52	48	40
In entries, breakthroughs between entries, breakthroughs between rooms and room turnings	do	[16]	[18] .52	48	40
Outside day labor:			*Per day*		
Licensed steam coal-hoist engineers	do	[16]	5.23	48	
Licensed steam stationary plant engineers	do	[16]	4.60	48	40 40
Electric coal-hoist engineers	do	[16]	[8] 4.60	48	40
Firemen, steam plants	do	[16]	4.35	48	40
First blacksmiths	do	[16]	4.60	48	40
Second blacksmiths	do	[16]	4.35	48	40
Mine carpenters	do	[16]	4.35	48	40
Mine-car repairmen	do	[16]	3.84	48	40
Dumpers and other tipple men	do	[16]	3.84	48	40
Trimmers and car droppers	do	[16]	3.84	48	40
Pickers, greasers, and couplers	do	[16]	3.60	48	40
Other able-bodied labor	do	[16]	3.60	48	40

[a] Extra.
[b] Above specified "wide" rates for machine cutting, plus $0.144 per yard.
[8] Minimum.
[10] Basic rate, $5 per day.
[16] Basic rate, $3.28 per day.
[17] Plus $2.304 per yard.
[18] Plus $0.504 per yard.

RECENT WAGE CHANGES BY INDUSTRY, OCCUPATION, AND LOCALITY, SEPTEMBER TO DECEMBER 1933—Continued

Industry or occupation and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Miners—Continued.					
Ohio—Division no. 3:					
Inside day labor:					
Machine runners, cutting or shearing machine	Oct. 2	[16]	*Per day* $6.00	48	40
Operators, coal-loading machines	do	[16]	6.00	48	40
Operators' helpers, coal-loading machines	do	[16]	4.88	48	40
Track-mounted loading-machine operators, rock	do	[16]	5.24	48	40
Motormen	do	[16]	4.76	48	40
Machine runners, shortwall and breast	do	[16]	4.76	48	40
Drivers	do	[16]	4.60	48	40
Bottom cagers	do	[16]	4.60	48	40
Tracklayers	do	[16]	4.60	48	40
Timbermen	do	[16]	4.60	48	40
Trip riders	do	[16]	4.60	48	40
Spraggers	do	[16]	4.60	48	40
Water haulers	do	[16]	4.60	48	40
Machine haulers	do	[16]	4.60	48	40
Wireman	do	[16]	4.60	48	40
Clean-up men at face (on loading machine)	do	[16]	4.60	48	40
Tracklayers' helpers	do	[16]	4.36	48	40
Wiremen's helpers	do	[16]	4.36	48	40
Timbermen's helpers	do	[16]	4.36	48	40
Bratticemen	do	[16]	4.36	48	40
Pumpers	do	[16]	4.36	48	40
Trappers	do	[16]	3.00	48	40
Other inside labor	do	[16]	4.36	48	40
Outside day labor:					
First blacksmiths	do	[16]	4.76	48	40
Second blacksmiths	do	[16]	4.60	48	40
Blacksmiths' helpers	do	[16]	4.20	48	40
Bit sharpeners	do	[16]	3.84	48	40
Mine carpenters	do	[16]	4.20	48	40
Car repairmen	do	[16]	3.84	48	40
Car droppers	do	[16]	3.84	48	40
Trimmers	do	[16]	3.84	48	40
Dumpers	do	[16]	3.84	48	40
Sand dryers	do	[16]	3.60	48	40
Car cleaners	do	[16]	3.60	48	40
Slate pickers	do	[16]	3.00	48	40
Couplers	do	[16]	3.00	48	40
Greasers	do	[16]	3.00	48	40
Other able-bodied outside labor	do	[16]	3.60	48	40
Pick mining	do	[16]	*Per ton* .70	48	40
Loading in wide work with hand drilling and shooting	do	[16]	.52	48	40
Loading in wide work with hand drilling and shooting where coal has been cut and sheared	do	[16]	.50	48	40
Loading in wide work where company lays the track, furnishes explosive, cuts, shears, drills, and shoots the coal	do	[16]	.42	48	40
Loading in entries and breakthroughs	do	[16]	.648	48	40
Paper-box workers, New York City, N. Y.:		*Per week*	*Per week*		
Cutters	Sept. 14	[6] 25.00	[6] 37.00	[6] 50	40
Stayers	do	[6] 20.00	[6] 27.50	[6] 50	40
Strippers	do	[6] 15.00	[6] 20.00	[6] 50	40
Printing and publishing trades:		*Per hour*	*Per hour*		
Compositors and machine operators, Pittsburgh, Pa	Oct. 1	.96	1.01	44	40
Street-railway workers:					
Birmingham, Ala.:					
1-man car operators	Oct. 2	.50	.57	60	48–54
2-man car operators	do	.45	.52	60	48–54
Shop employees	do	.55¾–.60¼	.62¾–.67¼	45–54	44–48
Detroit, Mich., motormen, conductors, and bus operators	Oct. 1	.67½	.75	40–45	40
Textile industry:					
Hosiery workers, Bangor, Pa	Sept. 20	[1]	[19]	54–60	40
Other occupations:			*Per week*		
Porters, Brooklyn, N.Y	Oct. 15	[1]	30.00	[1]	48
			Per hour		
Grain-elevator workers, Buffalo, N.Y	Sept. 13	.45–.65	.75	55	40
Municipal employees:					
Atlanta, Ga	Sept. 16	[1]	[9]	[1]	[1]

[1] Not reported. [6] Average. [9] 10 percent increase. [16] Basic rate, $3.28 per day. [19] 70 percent increase.

Earnings of Office Workers in New York State Factories, October 1933

IN ITS Industrial Bulletin for November 1933 the New York Department of Labor gives the report of its annual survey of office workers' earnings in New York State factories, made in October of each year. The report shows that average weekly earnings in October 1933 were almost the same as in October 1932, being only 1 cent less than the October 1932 average of $31.86. This figure represents a decrease of 15 percent from the peak reached in October 1930, when the average was $37.48. Earnings were lower in 1933 than in 1932 in most of the industry groups, but the decreases were offset by gains in three groups—metals and machinery, chemicals, oils, and paints, and textiles—so that the general level remained the same as in 1932.

The workers covered by the survey included such employees as office clerks, stenographers, bookkeepers, accountants, cashiers, stock clerks, office managers, and superintendents. The reporting establishments represented are those comprising the fixed list of manufacturing plants which submit regular monthly reports for the labor-market analysis of the New York Department of Labor.

Table 1, taken from the report, shows the average weekly earnings in October of each year from 1924 to 1933. The New York Department of Labor cautions the reader against comparing average wage levels in one industry group with those in another because of "the uneven distribution of the higher-salaried supervisory and technical staff and the lower-paid clerical force in different industries."

TABLE 1.—AVERAGE WEEKLY EARNINGS OF OFFICE EMPLOYEES IN REPRESENTATIVE NEW YORK STATE FACTORIES IN OCTOBER OF EACH YEAR, 1924 TO 1933

Industry group	Oct. 1924	Oct. 1925	Oct. 1926	Oct. 1927	Oct. 1928	Oct. 1929	Oct. 1930	Oct. 1931	Oct. 1932	Oct. 1933
Stone, clay, and glass	$32.65	$32.78	$34.06	$34.40	$35.10	$34.70	$35.52	$34.35	$31.48	$28.83
Metals and machinery	34.63	35.75	36.31	36.88	37.63	37.72	38.29	35.06	31.27	32.39
Wood manufactures	35.06	36.94	39.19	39.52	37.22	37.56	36.74	38.07	32.04	30.31
Furs, leather, and rubber goods	29.41	28.75	29.64	29.62	29.82	29.34	30.58	28.75	24.73	24.72
Chemicals, oils, paints, etc	28.80	29.45	31.10	32.64	33.38	34.07	34.74	32.87	29.93	30.64
Pulp and paper	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]
Printing and paper goods	37.48	38.90	39.91	40.49	41.37	42.68	43.94	41.85	37.25	36.44
Textiles	28.83	29.36	29.95	29.85	30.81	30.87	33.47	33.46	29.35	31.76
Clothing and millinery	30.29	30.92	31.41	31.45	31.82	33.30	32.60	31.27	27.63	26.24
Food and tobacco	34.31	34.86	35.86	35.86	35.03	36.04	36.49	35.10	33.10	31.90
Water, light, and power	31.97	32.78	32.53	31.79	31.60	30.77	33.01	30.64	31.59	30.24
Total	33.58	34.49	35.38	35.88	36.37	36.94	37.48	35.49	31.86	31.85

[1] Separate earnings not computed because of small number of employees.

A comparison of the earnings of men and women in factory offices in New York State in October 1933 is given in table 2. The figures in this table are not based on a fixed list of reporting firms as are those in table 1, since it is not possible to secure separate data for men and women from all the firms or from identical firms each year.

TABLE 2.—AVERAGE WEEKLY EARNINGS OF MEN AND WOMEN IN FACTORY OFFICES IN NEW YORK STATE, OCTOBER 1933

Industry group	Men			Women		
	Total State	New York City	Up-State	Total State	New York City	Up-State
Stone, clay, and glass	(1)	(1)	(1)	(1)	(1)	(1)
Metals and machinery	$39.50	$37.35	$40.11	$19.48	$21.64	$18.81
Wood manufactures	40.09	37.27	41.26	19.40	23.36	18.29
Furs, leather, and rubber goods	32.06	36.01	29.61	18.35	21.09	17.43
Chemicals, oils, paints, etc	44.74	38.45	47.56	19.58	21.46	18.87
Pulp and paper	(1)	(1)	(1)	(1)	(1)	(1)
Printing and paper goods	48.69	53.98	37.75	22.12	23.17	20.07
Textiles	39.77	38.32	40.12	21.06	22.60	20.60
Clothing and millinery	37.81	38.88	35.60	21.68	23.13	17.94
Food and tobacco	40.55	44.06	35.27	22.40	23.56	21.33
Water, light, and power	(1)	(1)	(1)	(1)	(1)	(1)
Total	41.52	44.85	39.31	20.63	22.73	19.20

[1] Separate earnings not computed because of small number of employees.

Employment of office workers and the total amount of salaries paid them increased 1.2 percent between October 1932 and October 1933 in the factories covered by the survey, as is indicated in table 3, showing the number of employees and the total amount of pay roll for the various industry groups in October 1933, with the percent of change from October 1932.

TABLE 3.—EMPLOYMENT AND PAY ROLLS IN FACTORY OFFICES IN NEW YORK STATE, OCTOBER 1933 COMPARED WITH OCTOBER 1932

Industry group	Employment		Pay roll	
	Number of employees, Oct. 1933	Percent of change, Oct. 1932 to Oct. 1933	Amount, Oct. 1933	Percent of change, Oct. 1932 to Oct. 1933
Stone, clay, and glass	612	+1.0	$17,641	−7.5
Metals and machinery	10,833	+2.6	350,855	+6.3
Wood manufactures	1,155	+1.2	35,003	−4.3
Furs, leather and rubber goods	2,251	+7.3	55,638	+7.3
Chemicals, oils, paints, etc	3,237	−4.0	99,184	−1.7
Pulp and paper	306	+4.1	10,844	−0.6
Printing and paper goods	7,693	−0.4	280,337	−2.6
Textiles	1,880	+1.7	59,705	+10.1
Clothing and millinery	2,953	−10.1	77,501	−14.6
Food and tobacco	3,043	+12.5	97,067	+8.4
Water, light, and power	1,348	+7.1	40,759	+2.4
Total	35,311	+1.2	1,124,534	+1.2

Basis of Wage Payment in the Soviet Union

AFTER the "October Revolution" in Russia in 1917, equality in wages was generally practiced. Later a continuous workday, consisting of three 8-hour shifts, was introduced. The authorities soon came to the conclusion, however, that the 3-shift system, with three different workers using the same equipment, was resulting in a lack of individual responsibility for the condition and care of the equipment. The system of equal wages came into disfavor also,

because under it the best "shock workers" and the workers doing poor work received the same remuneration. A Soviet treatise on wages declared: "Equalization of wages must be abolished. If we want to train skilled workers more speedily and better, they must be given a material interest in raising their qualifications. To this end trained workers must be paid higher wages than untrained." [1]

It was further pointed out that the abolition of the equal-wage system consists not only in the establishment of proper wage scales according to the worker's skill and the nature of his work, but also in organizing a new wage system which would offer incentives to the workers to raise their efficiency in output and its quality.

The piecework system was introduced and jobs were classified on the basis of the worker's qualifications and the conditions of the work.

> Payment for the various kinds of work within the groups must also be differentiated in accordance with the qualifications required and the conditions under which the job is done. In order to prevent the rates being fixed casually or arbitrarily in each case, every kind of work is grouped beforehand in a definite category.
>
> Each worker is placed in a particular category, and his wages vary according to his qualifications and capacities within this category. To make the establishment of wage categories at enterprises easier, there are special handbooks containing a list of all types of work and the group to which they belong, together with the minimum qualifications which a worker must have.
>
> These handbooks are compiled by the trade unions and economic bodies, with the help of specialists on labor organization, scientific institutes, and the workers themselves. The collective agreements always specify which handbooks are to be used in deciding knotty points. The use of these handbooks does away with all casual and arbitrary features in deciding to which category a worker should belong. Each worker is paid at a definite rate regardless of his age, sex, or nationality.

During the last quarter of 1931 the wage system was reorganized in the iron and steel, coal, coke, and iron ore, and other industries. As a result the relative standing of the industries as to wage level underwent considerable change. Machine building rose to first place, the iron and steel industry to second place, the coal industry to third place, etc.

For all these reclassified industries new wage scales were worked out in order to give the workers a material incentive to raise their qualifications and increase the productivity of their labor. In metal trades, for instance, the six trade unions which used to form the trade union of metal workers established the following ratios among the various classes of workers in their new wage schedule: [2]

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[1] Nelepin, A.: Wages in capitalist countries and in the Soviet Union. Moscow, Cooperative Publishing Society of Foreign Workers in the U.S.S.R., 1932, p. 52.

[2] Congress of Trade Unions of the U.S.S.R. The Soviet trade unions on the threshold of the second 5-year plan. Speeches and resolutions, ninth congress. Moscow, Cooperative Publishing Society of Foreign Workers in the U.S.S.R., 1933, p. 55.

WAGE RATIOS OF WAGE EARNERS, UNSKILLED AND SKILLED, IN THE METAL TRADES IN THE SOVIET UNION (U.S.S.R.)

Wage classes	Ratio	Percent of increase as compared with—	
		Preceding class	Lowest class
Class I	1.00		
Class II	1.15	15.0	15.0
Class III	1.35	18.4	35.0
Class IV	1.60	18.5	60.0
Class V	1.92	20.0	92.0
Class VI	2.35	22.4	135.0
Class VII	2.90	23.4	190.0
Class VIII	3.60	24.1	260.0

It is seen that the highest-paid wage earners (class VIII) get more than three and one half times as much as the lowest-paid wage earners (class I).

The new wage schedules for all other industries are now being drawn up on the same principle of variation in wages.

It has been made the policy of the Soviet industrial leaders to introduce a maximum degree of piecework. On January 1, 1932, the extent of the piecework system in the various industries was as follows: Coal mining, 67.1 percent; oil industry, 24.4 percent; metallurgy, 63.3 percent; machine building, 63 percent; woodworking, 59.8 percent; chemical industry, 54 percent; needle industry, 84 percent; paper industry, 61.2 percent; and the textile industry, 68.4 percent.[3] The percentage for industry as a whole was 64.1.

Piecework is paid for by a system of progressive rates; with the increase of output the rate of pay per unit is increased in a certain ratio.

The new system, it is reported, resulted in noticeable increases in efficiency and wages. Thus, at the "Red Profitern" works, on the basis of the wages and productivity in September 1931 as 100, wages had risen in October 1932 to 105 and in December to 114.4, while productivity rose to 138.8 in October and 156.3 in December.

The introduction of the progressive piecework system was accompanied by a 12.7 percent increase in productivity at the machine-building plant, "Red Viborg", and by an increase of 30 percent at the work benches in the "Russian Diesel", while in the electrical works in Lepse productivity showed a rise of from 70.5 to 107.6 percent.[4]

The wages in the new wage-rate system are sometimes called by the Soviet authorities incentive wages and sometimes productivity wages.

[3] Congress of Trade Unions of the U.S.S.R. The Soviet trade unions on the threshold of the second 5-year plan. Speeches and resolutions, ninth congress. Moscow, Cooperative Publishing Society of Foreign Workers in the U.S.S.R., 1933, p. 58.

[4] Idem, p. 60.

TREND OF EMPLOYMENT

Trend of Employment, November 1933

THE Bureau of Labor Statistics of the United States Department of Labor presents herewith data compiled from pay-roll reports supplied by representative establishments in 89 of the principal manufacturing industries of the country and 16 nonmanufacturing industries, covering the pay period ending nearest the 15th of the month. Additional information is presented concerning employment on public-works projects, public roads, the executive civil service, and class I steam railroads.

Employment in Selected Manufacturing Industries in November 1933

Comparison of Employment and Pay-Roll Totals in November 1933 with October 1933 and November 1932

EMPLOYMENT in manufacturing industries decreased 3.5 percent between October and November 1933 and pay rolls decreased 6.2 percent over the month interval, according to reports received from representative establishments in 89 important manufacturing industries of the country. Comparing the changes in employment and pay rolls over the year interval, it is seen that the level of employment in November 1933 is 20.2 percent above the level of November 1932, and pay rolls in November 1933 showed a gain of 30.3 percent over the year interval.

The index of employment in November 1933 was 71.4, as compared with 74 in October 1933, 73.9 in September 1933, and 59.4 in November 1932; the pay-roll index in November 1933 was 50.3, as compared with 53.6 in October 1933, 53.3 in September 1933, and 38.6 in November 1932. The 12-month average for 1926 equals 100.

These changes in employment and pay rolls in November 1933 are based on reports supplied by 18,047 establishments in 89 of the principal manufacturing industries of the United States. These establishments reported 3,128,908 employees on their pay rolls during the pay period ending nearest November 15 whose combined weekly earnings were $56,393,962. The employment reports received from these cooperating establishments cover approximately 50 percent of the total wage earners in all manufacturing industries of the country.

These declines in employment and pay rolls in November 1933 mark the first decreases to occur in either of these items since March. Decreases in both employment and pay rolls between October 15 and November 15 have been reported each year since 1923, with the single exception of the year 1925 in which a slight gain in employment combined with unchanged pay-roll totals was reported. The decreases of 3.5 percent in emplyoment and 6.2 percent in pay rolls in the current report, however, are greater than the average declines shown in November of preceding years. The changes in employment in November over the preceding 10-year period show an average decrease of 1.3 percent and the changes in pay rolls over the same interval show an average decrease of 3.3 percent.

It is estimated that this decrease of 3.5 percent in employment in manufacturing industries between October and November is equivalent in actual numbers to a decrease of 234,000 wage earners.

The decrease of 6.2 percent in pay rolls represents a decrease of approximately $7,300,000 in the amount disbursed in factory workers' envelops in November, compared with weekly disbursements in October.

Comparing the index number of employment in November 1933 with the March employment index (55.1) shows a gain of 29.6 percent in employment over this 8-month interval, while a similar comparison of the pay-roll indexes in these 2 months shows that the November pay-roll index is 50.6 percent above the level of the March 1933 pay-roll index (33.4). These percentage gains indicate an increase in actual number of workers over this interval of approximately 1,460,000 and in weekly pay rolls of approximately $37,100,000.

Thirty of the 89 manufacturing industries surveyed reported increased employment in November 1933, compared with October, and 24 industries reported increased pay-roll totals. The most pronounced increases in employment and pay rolls over the month were shown in the dyeing and finishing textiles industry, in which the termination of the strike which had been in progress for a number of weeks resulted in the return to employment of large numbers of workers. The beet-sugar industry, reflecting seasonal activity, reported a gain of 16.2 percent in employment. The iron and steel forgings industry reported a gain of 8.4 percent and the typewriter industry reported a gain of 8 percent in number of employees. The agricultural-implement industry reported an increase of 7.2 percent in employment, the machine-tool industry 6.7 percent, the engine-tractor-turbine industry 5.5 percent, and the aircraft industry 5.4 percent. The radio industry and the silverware industry reported increases in employment of 4.2 percent and 4 percent, respectively. Other industries in which large numbers of wage earners are employed and in which increased employment was reported in November were cigars and cigarettes, news-

papers, book and job printing, glass, petroleum refining, and chemicals. The most pronounced decreases in employment between October and November were reported in the following industries: Plumbers' supplies, 15.7 percent; stamped and enameled ware, 14.5 percent; cottonseed-oil-cake meal, 13.2 percent; millinery, 13.1 percent; boots and shoes, 12.9 percent; women's clothing, 12.2 percent; automobiles, 11.8 percent; and woolen and worsted goods, 11.2 percent. The declines in a number of these industries were of seasonal character. Substantial declines also were reported in such industries of major importance as furniture, men's clothing, knit goods, sawmills, leather, cotton goods, shipbuilding, and iron and steel.

Strikes continued to cause restricted operation or a complete cessation of production in a number of silk, jewelry, leather, knit goods, and furniture factories.

Only 2 of the 14 groups into which the 89 manufacturing industries are classified, showed increased employment between October and November. The tobacco manufactures group showed a gain of 2.2 percent, due to increased employment in the cigar and cigarette industry and the machinery group showed a small net gain in number of workers due to increased employment in the typewriter, agricultural-implement, machine-tool, engine-tractor-turbine, radio, and cash-register industries. The remaining three industries in this group (electrical machinery, textile machinery, and foundries) showed losses in employment ranging from 0.4 percent to 1.7 percent.

In the remaining 12 groups of manufacturing industries decreased employment was reported in November. The leather group reported the greatest decline in employment (11.1 percent) reflecting seasonal losses in both the shoe and leather manufacturing industries. The transportation group reported a decrease of 9.8 percent in number of workers in November, the decrease of 11.8 percent in employment in the automobile industry accounting largely for the pronounced decline. The shipbuilding industry reported a decrease of 3.8 percent and the locomotive industry reported a small decline. The remaining two industries in this group, aircraft and car building, reported gains in number of workers. The lumber group reported a decline of 5.2 percent in number of workers between October and November, the furniture industry reporting a decline of 7.9 percent and the sawmills and millwork industries reporting losses of 4.1 percent and 3.8 percent, respectively. The textile-products group reported a loss of 4.8 percent in number of workers between October and November. Seasonal decreases in millinery, men's and women's clothing, and woolen goods, together with declines in several other textile industries, more than offset the pronounced gain of 22.4 percent in the dyeing and finishing industry and the smaller gains in the corset and silk goods industries. The nonferrous metals group reported a loss of 4 percent

in employment and the iron and steel group reported a decrease of 3.1 percent. In this last-named group, the iron and steel industry reported a decrease of 3.3 percent. In the remaining 6 groups, the decreases in employment in 3 groups (paper and printing, railroad repair shops, and chemicals) was six tenths of 1 percent or less and in the food, rubber, and stone-clay-glass groups the decreases ranged from 2.1 percent to 2.5 percent.

A comparison of the indexes of employment and pay roll in manufacturing industries in November 1933 with November 1932 shows that 79 of the 89 industries surveyed reported increased employment over the year interval while 83 industries had increased pay rolls. Decreases in both items over the 12-month period were reported in six industries—corsets and allied garments, men's furnishings, millinery, electric-railroad repair shops, cement, and marble-granite-slate. Four additional industries—women's clothing, boots and shoes, cottonseed-oil-cake meal, and cigars and cigarettes—reported decreases in employment over the year interval, coupled with increased pay rolls.

In table 1, which follows, are shown the number of identical establishments reporting in both October and November 1933 in the 89 manufacturing industries surveyed, together with the total number of employees on the pay rolls of these establishments during the pay period ending nearest November 15, the amount of their earnings for 1 week in November, the percentages of change over the month and year intervals, and the indexes of employment and pay roll in November 1933.

The monthly percentages of change for each of the 89 separate industries are computed by direct comparison of the total number of employees and of the amount of weekly pay roll reported in identical establishments for the 2 months considered. The percentages of change over the month interval in the several groups and in the total of the 89 manufacturing industries are computed from the index numbers of these groups, which are obtained by weighting the index numbers of the several industries in the groups by the number of employees or wages paid in the industries. The percentages of change over the year interval in the separate industries, in the groups and in the totals, are computed from the index numbers of employment and pay-roll totals.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **MANUFACTURING** ESTABLISHMENTS IN NOVEMBER 1933 WITH OCTOBER 1933 AND NOVEMBER 1932

Industry	Establishments reporting in both October and November	Employment			Pay-roll totals			Index numbers November 1933 (average 1926=100)	
		Number on pay roll November 1933	Percent of change		Amount of pay roll (1 week) November 1933	Percent of change		Employment	Pay-roll totals
			October to November 1933	November 1932 to November 1933		October to November 1933	November 1932 to November 1933		
Food and kindred products	**2,973**	**298,671**	**−2.1**	**+18.9**	**$6,032,570**	**−1.6**	**+20.5**	**101.5**	**80.4**
Baking	1,006	69,650	−.9	+11.1	1,511,067	−.3	+9.2	88.2	72.3
Beverages	385	22,549	−9.5	+100.9	607,689	−8.7	+126.8	136.6	116.6
Butter	273	4,680	−3.1	+7.3	96,658	−4.8	+.1	102.7	76.8
Confectionery	303	42,615	−4.2	+5.9	604,639	−7.9	+13.7	98.1	73.8
Flour	395	16,626	−.2	+15.7	331,236	−1.0	+10.0	96.0	74.5
Ice cream	315	8,891	−9.2	+8.9	221,365	−9.5	+3.2	69.8	52.0
Slaughtering and meat packing	221	99,973	−2.5	+25.1	1,985,695	−1.4	+28.1	107.8	85.7
Sugar, beet	63	24,739	+16.2	+21.2	482,714	+25.2	+30.6	289.1	204.1
Sugar refining, cane	12	8,948	−1.5	+20.2	191,507	+1.6	+10.6	91.8	69.1
Textiles and their products	**3,245**	**717,839**	**−4.8**	**+14.7**	**10,398,489**	**−9.6**	**+29.1**	**83.7**	**61.2**
Fabrics	**1,912**	**585,239**	**−3.5**	**+20.6**	**8,392,061**	**−6.0**	**+36.3**	**90.3**	**69.9**
Carpets and rugs	26	16,765	−6.9	+39.7	289,389	−17.4	+63.6	77.0	54.3
Cotton goods	668	286,295	−3.7	+30.9	3,618,061	−5.8	+57.8	98.8	81.4
Cotton small wares	113	10,318	−9.4	+9.6	152,915	−13.5	+16.5	90.2	67.0
Dyeing and finishing textiles	149	39,698	+22.4	+18.6	731,983	+26.6	+26.7	92.6	68.4
Hats, fur-felt	31	5,492	−7.6	+2.3	113,224	−15.1	+14.0	71.0	48.9
Knit goods	441	110,170	−4.4	+3.7	1,703,659	−5.8	+13.3	92.4	74.9
Silk and rayon goods	248	51,891	+.2	+7.4	741,611	−2.3	+24.5	65.3	49.3
Woolen and worsted goods	236	64,610	−11.2	+24.0	1,041,219	−15.5	+32.8	88.4	66.0
Wearing apparel	**1,333**	**132,600**	**−8.3**	**−.3**	**2,006,428**	**−19.1**	**+10.8**	**68.1**	**44.1**
Clothing, men's	401	66,322	−7.5	+2.3	1,020,630	−16.4	+21.6	71.3	46.2
Clothing, women's	574	28,878	−12.2	−2.8	488,478	−25.8	+5.2	63.0	40.4
Corsets and allied garments	28	4,749	+2.9	−1.5	58,676	−12.5	−8.4	98.2	70.5
Men's furnishings	75	7,723	−1.6	−9.7	101,520	−8.4	−8.8	66.1	44.8
Millinery	133	7,334	−13.1	−5.6	117,481	−19.3	−5.6	60.5	35.5
Shirts and collars	122	17,594	−5.1	+6.7	219,643	−11.0	+27.9	69.7	55.9
Iron and steel and their products, not including machinery	**1,386**	**394,076**	**−3.1**	**+33.3**	**6,795,484**	**−9.3**	**+65.0**	**70.9**	**42.9**
Bolts, nuts, washers, and rivets	79	13,549	−3.2	+39.9	240,113	−1.5	+68.3	85.9	57.9
Cast-iron pipe	45	6,454	−4.9	+11.0	89,517	+2.5	+35.7	33.4	19.4
Cutlery (not including silver and plated cutlery) and edge tools	132	10,675	−.7	+22.3	192,122	−.1	+28.4	78.5	54.3
Forgings, iron and steel	66	7,848	+8.4	+56.5	146,524	+8.9	+105.3	83.1	54.0
Hardware	88	26,260	−.6	+10.2	419,447	−.5	+24.5	55.0	30.5
Iron and steel	205	238,818	−3.3	+38.7	4,106,741	−12.1	+89.6	73.8	43.6
Plumbers' supplies	70	8,306	−15.7	+24.0	116,735	−26.3	+7.9	68.8	34.3
Steam and hot-water heating apparatus and steam fittings	97	16,851	+1.6	+18.2	296,162	−.2	+24.7	45.4	27.8
Stoves	154	22,779	−2.8	+46.0	411,406	−10.7	+59.0	80.3	50.4
Structural and ornamental metalwork	196	16,295	−2.4	+24.1	301,684	−1.3	+33.7	50.0	32.6
Tin cans and other tinware	61	10,107	−1.2	+16.0	189,000	−1.2	+22.1	84.9	50.9
Tools (not including edge tools, machine tools, files, and saws)	122	8,619	+.3	+34.8	154,403	−.4	+50.7	83.3	53.8
Wirework	71	7,515	−4.4	+36.0	131,630	−11.4	+50.2	122.5	92.1

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **MANUFACTURING** ESTABLISHMENTS IN NOVEMBER 1933 WITH OCTOBER 1933 AND NOVEMBER 1932—Continued

Industry	Establishments reporting in both October and November	Employment			Pay-roll totals			Index numbers November 1933 (average 1926=100)	
		Number on pay roll November 1933	Percent of change		Amount of pay roll (1 week) November 1933	Percent of change		Employment	Pay-roll totals
			October to November 1933	November 1932 to November 1933		October to November 1933	November 1932 to November 1933		
Machinery, not including transportation equipment	**1,752**	**350,683**	**+0.2**	**+40.0**	**$6,988,329**	**−0.2**	**+62.9**	**64.1**	**43.5**
Agricultural implements	78	9,562	+7.2	+78.8	177,303	+13.0	+124.2	40.4	35.2
Cash registers, adding machines, and calculating machines	32	15,541	+1.1	+36.8	385,156	+4.5	+54.4	86.7	70.4
Electrical machinery, apparatus, and supplies	289	112,654	−.4	+27.5	2,306,050	−.7	+43.4	62.6	46.6
Engines, turbines, tractors, and water wheels	88	22,093	+5.5	+47.4	464,729	+5.8	+63.6	58.5	38.6
Foundry and machine-shop products	1,018	110,675	−1.7	+34.1	2,055,714	−3.4	+58.7	59.4	36.5
Machine tools	143	16,454	+6.7	+67.9	346,921	+9.2	+97.8	51.2	36.2
Radios and phonographs	41	40,978	+4.2	+117.9	794,444	+5.3	+125.9	169.3	131.9
Textile machinery and parts	51	10,235	−.6	+69.2	219,693	−1.7	+111.5	89.5	68.1
Typewriters and supplies	12	12,491	+8.0	+48.1	238,319	+6.4	+99.4	87.7	65.2
Nonferrous metals and their products	**609**	**103,751**	**−4.0**	**+28.9**	**1,893,567**	**−2.3**	**+39.1**	**70.1**	**50.2**
Aluminum manufactures	24	6,515	−1.8	+30.4	113,887	−3.4	+38.0	63.0	42.1
Brass, bronze, and copper products	208	37,348	−3.5	+34.5	679,159	−5.9	+50.0	69.8	46.5
Clocks and watches and time-recording devices	26	9,518	+.3	+21.1	177,545	+2.0	+37.2	52.7	44.6
Jewelry	118	7,571	−6.7	+4.4	146,972	−4.7	+13.0	44.6	33.0
Lighting equipment	50	3,282	+1.7	+26.7	60,234	+4.6	+28.0	85.5	62.1
Silverware and plated ware	56	9,359	+4.0	+25.9	190,505	+2.8	+30.6	80.6	56.7
Smelting and refining—copper, lead, and zinc	40	13,819	+.4	+52.1	255,370	−1.1	+47.2	86.7	55.2
Stamped and enameled ware	87	16,339	−14.5	+12.9	269,895	−4.4	+36.2	71.0	53.4
Transportation equipment	**414**	**228,805**	**−9.8**	**+21.9**	**4,665,686**	**−11.7**	**+31.4**	**51.3**	**36.4**
Aircraft	27	7,756	+5.4	+42.1	198,755	+7.5	+28.4	260.7	239.3
Automobiles	226	181,809	−11.8	+23.6	3,656,279	−14.1	+34.9	51.3	36.3
Cars, electric- and steam-railroad	51	8,628	+2.0	+3.8	156,196	+.7	+8.5	21.9	12.7
Locomotives	10	2,783	−.7	+43.3	54,366	+2.8	+39.2	20.2	13.5
Shipbuilding	100	27,829	−3.8	+14.1	600,090	−1.4	+19.0	76.1	57.0
Railroad repair shops	**921**	**93,574**	**−.4**	**+1.2**	**2,239,131**	**−5.8**	**+7.7**	**50.8**	**42.1**
Electric railroad	383	19,710	+1.3	−2.4	499,357	+3.6	−1.5	64.0	51.7
Steam railroad	538	73,864	−.5	+1.6	1,739,774	−6.5	+8.7	49.8	41.4
Lumber and allied products	**1,567**	**153,643**	**−5.2**	**+28.9**	**2,178,674**	**−10.2**	**+43.3**	**49.1**	**29.8**
Furniture	468	55,296	−7.9	+24.5	789,821	−18.0	+33.6	59.0	34.2
Lumber:									
Millwork	485	19,786	−3.8	+14.2	284,271	−5.6	+16.0	38.7	23.2
Sawmills	595	76,878	−4.1	+33.9	1,084,545	−6.3	+60.2	47.0	29.0
Turpentine and rosin	19	1,683	−2.7	+40.2	20,037	−6.2	+42.1	62.8	52.3
Stone, clay, and glass products	**1,283**	**100,141**	**−2.5**	**+15.3**	**1,677,120**	**−5.5**	**+19.7**	**50.4**	**31.0**
Brick, tile, and terra cotta	655	18,880	−8.3	+5.5	233,780	−8.6	+16.5	28.9	13.4
Cement	113	10,071	−.4	−7.8	177,760	−7.1	−8.6	37.8	21.2
Glass	180	47,509	+1.3	+41.1	861,251	−.7	+47.3	81.7	59.2
Marble, granite, slate, and other products	218	5,140	−9.6	−12.0	89,873	−17.6	−22.1	41.0	22.5
Pottery	117	18,541	−.7	+18.3	314,456	−4.2	+27.2	74.2	48.1

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **MANUFACTURING** ESTABLISHMENTS IN NOVEMBER 1933 WITH OCTOBER 1933 AND NOVEMBER 1932—Continued

Industry	Establishments reporting in both October and November	Employment			Pay-roll totals			Index numbers November 1933 (average 1926=100)	
		Number on pay roll November 1933	Percent of change		Amount of pay roll (1 week) November 1933	Percent of change		Employment	Pay-roll totals
			October to November 1933	November 1932 to November 1933		October to November 1933	November 1932 to November 1933		
Leather and its manufactures	**492**	**132,381**	**−11.1**	**+4.0**	**$2,118,430**	**−16.6**	**+21.9**	**74.8**	**51.7**
Boots and shoes	339	101,767	−12.9	−.3	1,521,332	−20.6	+19.2	71.8	46.5
Leather	153	30,614	−4.0	+21.1	597,098	−5.7	+29.0	86.8	69.8
Paper and printing	**1,944**	**234,688**	**−.3**	**+12.6**	**5,242,861**	**−.4**	**+7.7**	**90.2**	**70.3**
Boxes, paper	326	26,163	−4.5	+19.3	446,686	−5.0	+17.2	88.4	72.2
Paper and pulp	436	103,373	−1.8	+24.1	1,808,867	−6.5	+23.3	93.1	62.0
Printing and publishing:									
Book and job	747	46,047	+1.3	+3.8	1,149,026	+2.1	+3.5	74.5	59.0
Newspapers and periodicals	435	59,105	+1.6	+8.1	1,838,282	+2.3	+1.8	105.8	87.2
Chemicals and allied products	**1,085**	**176,205**	**−.6**	**+29.1**	**3,755,058**	**−1.2**	**+26.5**	**98.1**	**76.9**
Chemicals	102	24,934	+.8	+42.9	578,783	−.8	+40.1	121.9	86.3
Cottonseed—oil, cake, and meal	104	5,577	−13.2	−.2	57,280	−15.6	+8.3	54.6	50.9
Druggists' preparations	55	8,798	+2.0	+14.6	178,769	+1.9	+13.9	82.4	81.8
Explosives	31	4,528	+.3	+34.6	92,630	−3.6	+37.9	106.3	74.6
Fertilizers	172	8,709	−.2	+56.5	101,794	−7.9	+43.5	72.0	44.2
Paints and varnishes	349	16,226	−3.2	+15.9	331,305	+3.4	+13.9	77.8	58.9
Petroleum refining	147	57,173	+1.0	+19.3	1,492,523	+.5	+15.6	73.4	60.1
Rayon and allied products	23	34,678	+.2	+38.4	608,577	+.3	+43.8	197.7	172.9
Soap	102	15,582	−3.9	+14.0	313,397	−1.1	+10.4	112.1	91.6
Rubber products	**147**	**89,952**	**−2.2**	**+34.8**	**1,681,362**	**−7.6**	**+44.3**	**87.1**	**58.0**
Rubber boots and shoes	8	9,847	+1.8	+26.6	181,890	+(1)	+36.5	69.9	61.7
Rubber goods, other than boots, shoes, tires, and inner tubes	101	26,186	−3.0	+37.2	446,896	−6.9	+32.6	117.2	76.9
Rubber tires and inner tubes	38	53,919	−3.0	+35.7	1,052,576	−9.8	+54.3	79.8	50.6
Tobacco manufactures	**229**	**54,499**	**+2.2**	**−1.2**	**727,201**	**−2.0**	**+3.8**	**73.9**	**57.8**
Chewing and smoking tobacco and snuff	30	9,677	−2.0	+.7	126,625	−6.2	+.7	89.8	72.3
Cigars and cigarettes	199	44,822	+2.9	−1.4	600,576	−1.4	+4.3	71.9	56.0
Total, 89 industries	**18,047**	**3,128,908**	**−3.5**	**+20.2**	**56,393,962**	**−6.2**	**+30.3**	**71.4**	**50.3**

[1] Less than one tenth of 1 percent.

Per Capita Earnings in Manufacturing Industries

PER capita weekly earnings in November 1933 for each of the 89 manufacturing industries surveyed by the Bureau of Labor Statistics and for all industries combined, together with the percentages of change in November 1933 as compared with October 1933 and November 1932, are shown in table 2.

These earnings must not be confused with full-time weekly rates of wages. They are per capita weekly earnings, computed by dividing the total amount of pay roll for the week by the total number of employees (part-time as well as full-time workers).

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN **MANUFACTURING** INDUSTRIES IN NOVEMBER 1933 AND COMPARISON WITH OCTOBER 1933 AND NOVEMBER 1932

Industry	Per capita weekly earnings in November 1933	Percent of change	
		October 1933 to November 1933	November 1932 to November 1933
Food and kindred products:			
Baking	$21.70	+0.6	−1.4
Beverages	26.95	+.9	+13.0
Butter	20.65	−1.8	−6.7
Confectionery	14.19	−3.9	+7.1
Flour	19.92	−.8	−4.6
Ice cream	24.90	−.3	−4.7
Slaughtering and meat packing	19.86	+1.1	+2.7
Sugar, beet	19.51	+7.7	+7.7
Sugar refining, cane	21.40	+3.1	−7.6
Textiles and their products:			
Fabrics:			
Carpets and rugs	17.26	−11.3	+16.4
Cotton goods	12.64	−2.2	+19.9
Cotton small wares	14.82	−4.6	+6.0
Dyeing and finishing textiles	18.44	+3.5	+7.0
Hats, fur-felt	20.62	−8.2	+11.5
Knit goods	15.46	−1.6	+9.2
Silk and rayon goods	14.29	−2.5	+16.1
Woolen and worsted goods	16.12	−4.8	+6.8
Wearing apparel:			
Clothing, men's	15.39	−9.7	+19.0
Clothing, women's	16.92	−15.4	+8.7
Corsets and allied garments	12.36	−14.9	−6.8
Men's furnishings	13.15	−6.9	+1.0
Millinery	16.02	−7.1	+.2
Shirts and collars	12.48	−6.2	+19.5
Iron and steel and their products, not including machinery:			
Bolts, nuts, washers, and rivets	17.72	+1.7	+20.1
Cast-iron pipe	13.87	+7.7	+22.8
Cutlery (not including silver and plated cutlery) and edge tools	18.00	+.6	+4.5
Forgings, iron and steel	18.67	+.5	+31.4
Hardware	15.97	+.1	+13.2
Iron and steel	17.20	−9.1	+36.7
Plumbers' supplies	14.05	−12.6	−13.0
Steam and hot-water heating apparatus and steam fittings	17.58	−1.7	+5.4
Stoves	18.06	−8.1	+8.8
Structural and ornamental metalwork	18.51	+1.1	+12.1
Tin cans and other tinware	18.70	+.1	+5.0
Tools (not including edge tools, machine tools, files, and saws)	17.91	−.7	+11.9
Wirework	17.52	−7.4	+10.5
Machinery, not including transportation equipment:			
Agricultural implements	18.54	+5.3	+24.8
Cash registers, adding machines, and calculating machines	24.78	+3.3	+12.8
Electrical machinery, apparatus, and supplies	20.47	−.3	+12.3
Engines, turbines, tractors, and water wheels	21.04	+.3	+10.9
Foundry and machine-shop products	18.57	−1.7	+18.6
Machine tools	21.08	+2.3	+17.4
Radios and phonographs	19.39	+1.0	+3.5
Textile machinery and parts	21.46	−1.2	+25.1
Typewriters and supplies	19.08	−1.4	+35.0
Nonferrous metals and their products:			
Aluminum manufactures	17.48	−1.6	+5.7
Brass, bronze, and copper products	18.18	−2.5	+11.9
Clocks and watches and time-recording devices	18.65	+1.6	+13.2
Jewelry	19.41	+2.1	+8.5
Lighting equipment	18.35	+2.8	+.9
Silverware and plated ware	20.36	−1.2	+3.8
Smelting and refining—copper, lead, and zinc	18.48	−1.4	−2.8
Stamped and enameled ware	16.52	+11.8	+20.6
Transportation equipment:			
Aircraft	25.63	+2.0	−9.7
Automobiles	20.11	−2.6	+9.4
Cars, electric- and steam-railroad	18.10	−1.4	+4.7
Locomotives	19.54	+3.6	−3.1
Shipbuilding	21.56	+2.5	+4.2
Railroad repair shops:			
Electric railroad	25.34	+2.3	+1.0
Steam railroad	23.55	−6.0	+6.6
Lumber and allied products:			
Furniture	14.28	−10.9	+7.2
Lumber:			
Millwork	14.37	−1.8	+1.9
Sawmills	14.11	−2.2	+19.1
Turpentine and rosin	11.91	−3.6	+1.1
Stone, clay, and glass products:			
Brick, tile, and terra cotta	12.38	−.3	+9.7
Cement	17.65	−6.7	−.8
Glass	18.13	−1.9	+4.4
Marble, granite, slate, and other products	17.49	−8.9	−11.6
Pottery	16.96	−3.5	+7.7

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN **MANUFACTURING** INDUSTRIES IN NOVEMBER 1933 AND COMPARISON WITH OCTOBER 1933 AND NOVEMBER 1932—Con.

Industry	Per capita weekly earnings in November 1933	Percent of change	
		October 1933 to November 1933	November 1932 to November 1933
Leather and its manufactures:			
Boots and shoes	$14.95	−8.9	+19.3
Leather	19.50	−1.8	+6.9
Paper and printing:			
Boxes, paper	17.07	−.6	−1.9
Paper and pulp	17.50	−4.7	−.9
Printing and publishing:			
Book and job	24.95	+.8	−.1
Newspapers and periodicals	31.10	+.7	−6.3
Chemicals and allied products:			
Chemicals	23.21	−1.6	−1.6
Cottonseed—oil, cake, and meal	10.27	−2.7	+8.8
Druggists' preparations	20.32	−.1	−.3
Explosives	20.46	−3.9	+2.3
Fertilizers	11.69	−7.7	−7.8
Paints and varnishes	20.42	−.2	−1.7
Petroleum refining	26.11	−.4	−3.1
Rayon and allied products	17.55	+.1	+3.5
Soap	20.11	+2.9	−3.6
Rubber products:			
Rubber boots and shoes	18.47	−1.8	+7.5
Rubber goods, other than boots, shoes, tires, and inner tubes	17.07	−4.0	−3.3
Rubber tires and inner tubes	19.52	−7.0	+13.9
Tobacco manufactures:			
Chewing and smoking tobacco and snuff	13.09	−4.2	[1]
Cigars and cigarettes	13.40	−4.1	+5.9
Total, 89 industries	18.02	[2] −2.8	[2] +8.3

[1] No change. [2] Weighted.

General Index Numbers of Employment and Pay-Roll Totals in Manufacturing Industries

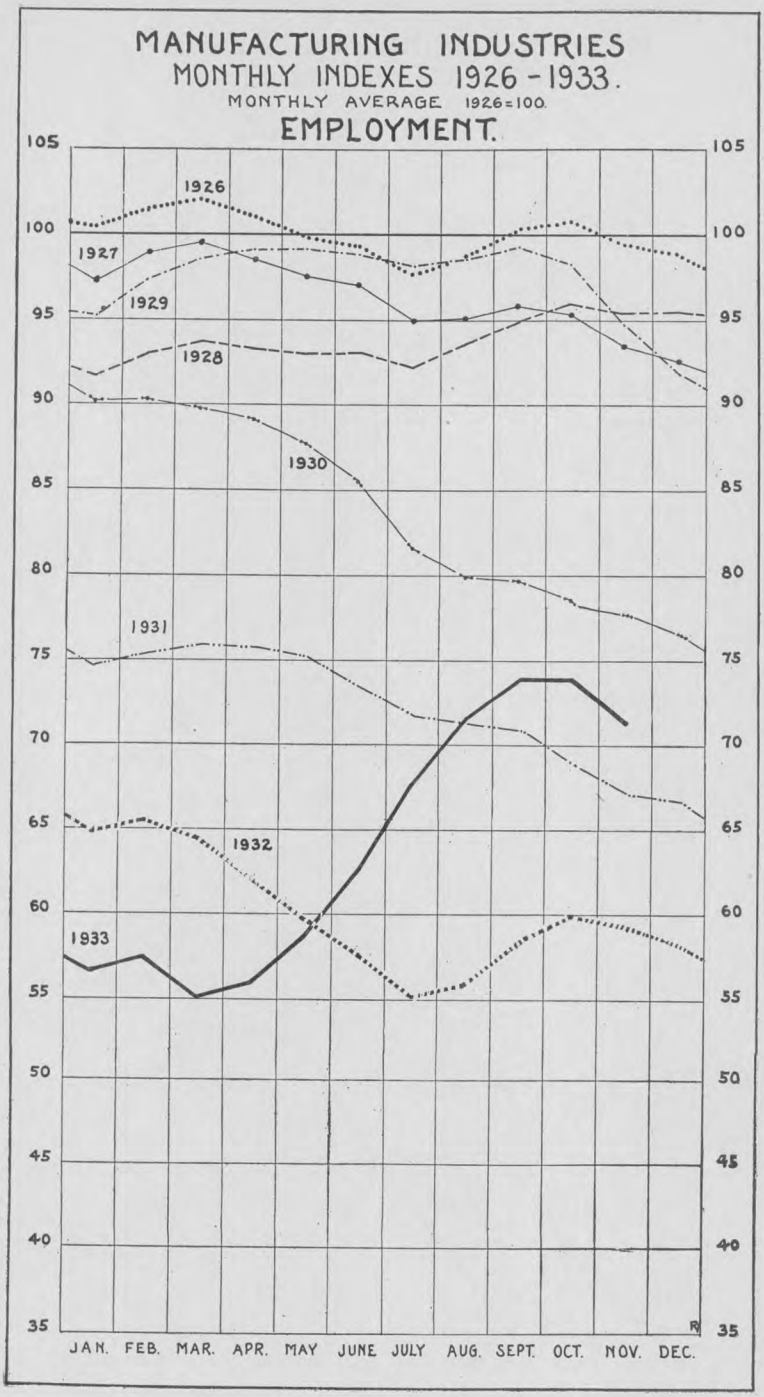
GENERAL index numbers of employment and pay-roll totals in manufacturing industries by months, from January 1926 to November 1933, together with average indexes for each of the years from 1926 to 1932 and for the 11-month period, January to November 1933, inclusive, are shown in the following table. In computing these general indexes the index numbers of each of the separate industries are weighted according to their relative importance in the total. Following this table are two charts prepared from these general indexes showing the course of employment and pay rolls from January 1926 to November 1933, inclusive.

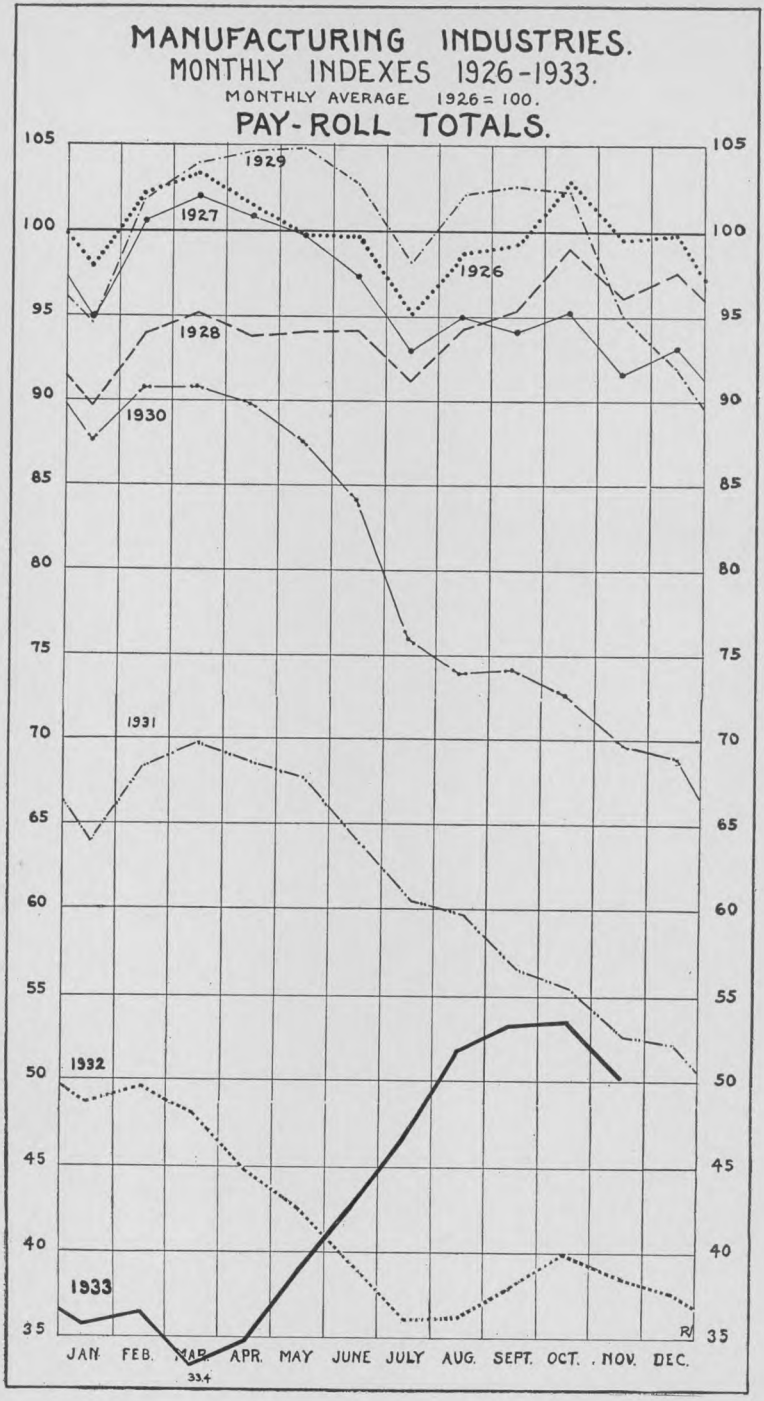
TABLE 3.—GENERAL INDEXES OF EMPLOYMENT AND PAY ROLLS IN **MANUFACTURING** INDUSTRIES, JANUARY 1926 TO NOVEMBER 1933

[12-month average, 1926=100]

Month	Employment								Pay rolls							
	1926	1927	1928	1929	1930	1931	1932	1933	1926	1927	1928	1929	1930	1931	1932	1933
January	100.4	97.3	91.6	95.2	90.7	74.6	64.8	56.6	98.0	94.9	89.6	94.5	88.1	63.7	48.6	35.8
February	101.5	99.0	93.0	97.4	90.9	75.3	65.6	57.5	102.2	100.6	93.9	101.8	91.3	68.1	49.6	36.4
March	102.0	99.5	93.7	98.6	90.5	75.9	64.5	55.1	103.4	102.0	95.2	103.9	91.6	69.6	48.2	33.4
April	101.0	98.6	93.3	99.1	89.9	75.7	62.2	56.0	101.5	100.8	93.8	104.6	90.7	68.5	44.7	34.9
May	99.8	97.6	93.0	99.2	88.6	75.2	59.7	58.7	99.8	99.8	94.1	104.8	88.6	67.7	42.5	38.9
June	99.3	97.0	93.1	98.8	86.5	73.4	57.5	62.8	99.7	97.4	94.2	102.8	85.2	63.8	39.3	43.1
July	97.7	95.0	92.2	98.2	82.7	71.7	55.2	67.3	95.2	93.0	91.2	98.2	77.0	60.3	36.2	46.5
August	98.7	95.1	93.6	98.6	81.0	71.2	56.0	71.6	98.7	95.0	94.2	102.1	75.0	59.7	36.3	51.9
September	100.3	95.8	95.0	99.3	80.9	70.9	58.5	73.9	99.3	94.1	95.4	102.6	75.4	56.7	38.1	53.3
October	100.7	95.3	95.9	98.4	79.9	68.9	59.9	74.0	102.9	95.2	99.0	102.4	74.0	55.3	39.9	53.6
November	99.5	93.5	95.4	95.0	77.9	67.1	59.4	71.4	99.6	91.6	96.1	95.4	69.6	52.5	38.6	50.3
December	98.9	92.6	95.5	92.3	76.6	66.7	58.3	-----	99.8	93.2	97.7	92.4	68.8	52.2	37.7	-----
Average	**100.0**	**96.4**	**93.8**	**97.5**	**84.7**	**72.2**	**60.1**	[1] **64.1**	**100.0**	**96.5**	**94.5**	**100.5**	**81.3**	**61.5**	**41.6**	[1] **43.5**

[1] Average for 11 months.





Time Worked in Manufacturing Industries in November 1933

REPORTS as to working time in November were received from 14,631 establishments in 89 manufacturing industries. Of these establishments 2 percent were idle, 68 percent operated on a full-time basis, and 30 percent worked on a part-time schedule.

An average of 92 percent of full-time operation in November was shown by reports received from all the operating establishments included in table 4. The establishments working part time in November averaged 74 percent of full-time operation.

TABLE 4.—PROPORTION OF FULL TIME WORKED IN **MANUFACTURING** INDUSTRIES BY ESTABLISHMENTS REPORTING IN NOVEMBER 1933

Industry	Establishments reporting		Percent of establishments operating—		Average percent of full time reported by—	
	Total number	Percent idle	Full time	Part time	All operating establishments	Establishments operating part time
Food and kindred products	**2,524**	**1**	**76**	**24**	**95**	**79**
Baking	905	(1)	85	15	98	86
Beverages	328	1	55	45	90	78
Butter	201	1	61	38	92	80
Confectionery	260	2	63	35	92	77
Flour	361	(1)	89	11	96	66
Ice cream	228	(1)	70	29	93	77
Slaughtering and meat packing	174		78	22	96	82
Sugar, beet	56		98	2	100	80
Sugar refining, cane	11		64	36	88	66
Textiles and their products	**2,677**	**4**	**74**	**22**	**92**	**66**
Fabrics:						
Carpets and rugs	19	11	58	32	87	63
Cotton goods	622	2	73	25	91	64
Cotton small wares	100	4	65	31	91	73
Dyeing and finishing textiles	136	1	74	24	93	73
Hats, fur-felt	20		30	70	76	65
Knit goods	408	3	84	13	96	70
Silk and rayon goods	225	6	87	7	97	65
Woolen and worsted goods	218	2	80	17	95	71
Wearing apparel:						
Clothing, men's	292	5	76	18	94	69
Clothing, women's	384	10	58	32	84	55
Corsets and allied garments	24		33	67	79	68
Men's furnishings	53	2	47	51	88	76
Millinery	86	1	73	26	92	71
Shirts and collars	90	2	86	12	96	66
Iron and steel and their products, not including machinery	**1,124**	**3**	**46**	**51**	**85**	**72**
Bolts, nuts, washers, and rivets	65		42	58	85	74
Cast-iron pipe	41	24	15	61	73	67
Cutlery (not including silver and plated cutlery) and edge tools	105	3	40	57	86	76
Forgings, iron and steel	37		35	65	82	73
Hardware	72		47	53	84	70
Iron and steel	142	9	61	30	91	73
Plumbers' supplies	55		42	58	79	65
Steam and hot-water heating apparatus and steam fittings	86	2	35	63	77	64
Stoves	137		53	47	88	74
Structural and ornamental metal work	170	4	65	32	94	81
Tin cans and other tinware	55		47	53	88	78
Tools (not including edge tools, machine tools, files, and saws)	100	2	24	74	80	74
Wirework	59		37	63	72	56
Machinery, not including transportation equipment	**1,465**	**1**	**62**	**37**	**90**	**74**
Agricultural implements	50		80	20	96	78
Cash registers, adding machines, and calculating machines	28		46	54	88	77
Electrical machinery, apparatus, and supplies	248		67	33	94	83
Engines, turbines, tractors, and water wheels	70		29	71	77	68

[1] Less than one half of 1 percent.

TABLE 4.—PROPORTION OF FULL TIME WORKED IN **MANUFACTURING** INDUSTRIES BY ESTABLISHMENTS REPORTING IN NOVEMBER 1933—Continued

Industry	Establishments reporting		Percent of establishments operating—		Average percent of full time reported by—	
	Total number	Percent idle	Full time	Part time	All operating establishments	Establishments operating part time
Machinery, not including transportation equipment—Continued.						
Foundry and machine-shop products	869	1	61	38	89	72
Machine tools	122		66	34	91	72
Radios and phonographs	35		91	9	99	84
Textile machinery and parts	36		56	44	91	79
Typewriters and supplies	7		71	29	96	86
Nonferrous metals and their products	**523**	**1**	**52**	**47**	**89**	**77**
Aluminum manufactures	23		52	48	89	76
Brass, bronze, and copper products	187	1	61	38	91	77
Clocks and watches and time-recording devices	20		10	90	81	79
Jewelry	92	3	25	72	85	79
Lighting equipment	41		39	61	82	70
Silverware and plated ware	49	2	41	57	85	74
Smelting and refining—copper, lead, and zinc	37		81	19	95	75
Stamped and enameled ware	74		72	28	93	76
Transportation equipment	**321**	**2**	**70**	**28**	**95**	**78**
Aircraft	25		76	24	96	85
Automobiles	156		83	17	99	82
Cars, electric- and steam-railroad	40	8	13	80	73	68
Locomotives	6		33	67	82	73
Shipbuilding	94	3	76	21	97	88
Railroad repair shops	**725**	(1)	**52**	**48**	**91**	**80**
Electric railroad	316		83	17	97	83
Steam railroad	409	1	28	71	86	80
Lumber and allied products	**1,303**	**2**	**69**	**29**	**93**	**75**
Furniture	395	2	78	20	95	73
Lumber:						
Millwork	397	2	65	32	92	75
Sawmills	499	2	66	32	92	74
Turpentine and rosin	12		50	50	88	77
Stone, clay, and glass products	**717**	**12**	**58**	**30**	**90**	**71**
Brick, tile, and terra cotta	217	23	59	18	93	68
Cement	68	12	65	24	87	52
Glass	157	1	82	17	97	83
Marble, granite, slate, and other products	176	13	22	66	79	73
Pottery	99	3	80	17	94	65
Leather and its manufactures	**409**	**8**	**73**	**19**	**93**	**65**
Boots and shoes	269	10	65	25	90	63
Leather	140	4	88	8	98	81
Paper and printing	**1,681**	**1**	**80**	**19**	**95**	**76**
Boxes, paper	283	(1)	75	25	95	78
Paper and pulp	365	2	63	35	90	73
Printing and publishing:						
Book and job	649	(1)	87	13	97	74
Newspapers and periodicals	384		90	10	99	88
Chemicals and allied products	**841**	**2**	**70**	**28**	**94**	**79**
Chemicals	71	1	90	8	99	86
Cottonseed—oil, cake, and meal	75	7	73	20	93	69
Druggists' preparations	28		57	43	92	81
Explosives	15		33	67	87	81
Fertilizers	159		96	4	99	68
Paints and varnishes	311	1	53	46	90	78
Petroleum refining	96	3	88	9	99	91
Rayon and allied products	14		100		100	
Soap	72		49	51	90	80
Rubber products	**124**		**41**	**59**	**86**	**75**
Rubber boots and shoes	8		63	38	95	86
Rubber goods, other than boots, shoes, tires, and inner tubes	88		36	64	85	76
Rubber tires and inner tubes	28		50	50	86	72
Tobacco manufactures	**197**	**6**	**52**	**43**	**88**	**74**
Chewing and smoking tobacco and snuff	29	3	48	48	86	73
Cigars and cigarettes	168	6	52	42	89	74
Total, 89 industries	14,631	.2	68	30	92	74

[1] Less than one half of 1 percent.

Employment in Nonmanufacturing Industries in November 1933

EMPLOYMENT increased in November as compared with October 1933 in 8 of the 15 nonmanufacturing industries appearing in the following table, and increased pay-roll totals were reported in 5 of these industries. Data for the building-construction industry are not presented here but are shown in more detail under the section "Building construction."

The most important gains in employment over the month interval in these nonmanufacturing industries were in coal mining, in which it is estimated 37,000 additional workers were returned to employment in November. The bituminous-coal-mining industry, reflecting seasonal demands and the settlement of strikes in certain areas, reported a gain of 10 percent in employment between October and November. The anthracite mining industry reported 7.3 percent more employees in November than in October, coupled, however, with sharply decreased earnings due to the All Saints Day and Armistice Day holidays in the pay period reported. Employment in the crude petroleum producing industry increased 2.3 percent over the month interval. Reports supplied by 18,666 retail trade establishments showed a gain of 2.2 percent in employment between October and November. Under this retail classification, the group composed of department-variety-general-merchandise stores and mail-order houses showed a gain of 3.7 percent between October and November. This percentage change indicates an estimated return to employment of 26,500 workers in this general merchandise group. The group of grocery stores and meat markets reported a decline of 0.1 percent and the combined total of the remaining reporting retail establishments showed a small loss in employment. The gains in the 3 industries comprising the public utilities group (telephone and telegraph, power and light, and electric-railroad and motor-bus operation) ranged from 0.3 to 0.5 percent, and the banks-brokerage-insurance, real-estate group showed an increase of 0.2 percent in employment from October to November.

The most pronounced percentage decline over the month interval (45.1 percent) was a seasonal decrease in employment in the canning and preserving industry, which regularly registers sharp declines at this season of the year. This seasonal decline indicates the release of approximately 64,000 workers from gainful employment in this industry. The dyeing and cleaning industry reported 6.8 percent fewer employees in November than in October. The quarrying and nonmetallic-mining industry and the laundry industry reported decreases in employment of 3.9 percent and 3.5 percent, respectively.

The hotel industry reported a loss in employment of 1.6 percent over the month interval and the decreases in the two remaining industries (wholesale trade and metalliferous mining) were two tenths of 1 percent or less.

Eleven of the 15 nonmanufacturing industries appearing in the following table reported increased employment between November 1932 and November 1933. The industries in which the level of employment in 1933 was below the level of 1932 were electric-railroad and motor-bus operation and maintenance, laundries, anthracite mining, and telephone and telegraph.

In the following table are presented employment and pay-roll data for the nonmanufacturing industries surveyed, exclusive of building construction.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **NONMANUFACTURING** ESTABLISHMENTS IN NOVEMBER 1933 WITH OCTOBER 1933 AND NOVEMBER 1932

Industrial group	Establishments reporting in both October and November 1933	Employment			Pay-roll totals			Index numbers November 1933 (average 1929=100)	
		Number on pay roll November 1933	Percent of change		Amount of pay roll (1 week) November 1933	Percent of change		Employment	Pay-roll totals
			October to November 1933	November 1932 to November 1933		October to November 1933	November 1932 to November 1933		
Coal mining:									
Anthracite	160	84,729	+7.3	−2.7	$1,932,194	−22.5	−6.3	61.9	47.8
Bituminous	1,509	227,883	+10.0	+7.8	3,962,551	+15.1	+33.4	74.8	50.7
Metalliferous mining	294	27,784	−.2	+27.3	564,712	−1.3	+36.9	40.6	25.6
Quarrying and nonmetallic mining	1,185	34,303	−3.9	+3.4	497,238	−9.3	+4.4	51.1	28.3
Crude petroleum producing	264	28,610	+2.3	+27.8	780,558	+.5	+18.6	72.2	50.3
Public utilities:									
Telephone and telegraph	8,234	247,820	+.3	−8.7	6,595,151	+1.0	−8.9	68.9	67.7
Power and light	3,188	209,433	+.5	+4.4	5,946,943	−2.2	+1.8	82.6	74.5
Electric-railroad and motor-bus operation and maintenance	554	132,975	+.5	−1.1	3,538,996	−.7	−3.7	71.0	59.4
Trade:									
Wholesale	3,019	86,591	−.1	+7.5	2,235,204	−2.9	+1.3	83.4	64.1
Retail	18,666	438,484	+2.2	+12.1	8,416,269	+.4	+8.5	91.6	72.6
Hotels (cash payments only)[1]	2,483	132,647	−1.6	+2.0	1,704,661	−1.7	−4.0	75.8	55.2
Canning and preserving	906	56,145	−45.1	+37.2	648,226	−41.7	+47.7	69.3	50.8
Laundries	1,290	66,086	−3.5	−1.2	963,948	−2.9	−2.0	75.3	57.9
Dyeing and cleaning	338	10,187	−6.8	+5.6	177,021	−8.6	+5.9	82.4	55.4
Banks, brokerage, insurance, and real estate	4,599	179,403	[2] +.2	[2] +1.6	5,859,816	+1.7	[2] +.5	[2] 99.6	[2] 86.1

[1] The additional value of board, room, and tips cannot be computed.
[2] Weighted.

Per capita weekly earnings in November 1933 for 15 nonmanufacturing industries included in the Bureau's monthly trend-of-employment survey, together with the percentages of change in

November 1933 as compared with October 1933 and November 1932, are given in the table following. These per capita weekly earnings must not be confused with full-time weekly rates of wages; they are per capita weekly earnings computed by dividing the total amount of pay roll for the week by the total number of employees (part-time as well as full-time workers).

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN 15 **NONMANUFACTURING** INDUSTRIES IN NOVEMBER 1933 AND COMPARISON WITH OCTOBER 1933 AND NOVEMBER 1932

Industrial group	Per capita weekly earnings in November 1933	Percent of change November 1933 compared with—	
		October 1933	November 1932
Coal mining:			
Anthracite	$22.80	−27.8	−3.6
Bituminous	17.39	+4.6	+23.7
Metalliferous mining	20.33	−1.1	+7.7
Quarrying and nonmetallic mining	14.50	−5.5	+.9
Crude petroleum producing	27.28	−1.8	−7.1
Public utilities:			
Telephone and telegraph	26.61	+.7	−.1
Power and light	28.40	−2.6	−2.5
Electric-railroad and motor-bus operation and maintenance	26.61	−1.3	−2.6
Trade:			
Wholesale	25.81	−2.8	−5.8
Retail	19.19	−1.8	−3.2
Hotels (cash payments only)[1]	12.85	−.1	−5.9
Canning and preserving	11.55	+6.3	+7.6
Laundries	14.59	+.6	−.9
Dyeing and cleaning	17.38	−1.9	+.1
Banks, brokerage, insurance, and real estate	32.66	[2] +1.4	[2] −1.1

[1] The additional value of board, room, and tips cannot be computed.
[2] Weighted.

Indexes of Employment and Pay-Roll Totals for Nonmanufacturing Industries

INDEX numbers of employment and pay-roll totals for 15 nonmanufacturing industries are presented in the following table. These index numbers show the variation in employment and pay rolls by months, from January 1930 to November 1933, in all nonmanufacturing industries except the laundry, dyeing and cleaning, and the banks, brokerage, insurance, and real-estate industries for which information over the entire period is not available. The Bureau has secured data concerning employment and pay rolls for the index base year 1929 from establishments in these industries and has computed index numbers for those months for which data are available from the Bureau's files. These indexes are shown in this tabulation.

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TABLE 3.—INDEXES OF EMPLOYMENT AND PAY ROLLS FOR **NONMANUFACTURING** INDUSTRIES, JANUARY TO DECEMBER 1930, 1931, AND 1932, AND JANUARY TO NOVEMBER 1933

[12-month average, 1929=100]

Month	Anthracite mining								Bituminous-coal mining							
	Employment				Pay rolls				Employment				Pay rolls			
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
January	102.1	90.6	76.2	52.5	105.8	89.3	61.5	43.2	102.5	93.9	80.8	69.8	101.4	73.3	47.0	36.1
February	106.9	89.5	71.2	58.7	121.5	101.9	57.3	56.8	102.4	91.5	77.4	69.3	102.1	68.3	47.0	37.2
March	82.6	82.0	73.7	54.6	78.5	71.3	61.2	48.8	98.6	88.8	75.2	67.6	86.4	65.2	46.8	30.7
April	84.1	85.2	70.1	51.6	75.0	75.2	72.0	37.4	94.4	85.9	65.5	63.7	81.7	58.6	33.9	26.6
May	93.8	80.3	66.9	43.2	98.8	76.1	58.0	30.0	90.4	82.4	62.6	61.2	77.5	54.4	30.7	26.9
June	90.8	76.1	53.0	39.5	94.3	66.7	37.4	34.3	88.4	78.4	60.5	61.3	75.6	52.4	27.3	29.2
July	91.6	65.1	44.5	43.8	84.0	53.7	34.5	38.2	88.0	76.4	58.6	63.2	68.9	50.4	24.4	33.6
August	80.2	67.3	49.2	47.7	78.8	56.4	41.4	46.6	89.2	77.0	59.4	68.6	71.1	50.6	26.4	43.3
September	93.8	80.0	55.8	56.8	91.6	64.9	47.0	60.7	90.5	80.4	62.4	71.8	74.9	53.6	30.2	44.1
October	99.0	86.8	63.9	56.9	117.2	91.1	66.7	61.6	91.8	81.3	67.0	68.0	79.4	56.2	37.8	44.1
November	97.2	83.5	62.7	61.0	98.0	79.5	51.0	47.8	92.5	81.1	69.4	74.8	79.1	54.6	38.0	50.7
December	99.1	79.8	62.3	-----	100.0	78.4	56.2	-----	92.5	81.2	70.0	-----	77.7	52.3	37.7	-----
Average	93.4	80.5	62.5	[1] 51.5	95.3	75.4	53.7	[1] 45.9	93.4	83.2	67.4	[1] 67.2	81.3	57.5	35.6	[1] 36.6

Month	Metalliferous mining								Quarrying and nonmetallic mining							
January	95.7	68.3	49.3	32.4	92.7	55.0	29.7	18.1	79.6	64.4	48.9	35.1	71.9	50.4	30.2	18.1
February	92.3	65.3	46.9	31.5	92.5	54.6	27.8	17.8	79.8	66.6	47.4	34.8	73.5	54.4	29.6	17.4
March	90.9	63.5	45.0	30.0	90.8	52.8	26.5	17.4	83.0	70.0	46.0	35.1	80.0	58.2	28.7	17.8
April	89.3	63.9	43.3	29.4	88.3	51.4	25.0	16.4	87.4	76.1	48.6	39.3	85.4	62.6	30.0	20.2
May	87.5	62.4	38.3	30.0	85.6	49.3	23.8	17.0	90.8	75.0	50.6	43.4	90.2	62.3	32.3	23.8
June	84.6	60.0	32.2	31.5	81.6	46.1	20.1	18.3	90.3	72.3	49.5	47.3	90.9	60.1	30.0	27.5
July	80.5	56.2	29.5	33.0	71.9	41.3	16.9	19.0	89.9	71.0	49.5	49.5	85.5	57.3	29.1	28.4
August	79.0	55.8	28.6	36.8	71.0	40.2	16.5	21.9	89.3	68.9	51.1	51.6	85.8	55.1	29.7	29.9
September	78.1	55.5	29.3	38.9	69.9	40.0	17.0	23.9	87.7	66.6	52.4	52.6	82.5	51.2	30.5	29.3
October	77.2	53.8	30.5	40.7	68.6	37.4	18.0	25.9	84.7	64.5	52.4	53.2	79.3	48.7	30.1	31.2
November	72.8	52.8	31.9	40.6	63.4	35.1	18.7	25.6	78.3	59.3	49.4	51.1	66.8	43.3	27.1	28.3
December	70.1	51.2	33.3	-----	59.9	34.3	18.7	-----	70.2	53.9	42.3	-----	59.9	36.9	22.1	-----
Average	83.2	59.1	36.5	[1] 34.1	78.0	44.8	21.6	[1] 20.1	84.3	67.4	49.0	[1] 44.8	79.3	53.4	29.1	[1] 24.7

Month	Crude-petroleum producing								Telephone and telegraph							
January	92.7	74.8	54.9	57.2	94.0	71.5	46.5	39.9	101.6	90.5	83.0	74.6	105.1	96.3	89.1	71.7
February	90.8	73.2	54.4	57.0	88.6	70.0	46.9	41.7	100.2	89.2	82.0	73.9	101.9	94.8	89.6	71.9
March	89.3	72.2	51.4	56.5	91.3	73.2	43.2	42.5	99.4	88.6	81.7	73.2	105.8	97.9	88.2	71.6
April	86.8	69.8	54.9	56.8	86.6	66.3	44.5	40.1	98.9	88.1	81.2	72.3	103.4	95.0	83.4	67.8
May	89.8	67.8	54.5	56.9	85.4	64.7	47.1	41.6	99.7	87.4	80.6	70.1	103.2	94.1	82.8	68.5
June	90.2	65.0	54.2	58.0	87.1	62.7	44.8	40.6	99.8	86.9	79.9	69.2	103.4	95.0	82.1	66.6
July	89.9	65.3	55.4	59.5	88.5	59.2	44.6	42.2	100.0	86.6	79.1	68.5	106.6	93.3	79.6	66.7
August	87.7	62.4	57.4	60.8	86.0	56.3	42.9	42.5	98.8	85.9	78.1	68.1	102.5	92.3	79.1	66.1
September	85.0	61.2	56.2	66.2	84.0	55.2	41.9	44.4	96.8	85.0	77.4	68.3	102.2	92.1	75.9	64.6
October	85.2	60.4	56.8	70.6	82.6	54.4	42.5	50.1	94.5	84.1	76.2	68.7	100.9	91.6	75.7	67.0
November	83.6	57.6	56.5	72.2	80.0	52.0	42.4	50.3	93.0	83.5	75.5	68.9	97.9	89.7	74.3	67.7
December	77.4	58.2	57.2	-----	77.2	54.9	41.7	-----	91.6	83.1	74.8	-----	101.3	92.7	73.5	-----
Average	87.4	65.7	55.3	[1] 61.1	85.9	61.7	44.1	[1] 43.3	97.9	86.6	79.1	[1] 70.5	102.9	93.7	81.1	[1] 68.2

Month	Power and light								Electric-railroad and motor-bus operation and maintenance [2]							
January	99.6	99.2	89.3	77.7	99.7	98.6	88.4	73.0	97.1	86.9	79.5	70.6	97.8	85.6	75.4	60.9
February	98.8	97.8	87.2	77.4	100.4	99.7	86.0	71.6	95.1	86.6	78.9	70.4	95.7	87.1	74.8	60.6
March	99.7	96.7	85.5	76.9	102.1	102.4	85.4	71.9	94.4	86.4	77.6	69.8	95.4	88.1	73.6	59.4
April	100.7	97.1	84.8	76.9	102.6	97.6	82.4	69.4	95.2	86.8	78.0	69.5	97.1	86.6	71.8	58.1
May	103.4	97.6	84.0	76.9	104.5	98.7	84.2	69.9	95.2	85.9	76.9	69.1	96.0	85.1	72.2	58.2
June	104.6	97.2	83.2	77.3	107.8	98.3	80.5	69.9	94.8	85.3	76.5	69.3	97.0	84.8	70.2	58.0
July	105.9	96.7	82.3	77.5	106.7	97.4	78.7	70.0	95.3	85.6	75.6	69.4	95.6	83.3	66.4	57.4
August	106.4	95.9	81.5	78.1	106.6	96.2	76.7	70.9	92.9	84.8	74.1	69.5	92.1	81.9	63.8	58.2
September	105.2	94.7	81.0	80.3	106.1	94.3	74.7	71.8	91.8	84.0	73.5	69.7	90.5	81.2	62.5	57.8
October	104.8	92.7	79.9	82.2	105.6	93.2	74.4	76.2	91.0	82.7	72.3	70.6	88.9	79.0	61.5	59.8
November	103.4	91.3	79.1	82.6	103.7	93.3	73.2	74.5	89.3	81.5	71.8	71.0	87.7	79.7	61.7	59.4
December	103.2	90.3	78.4	-----	106.3	91.2	73.2	-----	88.8	79.9	71.4	-----	88.6	77.8	61.9	-----
Average	103.0	95.6	83.0	[1] 78.5	104.3	96.7	79.8	[1] 71.7	93.4	84.7	75.5	[1] 69.9	93.5	83.4	68.0	[1] 58.9

[1] Average for 11 months.

[2] Not including electric-railroad-car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 1.

TABLE 3.—INDEXES OF EMPLOYMENT AND PAY ROLLS FOR **NONMANUFACTURING** INDUSTRIES, JANUARY TO DECEMBER 1930, 1931, AND 1932, AND JANUARY TO NOVEMBER 1933—Continued

[12-month average, 1929=100]

Month	Wholesale trade								Retail trade							
	Employment				Pay rolls				Employment				Pay rolls			
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
January	100.0	89.5	81.8	75.3	100.0	87.5	74.1	61.7	98.9	90.0	84.3	76.9	99.7	89.4	78.0	62.7
February	98.5	88.2	80.9	74.1	98.3	88.4	72.5	58.6	94.4	87.1	80.5	73.4	96.0	86.7	73.7	58.4
March	97.7	87.4	79.8	73.1	99.7	89.1	71.3	57.1	93.9	87.8	81.4	71.4	95.5	87.5	73.4	55.1
April	97.3	87.4	78.9	73.3	97.9	85.2	68.9	56.0	97.3	90.1	81.6	78.6	97.5	88.3	72.7	60.4
May	96.8	87.1	77.9	74.0	97.4	84.7	69.7	57.4	96.7	89.9	80.9	77.0	97.3	88.0	71.1	59.5
June	96.5	87.1	77.0	75.7	98.6	84.1	66.2	57.3	93.9	89.1	79.4	78.3	96.8	87.6	68.2	60.5
July	96.0	86.8	76.6	76.9	96.0	83.3	64.7	59.1	89.0	83.9	74.6	74.6	91.7	83.3	63.3	58.1
August	95.0	86.5	76.4	79.7	93.6	82.1	63.2	60.8	85.6	81.8	72.6	78.1	87.6	80.3	60.7	62.7
September	94.8	86.1	77.1	82.1	93.6	81.4	63.1	62.3	92.0	86.6	77.8	86.0	92.4	83.5	64.6	69.2
October	94.2	85.2	77.8	83.5	92.9	79.9	63.9	66.0	95.5	89.8	81.3	89.6	95.1	84.6	67.1	72.3
November	92.6	84.1	77.6	83.4	91.0	79.7	63.3	64.1	98.4	90.9	81.7	91.6	96.8	85.4	66.9	72.6
December	92.0	83.7	77.0	-----	91.3	77.8	62.6	-----	115.1	106.2	95.2	-----	107.7	94.1	73.6	-----
Average	96.0	86.6	78.2	[1] 77.4	95.9	83.6	67.0	[1] 60.0	95.9	89.4	80.9	[1] 79.6	96.2	86.6	69.4	[1] 62.9

Month	Hotels								Canning and preserving							
January	100.4	95.0	83.2	73.8	100.3	91.0	73.9	55.7	46.1	48.9	35.0	34.1	50.3	46.1	31.8	24.8
February	102.4	96.8	84.3	73.8	103.8	93.7	73.9	55.9	45.7	48.3	37.1	35.1	51.5	48.6	32.7	25.9
March	102.4	96.8	84.0	72.4	104.4	93.4	72.4	53.5	49.7	53.0	36.3	33.2	50.8	50.3	31.9	24.2
April	100.1	95.9	82.7	71.9	100.3	89.9	69.6	51.7	74.8	59.6	47.0	49.2	72.6	57.1	37.9	33.5
May	98.0	92.5	80.1	71.9	98.4	87.7	67.0	51.8	65.7	56.0	40.5	45.5	66.9	56.0	36.0	31.8
June	98.0	91.6	78.0	73.6	98.1	85.4	63.8	52.3	83.0	70.6	55.5	55.6	81.5	58.6	40.5	36.7
July	101.3	93.3	78.4	75.6	99.8	85.2	61.8	53.3	126.3	102.2	73.0	76.6	112.7	74.2	47.5	46.2
August	101.5	92.8	77.6	77.1	98.6	83.8	59.6	54.0	185.7	142.9	99.0	112.7	172.0	104.7	65.6	68.3
September	100.1	90.6	77.0	78.7	97.1	81.9	59.1	55.6	246.6	180.1	125.3	175.6	214.8	129.4	75.1	127.0
October	97.5	87.4	75.4	77.0	95.5	79.7	58.6	56.2	164.7	108.1	81.1	126.3	140.0	77.6	51.8	87.1
November	95.2	84.9	74.3	75.8	93.6	77.1	57.5	55.2	96.7	60.8	50.5	69.3	82.9	48.1	34.4	50.8
December	93.5	83.1	73.2	-----	91.5	75.4	56.6	-----	61.6	40.7	33.7	-----	57.4	36.9	25.6	----
Average	99.2	91.7	79.0	[1] 74.7	98.5	85.4	64.5	[1] 54.1	103.9	80.9	59.5	[1] 73.9	96.1	65.6	42.6	[1] 50.6

Month	Laundries						Dyeing and cleaning						Banks, brokerage, insurance, and real estate			
	Employment			Pay rolls			Employment			Pay rolls			Employment		Pay rolls	
	1931	1932	1933	1931	1932	1933	1931	1932	1933	1931	1932	1933	1932	1933	1932	1933
January	90.5	84.7	75.4	86.6	76.4	57.9	88.9	82.1	73.0	77.7	65.8	46.6	98.3	97.5	93.5	85.2
February	90.0	82.9	74.4	85.6	73.3	55.5	87.4	80.5	70.9	75.1	62.2	42.4	98.3	96.8	93.0	84.3
March	89.5	82.0	73.0	85.6	71.6	52.9	88.0	80.6	71.2	75.6	61.7	41.0	98.9	96.5	92.9	83.7
April	90.5	82.0	73.4	86.8	71.4	54.0	95.7	83.3	81.1	86.3	65.9	54.6	98.6	96.2	92.1	82.9
May	90.3	81.4	73.5	86.5	70.6	54.5	96.7	84.5	82.0	86.6	67.3	53.9	98.0	96.2	92.7	83.2
June	91.0	81.0	76.0	87.1	68.6	56.7	99.0	85.1	85.6	89.1	65.8	56.7	97.9	97.3	90.0	84.4
July	91.8	80.3	76.3	87.4	66.3	56.1	98.6	82.4	82.9	86.2	60.0	52.8	98.4	97.7	89.8	84.8
August	90.2	78.9	77.9	84.6	63.9	57.6	93.5	79.5	83.1	80.0	56.3	52.8	98.5	98.3	88.2	84.4
September	89.3	78.6	79.3	84.1	62.9	60.6	95.3	83.3	88.6	82.6	61.0	60.3	98.4	99.0	87.1	84.5
October	88.1	77.5	78.0	81.8	61.2	59.7	94.2	82.3	88.4	81.4	58.8	60.6	98.6	99.4	86.3	84.7
November	86.2	76.2	75.3	78.9	59.1	57.9	90.1	78.0	82.4	74.7	52.3	55.4	98.0	99.6	85.7	86.1
December	85.3	75.9	-----	77.4	58.7	-----	84.9	75.2	-----	67.9	48.4	-----	98.0	-----	85.5	-----
Average	89.4	80.1	[1] 75.7	84.4	67.0	[1] 56.7	92.7	81.4	[1] 80.8	80.3	60.5	[1] 52.5	98.3	[1] 97.7	89.7	[1] 84.4

[1] Average for 11 months

Average Man-Hours Worked and Average Hourly Earnings

IN THE following tables the Bureau presents a tabulation of man-hours worked per week and average hourly earnings based on reports supplied by identical establishments in October and November 1933 in 15 industrial groups and 78 separate manufacturing industries. Man-hour data for the building-construction group and for the insurance, real estate, banking, and brokerage group are not available, and data for several of the 89 manufacturing industries surveyed monthly are omitted from these tables due to lack of adequate information.

The total number of establishments supplying man-hour data in these 15 industrial groups represents approximately 50 percent of the establishments supplying monthly employment data.

The tabulations are based on reports supplying actual man-hours worked and do not include nominal man-hour totals, obtained by multiplying the total number of employees in the establishment by the plant operating time.

Table 1 shows the average hours worked per employee per week and average hourly earnings in 15 industrial groups and for all groups combined. The average hours per week and average hourly earnings for the combined total of the 15 industrial groups are weighted averages, wherein the average man-hours and average hourly earnings in each industrial group are multiplied by the total number of employees in the group in the current month and the sum of these products divided by the total number of employees in the combined 15 industrial groups. The average man-hours and hourly earnings for the combined 89 manufacturing industries have been weighted in the same manner as the averages for all industrial groups combined, table 1.

In presenting information for the separate manufacturing industries shown in table 2, data are published for only those industries in which the available man-hour information covers 20 percent or more of the total number of employees in the industry at the present time.

TABLE 1.—AVERAGE HOURS WORKED PER WEEK PER EMPLOYEE AND AVERAGE HOURLY EARNINGS IN 15 INDUSTRIAL GROUPS, OCTOBER AND NOVEMBER 1933

Industrial group	Average hours per week		Average hourly earnings	
	October 1933	November 1933	October 1933	November 1933
			Cents	*Cents*
Manufacturing	35.7	34.4	51.7	52.1
Coal mining:				
Anthracite	38.7	28.1	81.5	80.8
Bituminous	29.9	29.6	56.8	58.0
Metalliferous mining	39.3	37.9	51.7	53.0
Quarrying and nonmetallic mining	34.8	32.5	44.4	45.2
Crude petroleum producing	36.2	35.0	77.3	76.6
Public utilities:				
Telephone and telegraph	37.6	37.5	67.2	68.1
Power and light	43.1	42.3	67.5	66.9
Electric-railroad and motor-bus operation and maintenance	45.6	44.9	56.2	56.2
Trade:				
Wholesale	42.9	42.3	60.9	59.8
Retail	39.5	39.9	49.8	48.1
Hotels	49.7	49.8	24.6	24.7
Canning and preserving	34.4	32.2	33.7	37.6
Laundries	37.9	37.9	37.5	37.6
Dyeing and cleaning	41.4	40.7	43.6	43.2
Average	37.8	37.1	52.2	51.9

Per capita weekly earnings, computed by multiplying the average man-hours worked per week by the average hourly earnings, are not identical with the per capita weekly earnings appearing elsewhere in this trend-of-employment compilation, which are obtained by dividing the total weekly earnings in all establishments reporting by the total number of employees in those establishments. As already noted, the basic information upon which the average weekly man-hours and average hourly earnings are computed covers approximately 50 percent of the establishments reporting monthly employment data.

TABLE 2.—AVERAGE HOURS WORKED PER WEEK PER EMPLOYEE AND AVERAGE HOURLY EARNINGS IN SELECTED **MANUFACTURING** INDUSTRIES, OCTOBER AND NOVEMBER 1933

Industry	Average hours per week		Average hourly earnings	
	October 1933	November 1933	October 1933	November 1933
			Cents	*Cents*
Food and kindred products:				
Baking	39.6	40.0	51.8	51.8
Beverages	40.6	37.5	66.3	73.4
Confectionery	35.9	33.7	39.8	39.8
Flour	39.0	38.2	49.3	49.7
Ice cream	43.5	41.1	60.2	63.2
Slaughtering and meat packing	39.5	39.9	49.8	49.8
Sugar, beet	51.7	50.4	37.7	39.8
Sugar refining, cane	35.5	36.6	56.1	56.3
Textiles and their products:				
Fabrics:				
Carpets and rugs	37.6	32.2	51.2	52.7
Cotton goods	35.2	34.6	36.2	36.4
Cotton small wares	36.3	35.1	43.4	43.4
Dyeing and finishing textiles	36.4	35.9	49.0	51.8
Knit goods	36.7	36.1	44.8	44.8
Silk and rayon goods	34.8	33.8	42.3	42.5
Woolen and worsted goods	34.8	32.8	48.6	49.4

TABLE 2.—AVERAGE HOURS WORKED PER WEEK PER EMPLOYEE AND AVERAGE HOURLY EARNINGS IN SELECTED **MANUFACTURING** INDUSTRIES, OCTOBER AND NOVEMBER 1933—Continued

Industry	Average hours per week		Average hourly earnings	
	October 1933	November 1933	October 1933	November 1933
			Cents	*Cents*
Iron and steel and their products, not including machinery:				
Bolts, nuts, washers, and rivets	33.8	34.4	50.1	50.2
Cast-iron pipe	25.3	27.2	49.5	51.1
Cutlery (not including silver and plated cutlery) and edge tools	36.8	36.8	49.1	49.9
Forgings, iron and steel	34.4	33.5	57.9	57.3
Hardware	34.9	32.6	46.5	50.5
Iron and steel	33.5	29.0	56.4	59.0
Plumbers' supplies	32.1	28.0	51.0	50.0
Steam and hot-water heating apparatus and steam fittings	32.5	31.8	54.8	54.9
Stoves	38.0	34.9	51.7	51.5
Structural and ornamental metalwork	34.2	33.8	53.7	55.0
Tin cans and other tinware	36.0	35.5	50.7	51.9
Tools (not including edge tools, machine tools, files, and saws)	36.6	37.5	49.1	48.7
Wirework	34.6	32.3	54.9	53.8
Machinery, not including transportation equipment:				
Agricultural implements	35.0	35.9	50.6	51.9
Cash registers, adding machines, and calculating machines	37.5	38.2	65.1	65.6
Electrical machinery, apparatus, and supplies	32.8	33.1	62.9	61.9
Engines, turbines, tractors, and water wheels	34.9	35.1	60.0	59.9
Foundry and machine-shop products	33.9	33.3	55.7	56.4
Machine tools	36.0	36.5	57.3	57.7
Radios and phonographs	36.0	34.5	49.7	50.0
Textile machinery and parts	37.2	37.5	64.1	63.5
Typewriters and supplies	38.9	39.0	49.7	48.9
Nonferrous metals and their products:				
Aluminum manufactures	35.7	35.0	47.5	48.1
Brass, bronze, and copper products	35.7	34.9	51.9	52.0
Clocks and watches and time-recording devices	41.6	41.2	44.5	44.6
Jewelry	37.9	38.5	48.1	49.0
Lighting equipment	36.3	36.9	50.8	51.3
Silverware and plated ware	40.0	39.3	50.6	50.8
Smelting and refining—copper, lead, and zinc	36.3	36.0	50.8	50.6
Stamped and enameled ware	32.0	35.8	45.2	46.1
Transportation equipment:				
Aircraft	37.4	38.0	63.2	65.0
Automobiles	32.3	30.6	64.5	65.4
Cars, electric- and steam-railroad	33.8	34.5	58.6	58.0
Locomotives	31.6	32.9	60.8	60.8
Shipbuilding	30.5	29.5	66.8	67.5
Railroad repair shop:				
Electric railroad	43.2	43.6	57.0	57.6
Steam railroad	40.3	37.7	62.2	62.4
Lumber and allied products:				
Furniture	38.0	34.9	42.0	42.6
Lumber:				
Millwork	34.3	34.2	43.5	42.8
Sawmills	34.7	34.4	42.9	42.0
Stone, clay, and glass products:				
Brick, tile, and terra cotta	31.3	30.5	39.8	40.4
Cement	34.5	32.4	54.3	54.2
Glass	33.5	33.1	53.0	52.7
Marble, granite, slate, and other products	34.3	31.5	59.7	58.0
Pottery	39.3	38.5	44.6	44.8
Leather and its manufactures:				
Leather	37.6	37.5	50.8	50.5
Paper and printing:				
Boxes, paper	36.8	36.5	46.2	46.6
Paper and pulp	38.7	36.5	47.5	48.1
Printing and publishing:				
Book and job	34.8	35.5	71.9	71.5
Newspapers and periodicals	36.9	36.4	80.4	81.5
Chemicals and allied products:				
Chemicals	39.7	39.1	60.5	60.4
Cottonseed—oil, cake, and meal	42.8	41.6	26.4	25.9
Druggists' preparations	38.7	39.2	47.9	48.0
Explosives	35.3	33.4	59.5	62.2
Fertilizers	36.0	32.4	35.5	36.5
Paints and varnishes	38.1	37.9	53.1	53.6
Petroleum refining	36.4	35.3	69.4	69.8
Rayon and allied products	37.9	37.8	46.3	46.4
Soap	39.1	38.6	49.7	51.0
Rubber products:				
Rubber goods, other than boots, shoes, tires, and inner tubes	35.3	33.7	48.9	49.6
Rubber tires and inner tubes	30.5	27.9	69.5	71.1
Tobacco manufactures:				
Chewing and smoking tobacco and snuff	36.4	34.1	37.5	37.9
Cigars and cigarettes	37.7	36.8	36.8	36.0

Employment in Building Construction in November 1933

EMPLOYMENT in the building-construction industry decreased 7.3 percent in November as compared with October and pay rolls decreased 7.5 percent over the month interval.

The percents of change in employment and pay-roll totals in November as compared with October are based on returns made by 11,149 firms engaged on public and private projects not aided by public-works funds. These firms employed in November 85,582 workers in the various trades in the building-construction industry whose combined weekly earnings during the pay period ending nearest November 15 were $1,866,494. These reports cover building operations in various localities in 34 States and the District of Columbia.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN THE **BUILDING CONSTRUCTION** INDUSTRY IN IDENTICAL FIRMS, OCTOBER AND NOVEMBER 1933

Locality	Number of firms reporting	Number on pay roll		Percent of change	Amount of pay roll		Percent of change
		Oct. 15	Nov. 15		Oct. 15	Nov. 15	
Alabama: Birmingham	70	352	352	(1)	$5,373	$4,954	−7.8
California:							
Los Angeles [2]	22	819	674	−17.7	14,793	12,353	−16.5
San Francisco-Oakland [2]	32	833	783	−6.0	17,517	19,070	+8.9
Other reporting localities [2]	19	509	368	−27.7	10,312	7,968	−22.7
Colorado: Denver	202	733	789	+7.6	13,501	14,321	+6.1
Connecticut:							
Bridgeport	123	609	592	−2.8	12,309	12,038	−2.2
Hartford	260	1,239	1,196	−3.5	26,990	25,779	−4.5
New Haven	179	1,124	931	−17.2	25,750	21,748	−15.5
Delaware: Wilmington	114	925	922	−.3	18,992	18,622	−1.9
District of Columbia	512	7,729	7,531	−2.6	211,317	209,658	−.8
Florida:							
Jacksonville	62	517	516	−.2	7,042	7,948	+12.9
Miami	79	1,105	1,059	−4.2	18,671	20,115	+7.7
Georgia: Atlanta	152	1,152	1,040	−9.7	17,859	15,029	−15.8
Illinois:							
Chicago [2]	132	1,448	1,722	+18.9	39,666	51,416	+29.6
Other reporting localities [2]	73	1,423	1,915	+34.6	28,460	63,432	+122.9
Indiana:							
Evansville	57	343	328	−4.4	5,234	5,291	+1.1
Fort Wayne	83	352	327	−7.1	6,309	5,290	−16.2
Indianapolis	158	1,221	984	−19.4	24,722	19,478	−21.2
South Bend	36	239	238	−.4	5,424	3,765	−30.6
Iowa: Des Moines	96	577	383	−33.6	10,079	6,836	−32.2
Kansas: Wichita	69	343	233	−32.1	5,968	3,888	−34.9
Kentucky: Louisville	151	1,272	1,229	−3.4	23,029	21,746	−5.6
Louisiana: New Orleans	120	1,006	877	−12.8	17,071	15,274	−10.5
Maine: Portland	99	423	349	−17.5	9,478	6,980	−26.4
Maryland: Baltimore [2]	107	899	874	−2.8	16,765	15,030	−10.3
Massachusetts: All reporting localities [2]	711	4,896	4,617	−5.7	114,694	105,289	−8.2
Michigan:							
Detroit	501	4,636	3,995	−13.8	95,725	81,211	−15.2
Flint	57	238	224	−5.9	3,935	3,907	−.7
Grand Rapids	108	470	437	−7.0	7,036	6,869	−2.4
Minnesota:							
Duluth	52	325	307	−5.5	5,216	4,969	−4.7
Minneapolis	223	1,905	1,476	−22.5	39,063	27,965	−28.4
St. Paul	179	1,343	1,042	−22.4	29,488	21,760	−26.2

[1] No change.
[2] Data supplied by cooperating State bureaus.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN THE **BUILDING CONSTRUCTION** INDUSTRY IN IDENTICAL FIRMS, OCTOBER AND NOVEMBER 1933—Continued

Locality	Number of firms reporting	Number on pay roll		Percent of change	Amount of pay roll		Percent of change
		Oct. 15	Nov. 15		Oct. 15	Nov. 15	
Missouri:							
Kansas City [3]	292	1,722	1,645	−4.5	$37,909	$35,884	−5.3
St. Louis	597	3,524	3,516	−.2	92,319	86,689	−6.1
Nebraska: Omaha	153	814	735	−9.7	16,992	14,927	−12.2
New York:							
New York City [2]	337	6,053	5,773	−4.6	182,775	180,991	−1.0
Other reporting localities [2]	243	5,807	5,697	−1.9	135,713	126,308	−6.9
North Carolina: Charlotte	54	354	416	+17.5	5,791	5,790	−([4])
Ohio:							
Akron	84	399	314	−21.3	7,831	5,500	−29.8
Cincinnati [5]	475	2,373	2,124	−10.5	54,699	48,236	−11.8
Cleveland	627	2,996	2,304	−23.1	82,002	52,714	−35.7
Dayton	125	531	422	−20.5	10,282	7,648	−25.6
Youngstown	76	326	289	−11.3	5,448	5,010	−8.0
Oklahoma:							
Oklahoma City	97	648	567	−12.5	10,229	9,617	−6.0
Tulsa	55	278	222	−20.1	4,312	3,626	−15.9
Oregon: Portland	186	1,098	1,011	−7.9	22,931	19,061	−16.9
Pennsylvania: [6]							
Erie area [2]	30	244	496	+103.3	2,714	3,366	+24.0
Philadelphia area [2]	484	6,297	6,060	−3.8	118,328	109,368	−7.6
Pittsburgh area [2]	262	2,011	1,690	−16.0	46,681	36,701	−21.4
Reading-Lebanon area [2]	51	319	285	−10.7	5,545	4,378	−21.0
Scranton area [2]	37	251	251	([1])	5,818	4,759	−18.2
Other reporting areas [2]	335	3,478	3,158	−9.2	71,437	65,629	−8.1
Rhode Island: Providence	250	1,844	1,643	−10.9	42,159	36,525	−13.4
Tennessee:							
Chattanooga	40	198	201	+1.5	3,228	2,851	−11.7
Knoxville	48	460	329	−28.5	6,833	4,746	−30.5
Memphis	79	404	360	−10.9	6,446	5,813	−9.8
Nashville	85	957	576	−39.8	13,730	8,471	−38.3
Texas:							
Dallas	183	771	685	−11.2	12,186	10,022	−17.8
El Paso	27	136	171	+25.7	1,357	2,127	+56.7
Houston	177	1,168	1,414	+21.1	18,113	26,108	+44.1
San Antonio	112	563	394	−30.0	7,600	5,019	−34.0
Utah: Salt Lake City	87	612	314	−48.7	8,194	6,153	−24.9
Virginia:							
Norfolk-Portsmouth	93	816	662	−18.9	16,210	12,540	−22.6
Richmond	138	1,075	956	−11.1	21,891	17,599	−19.6
Washington:							
Seattle	155	731	647	−11.5	13,964	12,054	−13.7
Spokane	53	212	369	+74.1	4,021	6,663	+65.7
Tacoma	78	122	136	+11.5	1,968	2,091	+6.3
West Virginia: Wheeling	49	281	221	−21.4	6,375	4,222	−33.8
Wisconsin: All reporting localities [2]	57	1,396	1,219	−12.7	24,957	17,289	−30.7
Total, all localities	11,149	92,274	85,582	−7.3	2,016,776	1,866,494	−7.5

[1] No change.
[2] Data supplied by cooperating State bureaus.
[3] Includes both Kansas City, Mo., and Kansas City, Kans.
[4] Less than one tenth of 1 percent.
[5] Includes Covington and Newport, Ky.
[6] Each separate area includes from 2 to 8 counties.

Trend of Employment in November 1933, by States

IN THE following table are shown the fluctuations in employment and pay-roll totals in November 1933 as compared with October 1933, in certain industrial groups by States. These tabulations have been prepared from data secured directly from reporting establishments and from information supplied by cooperating State agencies. The combined total of all groups does not include building-construction data, information concerning which is published elsewhere in a separate tabulation by city and State totals. In addition to the combined total of all groups, the trend of employment and pay rolls in the manufacturing, public utility, hotel, wholesale trade, retail trade, bituminous-coal mining, crude-petroleum producing, quarrying and nonmetallic mining, metalliferous mining, laundry, and dyeing and cleaning groups is presented. In this State compilation, the totals of the telephone and telegraph, power and light, and electric-railroad operation groups have been combined and are presented as one group—public utilities. Due to the extreme seasonal fluctuations in the canning and preserving industry, and the fact that during certain months the activity in this industry in a number of States is negligible, data for this industry are not presented separately. The number of employees and the amount of weekly pay roll in October and November 1933 as reported by identical establishments in this industry are included, however, in the combined total of "all groups."

The percents of change shown in the accompanying table, unless otherwise noted, are unweighted percents of change; that is, the industries included in the groups, and the groups comprising the total of all groups, have not been weighted according to their relative importance in the combined totals.

The State totals for the anthracite-mining industry, which is confined entirely to the State of Pennsylvania, will be found in table 1, nonmanufacturing industries.

When the identity of any reporting company would be disclosed by the publication of a State total for any industrial group, figures for the group do not appear in the separate industrial-group tabulation, but are included in the State totals for "all groups." Data are not presented for any industrial group when the representation in the State covers less than three establishments.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN OCTOBER AND NOVEMBER 1933, BY STATES

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Total, all groups					Manufacturing				
	Number of establishments	Number on pay roll Nov. 15, 1933	Per cent of change	Amount of pay roll (1 week) Nov. 15, 1933	Per cent of change	Number of establishments	Number on pay roll Nov. 15, 1933	Per cent of change	Amount of pay roll (1 week) Nov. 15, 1933	Per cent of change
Alabama	523	65,255	−2.0	$836,245	−4.6	211	45,963	−2.7	$569,282	−6.6
Arizona	409	9,047	+.9	179,802	−1.9	42	2,027	+.2	36,665	−6.6
Arkansas	[1] *426*	*18,718*	*+.2*	*250,954*	*−2.1*	*174*	*13,451*	−[2]	*167,857*	*−2.4*
California	[3] *1,829*	*250,099*	*−.9*	*5,912,633*	*−3.0*	*1,045*	*139,981*	*−10.6*	*3,063,479*	*−5.9*
Colorado	826	33,355	−3.8	691,253	−1.4	108	12,390	−4.0	256,142	+.5
Connecticut	1,114	164,239	−2.0	3,081,418	−4.0	632	143,018	−2.3	2,539,725	−4.9
Delaware	154	10,559	−13.9	214,509	−8.3	47	7,519	−2.5	142,495	−4.7
Dist. of Columbia	614	33,052	+1.8	747,880	+.1	51	3,382	−.8	108,914	−.1
Florida	632	27,369	+1.6	451,112	−.8	129	14,972	−1.0	212,405	−2.1
Georgia	729	88,664	−3.6	1,208,370	−3.5	303	71,566	−3.6	873,543	−4.3
Idaho	238	9,982	+5.4	188,564	+11.5	35	5,053	+12.8	92,826	+22.7
Illinois	[4] *1,755*	*340,231*	*−2.6*	*6,993,196*	*−3.7*	*1,105*	*213,499*	*−3.9*	*3,974,049*	*−6.3*
Indiana	1,310	129,862	−5.2	2,407,855	−.7	563	95,223	−3.1	1,756,195	+1.5
Iowa	1,184	45,901	−1.4	848,180	−3.4	396	23,857	−2.2	432,617	−3.0
Kansas	[5] *1,366*	*71,299*	[6]+(2)	*1,581,233*	[6]*+2.2*	*447*	*27,649*	*−2.1*	*574,354*	*−.3*
Kentucky	879	70,946	−4.7	1,139,323	−10.8	200	25,025	−10.1	371,576	−24.5
Louisiana	458	32,618	−1.2	533,127	−1.5	191	18,780	−1.8	270,713	−1.8
Maine	561	44,343	−9.0	723,248	−11.1	177	36,628	−8.1	582,115	−12.1
Maryland	*806*	*90,472*	*−2.3*	*1,772,955*	*−2.8*	*444*	*64,679*	[6]*−5.1*	*1,217,823*	[6]*−4.8*
Massachusetts	[8] *8,048*	*385,949*	*−2.5*	*7,867,169*	*−3.1*	*1,142*	*198,339*	*−4.7*	*3,625,464*	*−6.3*
Michigan	1,664	265,421	−5.7	5,447,086	−8.3	*651*	*229,098*	*−7.6*	*4,651,431*	*−6.8*
Minnesota	1,140	72,953	−1.1	1,466,184	−2.8	281	33,057	−4.6	635,302	−4.7
Mississippi	373	10,573	−3.4	143,508	−4.0	73	6,919	−5.5	86,958	−6.1
Missouri	1,214	110,978	−4.3	2,163,148	−5.7	502	58,938	−7.9	1,036,539	−10.4
Montana	361	11,640	+1.0	270,176	−.4	50	3,786	−1.1	73,072	−5.9
Nebraska	718	22,676	−2.7	469,643	−2.6	112	10,678	−4.3	216,916	−3.0
Nevada	146	1,859	+.8	45,073	+1.7	22	290	−3.0	6,547	−1.8
New Hampshire	491	35,834	−7.9	587,096	−3.5	181	31,358	−8.2	490,150	−2.7
New Jersey	1,522	211,471	+5.0	4,725,167	+5.4	[7] *650*	*183,802*	+(2)	*3,877,518*	*+.6*
New Mexico	191	4,609	−3.0	82,709	−7.8	24	713	+.3	12,389	−1.5
New York	8,292	573,053	−1.6	13,537,088	−2.1	[8] *1,803*	*354,108*	*−3.2*	*7,880,324*	*−4.3*
North Carolina	893	124,708	−2.5	1,571,644	−7.9	533	119,390	−2.6	1,486,257	−8.3
North Dakota	336	4,469	+1.4	89,267	−2.8	56	953	−5.0	18,981	−8.3
Ohio	4,941	422,030	−3.8	7,888,825	−9.2	1,819	303,270	−4.4	5,410,173	−11.9
Oklahoma	833	31,271	−.1	617,735	−1.0	147	9,989	−3.0	186,337	−3.6
Oregon	698	33,624	−17.7	643,475	−16.0	150	19,065	−4.2	337,835	−9.4
Pennsylvania	5,062	676,599	+2.3	13,164,007	−4.3	*1,753*	*392,454*	*−1.3*	*6,818,851*	*−4.5*
Rhode Island	897	55,049	−12.2	996,904	−14.5	249	42,106	−15.5	695,940	−19.9
South Carolina	327	59,035	−1.0	747,501	−2.4	170	55,189	−1.6	687,510	−2.8
South Dakota	259	6,380	+1.7	150,579	+5.6	44	2,325	+9.0	44,914	+19.9
Tennessee	732	65,045	−2.9	980,709	−3.6	249	46,495	−3.6	670,305	−4.7
Texas	*817*	*73,405*	*−.3*	*1,592,570*	*+1.4*	*397*	*42,198*	*+1.4*	*862,214*	*+2.2*
Utah	335	16,024	−.1	310,027	+1.8	73	6,442	+18.8	111,501	+18.1
Vermont	379	10,190	−3.8	183,684	−4.6	113	5,376	−5.1	91,689	−8.0
Virginia	1,280	85,351	−3.4	1,403,655	−3.6	385	57,789	−4.3	892,345	−4.8
Washington	1,159	57,695	−8.4	1,147,288	−6.2	252	27,802	−5.1	522,398	−4.1
West Virginia	870	117,106	+4.7	2,202,028	+8.9	173	44,573	+9.8	843,566	+26.1
Wisconsin	[9] *1,044*	*151,113*	*−3.5*	*2,639,475*	*−5.4*	*772*	*119,200*	[6]*−.6*	*2,024,895*	[6]*−3.1*
Wyoming	195	6,648	−.6	154,439	−11.8	22	1,759	−4.6	44,116	−2.7

[1] Includes automobile dealers and garages, and sand, gravel, and building construction.
[2] Less than one tenth of 1 percent.
[3] Includes banks, insurance, and office employment.
[4] Includes building and contracting.
[5] Includes construction, municipal, agricultural, and office employment, amusement and recreation, professional, and transportation services.
[6] Weighted percent of change.
[7] Includes laundries.
[8] Includes laundering and cleaning.
[9] Includes construction but does not include hotels and restaurants.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN OCTOBER AND NOVEMBER 1933, BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Wholesale trade					Retail trade				
	Number of establishments	Number on pay roll Nov. 15, 1933	Percent of change	Amount of pay roll (1 week) Nov. 15, 1933	Percent of change	Number of establishments	Number on pay roll Nov. 15, 1933	Percent of change	Amount of pay roll (1 week) Nov. 15, 1933	Percent of change
Alabama	14	577	+0.5	$14,988	+0.4	63	2,136	−2.3	$36,546	−1.3
Arizona	22	174	+2.4	4,310	−4.8	192	1,932	+3.4	33,768	+.8
Arkansas	*20*	*567*	−.7	*13,576*	*−10.8*	*120*	*1,423*	*+1.4*	*13,719*	*+7.1*
California	*95*	*5,254*	+.4	*145,767*	*+1.0*	*125*	*24,143*	*−.5*	*489,914*	*−.8*
Colorado	26	842	−.5	22,892	−6.8	278	4,391	−2.9	84,051	−4.1
Connecticut	55	964	−.2	28,379	−2.3	125	5,347	−.6	104,997	−1.4
Delaware	7	110	−1.8	2,216	+.2	27	374	+4.5	6,692	+2.1
Dist. of Columbia	25	342	+.3	10,100	−1.8	410	13,042	+3.6	257,792	+.7
Florida	72	1,140	+2.1	26,083	+.9	105	2,216	+4.0	40,404	+3.2
Georgia	31	432	+2.6	12,018	−.9	84	3,579	+.6	61,801	−2.8
Idaho	8	133	+8.1	3,306	−4.1	68	919	−3.4	14,799	−3.5
Illinois	*48*	*2,500*	*+3.2*	*58,523*	*+.3*	*148*	*26,311*	*+5.4*	*510,066*	*+3.8*
Indiana	70	1,616	−.2	37,624	−.9	185	7,132	+2.7	123,803	+.9
Iowa	38	1,137	−3.8	27,335	−8.9	121	3,355	+2.8	57,652	+.1
Kansas	*81*	*2,142*	*+1.7*	*49,798*	*+2.2*	*491*	*7,094*	*+1.8*	*122,834*	*−.3*
Kentucky	21	418	−3.0	9,087	−4.8	61	2,492	−2.0	41,937	−2.4
Louisiana	21	653	+1.4	14,611	−4.9	27	3,766	+18.1	54,489	+4.3
Maine	18	444	−4.3	10,352	−4.7	67	955	−.6	17,682	+.5
Maryland	*34*	*740*	*−.3*	*16,319*	*−2.7*	*38*	*7,333*	*+2.7*	*124,100*	*+1.8*
Massachusetts	*708*	*15,543*	*−.5*	*397,010*	*−.9*	*4,172*	*67,841*	*+1.5*	*1,311,980*	*+1.5*
Michigan	65	1,570	−.9	41,721	−5.7	161	13,180	+6.1	249,685	−1.5
Minnesota	79	5,249	+.6	132,717	−3.8	272	9,681	+12.2	152,201	+3.8
Mississippi	4	114	+1.8	2,215	+.3	47	483	+2.8	5,259	−4.7
Missouri	60	4,781	+.5	120,652	−4.3	137	11,232	+11.3	207,042	+5.2
Montana	14	242	−.8	7,109	−4.6	83	903	−.4	18,056	−2.3
Nebraska	34	981	−1.1	25,177	−6.0	188	2,086	+1.0	38,232	+.8
Nevada	8	115	+2.7	3,403	+.9	43	281	−8.2	6,306	−4.0
New Hampshire	16	168	−.6	4,329	+.1	73	1,018	+1.6	14,829	−3.1
New Jersey	22	621	−.3	16,797	−.8	417	9,239	+5.0	198,038	+3.1
New Mexico	6	87	[10]	3,000	−3.5	49	268	+.4	6,316	+1.4
New York	445	13,326	−.7	397,118	−2.3	4,147	82,037	+2.2	1,724,279	+1.9
North Carolina	14	172	−1.7	3,643	−.3	158	708	+6.5	14,691	+3.3
North Dakota	16	273	−2.8	6,835	−8.6	11	308	+3.0	4,361	−5.6
Ohio	234	5,385	−.1	132,377	−2.6	1,584	38,681	+2.0	709,015	−.7
Oklahoma	54	1,136	+1.9	24,945	−4.4	153	2,797	+3.0	51,473	−2.7
Oregon	52	1,398	−.9	35,161	−7.8	178	2,359	−3.8	46,572	−5.5
Pennsylvania	122	3,639	−.1	95,861	−2.1	351	32,159	+.6	613,436	−.2
Rhode Island	40	1,114	+.8	26,090	+.8	492	5,699	+1.5	107,131	+.6
South Carolina	14	221	+1.8	4,898	−.6	29	688	+3.3	7,927	−.1
South Dakota	9	111	[10]	2,919	−4.1	9	124	[10]	2,152	+2.3
Tennessee	35	871	−2.1	17,571	−4.9	54	3,892	−1.5	60,609	+[2]
Texas	*131*	*3,419*	*+3.1*	*81,669*	*+.4*	*85*	*8,403*	*−1.2*	*142,325*	*+.4*
Utah	14	506	+.2	12,374	+.4	77	575	−1.0	13,007	−3.8
Vermont	5	115	[10]	2,697	−1.1	39	456	−4.2	7,037	−5.6
Virginia	47	1,213	−1.0	26,468	−3.4	480	5,493	−.2	101,346	−1.3
Washington	105	2,274	−1.8	58,147	−7.0	393	6,837	−4.7	127,407	−4.6
West Virginia	27	576	−.5	14,13[illegible]	−10.5	53	953	−.3	15,999	−7.6
Wisconsin	*46*	*2,252*	*−.3*	*47,763*	*−2.3*	*50*	*11,058*	*−.3*	*152,712*	*−5.9*
Wyoming	8	61	−4.7	1,727	−7.4	44	260	−1.9	5,883	−6.0

[2] Less than one tenth of 1 percent.
[10] No change.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN OCTOBER AND NOVEMBER 1933, BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Quarrying and nonmetallic mining					Metalliferous mining				
	Number of establishments	Number on pay roll Nov. 15, 1933	Percent of change	Amount of pay roll (1 week) Nov. 15, 1933	Percent of change	Number of establishments	Number on pay roll Nov. 15, 1933	Percent of change	Amount of pay roll (1 week) Nov. 15, 1933	Percent of change
Alabama	15	643	+1.9	$5,903	−7.4	10	1,754	+5.7	$22,374	−6.2
Arizona	4	61	−3.2	833	+4.3	20	2,309	−2.2	51,335	−4.1
Arkansas	10	299	−7.7	3,697	−17.9					
California	41	1,249	+4.0	24,261	+2.4	*34*	*2,664*	*+.2*	*63,455*	*+6.6*
Colorado	5	44	−17.0	657	−15.8	15	1,064	+1.9	26,608	−7.0
Connecticut	26	347	−1.7	5,630	+.1					
Delaware	3	73	+23.7	1,304	+52.7					
Dist. of Columbia										
Florida	14	821	+6.3	9,707	+10.5					
Georgia	27	1,426	−3.8	14,063	−10.4					
Idaho						11	2,168	+1.0	48,836	+4.2
Illinois	24	774	−14.4	13,392	−10.3					
Indiana	67	1,366	−16.7	19,541	−21.0					
Iowa	33	476	−19.7	6,508	−19.9					
Kansas	*25*	*1,226*	*+.9*	*22,178*	*−1.4*	*10*	*853*	*+.8*	*17,541*	*+10.6*
Kentucky	34	1,004	+3.6	11,085	+17.1					
Louisiana	7	633	+2.4	9,196	−3.0					
Maine	9	408	+107.1	6,632	+79.6					
Maryland	*14*	*291*	*−8.2*	*3,900*	*−8.2*					
Massachusetts	24	479	−8.9	9,830	−13.1					
Michigan	45	1,417	+1.1	22,393	−16.7	42	4,278	+6.0	62,311	+5.0
Minnesota	31	418	−21.9	6,429	−30.1	31	1,329	−16.9	23,867	−29.4
Mississippi	11	213	+3.9	2,294	−5.3					
Missouri	48	1,310	+12.0	18,399	+2.0	14	1,670	−1.8	22,671	+3.7
Montana	9	56	−54.1	762	−45.1	17	2,537	+6.6	68,249	+1.5
Nebraska	6	249	+9.2	3,577	+11.2					
Nevada						18	572	+5.0	14,225	+6.5
New Hampshire	10	122	−43.5	2,312	−63.8					
New Jersey	37	666	+2.1	12,003	+6.9	3	14	+7.7	335	+27.9
New Mexico						5	952	+2.3	16,869	−13.4
New York	80	2,021	−8.0	33,704	−14.5					
North Carolina	14	440	+11.4	4,817	−3.3					
North Dakota										
Ohio	144	3,470	−6.4	48,002	−14.8					
Oklahoma	14	275	+11.3	2,295	+19.0	31	1,460	−9.8	23,780	−2.4
Oregon	5	76	+22.6	1,130	+14.8	6	71	+18.3	1,373	+23.5
Pennsylvania	152	4,834	−9.5	65,024	−15.8					
Rhode Island										
South Carolina	7	120	+4.3	1,129	+6.4					
South Dakota	8	55	−11.3	876	−24.0					
Tennessee	29	1,438	−9.7	18,065	−10.7	4	312	−.3	6,126	−2.8
Texas	*22*	*468*	*+6.6*	*9,037*	*+.5*					
Utah	6	178	+30.9	2,313	+13.9	12	1,998	−5.2	40,100	−2.2
Vermont	38	2,218	−4.2	41,565	−2.5					
Virginia	30	1,172	−10.1	10,427	−16.0					
Washington	14	231	+77.7	4,141	+101.2					
West Virginia	21	887	+1.8	11,736	−9.1					
Wisconsin	*14*	*198*	*+18.5*	*2,705*	*+20.3*	(11)	*378*	+(2)	*7,616*	*+10.0*
Wyoming										

[2] Less than one tenth of 1 percent.
[11] Not available.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN OCTOBER AND NOVEMBER 1933, BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Bituminous-coal mining					Crude-petroleum producing				
	Number of establishments	Number on pay roll Nov. 15, 1933	Percent of change	Amount of pay roll (1 week) Nov. 15, 1933	Percent of change	Number of establishments	Number on pay roll Nov. 15, 1933	Percent of change	Amount of pay roll (1 week) Nov. 15, 1933	Percent of change
Alabama	55	9,604	−0.7	$116,541	+1.6					
Arizona										
Arkansas	*3*	*247*	(19)	*5,707*	*+23.6*	8	469	−1.9	$11,186	−4.6
California						39	7,196	+2.5	211,019	−2.8
Colorado	50	4,703	+5.0	82,064	+1.7					
Connecticut										
Delaware										
Dist. of Columbia										
Florida										
Georgia										
Idaho										
Illinois	*25*	*8,165*	*+3.7*	*153,664*	*−4.0*	10	209	+13.6	4,328	+22.6
Indiana	50	5,611	+4.5	119,880	+15.7	5	45	−4.3	787	+15.2
Iowa	22	2,270	+20.9	37,579	−3.5					
Kansas	*30*	*2,095*	*+3.0*	*38,852*	*+22.5*	30	1,589	+9.3	36,136	+15.6
Kentucky	164	31,053	−.6	492,790	−2.5	6	241	−7.7	3,326	−7.5
Louisiana						10	247	+1.2	5,641	+3.7
Maine										
Maryland	*14*	*1,504*	*+4.3*	*22,751*	*+17.8*					
Massachusetts										
Michigan										
Minnesota										
Mississippi										
Missouri	19	1,677	+3.8	23,381	−7.9					
Montana	11	953	+4.4	24,643	+3.9	4	32	+33.3	634	+12.4
Nebraska										
Nevada										
New Hampshire										
New Jersey										
New Mexico	13	1,344	−10.0	22,975	−12.4	4	35	+12.9	908	+9.4
New York						3	81	+19.1	2,115	+3.3
North Carolina										
North Dakota	10	831	+15.3	16,698	+10.5					
Ohio	83	13,851	+4.4	250,195	+2.0	6	67	−23.0	766	−41.5
Oklahoma	20	903	+12.5	15,496	+.6	62	5,704	+4.9	134,212	+3.9
Oregon										
Pennsylvania	449	63,788	+34.0	1,084,637	+81.5	21	959	+7.3	21,833	+8.1
Rhode Island										
South Carolina										
South Dakota										
Tennessee	22	3,040	+2.1	38,968	+1.1					
Texas	5	356	−4.0	5,973	−12.4	*3*	*8,552*	*+1.3*	*274,178*	*+3.1*
Utah	19	2,381	+7.2	55,931	+.7					
Vermont										
Virginia	39	8,730	+3.9	148,430	+3.6					
Washington	11	1,317	+220.4	32,383	+185.2					
West Virginia	358	61,095	+2.6	1,117,537	+1.6	6	393	+17.3	8,051	+8.6
Wisconsin										
Wyoming	32	3,508	+2.8	79,045	−18.9	7	179	−6.3	4,855	−.6

[19] No change.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN OCTOBER AND NOVEMBER 1933, BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Public utilities					Hotels				
	Number of establishments	Number on pay roll Nov. 15, 1933	Percent of change	Amount of pay roll (1 week) Nov. 15, 1933	Percent of change	Number of establishments	Number on pay roll Nov. 15, 1933	Percent of change	Amount of pay roll (1 week) Nov. 15, 1933	Percent of change
Alabama	89	1,752	+0.9	$36,983	+2.9	26	1,197	+3.1	$9,853	+0 8
Arizona	67	1,456	+4.5	35,015	+3.7	21	472	+1.3	6,747	+3.3
Arkansas	*62*	*1,804*	+.4	*37,911*	−.7	*16*	*637*	+8.7	*6,033*	+28.8
California	*43*	*41,931*	+.7	*1,164,424*	−(2)	*167*	*7,827*	+.4	*120,319*	+4.0
Colorado	196	5,395	+.1	134,131	−2.3	57	1,279	−5.5	17,386	−2.7
Connecticut	133	9,510	+.9	290,254	+2.0	28	1,217	−.8	15,278	+1.8
Delaware	28	1,124	+1.8	31,345	+.3	6	255	+1.6	3,433	+.9
Dist. of Columbia	22	8,554	+1.8	229,478	−.8	46	4,119	+1.7	58,479	+3.3
Florida	185	4,533	−5.1	111,640	−9.4	61	1,222	+8.7	11,592	+8.2
Georgia	186	6,535	+.5	180,086	+1.5	22	814	+.5	6,100	−(2)
Idaho	56	766	+4.9	14,916	+4.9	21	351	−.6	4,054	+1.1
Illinois	*81*	*71,237*	*+1.1*	*1,947,600*	+.6	[12] *55*	*10,860*	*−16.6*	*165,725*	*−22.0*
Indiana	133	9,379	+1.6	220,560	−4.0	78	2,825	−5.0	27,511	−6.2
Iowa	430	9,379	+1.3	207,805	−2.4	69	2,565	+6.3	23,533	+5.1
Kansas	[11] *125*	*7,417*	*+1.6*	*171,625*	*+2.7*	*32*	*728*	+.7	*7,758*	*+1.4*
Kentucky	293	6,315	+.2	143,168	−1.7	36	1,866	+.2	18,805	+1.0
Louisiana	150	5,696	+3.1	139,159	−.7	22	1,818	+4.8	19,027	+5.9
Maine	169	2,652	+3.2	69,392	+.6	26	772	−36.0	9,042	−34.7
Maryland	*94*	*12,675*	*+1.5*	*341,172*	*+.8*	*22*	*1,138*	*+9.4*	*13,996*	*+7.8*
Massachusetts	*131*	*45,412*	*−.6*	*1,254,837*	*−1.5*	*82*	*4,845*	*+1.2*	*66,236*	*+2.4*
Michigan	412	20,451	+.2	615,494	+3.1	98	4,535	−.2	50,945	+1.6
Minnesota	232	12,624	−1.4	311,778	−5.8	76	3,325	+3.0	38,028	+.9
Mississippi	190	1,676	+.7	34,860	+1.4	15	430	+2.9	2,992	+2.8
Missouri	185	19,332	−.9	500,856	−.7	86	4,272	+1.0	50,736	+2.2
Montana	100	1,982	+1.5	57,122	+6.3	30	444	+3.7	5,858	+1.4
Nebraska	299	5,604	+.1	139,761	−1.6	42	1,585	+6.0	15,610	+2.5
Nevada	38	421	+18.9	10,996	+8.0	10	93	−33.1	1,648	−26.2
New Hampshire	140	2,227	+3.6	57,907	+.8	15	180	−58.2	2,138	−59.5
New Jersey	265	21,151	−.1	591,893	−2.0	62	3,415	−2.6	41,489	−3.5
New Mexico	53	577	−4.0	11,549	−6.4	14	323	+.9	3,264	−4.4
New York	856	97,279	+1.1	2,976,700	+1.8	255	30,719	+.1	469,482	+1.7
North Carolina	96	1,748	−2.5	36,737	−2.0	33	1,225	+3.6	10,562	+1.4
North Dakota	170	1,209	−.7	28,523	−4.5	21	364	+2.8	3,439	−2.6
Ohio	464	33,814	+.4	873,209	−3.0	144	8,281	+.3	98,271	+1.5
Oklahoma	245	5,968	+.7	133,650	−.2	58	1,495	+2.4	16,103	+.9
Oregon	183	5,531	−.4	137,269	−2.1	60	1,281	+1.5	15,470	+.1
Pennsylvania	*809*	*54,406*	*+.4*	*1,471,087*	*−1.3*	168	9,091	−1.0	110,987	+.2
Rhode Island	42	3,301	+1.2	94,594	+.9	14	325	−1.8	3,865	−.7
South Carolina	70	1,599	+4.3	32,823	−2.6	11	281	−.7	2,327	+2.5
South Dakota	129	1,047	+2.1	25,158	+.1	19	302	−1.6	3,649	−1.9
Tennessee	245	4,482	+1.2	100,044	−.7	35	2,003	+3.6	16,688	+.4
Texas	*134*	*6,750*	*−11.5*	*177,866*	*−2.8*	*45*	*3,615*	*−1.5*	*45,281*	−.7
Utah	69	1,906	+2.8	38,428	+1.0	12	467	([10])	5,730	−.2
Vermont	122	1,109	+5.1	26,976	+5.4	22	524	−8.2	5,105	−9.6
Virginia	179	5,894	+(2)	141,201	−2.4	31	1,989	+8.1	20,143	+3.8
Washington	196	9,658	+.8	257,325	−.5	82	2,464	−1.9	28,313	−.6
West Virginia	120	5,996	−4.4	150,067	−4.7	37	1,121	+1.5	11,856	+1.4
Wisconsin	[12] *41*	*10,635*	*−1.6*	*300,249*	*−3.8*	[13] *43*	*1,263*	*−1.5*	([14])	
Wyoming	48	452	+.7	10,443	−.1	10	117	−2.5	1,519	−3.3

[2] Less than one tenth of 1 percent.
[10] No change.
[11] Includes steam railroads.
[12] Includes railways and express.
[13] Includes restaurants.
[14] Not available.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN OCTOBER AND NOVEMBER 1933, BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Laundries					Dyeing and cleaning				
	Number of establishments	Number on pay roll Nov. 15, 1933	Per cent of change	Amount of pay roll (1 week) Nov. 15, 1933	Per cent of change	Number of establishments	Number on pay roll Nov. 15, 1933	Per cent of change	Amount of pay roll (1 week) Nov. 15, 1933	Per cent of change
Alabama	18	990	−2.8	$8,699	−0.5					
Arizona	11	378	−.8	5,180	+3.2					
Arkansas	*12*	*316*	*−11.7*	*2,812*	*−15.2*	3	42	−6.7	$468	−23.9
California	[15] *64*	*4,598*	+[2]	*81,800*	*−.1*					
Colorado	34	1,328	−1.0	16,903	+.2	11	163	−5.2	2,798	−8.6
Connecticut	46	1,762	−1.9	27,329	−1.8	9	216	−6.1	4,321	−7.0
Delaware	4	297	−4.5	4,990	−1.9					
Dist. of Columbia	14	2,150	−2.3	33,428	−.3	5	116	−12.1	2,139	−7.1
Florida	21	971	+1.1	8,955	+4.9	9	98	+5.4	1,427	+.1
Georgia	30	2,326	−2.8	23,309	−4.7	4	91	−7.1	1,055	−6.2
Idaho	19	361	+.6	5,453	+.7					
Illinois	[15] *25*	*1,502*	*−3.2*	*20,799*	*−5.0*					
Indiana	46	2,003	−3.6	26,200	−2.3	10	143	−2.7	2,168	−9.7
Iowa	33	1,185	−2.2	15,785	−2.2	6	232	−9.4	3,651	−6.2
Kansas	[15] *41*	*868*	*−5.4*	*10,905*	*−6.8*					
Kentucky	33	1,384	−2.2	16,441	−1.2	5	239	−4.8	3,269	−9.4
Louisiana	7	447	−5.5	4,514	−4.6	4	76	−3.8	848	−12.6
Maine	23	513	−6.7	7,250	−8.8					
Maryland	*23*	*1,752*	*−4.4*	*27,062*	*−1.9*	*10*	*181*	*+1.1*	*3,028*	*−1.4*
Massachusetts	*114*	*3,843*	*−.8*	*61,447*	*−.4*	*80*	*1,984*	*−4.1*	*34,820*	*+1.0*
Michigan	56	2,725	−.8	36,833	−1.5	13	377	−9.6	7,251	−8.6
Minnesota	49	1,757	−3.1	25,621	−4.4	14	489	−9.1	8,007	−11.4
Mississippi	11	399	−3.4	3,597	−5.4					
Missouri	53	2,407	−23.5	32,663	−20.8	11	362	−11.5	6,006	−15.7
Montana	17	412	−2.1	6,904	−3.6	3	20	−9.1	444	−4.5
Nebraska	12	669	+1.7	8,902	+1.6	4	98	−10.1	1,778	−7.5
Nevada	4	50	−2.0	922	−3.6					
New Hampshire	15	266	−5.0	3,982	−3.4					
New Jersey	26	3,004	−5.0	58,459	−5.3	7	210	−.5	5,172	−3.3
New Mexico	6	216	+1.4	3,023	−1.5					
New York	71	6,947	−2.9	120,881	−.7	14	502	−8.2	9,528	−8.8
North Carolina	13	643	−1.4	6,892	−.1	4	65	−19.8	822	−17.3
North Dakota	11	230	−.4	3,445	−1.2					
Ohio	75	3,824	−2.3	55,989	−2.5	39	1,552	−5.4	27,272	−9.0
Oklahoma	16	745	−3.4	9,066	−4.8	7	171	−13.6	2,349	−13.4
Oregon	9	337	−1.7	4,804	−4.0	4	60	−6.2	1,114	−7.5
Pennsylvania	38	2,740	−.5	41,603	−.7	16	946	−11.1	16,716	−18.3
Rhode Island	22	1,106	−.9	18,404	−1.3	5	314	−9.8	5,707	−12.2
South Carolina	10	520	−6.5	5,046	−4.0					
South Dakota	8	192	−1.5	2,457	−1.2					
Tennessee	15	1,299	−5.1	11,686	−5.2	4	52	−3.7	646	−14.3
Texas	24	1,112	−4.7	12,113	−3.8	15	466	−5.1	7,209	−7.6
Utah	9	579	[10]	8,408	+.6	7	84	−1.2	1,544	−2.1
Vermont	9	137	+.7	1,722	−5.4					
Virginia	17	998	−7.5	11,018	−6.9	20	316	−3.1	4,463	−5.4
Washington	16	605	−2.4	10,300	−3.0	9	80	−5.9	1,319	−13.8
West Virginia	22	734	−.9	9,145	−1.3	7	175	−.6	2,425	−2.6
Wisconsin	[15] *28*	*939*	*−5.7*	*12,016*	*−6.8*					
Wyoming	8	140	−.7	2,186	+.8					

[2] Less than one tenth of 1 percent.
[10] No change.
[15] Includes dyeing and cleaning.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN OCTOBER AND NOVEMBER 1933, BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Banks, brokerage, insurance, and real estate				
	Number of establishments	Number on pay roll Nov. 15, 1933	Percent of change	Amount of pay roll (1 week) Nov. 15, 1933	Percent of change
Alabama	18	472	(10)	$13,448	+0.4
Arizona	28	201	−1.5	5,299	−4.8
Arkansas	19	242	(10)	5,906	−.1
California	1,134	23,375	−.7	762,840	−.4
Colorado	31	1,088	−.6	39,626	+4.8
Connecticut	59	1,847	+.2	65,275	+1.9
Delaware	15	562	−.5	19,371	−.9
District of Columbia	41	1,347	+.9	47,550	−.6
Florida	20	584	+1.0	17,620	−.4
Georgia	31	1,120	+1.3	33,350	+2.7
Idaho	16	150	+8.7	3,928	+13.3
Illinois	94	10,842	+.4	375,400	+1.9
Indiana	43	1,492	+.5	47,834	−.1
Iowa	17	983	(10)	31,215	−.9
Kansas	*82*	*798*	−.3	*24,862*	−.5
Kentucky	20	709	−.7	25,408	−.6
Louisiana	9	368	−.8	13,512	−.1
Maine	15	247	−.4	6,472	−.2
Maryland	24	857	+.1	31,287	−1.2
Massachusetts	16 *273*	*7,336*	−.4	*215,606*	−(2)
Michigan	93	4,327	+.6	133,908	+(2)
Minnesota	53	4,611	+10.0	127,929	+25.5
Mississippi	17	197	+1.0	4,364	+1.0
Missouri	87	4,758	+.1	139,662	+.1
Montana	21	244	(10)	6,879	+.2
Nebraska	17	501	−.8	17,246	−1.0
Nevada					
New Hampshire	39	464	−1.3	11,041	−1.9
New Jersey	121	12,601	+.5	361,992	+2.6
New Mexico	15	78	−1.3	2,286	+.3
New York	726	53,369	−.6	1,862,628	+1.0
North Carolina	27	292	(10)	7,018	−.7
North Dakota	38	275	+.4	6,567	−.3
Ohio	282	7,985	−.2	261,536	+.8
Oklahoma	24	611	+1.5	17,837	−.4
Oregon	25	1,180	+.3	34,737	−9.3
Pennsylvania	*805*	*23,959*	+(2)	*746,582*	+.6
Rhode Island	31	1,067	+2.2	44,863	+7.6
South Carolina	9	100	+2.0	2,899	+1.6
South Dakota	31	236	−1.7	5,935	−1.3
Tennessee	36	1,158	+.8	39,980	+2.2
Texas	27	1,479	+1.1	42,192	+2.6
Utah	16	471	−.2	16,323	−1.2
Vermont	28	226	−.9	6,469	−.3
Virginia	36	1,378	+.4	44,253	−.4
Washington	35	1,355	+.5	41,986	+1.3
West Virginia	44	603	−1.0	17,507	−.1
Wisconsin	17	916	−.3	30,889	−.7
Wyoming	12	114	−.9	3,461	−2.3

[2] Less than one tenth of 1 percent.
[10] No change.
[16] Includes banks and trust companies, insurance companies, and agencies.

Employment and Pay Rolls in November 1933 in Cities of Over 500,000 Population

IN THE following table are presented the fluctuations in employment and pay-roll totals in November 1933 as compared with October 1933 in 13 cities of the United States having a population of 500,000 or over. These changes are computed from reports received from identical establishments in each of the months considered.

In addition to including reports received from establishments in the several industrial groups regularly covered in the Bureau's survey, excluding building construction, reports have also been secured from other establishments in these cities for inclusion in these totals. Information concerning employment in building construction is not available for all cities at this time and therefore has not been included.

FLUCTUATIONS IN EMPLOYMENT AND PAY ROLLS IN NOVEMBER 1933, AS COMPARED WITH OCTOBER 1933

Cities	Number of establishments reporting in both months	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October 1933	November 1933		October 1933	November 1933	
New York City	5,260	344,495	343,559	−0.3	$8,975,266	$8,975,711	+(1)
Chicago, Ill	1,821	239,125	232,334	−2.8	5,578,196	5,390,684	−3.4
Philadelphia, Pa	820	149,543	147,332	−1.5	3,355,169	3,260,509	−2.8
Detroit, Mich	543	165,882	153,393	−7.5	3,668,890	3,305,915	−9.9
Los Angeles, Calif	816	77,928	76,464	−1.9	1,873,223	1,808,264	−3.5
Cleveland, Ohio	1,088	97,256	94,631	−2.7	2,000,984	1,904,321	−4.8
St. Louis, Mo	511	70,147	67,180	−4.2	1,440,210	1,362,016	−5.4
Baltimore, Md	575	56,035	54,499	−2.7	1,123,229	1,078,045	−4.0
Boston, Mass	3,655	99,371	97,632	−1.8	2,377,684	2,348,833	−1.2
Pittsburgh, Pa	403	56,280	55,850	−.8	1,226,302	1,182,463	−3.6
San Francisco, Calif	1,126	50,373	49,017	−2.7	1,213,069	1,177,841	−2.9
Buffalo, N.Y	439	43,235	42,238	−2.3	937,505	922,809	−1.6
Milwaukee, Wis	451	48,015	47,014	−2.1	964,579	929,623	−3.6

[1] Less than one tenth of 1 percent.

Employment in the Executive Civil Service of the United States, November 1933

THE United States Government had 588,035 employees on its pay rolls during the month of November. This is an increase of 16,973 as compared with November 1932. Comparing November 1933 with October 1933, there was an increase of 10,865 employees or 1.9 percent.

This data does not include the legislative, judicial, or Army and Navy services. The information shown in table 1 was compiled by the various departments and offices of the United States Government and sent to the United States Civil Service Commission where it was assembled. The figures were tabulated by the Bureau of Labor Statistics and are published here in compliance with the direction of Congress.

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Table 1 shows the number of Federal employees inside the District of Columbia, the number of Federal employees outside of the District of Columbia, and the total number of such employees for the entire Federal service.

Approximately 12 percent of the total workers employed by the United States Government work in the city of Washington.

TABLE 1.—EMPLOYEES IN THE EXECUTIVE CIVIL SERVICE OF THE UNITED STATES NOVEMBER 1932, OCTOBER AND NOVEMBER 1933

Item	District of Columbia			Outside the District			Entire service		
	Permanent	Temporary [1]	Total	Permanent	Temporary [1]	Total	Permanent	Temporary [1]	Total
Number of employees:									
November 1932	64,342	2,046	66,388	468,620	36,054	504,674	532,962	38,100	571,062
October 1933	64,668	6,386	71,054	454,056	52,060	506,116	518,724	58,446	577,170
November 1933	65,830	7,301	73,131	459,965	54,939	514,904	525,795	62,240	588,035
Gain or loss:									
November 1932–November 1933	+1,488	+5,255	+6,743	−8,655	+18,885	+10,230	−7,167	+24,140	+16,973
October 1933–November 1933	+1,162	+915	+2,077	+5,909	+2,879	+8,788	+7,071	+3,794	+10,865
Percent of change:									
November 1932–November 1933	+2.3	+256.8	+10.2	−1.8	+49.6	+2.0	−1.3	+63.4	+3.0
October 1933–November 1933	+1.8	+14.3	+2.9	+1.3	+5.5	+1.7	+1.4	+6.5	+1.9
Labor turnover November 1933:									
Additions	2,324	1,466	3,790	10,121	20,096	30,217	12,445	21,562	34,007
Separations	1,162	551	1,713	4,212	17,217	21,429	5,374	17,768	23,142
Turnover rate per 100	1.78	8.05	2.38	0.92	32.18	4.20	1.03	29.45	3.97

[1] Not including field employees of the Post Office Department.

Comparing November 1933 with October 1933, there was an increase of 2,077 or 2.9 percent in the number of employees in the District of Columbia. The number of permanent employees increased 1.8 percent, while temporary employees increasd 14.3 percent in number.

Comparing November 1933 with November 1932, there was an increase of 2.3 per cent in the number of permanent employees, but an increase of 256.8 percent in the number of temporary employees. The large addition to the number of temporary employees as compared with the same month of the previous year is caused by the creation of the emergency Government units, such as the Public Works Administration, the National Recovery Administration, and the Agricultural Adjustment Administration, etc. The total number of employees increased 10.2 percent.

Outside the District of Columbia, the number of permanent employees decreased 1.8 percent and the number of temporary employees increased 49.6 percent, comparing November 1933 with November 1932.

Comparing November 1933 with October 1933 there was an increase of 1.3 percent in the number of permanent employees, an increase of 5.5 percent in the number of temporary employees, making a net

increase of 1.7 percent in total Federal employment outside of the District of Columbia.

The total Government pay rolls for the Executive Civil Service for the month of October was $75,207,443. November pay rolls totaled $77,309,800.

Employment on Class I Steam Railroads in the United States

REPORTS of the Interstate Commerce Commission for class I railroads show that the number of employees (exclusive of executives and officials) decreased from 1,012,755 on October 15, 1933, to 985,428 on November 15, 1933, or 2.7 percent. Data are not yet available concerning total compensation of employees for November 1933. The latest pay-roll information available shows an increase from $118,777,553 in September to $121,981,119 in October, or 2.7 percent.

The monthly trend of employment from January 1923 to November 1933 on class I railroads—that is, all roads having operating revenues of $1,000,000 or over—is shown by index numbers published in the following table. These index numbers are constructed from monthly reports of the Interstate Commerce Commission, using the 12-month average for 1926 as 100.

TABLE 1.—INDEXES OF EMPLOYMENT ON **CLASS I STEAM RAILROADS** IN THE UNITED STATES, JANUARY 1923 TO NOVEMBER 1933

[12-month average, 1926=100]

Month	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
January	98.3	96.6	95.6	95.8	95.5	89.3	88.2	86.3	73.3	61.2	53.0
February	98.6	97.0	95.4	96.0	95.3	89.0	88.9	85.4	72.7	60.3	52.7
March	100.5	97.4	95.2	96.7	95.8	89.9	90.1	85.5	72.9	60.5	51.5
April	102.0	98.9	96.6	98.9	97.4	91.7	92.2	87.0	73.5	60.0	51.8
May	105.0	99.2	97.8	100.2	99.4	94.5	94.9	88.6	73.9	59.7	52.5
June	107.1	98.0	98.6	101.6	100.9	95.9	96.1	86.5	72.8	57.8	53.6
July	108.2	98.1	99.4	102.9	101.0	95.6	96.6	84.7	72.4	56.4	55.4
August	109.4	99.0	99.7	102.7	99.5	95.7	97.4	83.7	71.2	55.0	56.8
September	107.8	99.7	99.9	102.8	99.1	95.3	96.8	82.2	69.3	55.8	57.7
October	107.3	100.8	100.7	103.4	98.9	95.3	96.9	80.4	67.7	57.0	57.5
November	105.2	99.0	99.1	101.2	95.7	92.9	93.0	77.0	64.5	55.9	55.9
December	99.4	96.0	97.1	98.2	91.9	89.7	88.8	74.9	62.6	54.8	-------
Average	104.1	98.3	97.9	100.0	97.5	92.9	93.3	83.5	70.6	57.9	[1] 54.4

[1] Average for 11 months.

Table 2 shows the total number of employees by occupations on the 15th day of September and of October 1933 and by group totals on the 15th of November 1933; also, pay-roll totals for the entire months of September and October. Total compensation for the month of November is not yet available. Beginning in January 1933 the Interstate Commerce Commission excluded reports of switching and terminal companies from its monthly tabulations. The actual figures for the months shown in the following table therefore are not comparable with the totals published for the months prior to January 1933. The index numbers of employment for class I railroads shown in table 1 have been adjusted to allow for this revision and furnish a monthly indicator of the trend of employment from January 1923 to the latest month available. In these tabulations data for the occupational group reported as "executives, officials, and staff assistants" are omitted.

TABLE 2.—EMPLOYMENT ON CLASS I RAILROADS, SEPTEMBER, OCTOBER, AND NOVEMBER 1933, AND EARNINGS, SEPTEMBER AND OCTOBER 1933

[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. Employment figures for November 1933 are available by group totals only at this time.]

Occupations	Number of employees at middle of month			Total earnings	
	September 1933	October 1933	November 1933	September 1933	October 1933
Professional, clerical, and general	164,058	164,695	163,873	$21,755,246	$22,116,298
Clerks	86,295	86,735	.....	10,811,153	11,036,555
Stenographers and typists	15,376	15,395	.....	1,827,715	1,852,434
Maintenance of way and structures	224,753	218,316	198,614	16,976,799	17,053,238
Laborers, extra gang and work train	25,305	22,968	.....	1,329,912	1,270,357
Laborers, track and roadway section	121,658	117,748	.....	6,734,935	6,755,780
Maintenance of equipment and stores	278,881	275,673	275,583	29,646,178	31,041,415
Carmen	58,322	57,325	.....	6,917,320	7,234,292
Electrical workers	8,208	8,177	.....	1,067,127	1,114,125
Machinists	39,079	38,409	.....	4,899,397	5,179,999
Skilled trades helpers	62,304	61,392	.....	5,529,600	5,817,428
Laborers (shop, engine houses, power plants, and stores)	20,879	21,191	.....	1,552,596	1,616,763
Common laborers (ship, engine houses, power plants, and stores)	19,114	18,920	.....	1,107,924	1,155,680
Transportation, other than train, engine, and yard	126,880	126,924	123,569	13,853,114	14,007,947
Station agents	24,232	24,243	.....	3,332,881	3,384,659
Telegraphers, telephoners, and towermen	14,979	15,046	.....	2,023,279	2,086,106
Truckers (stations, warehouses, and platforms)	18,660	18,532	.....	1,378,984	1,390,749
Crossings and bridge flagmen and gatemen	16,864	17,192	.....	1,131,901	1,130,044
Transportation (yardmaster, switch tenders, and hostlers)	12,264	12,394	12,177	2,047,246	2,079,553
Transportation, train and engine	211,302	214,753	211,612	34,498,970	35,682,668
Road conductors	23,195	23,502	.....	4,889,069	5,044,660
Road brakemen and flagmen	48,520	49,495	.....	6,648,085	6,926,753
Yard brakemen and yard helpers	36,686	36,956	.....	4,622,539	4,764,936
Road engineers and motormen	28,103	28,794	.....	6,555,842	6,774,011
Road firemen and helpers	30,803	31,561	.....	4,744,397	4,905,379
All employees	1,018,138	1,012,755	985,428	118,777,553	121,981,119

Employment Created by the Public Works Fund

IT IS the duty of the Bureau of Labor Statistics to publish each month the number of wage earners, the amount of pay rolls, and the number of man-hours worked by persons employed directly on construction projects financed from the $3,300,000,000 public-works fund.

Allotments for construction projects awarded by the Public Works Administration are divided into two groups—first, Federal allotments, and second, non-Federal allotments.

Projects to be built from Federal allotments are financed wholly by public-works funds. They include such types of projects as post-office buildings, naval vessels, river, harbor, and flood-control work, reclamation projects, and forestry work. They are supervised entirely by a branch of the Federal Government. After the money has been allotted to a Federal agency, it may elect either to do the work by force account (that is by labor hired directly) or to award a contract. Whenever a contract is awarded by one of the Federal agencies, the name and address of the contractor, the type of project, and the amount of the contract are at once furnished the Bureau of Labor Statistics. The bureau then sends a questionnaire to each contractor asking for the number of wage earners employed, the amount of pay rolls, the number of man-hours worked, and the total amount of expenditures for materials, for all pay-roll periods ending between the 15th of the past month and the 15th of the current month. The contractor is also asked to furnish the names and addresses of all subcontractors. The Bureau in turn mails questionnaires to each subcontractor. For work done by force account, the Federal agency must supply the Bureau with the same information as is obtained from the contractors.

Information concerning non-Federal projects is obtained from the State engineers of the Public Works Administration. For the most part, non-Federal projects are confined to building construction, including housing projects; street and road paving; water and sewerage plants. The Public Works Administration makes an outright grant of 30 percent of the total cost of non-Federal work, and in many cases will loan the remaining 70 percent.

Table 1 shows, by type of project, employment, pay rolls, and man-hours worked during November 1933, on projects financed from public-works funds.

TABLE 1.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON PROJECTS FINANCED FROM PUBLIC-WORKS FUNDS DURING NOVEMBER 1933, BY TYPE OF PROJECT

Type of project	Number of wage earners employed	Amount of pay roll	Number of man-hours worked	Average earnings per hour	Average number of hours worked in month	Expenditures for material
Building construction	16,707	$676,901	986,109	$0.686	59.0	$1,163,818
Public roads	148,121	8,862,864	(1)	(1)	(1)	(1)
River, harbor, and flood control	36,978	1,942,747	3,547,483	.548	95.9	3,203,058
Streets and roads [2]	7,415	307,003	564,473	.544	76.1	432,079
Naval vessels	3,474	332,510	437,720	.760	126.0	4,126,398
Reclamation	4,037	222,052	397,249	.559	98.4	362,739
Forestry	23,144	1,152,526	2,038,061	.566	88.1	272,239
Water and sewerage	4,793	208,573	330,489	.631	69.0	462,414
Miscellaneous	7,182	467,368	808,732	.578	112.6	[3] 1,592,835
Total	251,851	14,172,544	[4] 9,110,316	[4] .583	[4] 87.8	[4] 11,615,580

[1] Data not available.
[2] Other than those reported by the Bureau of Public Roads.
[3] Includes $900,377 worth of material which cannot be charged to any specific type of project.
[4] Excluding data for Bureau of Public Roads.

For the month ending November 15, 1933, there were 251,851 persons directly employed on public-works construction jobs. This is more than double the number of workers that were employed on October 15, 1933. These figures exclude all clerical and supervisory workers.

Of the wage earners directly put to work on these construction projects, more than one half were working under the supervision of the Bureau of Public Roads. River, harbor, and flood-control work employed the next largest group (over 36,000). Forestry work gave employment to more than 23,000 and building construction to more than 16,000 persons.

Monthly pay rolls for all persons employed on public works totaled over $14,000,000, nearly $9,000,000 of this amount going to workers on public roads. It was impossible to obtain the number of man-hours worked by the employees of the Bureau of Public Roads. It is hoped that this data will be available for the month of December.

Exclusive of workers hired by the United States Bureau of Public Roads there were 103,730 wage earners employed from public-works funds. The average hourly earnings for these men for the month ending November 15 was approximately 58 cents. Workers engaged in constructing naval vessels received the highest average hourly rate, 76 cents. This was followed in order by building-construction wage earners, 69 cents, and water and sewerage workers, 63 cents.

The average hours worked during the month by workers exclusive of those on public roads totaled 87.8. Workers engaged on naval vessels put in 126 hours per month. Those engaged on miscellaneous projects, 112.6 per month. No other type of work afforded as much as 100 hours per month.

Expenditures for materials purchased by contractors and Government agencies doing force-account work totaled more than $11,000,000 during this period. More than one third of this was expended by contractors engaged in the construction of naval vessels.

Table 2 shows employment, pay rolls, and man-hours worked during November on projects financed from public-works funds, by geographic divisions.

TABLE 2.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON PROJECTS FINANCED FROM PUBLIC-WORKS FUNDS DURING NOVEMBER 1933, BY GEOGRAPHIC DIVISIONS

Geographic division	Number of wage earners employed on—		Amount of pay roll on—		Number of man-hours worked [1]	Average earnings per hour [1]	Average number of hours worked in month [1]	Expenditures for materials [1]
	Public roads	Projects other than public roads	Public roads	Projects other than public roads				
New England	12,921	4,741	$800,269	$295,364	437,014	$0.676	92.2	$265,232
Middle Atlantic	19,031	6,329	1,153,370	396,412	583,261	.680	92.2	777,293
East North Central	15,686	8,399	926,551	416,785	675,132	.617	80.4	1,003,311
West North Central	39,386	15,038	2,343,600	642,926	1,191,191	.540	79.2	1,454,336
South Atlantic	14,692	8,916	642,792	558,837	918,040	.609	103.0	4,061,077
East South Central	5,918	13,541	243,427	820,564	1,531,081	.536	113.1	1,049,721
West South Central	16,971	12,403	748,447	487,790	994,602	.490	80.2	1,121,185
Mountain	17,421	14,840	1,447,921	652,368	1,168,077	.558	78.7	209,445
Pacific	6,095	17,353	556,487	866,762	1,254,964	.691	72.3	668,865
Total continental United States	148,121	[2] 102,702	8,862,864	[2] 5,252,570	[2] 8,985,294	[2] .585	[2] 87.5	[3] 11,510,842
Outside continental United States	[4]	1,028	[4]	57,110	125,022	.457	121.6	104,738
Grand total	148,121	103,730	8,862,864	5,309,680	9,110,316	.583	87.8	11,615,580

[1] Excluding data for public roads which are not available.
[2] Including data for 1,142 wage earners which cannot be charged to any specific geographic division.
[3] Including $900,377 worth of material which cannot be charged to any specific geographic division.
[4] Data not available.

More than 54,000 of the 251,851 wage earners paid from public-works funds were at work in the West North Central division. This is over 20,000 more than were employed in any other geographic division. The New England and East South Central divisions each had less than 20,000 workers.

Pay rolls in the West North Central division reached a total of approximately $3,000,000. In the Middle Atlantic and Mountain divisions the pay rolls were over $1,500,000. Pay rolls for projects other than public roads totaled over $5,000,000.

Since data on man-hours were not available for public roads, the average earnings per hour as shown in the table are for projects other than public roads. The hourly average rate for the country as a whole was nearly 59 cents. The rate for the Pacific division was over 69 cents, or approximately 10 cents per hour more than for the country as a whole. Workers in the New England division, the Middle Atlantic division, the East North Central division, and the South Atlantic division also averaged over 60 cents per hour.

Material orders placed by contractors in the South Atlantic division amounted to more than those from any other division.

Table 3 shows expenditures for materials during the month ending November 15 by type of materials.

TABLE 3.—MATERIALS PURCHASED DURING MONTH ENDING NOV. 15, 1933, FOR PUBLIC-WORKS PROJECTS, BY TYPE OF MATERIAL

Type of material	Amount expended
Aluminum manufactures	$11,185
Bolts, nuts, washers, etc	10,883
Cast-iron pipe and fittings	333,731
Cement	366,384
Chemicals	13,162
Clay products	152,717
Concrete products	644,544
Cordage and twine	11,559
Crushed stone	23,074
Electrical machinery and supplies	1,324,010
Engines and turbines	441,105
Explosives	62,975
Foundry and machine-shop products, not elsewhere classified	133,086
Hardware, miscellaneous	77,273
Instruments, professional and scientific	17,107
Lighting equipment	284,161
Lumber and timber products	1,684,150
Machine tools	331,646
Marble, granite, slate, and other stone products	403,924
Minerals and earths, ground or otherwise treated	24,879
Nonferrous-metal alloys; nonferrous-metal products, except aluminum, not elsewhere classified	72,879
Paints and varnishes	30,227
Paving materials and mixtures	178,268
Planing-mill products	22,317
Plumbing supplies	81,822
Pumps and pumping equipment	288,200
Roofing, built-up and roll; asphalt shingles; roof coatings other than paint	53,595
Sand and gravel	107,453
Sheet-metal work	312,840
Steam and hot-water heating apparatus	841,320
Steel-works and rolling-mill products	1,019,468
Structural and ornamental metalwork, not made in plants operated in connection with rolling mills	72,612
Tools, other than machine tools	81,063
Wire, drawn from purchased rods	288,507
Wire work not elsewhere classified	51,375
Other	1,762,079
Total	11,615,580

More than $11,000,000 was expended for materials by contractors on public-works projects during the month ending November 15. More money was expended for lumber and timber products than for any other class of material during the month. Electrical machinery and supplies accounted for the next highest expenditure.

It is estimated that the fabrication of the materials purchased during this month will create approximately 34,000 man-months of labor.

Civil Works Administration

EARLY in November an allotment of $400,000,000 was made to the Civil Works Administration to be expended in providing employment during the winter months.

As can readily be seen, it takes some time for the types of projects included under the regular Public Works Administration to get under way. There are legal obstacles in many States that must be overcome, plans must be drawn, and even after work is

started considerable time must elapse before a large number of men can be employed on a given job. In order to bridge the gap between the awarding of a contract and the maximum employment on public-works projects it was necessary to create the Civil Works Administration. The duty of this agency is to put people to work on needed projects at once. That this has been accomplished can be seen by the following table.

Employees from the civil-works rolls are engaged at the present time in tick and mosquito eradication, slum-clearance projects, road and street repair work, landscaping, etc.

Table 4 shows the number of civil-works employees on the pay rolls on December 2, by geographic divisions.

TABLE 4.—CIVIL-WORKS EMPLOYEES ON PAY ROLLS DEC. 2, 1933

Geographic divisions	On pay rolls	
	Number	Percent
New England	49,539	3.3
Middle Atlantic	208,089	13.7
East North Central	313,023	20.5
West North Central	118,234	7.8
South Atlantic	291,481	19.1
East South Central	94,778	6.2
West South Central	302,499	19.8
Mountain	46,930	3.1
Pacific	99,394	6.5
Total	1,523,967	100.0

The tentative quota of civil-works employees was set at 4,000,000. By December 2, two weeks after the allotment was made, more than 1,500,000 people had been hired. Some States were earlier than others in getting their projects under way. It is estimated that the entire quota will be employed before the end of December.

Emergency Conservation Work

EMPLOYEES on the rolls of the Emergency Conservation Work are now paid by allotments made from public-works funds.

Table 5 shows the employment and pay rolls in the Emergency Conservation Work during the months of October and November.

TABLE 5.—EMPLOYMENT AND PAY ROLLS IN THE EMERGENCY CONSERVATION WORK, OCTOBER AND NOVEMBER 1933

Group	Number		Pay rolls	
	October	November	October	November
Enrolled personnel	239,859	285,322	$7,490,799	$8,910,606
Reserve officers, line	3,298	3,494	676,031	[1]
Reserve officers, medical	1,074	1,085		
Supervisory and technical	13,488	13,099	1,605,140	1,558,781
Carpenters and laborers	[2] 22,812	26,059	[2] 1,761,828	2,400,304
Total	280,531	329,054	11,533,798	[3] 12,869,691

[1] Data not available. [2] First report. [3] See notes for details.

Comparing November with October, there was an increase of approximately 50,000 persons engaged in Emergency Conservation Work. This increase, for the most part, occurred in the enrolled personnel, although there was a slight increase in reserve officers. The number of supervisory and technical workers decreased. Information concerning employment and pay roll in the Emergency Conservation Work is collected by the Bureau of Labor Statistics from the War Department and the Forest Service of the Department of Agriculture.

The pay of the enrolled personnel is $30 per month, except that 5 percent of the personnel of each company are paid $45 a month and an additional 8 percent are paid $36 per month. The pay roll of this branch of the service is figured on that basis.

The carpenters and laborers shown in the above table are constructing barracks to be used as winter quarters by the Civilian Conservation Corps. This construction work will be finished early in December.

Employment on Public Roads

THE following table shows the number of employees (excluding those paid from public-works fund) engaged in building and maintaining public roads, State and Federal, during the months of October and November, by geographic divisions.

NUMBER OF EMPLOYEES ENGAGED IN THE CONSTRUCTION AND MAINTENANCE OF PUBLIC ROADS, STATE AND FEDERAL, DURING OCTOBER AND NOVEMBER 1933, BY GEOGRAPHIC DIVISIONS [1]

Geographic division	Federal			State		
	October employees	November		October employees	November	
		Employees	Pay roll (1 week)		Employees	Pay roll (1 week)
New England	2,640	1,769	$24,221	16,103	24,100	$496,913
Middle Atlantic	5,103	3,441	58,722	45,815	45,729	902,732
East North Central	10,357	6,631	87,317	53,210	48,227	647,429
West North Central	5,482	2,555	36,347	32,527	33,462	414,750
South Atlantic	7,040	6,017	53,770	43,970	40,655	332,193
East South Central	6,266	4,288	39,858	10,308	12,142	136,834
West South Central	7,897	7,105	71,057	11,909	11,503	188,775
Mountain	7,211	3,650	65,809	8,137	6,065	116,701
Pacific	4,876	2,656	51,549	7,992	12,249	258,248
Total	56,872	38,112	488,650	229,971	234,132	3,494,575
Percent of change		−33.0			+1.8	

[1] Exclusive of employment furnished by projects financed from public-works funds.

During the month of November there were 38,112 men employed on Federal roads projects other than those financed from public-works fund. This is a decrease of 33 percent. The reason for the decrease is that very few regular Federal-aid road contracts are now

being awarded. Most new work undertaken is financed from public-works fund. For the most part the Federal employees as shown in this table are engaged on projects for which contracts were awarded previous to the creation of the Public Works Administration. As these contracts are finished, the number of employees will naturally decrease rapidly.

There was an increase of over 50,000 in the number of employees engaged in public-roads work financed from P.W.A. funds. The number of people engaged on highway projects financed from State funds increased 1.8 percent comparing November with October.

Data concerning employment were obtained for the first time for the month of October. For the week ending November 15, pay rolls for State work totaled $3,494,575, of which 70.1 percent was for maintenance and 29.9 percent for new road work. Pay rolls for Federal work totaled nearly $500,000.

RETAIL PRICES

THE Bureau of Labor Statistics of the United States Department of Labor has since 1913 collected, compiled, and issued, as of the 15th of each month, retail prices of food. From time to time the work has been expanded by including additional cities and articles. The Bureau now covers 51 localities well scattered throughout the continental United States and also the Territory of Hawaii. Retail prices are secured for 45 of the principal articles of food.

In order that current information may be available oftener, the Bureau is now collecting these prices every 2 weeks. The plan was inaugurated during August 1933 and prices are being collected every other Tuesday.

Retail prices of coal were collected on January 15 and July 15 for the years 1913 through 1919 from the cities covered in the retail food study. Beginning with June 1920, prices have been collected on the 15th of each month. No change has been made in the dates for the collection of retail prices of coal. A summary of prices and index numbers for earlier years and for current months is shown in the section beginning on page 219.

Retail Prices of Food, November 1933

RETAIL prices of food were collected by the Bureau for two periods during the month, namely, November 7 and 21. Prices were received from the same dealers and the same cities were covered as have been included in the Bureau's reports for former periods. For August 29, however, a representative number of reports was not received from some of the cities, and average prices for the United States as a whole for this date are not strictly comparable with average prices shown for other dates. The index numbers, however, have been adjusted by using the percent of change in identical cities and are, therefore, comparable with indexes of other periods.

Three commodities have been added to the Bureau's list of food items beginning with August 29. These items are rye bread, canned peaches, and canned pears. Only average prices can be shown for these articles as corresponding prices for the year 1913 are not available for the purpose of index numbers.

Data for the tabular statements shown in this report are compiled from simple averages of the actual selling prices as reported to the

Bureau by retail dealers in the 51 cities. Comparable information for months and years, 1913 to 1928, inclusive, is shown in Bulletins Nos. 396 and 495; and by months and years, 1929 to 1932, inclusive, in the March, April, and June 1933 issues of this publication.

Indexes of all articles, combined, or groups of articles combined, both for cities and for the United States, are weighted according to the average family consumption. Consumption figures used since January 1921 are given in Bulletin 495 (p. 13). Those used for prior dates are given in Bulletin 300 (p. 61). The list of articles included in the groups, cereals, meats, and dairy products, will be found in the June 1932 (p. 223) issue of this publication.

Table 1 shows index numbers of the total weighted retail cost of important food articles and of three groups of these articles; viz, cereals, meats, and dairy products, in the United States, 51 cities combined, by years, 1913 to 1932, inclusive, and on specified days of the months of 1932 and 1933. These index numbers are based on the year 1913 as 100.

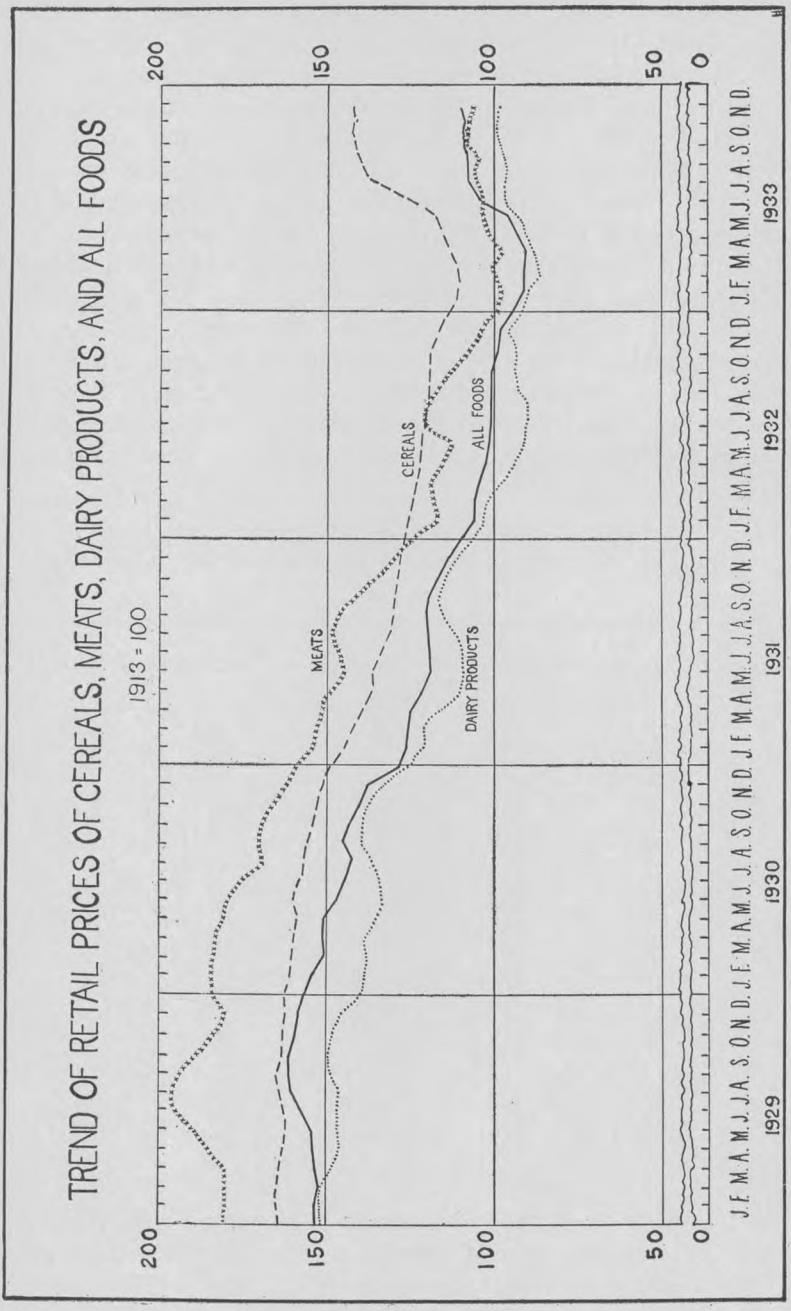
TABLE 1.—INDEX NUMBERS OF THE TOTAL RETAIL COST OF FOOD AND OF CEREALS, MEATS, AND DAIRY PRODUCTS IN THE UNITED STATES BY YEARS, 1913 TO 1932, INCLUSIVE, AND ON SPECIFIED DATES OF EACH MONTH, JAN. 15, 1932, TO NOV. 21, 1933, INCLUSIVE

[1913=100]

Year	All food	Cereals	Meats	Dairy products
1913	100.0	100.0	100.0	100.0
1914	102.4	106.7	103.4	97.1
1915	101.3	121.6	99.6	96.1
1916	113.7	126.8	108.2	103.2
1917	146.4	186.5	137.0	127.6
1918	168.3	194.3	172.8	153.4
1919	185.9	198.0	184.2	176.6
1920	203.4	232.1	185.7	185.1
1921	153.3	179.8	158.1	149.5
1922	141.6	159.3	150.3	135.9
1923	146.2	156.9	149.0	147.6
1924	145.9	160.4	150.2	142.8
1925	157.4	176.2	163.0	147.1
1926	160.6	175.5	171.3	145.5
1927	155.4	170.7	169.9	148.7
1928	154.3	167.2	179.2	150.0
1929	156.7	164.1	188.4	148.6
1930	147.1	158.0	175.8	136.5
1931	121.3	135.9	147.0	114.6
1932	102.1	121.1	116.0	96.6
1932				
Jan. 15	109.3	126.4	123.4	106.5
Feb. 15	105.3	125.0	117.3	102.9
Mar. 15	105.0	124.3	118.9	101.9
Apr. 15	103.7	122.9	118.6	97.4
May 15	101.3	122.6	115.3	94.3
June 15	100.1	122.5	113.4	92.6
July 15	101.0	121.2	122.6	91.4
Aug. 15	100.8	120.4	120.1	93.1
Sept. 15	100.3	119.2	119.2	93.5
Oct. 15	100.4	119.0	114.6	93.8
Nov. 15	99.4	118.0	109.1	93.9
Dec. 15	98.7	114.8	103.2	95.9
1933				
Jan. 15	94.8	112.3	99.9	93.3
Feb. 15	90.9	112.0	99.0	90.3
Mar. 15	90.5	112.3	100.1	88.3
Apr. 15	90.4	112.8	98.8	88.7
May 15	93.7	115.8	100.1	92.2
June 15	96.7	117.2	103.7	93.5
July 15	104.8	128.0	103.5	97.7
Aug. 15	106.7	137.8	105.7	96.5
Aug. 29	107.1	138.8	106.9	97.5
Sept. 12	107.0	140.2	104.4	97.8
Sept. 26	107.4	142.7	107.8	97.9
Oct. 10	107.3	143.8	107.3	98.6
Oct. 24	106.6	143.3	106.3	98.4
Nov. 7	106.7	143.4	105.9	98.6
Nov. 21	106.8	143.5	104.1	98.5

The following chart shows the trend in the retail cost of all food and of the classified groups, cereals, meats, and dairy products in the United States (51 cities) from January 15, 1929, to November 21, 1933, inclusive.

Table 2 shows index numbers of the total weighted retail cost of important food articles and of cereals, meats, and dairy products in



the United States based on the year 1913 as 100, and changes on November 21, 1933, compared with November 15, 1932, and October 24 and November 7, 1933.

TABLE 2.—INDEX NUMBERS OF THE TOTAL WEIGHTED RETAIL COST OF FOOD AND OF CEREALS, MEATS, AND DAIRY PRODUCTS FOR THE UNITED STATES ON SPECIFIED DATES, AND PERCENT OF CHANGE, NOV. 21, 1933, COMPARED WITH NOV. 15, 1932, AND OCT. 24 AND NOV. 7, 1933

Article	Index number (1913=100)					Percent of change Nov. 21, 1933, compared with—		
	1932	1933						
	Nov. 15	Oct. 10	Oct. 24	Nov. 7	Nov. 21	Nov. 15, 1932	Oct. 24, 1933	Nov. 7, 1933
All food	99.4	107.3	106.6	106.7	106.8	+7.5	+0.2	+0.1
Cereals	118.0	143.8	143.3	143.4	143.5	+21.6	+.1	+.1
Meats	109.1	107.3	106.3	105.9	104.1	−4.6	−2.1	−1.7
Dairy products	93.9	98.6	98.4	98.6	98.5	+4.9	+.1	−.1

Table 3 shows the average retail prices of principal food articles for the United States, and index numbers for 23 of these articles based on the year 1913, for November 15, 1932, and October 10 and 24, and November 7 and 21, 1933.

TABLE 3.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES ON NOV. 15, 1932, OCT. 10 AND 24, AND NOV. 7 AND 21, 1933

Article		Average price					Index number (1913=100)				
		1932	1933				1932	1933			
		Nov. 15	Oct. 10	Oct. 24	Nov. 7	Nov. 21	Nov. 15	Oct. 10	Oct. 24	Nov. 7	Nov. 21
		Cents	*Cents*	*Cents*	*Cents*	*Cents*					
Sirloin steak	pound	31.4	29.9	29.5	29.3	28.8	123.6	117.7	116.1	115.4	113.4
Round steak	do	27.1	25.9	25.8	25.5	25.0	121.5	116.1	115.7	114.3	112.1
Rib roast	do	22.9	21.0	20.8	20.8	20.4	115.7	106.1	105.1	105.1	103.0
Chuck roast	do	16.6	15.3	15.3	15.3	15.1	103.8	95.6	95.6	95.6	94.4
Plate beef	do	11.1	10.1	10.1	10.0	9.9	91.7	83.5	83.5	82.6	81.8
Pork chops	do	20.2	23.7	23.1	23.2	22.2	96.2	112.9	110.0	110.5	105.7
Bacon, sliced	do	22.5	23.3	23.3	23.3	23.3	83.3	86.3	86.3	86.3	86.3
Ham, sliced	do	31.7	32.3	32.0	32.1	32.0	117.8	120.1	119.0	119.3	119.0
Lamb, leg of	do	21.3	21.9	21.5	21.3	21.2	112.7	115.9	113.8	112.7	112.2
Hens	do	22.4	20.5	20.5	20.3	20.0	105.2	96.2	96.2	95.3	93.9
Salmon, red canned	16-oz. can	19.6	20.8	20.7	20.7	20.9					
Milk, fresh	quart	10.6	11.1	11.1	11.1	11.1	119.1	124.7	124.7	124.7	124.7
Milk, evaporated	14½-oz can	6.0	6.8	6.8	6.8	6.8					
Butter	pound	27.5	28.3	28.2	28.4	28.4	71.8	73.9	73.6	74.2	74.2
Margarine	do	14.3	13.4	13.3	13.1	12.8					
Cheese	do	22.4	23.4	23.2	23.1	22.8	101.4	105.9	105.0	104.5	103.2
Lard	do	8.7	9.6	9.5	9.6	9.8	55.1	60.8	60.1	60.8	62.0
Vegetable lard substitute	do	18.9	19.0	19.0	19.1	19.1					
Eggs, strictly fresh	dozen	37.6	32.5	33.5	34.6	36.1	109.0	94.2	97.1	100.3	104.6
Bread, wheat	pound	6.7	8.0	8.0	8.0	8.0	119.6	142.9	142.9	142.9	142.9
Bread, rye	do		8.6	8.6	8.6	8.6					
Flour	do	3.0	4.9	4.8	4.8	4.8	90.9	148.5	145.5	145.5	145.5
Corn meal	do	3.6	3.9	3.9	3.9	4.0	120.0	130.0	130.0	130.0	133.3
Rolled oats	do	7.3	6.5	6.5	6.5	6.5					
Corn flakes	8-oz. pkg	8.5	8.7	8.8	8.9	8.9					
Wheat cereal	28-oz. pkg	22.4	23.9	24.0	24.0	24.0					
Macaroni	pound	14.9	15.8	15.8	15.9	15.8					
Rice	do	6.2	6.8	6.8	6.9	6.9	71.3	78.2	78.2	79.3	79.3
Beans, navy	do	4.6	6.2	6.0	6.0	6.0					
Potatoes	do	1.4	2.5	2.3	2.3	2.3	82.4	147.1	135.3	135.3	135.3
Onions	do	2.6	3.5	3.4	3.4	3.4					
Cabbage	do	2.3	3.3	3.2	3.2	3.6					
Pork and beans	16-oz. can	6.8	6.8	6.9	6.9	6.8					

TABLE 3.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES ON NOV. 15, 1932, OCT. 10 AND 24, AND NOV. 7 AND 21, 1933—Continued

Article	Average price					Index number (1913=100)				
	1932	1933				1932	1933			
	Nov. 15	Oct. 10	Oct. 24	Nov. 7	Nov. 21	Nov. 15	Oct. 10	Oct. 24	Nov. 7	Nov. 21
	Cents	*Cents*	*Cents*	*Cents*	*Cents*					
Corn, canned ..... No. 2 can	10.2	10.8	10.9	10.9	10.9	.....	.....	.....	.....	.....
Peas, canned ..... do	12.7	13.5	13.5	13.6	13.6	.....	.....	.....	.....	.....
Tomatoes, canned ..... do	8.8	9.8	9.9	9.9	9.8	.....	.....	.....	.....	.....
Sugar ..... pound	5.1	5.7	5.7	5.6	5.6	92.7	103.6	103.6	101.8	101.8
Tea ..... do	68.1	66.8	66.9	67.0	66.6	125.2	122.8	123.0	123.2	122.4
Coffee ..... do	30.1	26.6	26.6	26.6	26.6	101.0	89.3	89.3	89.3	89.3
Prunes ..... do	8.8	10.4	10.6	10.6	10.6	.....	.....	.....	.....	.....
Raisins ..... do	9.9	9.4	9.4	9.4	9.3	.....	.....	.....	.....	.....
Bananas ..... dozen	21.9	24.6	24.7	24.0	24.0	.....	.....	.....	.....	.....
Oranges ..... do	30.7	29.8	29.7	28.7	27.6	.....	.....	.....	.....	.....
Peaches, canned ..... No. 2½ can	.....	17.1	17.2	17.3	17.4	.....	.....	.....	.....	.....
Pears, canned ..... do	.....	20.6	20.5	20.5	20.6	.....	.....	.....	.....	.....

Table 4 shows index numbers of the weighted retail cost of food for the United States and 39 cities, based on the year 1913 as 100. The percent of change on November 21, 1933, compared with November 15, 1932, and October 24 and November 7, 1933, are also given for these cities and the United States and for 12 additional cities from which prices were not secured in 1913.

TABLE 4.—INDEX NUMBERS OF THE TOTAL WEIGHTED RETAIL COST OF FOOD BY CITIES AND FOR THE UNITED STATES ON SPECIFIED DATES, AND PERCENT OF CHANGE NOV. 21, 1933, COMPARED WITH NOV. 15, 1932, AND OCT. 24 AND NOV. 7, 1933

City	Index number (1913=100)					Percent of change Nov. 21, 1933, compared with—		
	1932	1933						
	Nov. 15	Oct. 10	Oct. 24	Nov. 7	Nov. 21	Nov. 15, 1932	Oct. 24, 1933	Nov. 7, 1933
United States	99.4	107.3	106.6	106.7	106.8	+7.5	+0.2	+0.1
Atlanta	96.3	104.1	104.7	105.0	102.9	+6.8	−1.8	−2.0
Baltimore	103.8	113.4	112.9	113.2	112.4	+8.3	−.4	−.7
Birmingham	100.1	103.6	103.6	103.7	104.0	+3.9	+.4	+.3
Boston	102.2	108.4	107.4	108.0	108.1	+5.4	+.1	−.3
Bridgeport	.....	.....	.....	.....	.....	+5.4	+.1	+.3
Buffalo	102.7	112.1	111.8	111.8	111.7	+8.8	(1)	(1)
Butte	.....	.....	.....	.....	.....	+1.3	(1)	−.2
Charleston, S.C.	101.1	107.9	107.3	107.8	108.0	+6.8	+.6	+.1
Chicago	107.9	110.0	110.0	111.1	110.5	+2.4	+.4	−.6
Cincinnati	96.5	108.6	107.6	107.4	109.1	+13.0	+1.4	+1.6
Cleveland	92.5	105.5	102.4	102.4	103.2	+11.5	+.7	+.7
Columbus	.....	.....	.....	.....	.....	+11.9	−1.5	+.4
Dallas	95.6	102.5	103.5	103.4	104.5	+9.4	+1.0	+1.1
Denver	94.2	100.5	100.6	100.5	99.3	+5.4	−1.3	−1.3
Detroit	91.0	107.8	105.4	105.0	106.3	+16.8	+.9	+1.2
Fall River	97.6	106.7	105.6	105.4	105.1	+7.7	−.5	−.3
Houston	.....	.....	.....	.....	.....	+14.8	+1.1	+1.6
Indianapolis	92.5	101.2	99.7	100.6	101.2	+9.4	+1.5	+.6
Jacksonville	91.6	99.7	98.8	99.4	99.1	+8.2	+.4	−.2
Kansas City	98.7	103.5	101.7	103.6	102.7	+4.1	+1.1	−.8
Little Rock	89.4	96.7	96.7	97.1	97.6	+9.2	+.9	+.5
Los Angeles	94.2	101.3	101.8	101.9	100.1	+6.3	−1.6	−1.7
Louisville	92.1	103.6	101.9	101.2	101.0	+9.6	−.9	−.3
Manchester	101.5	108.3	107.2	107.6	108.3	+6.7	+1.0	+.6
Memphis	91.8	99.6	98.5	99.2	99.3	+8.1	+.7	+.1

TABLE 4.—INDEX NUMBERS OF THE TOTAL WEIGHTED RETAIL COST OF FOOD BY CITIES AND FOR THE UNITED STATES ON SPECIFIED DATES, AND PERCENT OF CHANGE NOV. 21, 1933, COMPARED WITH NOV. 15, 1932, AND OCT. 24 AND NOV. 7, 1933—Continued

City	Index number (1913=100)					Percent of change Nov. 21, 1933, compared with—		
	1932	1933						
	Nov. 15	Oct. 10	Oct. 24	Nov. 7	Nov. 21	Nov. 15, 1932	Oct. 24, 1933	Nov. 7, 1933
Milwaukee	101.3	107.0	107.9	109.8	109.2	+7.8	+1.2	−0.6
Minneapolis	98.3	106.9	105.6	106.2	106.1	+7.9	+.5	−.1
Mobile						+5.4	−.1	−1.0
Newark	105.1	109.6	108.5	108.0	108.2	+2.9	−.3	+.1
New Haven	104.7	113.7	112.0	112.7	111.8	+6.8	−.1	−.8
New Orleans	97.4	106.2	105.9	105.8	105.9	+8.7	(1)	+.2
New York	109.0	116.3	114.4	114.6	114.1	+4.7	−.2	−.4
Norfolk						+3.2	−1.3	−.7
Omaha	91.0	101.1	100.2	99.6	100.5	+10.5	+.4	+1.0
Peoria						+10.4	+.3	+.1
Philadelphia	102.5	110.9	110.8	111.3	111.2	+8.5	+.4	−.1
Pittsburgh	97.2	105.3	104.8	104.2	104.3	+7.2	−.5	(1)
Portland, Maine						+6.3	+.7	+.8
Portland, Oreg	92.8	95.9	96.0	94.6	94.5	+1.9	−1.6	−.1
Providence	101.7	110.1	109.1	109.1	108.5	+6.6	−.6	−.6
Richmond	102.0	112.0	110.3	110.9	110.1	+7.9	−.2	−.8
Rochester						+8.8	−.6	−.1
St. Louis	99.8	107.9	107.6	107.6	107.4	+7.6	−.2	−.2
St. Paul						+10.2	+.9	+.2
Salt Lake City	85.8	91.5	90.9	91.0	93.0	+8.3	+2.3	+2.2
San Francisco	107.0	108.8	110.3	110.0	110.3	+3.1	(1)	+.3
Savannah						+8.6	−.7	+1.2
Scranton	105.2	113.8	114.5	113.5	114.0	+8.4	−.4	+.4
Seattle	98.2	103.3	103.6	103.3	103.1	+5.1	−.4	−.1
Springfield, Ill						+9.2	+1.1	+.2
Washington	105.8	114.8	115.0	114.3	114.6	+8.3	−.3	+.3
Hawaii:								
Honolulu						+4.1		−.2
Other localities						+2.8		−1.6

Retail Prices of Coal, November 15, 1933

RETAIL prices of coal as of the 15th of each month are secured from each of the 51 cities from which retail food prices are obtained. The prices quoted are for coal delivered to consumers but do not include charges for storing the coal in cellar or bins where an extra handling is necessary.

Average prices for the United States for bituminous coal and for stove and chestnut sizes of Pennsylvania anthracite are computed from the quotations received from retail dealers in all cities where these coals are sold for household use. The prices shown for bituminous coal are averages of prices of the several kinds. 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.

Table 1 shows for the United States both average prices and index numbers of Pennsylvania white-ash anthracite, stove and chestnut sizes, and of bituminous coal on January 15 and July 15, 1913 to 1931, and for each month from January 15, 1932, to November 15, 1933. An average price for the year 1913 has been made from

the averages for January and July of that year. The average price for each month has been divided by this average price for the year 1913 to obtain the index number.

TABLE 1.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF COAL FOR THE UNITED STATES BASED ON THE YEAR 1913 AS 100, ON THE 15TH OF SPECIFIED MONTHS FROM JANUARY 1913 TO NOVEMBER 1933

Year and month	Pennsylvania anthracite, white ash— Stove		Pennsylvania anthracite, white ash— Chestnut		Bituminous	
	Average price	Index 1913 = 100	Average price	Index 1913 = 100	Average price	Index 1913 = 100
	Dols.		*Dols.*		*Dols.*	
1913: Av. for yr.	7.73	100.0	7.91	100.0	5.43	100.0
January	7.99	103.4	8.15	103.0	5.48	100.8
July	7.46	96.6	7.68	97.0	5.39	99.2
1914: January	7.80	100.9	8.00	101.0	5.97	109.9
July	7.60	98.3	7.78	98.3	5.46	100.6
1915: January	7.83	101.3	7.99	101.0	5.71	105.2
July	7.54	97.6	7.73	97.7	5.44	100.1
1916: January	7.93	102.7	8.13	102.7	5.69	104.8
July	8.12	105.2	8.28	104.6	5.52	101.6
1917: January	9.29	120.2	9.40	118.8	6.96	128.1
July	9.08	117.5	9.16	115.7	7.21	132.7
1918: January	9.88	127.9	10.03	126.7	7.68	141.3
July	9.96	128.9	10.07	127.3	7.92	145.8
1919: January	11.51	149.0	11.61	146.7	7.90	145.3
July	12.14	157.2	12.17	153.8	8.10	149.1
1920: January	12.59	162.9	12.77	161.3	8.81	162.1
July	14.28	184.9	14.33	181.1	10.55	194.1
1921: January	15.99	207.0	16.13	203.8	11.82	217.6
July	14.90	192.8	14.95	188.9	10.47	192.7
1922: January	14.98	193.9	15.02	189.8	9.89	182.0
July	14.87	192.4	14.92	188.5	9.49	174.6
1923: January	15.43	199.7	15.46	195.3	11.18	205.7
July	15.10	195.5	15.05	190.1	10.04	184.7
1924: January	15.77	204.1	15.76	199.1	9.75	179.5
July	15.24	197.2	15.10	190.7	8.94	164.5
1925: January	15.45	200.0	15.37	194.2	9.24	170.0
July	15.14	196.0	14.93	188.6	8.61	158.5
1926: January	(1)	(1)	(1)	(1)	9.74	179.3
July	15.43	199.7	15.19	191.9	8.70	160.1
1927: January	15.66	202.7	15.42	194.8	9.96	183.3
July	15.15	196.1	14.81	187.1	8.91	163.9
1928: January	15.44	199.8	15.08	190.6	9.30	171.1
July	14.91	192.9	14.63	184.9	8.69	159.9
1929: January	15.38	199.1	15.06	190.3	9.09	167.2
July	14.94	193.4	14.63	184.8	8.62	158.6
1930: January	15.33	198.4	15.00	189.5	9.11	167.6
July	14.84	192.1	14.53	183.6	8.65	159.1
1931: January	15.12	195.8	14.88	188.1	8.87	163.2
July	14.61	189.1	14.59	184.3	8.09	148.9
1932: January	15.00	194.2	14.97	189.1	8.17	150.3
February	14.98	193.9	14.95	188.9	8.14	149.7
March	14.54	188.2	14.45	182.6	8.01	147.4
April	13.62	176.3	13.46	170.0	7.85	144.5
May	13.30	172.2	13.11	165.6	7.60	139.9
June	13.36	173.0	13.16	166.3	7.53	138.6
July	13.37	173.0	13.16	166.2	7.50	138.0
August	13.50	174.8	13.28	167.9	7.52	138.4
September	13.74	177.9	13.52	170.8	7.54	138.7
October	13.79	178.5	13.58	171.5	7.60	139.9
November	13.83	178.9	13.60	171.9	7.59	139.7
December	13.87	179.5	13.65	172.5	7.51	138.3
1933: January	13.82	178.9	13.61	171.9	7.46	137.3
February	13.75	178.0	13.53	171.0	7.45	137.0
March	13.70	177.3	13.48	170.4	7.43	136.7
April	13.22	171.1	13.00	164.3	7.37	135.6
May	12.44	161.0	12.25	154.8	7.17	132.0
June	12.18	157.6	12.00	151.6	7.18	132.1
July	12.47	161.3	12.26	155.0	7.64	140.7
August	12.85	166.3	12.65	159.8	7.77	143.0
September	13.33	172.5	13.12	165.8	7.94	146.0
October	13.44	174.0	13.23	167.1	8.08	148.7
November	13.46	174.3	13.26	167.5	8.19	150.6

[1] Insufficient data.

The accompanying chart shows the trend in retail prices of stove and chestnut sizes of Pennsylvania anthracite and of bituminous coal in the United States. The trend is shown semiannually for the years 1913 to 1928, inclusive, and by months from January 15, 1929, to November 15, 1933, inclusive.

Table 2 shows average retail prices per ton of 2,000 pounds and index numbers (1913 = 100) for the United States on November 15, 1932, and October 15 and November 15, 1933, and percentage change in the year and in the month.

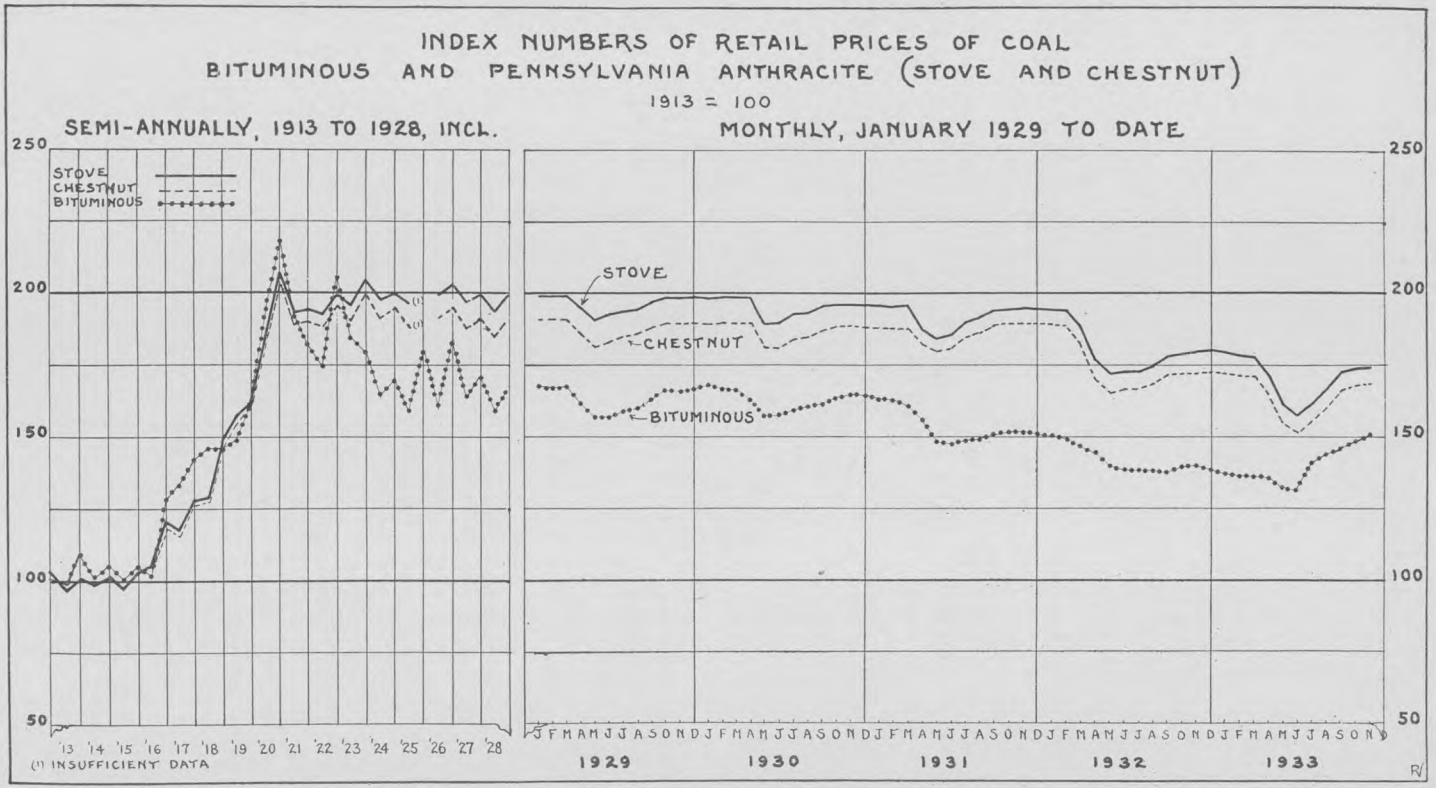


TABLE 2.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF COAL FOR THE UNITED STATES AND PERCENT OF CHANGE ON NOV. 15, 1933, COMPARED WITH NOV. 15, 1932, AND OCT. 15, 1933

Article	Average retail price and index number—			Percent of change Nov. 15, 1933, compared with—	
	Nov. 15, 1932	Oct. 15, 1933	Nov. 15, 1933	Nov. 15, 1932	Oct. 15, 1933
Pennsylvania anthracite:					
Stove:					
Average price per 2,000 pounds	$13.83	$13.44	$13.46	—2.7	+0.1
Index (1913=100)	178.9	174.0	174.3		
Chestnut:					
Average price per 2,000 pounds	$13.60	$13.23	$13.26	—2.5	+0.2
Index (1913=100)	171.9	167.1	167.5		
Bituminous:					
Average price per 2,000 pounds	$7.59	$8.08	$8.19	+7.9	+1.4
Index (1913=100)	139.7	148.7	150.6		

Table 3 shows average retail prices of coal for household use by cities on November 15, 1932, and October 15 and November 15, 1933, as reported by local dealers in each city.

TABLE 3.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, NOV. 15, 1932, AND OCT. 15 AND NOV. 15, 1933, BY CITIES

City and kind of coal	1932	1933		City and kind of coal	1932	1933	
	Nov. 15	Oct. 15	Nov. 15		Nov. 15	Oct. 15	Nov. 15
Atlanta, Ga.:				Cleveland, Ohio:			
Bituminous, prepared sizes	$6.15	$6.92	$7.05	Pennsylvania anthracite:			
Baltimore, Md.:				Stove	$13.69	$12.44	$12.44
Pennsylvania anthracite:				Chestnut	13.44	12.19	12.19
Stove	13.25	13.25	13.29	Bituminous:			
Chestnut	12.75	13.00	13.04	Prepared sizes:			
Bituminous:				High volatile	5.64	6.34	6.57
Prepared sizes:				Low volatile	8.36	9.07	9.09
Low volatile	8.75	9.25	9.56	Columbus, Ohio:			
Run of mine:				Bituminous:			
High volatile	6.86	7.50	7.61	Prepared sizes:			
Birmingham, Ala.:				High volatile	5.12	6.15	6.08
Bituminous, prepared sizes	5.03	6.00	6.00	Low volatile	6.67	7.54	7.50
Boston, Mass.:				Dallas, Tex.:			
Pennsylvania anthracite:				Arkansas anthracite, egg	14.00	13.50	14.00
Stove	13.75	13.75	13.75	Bituminous, prepared sizes	10.75	10.00	10.50
Chestnut	13.50	13.50	13.50	Denver, Colo.:			
Bridgeport, Conn.:				Colorado anthracite:			
Pennsylvania anthracite:				Furnace, 1 and 2 mixed	14.50	15.00	15.56
Stove	13.00	13.75	13.75	Stove, 3 and 5 mixed	14.50	15.00	15.56
Chestnut	13.00	13.75	13.75	Bituminous, prepared sizes	7.06	7.66	8.24
Buffalo, N.Y.:				Detroit, Mich.:			
Pennsylvania anthracite:				Pennsylvania anthracite:			
Stove	12.42	12.85	12.85	Stove	13.38	12.58	12.62
Chestnut	12.21	12.60	12.60	Chestnut	13.17	12.36	12.36
Butte, Mont.:				Bituminous:			
Bituminous, prepared sizes	9.74	9.70	9.71	Prepared sizes:			
Charleston, S.C.:				High volatile	5.80	6.90	6.84
Bituminous, prepared sizes	8.67	9.92	9.92	Low volatile	7.27	7.55	7.56
Chicago, Ill.:				Run of mine:			
Pennsylvania anthracite:				Low volatile	6.38	6.70	6.70
Stove	15.75	13.98	13.99	Fall River, Mass.:			
Chestnut	15.50	13.77	13.79	Pennsylvania anthracite:			
Bituminous:				Stove	14.50	14.50	14.50
Prepared sizes:				Chestnut	14.25	14.25	14.25
High volatile	7.25	8.09	8.21	Houston, Tex.:			
Low volatile	9.98	10.57	10.83	Bituminous, prepared sizes	9.80	11.60	11.60
Run of mine:				Indianapolis, Ind.:			
Low volatile	7.19	7.78	7.76	Bituminous:			
Cincinnati, Ohio:				Prepared sizes:			
Bituminous:				High volatile	5.04	5.83	5.93
Prepared sizes:				Low volatile	7.67	8.25	8.20
High volatile	5.25	6.06	6.10	Run of mine:			
Low volatile	7.50	7.83	7.98	Low volatile	6.10	7.13	7.00

TABLE 3.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, NOV. 15, 1932, AND OCT. 15 AND NOV. 15, 1933, BY CITIES—Continued

City and kind of coal	1932	1933	
	Nov. 15	Oct. 15	Nov. 15
Jacksonville, Fla.:			
Bituminous, prepared sizes	$9.00	$11.13	$11.13
Kansas City, Mo.:			
Arkansas anthracite:			
Furnace	10.75	10.50	10.50
Stove no. 4	12.25	12.50	12.58
Bituminous, prepared sizes	5.64	5.61	5.79
Little Rock, Ark.:			
Arkansas anthracite, egg	10.75	10.50	10.50
Bituminous, prepared sizes	8.39	8.17	8.33
Los Angeles, Calif.:			
Bituminous, prepared sizes	16.25	17.30	17.30
Louisville, Ky.:			
Bituminous:			
Prepared sizes:			
High volatile	4.67	5.61	5.63
Low volatile	7.38	7.94	8.00
Manchester, N.H.:			
Pennsylvania anthracite:			
Stove	14.83	15.00	15.00
Chestnut	14.83	15.00	15.00
Memphis, Tenn.:			
Bituminous, prepared sizes	5.67	6.68	7.14
Milwaukee, Wis.:			
Pennsylvania anthracite:			
Stove	15.05	13.25	13.25
Chestnut	14.80	13.00	13.00
Bituminous:			
Prepared sizes:			
High volatile	6.99	7.52	7.51
Low volatile	9.29	9.62	9.62
Minneapolis, Minn.:			
Pennsylvania anthracite:			
Stove	17.35	15.50	15.50
Chestnut	17.10	15.25	15.25
Bituminous:			
Prepared sizes:			
High volatile	9.57	9.91	9.88
Low volatile	12.22	12.24	12.24
Mobile, Ala.:			
Bituminous, prepared sizes	7.41	8.46	8.48
Newark, N.J.:			
Pennsylvania anthracite:			
Stove	12.38	12.70	12.75
Chestnut	12.13	12.45	12.50
New Haven, Conn.:			
Pennsylvania anthracite:			
Stove	13.90	13.90	13.90
Chestnut	13.90	13.90	13.90
New Orleans, La.:			
Bituminous, prepared sizes	8.57	9.07	10.07
New York, N.Y.:			
Pennsylvania anthracite:			
Stove	12.54	12.60	12.55
Chestnut	12.29	12.35	12.30
Norfolk, Va.:			
Pennsylvania anthracite:			
Stove	13.00	14.00	14.00
Chestnut	13.00	14.00	14.00
Bituminous:			
Prepared sizes:			
High volatile	6.50	7.50	8.00
Low volatile	8.00	9.00	9.50
Run of mine:			
Low volatile	6.50	7.50	8.00
Omaha, Nebr.:			
Bituminous, prepared sizes	8.50	8.52	8.55
Peoria, Ill.:			
Bituminous:			
Prepared sizes:			
High volatile	5.98	6.46	6.44
Low volatile	-------	9.29	9.29
Philadelphia, Pa.:			
Pennsylvania anthracite:			
Stove	$11.79	$12.25	$12.25
Chestnut	11.50	12.00	12.00
Pittsburgh, Pa.:			
Pennsylvania anthracite:			
Chestnut	12.88	12.38	13.00
Bituminous, prepared sizes	4.00	4.86	4.82
Portland, Maine:			
Pennsylvania anthracite:			
Stove	15.84	14.50	14.50
Chestnut	15.60	14.25	14.25
Portland, Oreg.:			
Bituminous, prepared sizes	11.74	12.96	12.88
Providence, R.I.:			
Pennsylvania anthracite:			
Stove	[1] 14.50	[1] 14.75	[1] 15.00
Chestnut	[1] 14.25	[1] 14.50	[1] 14.75
Richmond, Va.:			
Pennsylvania anthracite:			
Stove	13.50	13.75	14.00
Chestnut	13.50	13.75	14.00
Bituminous:			
Prepared sizes:			
High volatile	6.83	7.33	7.83
Low volatile	8.08	8.40	8.87
Run of mine:			
Low volatile	6.75	6.75	7.25
Rochester, N.Y.:			
Pennsylvania anthracite:			
Stove	13.25	13.10	13.10
Chestnut	13.00	12.85	12.85
St. Louis, Mo.:			
Pennsylvania anthracite:			
Stove	15.22	13.91	13.91
Chestnut	15.22	13.72	13.72
Bituminous, prepared sizes	5.45	5.50	5.54
St. Paul, Minn.:			
Pennsylvania anthracite:			
Stove	17.35	15.50	15.50
Chestnut	17.10	15.25	15.25
Bituminous:			
Prepared sizes:			
High volatile	9.40	10.00	9.98
Low volatile	12.42	12.33	12.33
Salt Lake City, Utah:			
Bituminous, prepared sizes	7.33	7.79	7.78
San Francisco, Calif.:			
New Mexico anthracite:			
Cerillos egg	25.00	25.63	25.63
Colorado anthracite:			
Egg	24.50	25.11	25.11
Bituminous, prepared sizes	15.00	16.06	16.06
Savannah, Ga.:			
Bituminous, prepared sizes	[2] 8.53	[2] 10.04	[2] 10.04
Scranton, Pa.:			
Pennsylvania anthracite:			
Stove	9.27	8.81	8.85
Chestnut	9.00	8.56	3.60
Seattle, Wash.:			
Bituminous, prepared sizes	9.86	9.69	9.70
Springfield, Ill.:			
Bituminous, prepared sizes	3.79	4.06	4.08
Washington, D.C.:			
Pennsylvania anthracite:			
Stove	[3] 14.46	[3] 14.45	[3] 14.45
Chestnut	[3] 14.15	[3] 14.15	[3] 14.15
Bituminous:			
Prepared sizes:			
High volatile	[2] 8.29	[3] 8.69	[3] 8.69
Low volatile	[3] 10.21	[3] 10.31	[3] 10.31
Run of mine:			
Mixed	[3] 7.50	[3] 7.88	[3] 7.98

[1] The average price of coal delivered in bins is 50 cents higher than here shown. Practically all coal is delivered in bins.

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

[3] Per ton of 2,240 pounds.

Retail Prices of Food in the United States and in Certain Foreign Countries

THE index numbers of retail prices of food published by certain foreign countries have been brought together with those of the Bureau of Labor Statistics of the United States Department of Labor in the subjoined table, the base years in all cases being as given in the original reports. As stated in the table, the number of articles included in the index numbers for the different countries differs widely. These results, which are designed merely to show price trends and not actual differences in prices in the several countries should not, therefore, be considered as closely comparable with one another. In certain instances, also, the figures are not absolutely comparable from month to month over the entire period, owing to slight changes in the list of commodities and the localities included on successive dates. Indexes are shown for July of each year from 1926 to 1930, inclusive, and by months since January 1931.

INDEX NUMBERS OF RETAIL FOOD PRICES IN THE UNITED STATES AND IN FOREIGN COUNTRIES

Country	United States	Australia	Austria	Belgium	Bulgaria	Canada	China	Czechoslovakia
Computing agency	Bureau of Statistics	Bureau of Census and Statistics	Federal Statistics Bureau	Ministry of Industry, Labor, and Social Welfare	General Direction of Statistics	Department of Labor	National Tariff Commission	Central Bureau of Statistics
Number of localities	51	30	Vienna	59	12	69	Shanghai	Prague
Commodities included	42 foods	46 foods and groceries	18 foods	33 foods	35 foods	29 foods	24 foods	35 foods
Base=100	1913	1923–27 (1,000)	July 1914	1921	1926	1913	1926	July 1914
1926								
July	157.0	[1] 1,027	[1] 116	184.9	[1] 100.0	151	101.3	117.8
1927								
July	153.4	[1] 1,004	[1] 119	209.6	[1] 97.8	149	110.7	126.2
1928								
July	152.8	[1] 989	[1] 119	203.8	[1] 102.5	147	93.2	125.5
1929								
July	158.5	1,041	123	212.3	[1] 106.4	150	94.8	123.1
1930								
July	144.0	958	119	205.5	[1] 86.7	149	130.0	119.0
1931								
January	132.8	876	109	195.1	----------	134	104.9	107.0
February	127.0	864	106	186.8	----------	129	122.0	105.6
March	126.4	854	105	183.1	----------	124	117.4	104.2
April	124.0	851	104	180.1	----------	121	98.7	106.2
May	121.0	840	104	176.6	----------	116	98.7	107.0
June	118.3	833	108	176.5	----------	111	99.6	109.3
July	119.0	811	110	174.8	[1] 68.0	110	96.4	107.9
August	119.7	805	109	171.5	----------	112	116.5	102.2
September	119.4	804	109	172.9	----------	109	124.4	104.3
October	119.1	805	111	170.2	----------	107	110.0	103.1
November	116.7	812	110	167.9	----------	107	103.2	99.6
December	114.3	809	110	160.7	----------	107	97.0	99.1
1932								
January	109.3	814	111	156.5	67.1	105	98.2	98.0
February	105.3	829	110	151.3	65.7	100	122.8	95.6
March	105.0	825	109	148.2	65.8	99	114.2	100.1
April	103.7	824	107	144.3	65.2	98	99.1	97.3
May	101.3	812	108	144.8	64.8	94	98.4	100.8
June	100.1	803	113	143.8	65.1	93	107.3	101.4
July	101.0	800	110	144.4	65.0	92	101.4	97.5
August	100.8	796	109	142.9	63.2	96	103.6	94.4
September	100.3	792	110	150.8	62.6	95	102.6	97.6
October	100.4	786	110	155.4	62.8	96	94.9	100.0
November	99.4	764	109	159.4	62.8	97	87.9	102.3
December	98.7	759	109	156.9	62.1	96	84.5	102.3
1933								
January	94.8	747	106	154.4	61.9	95	87.3	100.4
February	90.9	742	103	156.1	62.3	91	94.8	99.3
March	90.5	734	103	150.4	62.2	91	92.3	94.9
April	90.4	746	103	147.7	60.9	93	85.2	94.1
May	93.7	750	103	143.0	59.6	93	86.0	96.8
June	96.7	759	106	143.4	59.2	93	84.1	98.8
July	104.8	754	104	144.0	60.0	95	86.3	96.8
August	[2] 106.9	767	104	----------	59.5	101	90.0	95.2
September	[3] 107.2	768	104	----------	59.5	99	88.0	94.2
October	[4] 107.0	----------	104	----------	----------	99	88.1	94.2
November	[5] 106.8	----------	104	----------	----------	99	----------	----------

[1] Year.
[2] Average for Aug. 15 and 29.
[3] Average for Sept. 12 and 26.
[4] Average for Oct. 10 and 24.
[5] Average for Nov. 7 and 21.

INDEX NUMBERS OF RETAIL FOOD PRICES IN THE UNITED STATES AND IN FOREIGN COUNTRIES—Continued

Country	Estonia	Finland	France	Germany	Hungary	India	Ireland	Italy
Computing agency	Bureau of Statistics	Ministry of Social Affairs	Commission of Cost of Living	Federal Statistical Bureau	Central Office of Statistics	Labor Office	Department of Industry and Commerce	Office Provincial of Economy
Number of localities	Tallin	21	Paris	72	Budapest	Bombay	105	Milan
Commodities included	51 foods	14 foods	Foods	24 foods	12 foods	17 foods	29 foods	18 foods
Base=100	1913	January–June 1914	January–June 1914	October 1913–July 1914	1913	July 1914	July 1914	January–June 1914
1926								
July	121	1,104.5	[6] 507	145.3	115.0	155	174	654.3
1927								
July	117	1,102.3	[6] 559	156.8	125.6	154	166	524.0
1928								
July	127	1,155.3	[6] 544	154.1	130.5	143	166	512.5
1929								
July	134	1,116.4	[6] 590	155.7	127.2	145	166	528.3
1930								
July	103	969.4	[6] 593	145.9	104.6	136	156	519.3
1931								
January	95	893.2	----------	133.5	93.5	111	----------	467.1
February	96	882.6	----------	131.0	94.1	106	151	462.8
March	96	878.8	641	129.6	96.3	103	----------	464.7
April	96	869.8	----------	129.2	95.7	104	----------	466.8
May	95	849.4	----------	129.9	96.6	102	139	460.0
June	93	842.4	642	130.9	96.5	101	----------	456.6
July	94	846.0	----------	130.4	98.9	100	----------	452.0
August	91	869.5	----------	126.1	99.7	100	143	444.1
September	87	844.3	607	124.9	99.6	100	----------	438.3
October	83	847.9	----------	123.4	96.8	100	----------	435.1
November	82	885.2	----------	121.8	94.1	100	155	436.8
December	80	918.8	555	119.9	93.0	101	----------	437.8
1932								
January	81	915.8	----------	116.1	91.8	103	----------	431.2
February	81	908.3	----------	113.9	89.9	102	151	432.5
March	83	911.2	561	114.4	89.8	103	----------	445.6
April	83	886.3	----------	113.4	89.9	99	----------	450.4
May	81	875.7	----------	112.7	93.4	99	144	441.8
June	80	871.0	567	113.4	93.3	99	----------	438.0
July	83	885.7	----------	113.8	92.1	102	----------	426.8
August	80	897.8	----------	111.8	93.8	102	134	411.1
September	79	891.4	534	110.5	92.9	101	----------	409.7
October	77	894.5	----------	109.6	92.0	102	----------	423.4
November	76	919.8	----------	109.5	88.4	103	135	428.0
December	75	910.2	531	109.0	86.7	103	----------	433.9
1933								
January	75	894.1	----------	107.3	86.5	101	----------	426.1
February	74	883.5	----------	106.5	86.2	98	130	422.8
March	75	869.8	542	106.2	86.1	98	----------	416.6
April	73	868.0	----------	106.3	85.5	93	----------	405.1
May	74	867.8	----------	109.5	84.7	91	126	398.3
June	74	881.7	----------	110.7	84.4	95	----------	402.9
July	77	907.1	----------	110.5	79.2	95	----------	402.4
August	81	919.9	----------	110.2	77.8	94	129	391.2
September	81	920.1	----------	111.1	77.3	94	----------	401.5
October	77	923.2	----------	112.3	----------	----------	----------	405.1
November	----------	----------	----------	----------	----------	----------	----------	----------

[6] June.

INDEX NUMBERS OF RETAIL FOOD PRICES IN THE UNITED STATES AND IN FOREIGN COUNTRIES—Continued

Country	Netherlands	New Zealand	Norway	Poland	South Africa	Sweden	Switzerland	United Kingdom
Computing agency	Bureau of Statistics	Census and Statistics Office	Central Bureau of Statistics	Central Statistical Office	Office of Census and Statistics	Board of Social Welfare	Federal Labor Office	Ministry of Labor
Number of localities	Amsterdam	25	31	Warsaw	9	49	34	509
Commodities included	15 foods	58 foods	89 foods	85 foods	20 foods	43 foods	28 foods	14 foods
Base=100	1911–1913	1926–1930 (1,000)	July 1914	1927	1914 (1,000)	July 1914	June 1914	July 1914
1926								
July	[6] 168.1	[1] 1,026	198	----------	1,165	156	159	161
1927								
July	[6] 163.0	[1] 983	175	101.1	1,188	148	157	159
1928								
July	[6] 169.4	[1] 1,004	173	102.6	1,157	156	157	157
1929								
July	[6] 165.3	[1] 1,013	158	94.3	1,156	148	155	149
1930								
July	[6] 151.6	981	151	86.2	1,092	138	152	141
1931								
January	----------	910	146	72.2	1,081	132	148	138
February	----------	879	144	72.3	1,074	----------	146	136
March	139.9	856	143	73.5	1,071	----------	144	134
April	----------	851	141	76.4	1,073	130	142	129
May	----------	847	139	77.2	1,082	----------	141	129
June	140.6	839	138	75.9	1,064	----------	141	127
July	----------	824	140	72.9	1,043	127	140	130
August	----------	820	138	70.8	1,031	----------	139	128
September	136.9	812	136	70.3	1,022	----------	139	128
October	----------	834	136	68.3	1,026	128	138	128
November	----------	832	136	69.6	1,022	----------	137	130
December	125.5	835	136	69.1	1,004	----------	134	132
1932								
January	----------	827	135	65.0	990	127	132	131
February	----------	810	135	65.2	992	----------	129	131
March	118.8	792	135	64.5	993	----------	128	129
April	----------	797	134	68.2	987	125	128	126
May	----------	787	133	71.4	981	----------	126	125
June	119.2	778	133	68.1	963	----------	125	123
July	----------	761	134	63.1	944	124	124	125
August	----------	761	133	61.7	933	----------	123	123
September	119.7	758	134	60.9	927	----------	122	123
October	----------	765	133	59.2	927	125	123	125
November	----------	745	134	58.7	928	----------	122	125
December	119.2	713	132	56.7	926	----------	120	125
1933								
January	----------	707	130	56.3	931	123	118	123
February	----------	727	130	57.4	938	----------	117	122
March	115.5	712	130	58.8	950	----------	116	119
April	----------	714	130	59.2	966	119	116	115
May	----------	727	130	58.8	976	----------	116	114
June	116.5	723	130	58.3	989	----------	116	114
July	----------	732	132	59.2	980	120	116	118
August	----------	741	133	54.2	971	----------	116	119
September	121.1	747	132	54.9	987	----------	117	122
October	----------	----------	130	54.8	----------	123	117	123
November	----------	----------	----------	----------	----------	----------	----------	126

[1] Year. [6] June.

WHOLESALE PRICES

Index Numbers of Wholesale Prices, 1913 to November 1933

THE following table presents the index numbers of wholesale prices by groups of commodities, by years, from 1913 to 1932, inclusive, and by months from January 1932 to date:

INDEX NUMBERS OF WHOLESALE PRICES

[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
1913	71.5	64.2	68.1	57.3	61.3	90.8	56.7	80.2	56.3	93.1	69.8
1914	71.2	64.7	70.9	54.6	56.6	80.2	52.7	81.4	56.8	89.9	68.1
1915	71.5	65.4	75.5	54.1	51.8	86.3	53.5	112.0	56.0	86.9	69.5
1916	84.4	75.7	93.4	70.4	74.3	116.5	67.6	160.7	61.4	100.6	85.5
1917	129.0	104.5	123.8	98.7	105.4	150.6	88.2	165.0	74.2	122.1	117.5
1918	148.0	119.1	125.7	137.2	109.2	136.5	98.6	182.3	93.3	134.4	131.3
1919	157.6	129.5	174.1	135.3	104.3	130.9	115.6	157.0	105.9	139.1	138.6
1920	150.7	137.4	171.3	164.8	163.7	149.4	150.1	164.7	141.8	167.5	154.4
1921	88.4	90.6	109.2	94.5	96.8	117.5	97.4	115.0	113.0	109.2	97.6
1922	93.8	87.6	104.6	100.2	107.3	102.9	97.3	100.3	103.5	92.8	96.7
1923	98.6	92.7	104.2	111.3	97.3	109.3	108.7	101.1	108.9	99.7	100.6
1924	100.0	91.0	101.5	106.7	92.0	106.3	102.3	98.9	104.9	93.6	98.1
1925	109.8	100.2	105.3	108.3	96.5	103.2	101.7	101.8	103.1	109.0	103.5
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927	99.4	96.7	107.7	95.6	88.3	96.3	94.7	96.8	97.5	91.0	95.4
1928	105.9	101.0	121.4	95.5	84.3	97.0	94.1	95.6	95.1	85.4	96.7
1929	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.2	94.3	82.6	95.3
1930	88.3	90.5	100.0	80.3	78.5	92.1	89.9	89.1	92.7	77.7	86.4
1931	64.8	74.6	86.1	66.3	67.5	84.5	79.2	79.3	84.9	69.8	73.0
1932	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.5	75.1	64.4	64.8
1932:											
January	52.8	64.7	79.3	59.6	67.9	81.8	74.8	75.7	77.7	65.6	67.3
February	50.6	62.5	78.3	59.5	68.3	80.9	73.4	75.5	77.5	64.7	66.3
March	50.2	62.3	77.3	58.0	67.9	80.8	73.2	75.3	77.1	64.7	66.0
April	49.2	61.0	75.0	56.1	70.2	80.3	72.5	74.4	76.3	64.7	65.5
May	46.6	59.3	72.5	54.3	70.7	80.1	71.5	73.6	74.8	64.4	64.4
June	45.7	58.8	70.8	52.7	71.6	79.9	70.8	73.1	74.7	64.2	63.9
July	47.9	60.9	68.6	51.5	72.3	79.2	69.7	73.0	74.0	64.3	64.5
August	49.1	61.8	69.7	52.7	72.1	80.1	69.6	73.3	73.6	64.6	65.2
September	49.1	61.8	72.2	55.6	70.8	80.1	70.5	72.9	73.7	64.7	65.3
October	46.9	60.5	72.8	55.0	71.1	80.3	70.7	72.7	73.7	64.1	64.4
November	46.7	60.6	71.4	53.9	71.4	79.6	70.7	72.4	73.7	63.7	63.9
December	44.1	58.3	69.6	53.0	69.3	79.4	70.8	72.3	73.6	63.4	62.6
1933:											
January	42.6	55.8	68.9	51.9	66.0	78.2	70.1	71.6	72.9	61.2	61.0
February	40.9	53.7	68.0	51.2	63.6	77.4	69.8	71.3	72.3	59.2	59.8
March	42.8	54.6	68.1	51.3	62.9	77.2	70.3	71.2	72.2	58.9	60.2
April	44.5	56.1	69.4	51.8	61.5	76.9	70.2	71.4	71.5	57.8	60.4
May	50.2	59.4	76.9	55.9	60.4	77.7	71.4	73.2	71.7	58.9	62.7
June	53.2	61.2	82.4	61.5	61.5	79.3	74.7	73.7	73.4	60 8	65.0
July	60.1	65.5	86.3	68.0	65.3	80.6	79.5	73.2	74.8	64.0	68.9
August	57.6	64.8	91.7	74.6	65.5	81.2	81.3	73.1	77.6	65.4	69.5
September	57.0	64.9	92.3	76.9	70.4	82.1	82.7	72.7	79.3	65.1	70.8
October	55.7	64.2	89.0	77.1	73.6	83.0	83.9	72.7	81.2	65.3	71.2
November	56.6	64.3	88.2	76.8	73.5	82.7	84.9	73.4	81.0	65.5	71.1

INDEX NUMBERS OF SPECIFIED GROUPS OF COMMODITIES

[1926=100]

Year	Raw materials	Semi-manufactured articles	Finished products	Non-agricultural commodities	All commodities other than farm products and foods	Month	Raw materials	Semi-manufactured articles	Finished products	Non-agricultural commodities	All commodities other than farm products and foods
1913	68.8	74.9	69.4	69.0	70.0	1932:					
1914	67.6	70.0	67.8	66.8	66.4	January	58.3	63.1	72.1	70.3	71.7
1915	67.2	81.2	68.9	68.5	68.0	February	56.9	61.9	71.4	69.6	71.3
1916	82.6	118.3	82.3	85.3	88.3	March	56.1	60.8	71.5	69.3	70 9
1917	122.6	150.4	109.2	113.1	114.2	April	55.5	59.6	71.1	68.9	70.9
1918	135.8	153.8	124.7	125.1	124.6	May	53.9	58.1	70.3	68.1	70.4
1919	145.9	157.9	130.6	131.6	128.8	June	53.2	57.6	70.0	67.8	70.1
1920	151.8	198.2	149.8	154.8	161.3	July	54.7	55.5	70.5	68.0	69.7
1921	88.3	96.1	103.3	100.1	104.9	August	55.7	57.9	70.7	68.5	70.1
1922	96.0	98.9	96.5	97.3	102.4	September	56.2	60.7	70.4	68.7	70.4
1923	98.5	118.6	99.2	100.9	104.3	October	54.6	60.7	69.6	68.1	70.2
1924	97.6	108.7	96.3	97.1	99.7	November	54.2	58.9	69.3	67.5	69.8
1925	106.7	105.3	100.6	101.4	102.6	December	52.1	57.7	68.4	66.5	69.0
1926	100.0	100.0	100.0	100.0	100.0	1933:					
1927	96.5	94.3	95.0	94.6	94.0	January	50.2	56.9	66.7	64.9	67.3
1928	99.1	94.5	95.9	94.8	92.9	February	48.4	56.3	65.7	63.7	66.0
1929	97.5	93.9	94.5	93.3	91.6	March	49.4	56.9	65.7	63.8	65.8
1930	84.3	81.8	88.0	85.9	85.2	April	50.0	57.3	65.7	63.7	65.3
1931	65.6	69.0	77.0	74.6	75.0	May	53.7	61.3	67.2	65.4	66.5
1932	55.1	59.3	70.3	68.3	70.2	June	56.2	65.3	69.0	67.4	68.9
						July	61.8	69.1	72.2	70.7	72.2
						August	60.6	71.7	73.4	72.0	74.1
						September	61.7	72.9	74.8	73.7	76.1
						October	61.8	72.8	75.4	74.4	77.2
						November	62.4	71.4	75.2	74.2	77.2

Weekly Index Numbers of Wholesale Prices

A SUMMARIZATION of the weekly index numbers for the 10 major groups of commodities and for all commodities combined as issued during the month of November 1933 will be found in the following statement:

INDEX NUMBERS OF WHOLESALE PRICES FOR WEEKS OF NOVEMBER 4, 11, 18, AND 25, 1933

[1926=100]

Group	Week ending—			
	Nov. 4, 1933	Nov. 11, 1933	Nov. 18, 1933	Nov. 25, 1933
All commodities	70.9	71.2	71.7	71.0
Farm products	55.5	55.6	58.7	56.8
Foods	64.2	65.0	65.4	63.9
Hides and leather products	87.6	87.5	88.5	88.9
Textile products	76.1	76.0	75.8	75.8
Fuel and lighting materials	74.6	74.7	74.5	73.9
Metals and metal products	82.5	83.4	83.5	83.5
Building materials	83.8	84.4	84.7	85.1
Chemicals and drugs	72.6	73.2	73.5	73.8
House-furnishing goods	81.3	82.2	82.1	82.0
Miscellaneous	65.3	65.4	65.4	65.4

Purchasing Power of the Dollar, 1913 to November 1933

CHANGES in the buying power of the dollar expressed in terms of wholesale prices from 1913 to November 1933 are shown in the following table. The figures in this table are reciprocals of the index numbers. To illustrate, the index number representing the level of all commodities at wholesale in November 1933 with average prices for the year 1926 as the base, is shown to be 71.1. The reciprocal of this index number is 0.01406 which, translated into dollars and cents, becomes $1.406. The table shows that the dollar expanded so much in its buying value that $1 of 1926 had increased in value to $1.406 in November 1933 in the purchase of all commodities at wholesale.

The purchasing power of the dollar for all groups and subgroups of commodities for November will be found on page 236.

PURCHASING POWER OF THE DOLLAR EXPRESSED IN TERMS OF WHOLESALE PRICES

[1926=$1]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
1913	$1.399	$1.558	$1.468	$1.745	$1.631	$1.101	$1.764	$1.247	$1.776	$1.074	$1.433
1914	1.404	1.546	1.410	1.832	1.767	1.247	1.898	1.229	1.761	1.112	1.468
1915	1.399	1.529	1.325	1.848	1.931	1.159	1.869	.893	1.786	1.151	1.439
1916	1.185	1.321	1.071	1.420	1.346	.858	1.479	.622	1.629	.994	1.170
1917	.775	.957	.808	1.013	.949	.664	1.134	.606	1.348	.819	.851
1918	.676	.840	.796	.729	.916	.733	1.014	.549	1.072	.744	.762
1919	.635	.772	.574	.739	.959	.764	.865	.637	.944	.719	.722
1920	.664	.728	.584	.607	.611	.669	.666	.607	.705	.597	.648
1921	1.131	1.104	.916	1.058	1.033	.851	1.027	.870	.885	.916	1.025
1922	1.066	1.142	.956	.998	.932	.972	1.028	.997	.966	1.078	1.034
1923	1.014	1.079	.960	.898	1.028	.915	.920	.989	.918	1.003	.994
1924	1.000	1.099	.985	.937	1.087	.941	.978	1.011	.953	1.068	1.019
1925	.911	.998	.950	.923	1.036	.969	.983	.982	.970	.917	.966
1926	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1927	1.006	1.034	.929	1.046	1.133	1.038	1.056	1.033	1.026	1.099	1.048
1928	.944	.990	.824	1.047	1.186	1.031	1.063	1.046	1.052	1.171	1.034
1929	.953	1.001	.917	1.106	1.205	.995	1.048	1.062	1.060	1.211	1.049
1930	1.133	1.105	1.000	1.245	1.274	1.086	1.112	1.122	1.079	1.287	1.157
1931	1.543	1.340	1.161	1.508	1.481	1.183	1.263	1.261	1.178	1.433	1.370
1932	2.075	1.639	1.372	1.821	1.422	1.247	1.401	1.361	1.332	1.553	1.543
1932:											
January	1,894	1.546	1.261	1.678	1.473	1.222	1.337	1.321	1.287	1.524	1.486
February	1.976	1.600	1.277	1.681	1.464	1.236	1.362	1.325	1.290	1.546	1.508
March	1.992	1.605	1.294	1.724	1.473	1.238	1.366	1.328	1.297	1.546	1.515
April	2.033	1.639	1.333	1.783	1.425	1.245	1.379	1.344	1.311	1.546	1.527
May	2.146	1.686	1.379	1.842	1.414	1.248	1.399	1.359	1.337	1.553	1.553
June	2.188	1.701	1.412	1.898	1.397	1.252	1.412	1.368	1.339	1.558	1,565
July	2.088	1.642	1.458	1.942	1.383	1.263	1.435	1.370	1.351	1.555	1.550
August	2.037	1.618	1.435	1.898	1.387	1.248	1.437	1.364	1.359	1.548	1.534
September	2.037	1.618	1.385	1.799	1.412	1.248	1.418	1.372	1.357	1.546	1.531
October	2.132	1.653	1.374	1.818	1.406	1.245	1.414	1.376	1.357	1.560	1.553
November	2.141	1.650	1.401	1.855	1.401	1.256	1.414	1.381	1.357	1.570	1.565
December	2.268	1.715	1.437	1.887	1.443	1.259	1.412	1.383	1.359	1.577	1.597
1933:											
January	2.347	1.792	1.451	1.927	1.515	1.279	1.427	1.397	1.372	1.634	1.639
February	2.445	1.862	1.471	1.953	1.572	1.292	1.433	1.403	1.383	1.689	1.672
March	2.336	1.832	1.468	1.949	1.590	1.295	1.422	1.404	1.385	1.698	1.661
April	2.247	1.783	1.441	1.931	1.626	1.300	1.425	1.401	1.399	1.730	1.656
May	1.992	1.684	1.300	1.789	1.656	1.287	1.401	1.366	1.395	1.698	1.595
June	1.880	1.634	1.214	1.626	1.626	1.261	1.339	1.357	1.362	1.645	1.538
July	1.664	1.527	1.159	1.471	1.531	1.241	1.258	1.366	1.337	1.563	1.451
August	1.736	1.543	1.091	1.340	1.527	1.232	1.230	1.368	1.289	1.529	1.439
September	1.754	1.541	1.083	1.300	1.420	1.218	1.209	1.376	1.261	1.536	1.412
October	1.795	1.558	1.124	1.297	1.359	1.205	1.192	1.376	1.232	1.531	1.404
November	1.767	1.555	1.334	1.302	1.361	1.209	1.178	1.362	1.235	1.527	1.406

Processing Taxes and the Price Index

THE Agricultural Adjustment Act provided that "to obtain revenue for extraordinary expenses incurred by reason of the national economic emergency, there shall be levied processing taxes * * *."[1] In accordance with this act, the Secretary of Agriculture established a processing tax of 30 cents a bushel on wheat, effective July 10, 1933. There was also declared, effective August 1, 1933, a processing tax of 4.2 cents per pound on cotton. On September 14, the Secretary of Agriculture announced a processing tax, effective October 1, on leaf tobacco of 1.7 cents per pound for Maryland tobacco and 3 cents per pound for tobacco from other States.

The corn-hog ratio was declared effective as of November 5, with the following provisions: Until December 1, the tax on corn is announced as 5 cents per bushel of 56 pounds, and effective December 1, the rate of tax shall be 20 cents per bushel of 56 pounds. For hogs, the following taxes have been announced: Effective November 5, 50 cents per 100 pounds live weight; December 1, $1 per hundredweight; January 1, 1934, $1.50 per hundredweight; and February 1, 1934, $2 per hundredweight.

In all cases these taxes are to be collected by the Bureau of Internal Revenue on "the first domestic processing" of each raw material. No tax is to be paid by the purchaser of the raw materials when such materials are to be used by the farmer for purposes of feeding or otherwise. The tax is to be paid by the purchaser of the raw materials when such materials are to be processed or converted into other items for further sale.

As considerable portions of these raw materials are not purchased for processing it is not justifiable to include these taxes in regular market quotations. The index number of the Bureau of Labor Statistics, showing the general trend of wholesale commodity prices, represents market prices, and therefore prices used in the calculation of these indexes for articles subject to the processing tax do not include such taxes.

In order that the effect of processing taxes on the index numbers of the Bureau of Labor Statistics may be shown, there has been calculated a series of wholesale price indexes for the major groups and subgroups of farm products, including the articles upon which taxes have been assessed, for the period during which they have been effective. The following tabular statement shows the comparison of the regular series of index numbers of the Bureau for farm products with the indexes based upon prices including processing taxes:

[1] Pt. 2, sec. 9, par. a, H.R. 3835, approved May 12, 1933.

INDEX NUMBERS OF WHOLESALE PRICES OF FARM PRODUCTS WITH AND WITHOUT PROCESSING TAXES

Month	Grains		Live stock and poultry		Other farm products		All farm products	
	Without tax	With tax	Without tax	With tax	Without tax	With tax	Without tax	With tax
July	73.4	83.2	----------	----------	----------	----------	60.1	61.7
August	64.6	77.5	----------	----------	62.5	67.7	57.6	62.5
September	63.9	76.8	----------	----------	61.2	66.8	57.0	62.1
October	58.2	71.1	----------	----------	61.2	67.5	55.7	61.2
November	61.3	75.4	41.2	43.0	64.3	70.6	56.6	62.8

It will be seen from the above that the index numbers of the individual groups of farm products have been affected by the processing tax. The index number for grains for November, excluding the tax on wheat, was 61.3 as compared with 75.4 when the tax was included, showing a differential of 23 percent between the two figures. The index number for other farm products for the same month, excluding the tax on cotton and tobacco, was 64.3. Including these taxes, the index is 70.6. The differential between the two series was nearly 10 percent. Including the corn-hog ratio the index number of livestock and poultry for the month was 43.0, and excluding the corn-hog ratio the index was 41.2, showing a differential of over 4 percent. For all farm products for the month of November the index number of the regular series is 56.6 as compared with 62.8 with all taxes added, showing a differential of about 11 percent between the two indexes.

Wholesale Price Trends During November 1933

WHOLESALE commodity prices receded slightly during November according to an announcement made by the Bureau of Labor Statistics of the United States Department of Labor. The index number which includes 784 commodities or price series weighted according to their relative importance in the markets and based on the average of 1926 as 100 declined from 71.2 for October to 71.1 for November.

Between October and November, decreases in prices were reported for 150 items, increases for 181, while in 453 instances no change took place. Although price declines were reported for only one fifth of the commodities covered, these decreases were sufficiently large to offset the advance in other commodities and thus cause the total index to move slightly downward. Among the important price declines which accounted for the drop in the index number were a 26 percent fall for California refinery gas; a 10 percent decrease for livestock and poultry; 7½ percent for silk and silk yarns; 6 percent for cotton yarn; 5½ percent for sheeting, fresh and cured meats, and soap; 5 percent for leather; 3 percent for knit goods; 2½ percent for raw and granulated sugar; and 1½ percent for hides and skins.

For the sixth consecutive month current prices averaged higher than those in the corresponding month in the year before. The index shows an increase of more than 11 percent over prices of November a year ago when the index was 62.9. The average is 19 percent higher than that for the month of February 1933 when prices had reached their low point with an index of 59.8. As compared with June 1929, when the index stood at 95.2, prices last month were down by slightly more than 25 percent.

For the second consecutive month the hides and leather group, with a decline of nearly 1 percent, showed the greatest decrease of any of the 10 major groups of commodities. In this group leather prices showed an average decrease of nearly 5 percent. Market prices of hides and skins moved sharply downward, with boots and shoes showing a minor advance and other leather products rising by nearly 3 percent.

Weakening market prices for cotton textiles, knit goods, silk and rayon, and woolen and worsted goods more than offset advancing prices in clothing and other textiles and caused the textile-products group as a whole to decline slightly less than one half of 1 percent during November.

The metals and metal products group moved downward by less than one half of 1 percent because of declining prices in certain of the iron and steel items. The indexes for agricultural implements and motor vehicles were unchanged, while the average of nonferrous metals showed a slight advance. The house-furnishing-goods group and the group of fuel and lighting materials both showed declining prices between October and November.

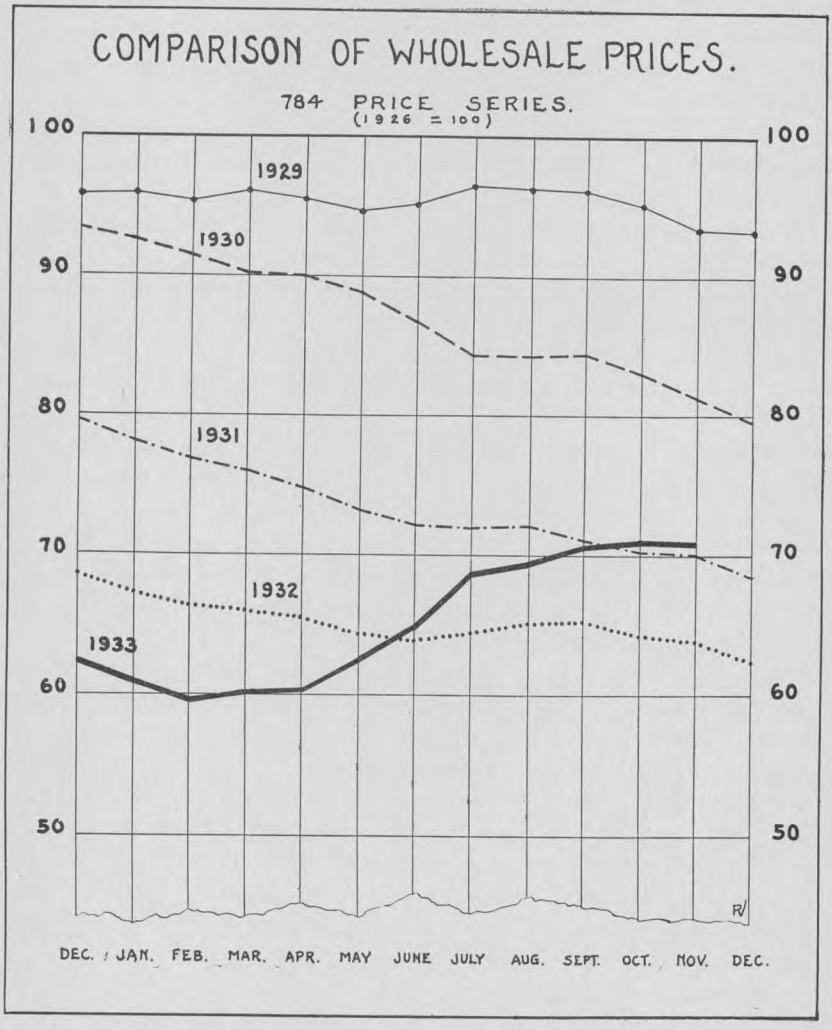
Wholesale prices of farm products showed the largest price advance. The group as a whole rose by more than 1½ percent over the previous month. The index for the group is 38 percent above February, the low point reached during the year, and about 21 percent higher than the corresponding month of last year, and within 5½ percent of the high point reached in July of the present year. Price advances in this group were shown for corn, oats, rye, wheat, cotton, eggs, apples, hay, tobacco, and wool. Decreases in average prices were reported for livestock and poultry, barley, lemons, oranges, hops, dried beans, onions, and potatoes.

The building materials group registered the second largest advance. This group increased by over 1 percent during the month. Brick and tile, lumber, paint and paint materials, and other building materials shared in the upward movement. Average prices for plumbing and heating materials moved downward, while cement and structural steel remained at the same level as for October.

The group of chemicals and drugs showed a strengthening in average prices and moved upward by nearly 1 percent, due to advancing prices

of drugs and pharmaceuticals, chemicals, fertilizer materials, and mixed fertilizers. Higher prices for crude rubber, which has advanced nearly 200 percent from early 1933, cattle feed, and paper and pulp forced the miscellaneous group to rise about one third of 1 percent.

Manufactured food products, as a whole, showed an upward movement by increasing fractionally. The index for the group is nearly



20 percent above February, the low point reached during the year, and more than 6 percent higher than November of last year. Among the food items which showed price increases were cheese, flour, cornmeal, rice, cured pork, edible tallow, and butter in several localities. Declining prices were reported for bread, macaroni, canned and dried

fruit, bananas, canned vegetables, bacon, fresh pork, coffee, raw and granulated sugar, and certain vegetable oils.

Raw materials as a whole, including basic farm products, pig tin, pig lead, crude rubber, and similar articles showed an increase of nearly 1 percent and averaged 15 percent over a year ago. The group was nearly 29 percent higher in November than in February, when the low point was reached.

Semimanufactured articles declined 2 percent to a level of 21 percent above a year ago and have risen by nearly 27 percent over the February average.

Prices of finished products moved downward about one fourth of 1 percent to a point slightly more than 8½ percent over last November, and to a level of 14½ percent above the low point of February.

The nonagricultural commodities group, which includes all commodities except farm products, declined less than one half of 1 percent within the month. The group now stands 10 percent over a year ago and nearly 16½ percent over the February average.

The combined index for all products exclusive of farm products and processed foods showed no change between October and November. It showed an increase of nearly 11 percent over last November and 17 percent over the February average.

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INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES

[1926=100.0]

Groups and subgroups	November 1932	October 1933	November 1933	Purchasing power of the dollar, November 1933.[1]
All commodities	63.9	71.2	71.1	$1.406
Farm products	46.7	55.7	56.6	1.767
Grains	33.2	58.2	61.3	1.631
Livestock and poultry	41.9	45.4	41.2	2.427
Other farm products	53.9	61.2	64.3	1.555
Foods	60.6	64.2	64.3	1.555
Butter, cheese, and milk	62.3	66.0	67.2	1.488
Cereal products	62.7	85.0	85.8	1.166
Fruits and vegetables	52.4	62.5	61.7	1.621
Meats	53.7	51.0	48.2	2.075
Other foods	67.7	64.4	66.4	1.506
Hides and leather products	71.4	89.0	88.2	1.134
Boots and shoes	84.2	98.9	99.0	1.010
Hides and skins	46.1	71.2	70.1	1.427
Leather	61.9	83.2	79.3	1.261
Other leather products	81.9	85.1	87.9	1.138
Textile products	53.9	77.1	76.8	1.302
Clothing	62.2	84.8	88.0	1.136
Cotton goods	53.6	88.8	86.0	1.163
Knit goods	51.0	74.7	72.5	1.379
Silk and rayon	29.5	32.0	30.4	3.289
Woolen and worsted goods	55.3	84.5	84.4	1.185
Other textile products	67.1	75.3	75.8	1.319
Fuel and lighting materials	71.4	73.6	73.5	1.361
Anthracite coal	88.8	81.8	81.8	1.222
Bituminous coal	80.4	89.8	90.7	1.103
Coke	75.6	82.6	83.2	1.202
Electricity	103.1	92.3	[2]	[2]
Gas	100.0	100.5	[2]	[2]
Petroleum products	48.2	52.7	51.6	1.938
Metals and metal products	79.6	83.0	82.7	1.209
Agricultural implements	84.6	83.7	83.7	1.195
Iron and steel	79.4	82.4	81.5	1.227
Motor vehicles	92.7	90.9	90.9	1.100
Nonferrous metals	49.1	67.0	68.0	1.471
Plumbing and heating	67.5	74.7	73.7	1.357
Building materials	70.7	83.9	84.9	1.178
Brick and tile	75.4	84.6	84.7	1.181
Cement	79.0	91.2	91.2	1.096
Lumber	56.6	84.2	86.5	1.156
Paint and paint materials	68.5	76.1	76.3	1.311
Plumbing and heating	67.5	74.7	73.7	1.357
Structural steel	81.7	86.8	86.8	1.152
Other building materials	80.1	87.1	88.4	1.131
Chemicals and drugs	72.4	72.7	73.4	1.362
Chemicals	79.7	78.6	79.2	1.263
Drugs and pharmaceuticals	55.0	56.8	58.4	1.712
Fertilizer materials	63.5	67.6	67.8	1.475
Mixed fertilizers	65.6	68.3	68.5	1.460
House-furnishing goods	73.7	81.2	81.0	1.235
Furnishings	74.7	82.8	82.8	1.208
Furniture	72.7	79.8	79.4	1.259
Miscellaneous	63.7	65.3	65.5	1.527
Automobile tires and tubes	44.6	43.2	43.2	2.315
Cattle feed	40.8	60.4	63.5	1.575
Paper and pulp	73.4	82.4	82.5	1.212
Rubber, crude	7.2	15.6	17.5	5.714
Other miscellaneous	81.5	78.6	78.4	1.276
Raw materials	54.2	61.8	62.4	1.603
Semimanufactured articles	58.9	72.8	71.4	1.401
Finished products	69.3	75.4	75.2	1.330
Nonagricultural commodities	67.5	74.4	74.2	1.348
All commodities other than farm products and foods	69.8	77.2	77.2	1.295

[1] This column shows the purchasing power of the dollar in November 1933, as compared with its average purchasing power for the year 1926 in terms of individual commodity groups.
[2] Data not yet available.

PUBLICATIONS RELATING TO LABOR

Official—United States

CALIFORNIA.—Department of Social Welfare. *Third biennial report, July 1, 1930, to June 30, 1932. Sacramento, 1933. 111 pp.*

Data on old-age pensions in California, taken from this report, are given in this issue of the Monthly Labor Review.

ILLINOIS.—Housing Commission. *Final report. Chicago, 1933. 34 pp.*

The commission recommends immediate action in providing medium and low cost housing as part of the effort to aid industrial recovery, and, as even more important, a long-range program of housing designed to meet the needs of middle and lower income families. Since the war, good housing has not been furnished at rates these classes can pay, and there is a tremendous demand waiting for satisfaction. It can be met if there is a united effort to avoid all possible wastes, make all possible economies, and provide careful and efficient management.

"The commission believes that the resources, the technical and professional skills, and the business and industrial ability of the construction industries, if effectively coordinated, could reduce this gap and bring satisfactory housing within the reach of a much larger proportion of the population. Here is a vast field for development, one which will be difficult to start in but which has enormous possibilities for industrial activity, employment, and improved community life."

NEW JERSEY.—Department of Labor. Bureau of Statistics and Records. *Industrial accidents report: Compensable cases closed during year ending December 31, 1932. [Trenton, 1933.] 17 pp. (Mimeographed.)*

Reviewed in this issue.

NORTH CAROLINA.—Department of Labor. *Rules for general safety in industry. Raleigh, [1933?]. 16 pp.*

A compilation of simple regulations for the prevention of industrial accidents.

OREGON.—State-wide Relief Council. Executive Committee. *Report, June 20, 1932, to December 15, 1932. Salem, 1933. 23 pp.*

PUERTO RICO.—Department of Labor. *Annual Report, 1931–32. San Juan, 1933. 128 pp., illus.*

Subjects covered in the report include workmen's compensation, industrial accidents, enforcement of labor laws, employment, and mediation and conciliation.

WEST VIRGINIA.—Bureau of Negro Welfare and Statistics. *Report, 1929–1932. [Charleston, 1933?] 61 pp.*

Reviewed in this issue.

—— Department of Mines. *Annual report, 1932. Charleston, [1933]. 173 pp.*

The first section of the report contains a summary report to the governor, a directory of mines, and coal and coke statistics. The second section, which is devoted to statistics of accidents, shows a total of 263 fatal, 2,654 nonfatal, and 2,782 minor injuries reported to the department for the year by mines employing 86,829 workers. Elsewhere in the report it is stated that during the same period 12,467 nonfatal and minor accidents were reported to the State workmen's compensation commissioner, so that the number reported to the department was only 44 percent of all nonfatal mine accidents.

UNITED STATES.—Department of Commerce. Bureau of Mines. *Bulletin 360: Explosion tests of Pittsburgh coal dust in the experimental mine, 1925 to 1932, inclusive, by G. S. Rice, H. P. Greenwald, and H. C. Howarth. Washington, 1933. 44 pp., diagrams, illus.*

One of a series of publications dealing with explosibility of coal dust and the prevention of explosions in coal mines.

—— —— —— *Information Circular 6746: A review of coal-mine fatalities in Indiana during the fiscal year October 1, 1931, to September 30, 1932, by C. A. Herbert. Washington, 1933. 16 pp.*

Describes accidents causing fatalities and recommends method of prevention.

—— —— —— *Information Circular 6747: Use of electric power in Castle Gate No. 2 Mine, Utah Fuel Co., by D. J. Parker. Washington, 1933. 8 pp.*

A description of unusual precautions to safeguard electrical installations in a coal mine.

—— —— —— *Technical Paper 551: Safety at petroleum cracking plants, by R. L. Marek. Washington, 1933. 92 pp., illus.*

Describes factors which influence the design of equipment, operating hazards, and methods of inspection.

Official—Foreign Countries

AUSTRIA.—Zentral-Gewerbe-Inspectorate. *Die Amtstätigkeit der Gewerbe-Inspectorate im Jahre 1932. Vienna, 1933. 159 pp., diagrams, illus.*

A report on the activities of the factory inspectors in Austria in 1932, including a historical review of the work of factory inspection for the last 50 years and a number of special reports by various authors, such as reports on medical examinations, industrial diseases, etc.

BRITISH COLUMBIA (CANADA).—Department of Labor. *Annual report, for the year ended December 31, 1932. Victoria, 1933. 83 pp., charts.*

DENMARK.—Statistiske Departement. *Statistisk aarbog, 1933. Copenhagen, 1933. 256 pp.*

A general statistical annual for Denmark and the Danish colonies, with a section containing international comparisons. The subjects covered in the part of the volume devoted to Denmark proper include number of agricultural and industrial workers, unemployment among trade-unionists, work of employment offices, industrial disputes, prices and cost of living, wages, social insurance, and cooperative societies. The international section includes data on production, number of trade-unionists, unemployment among trade-unionists, industrial disputes, and index numbers of prices and cost of living. Although some of the statistics are for 1933, most of them are for 1932 and earlier years.

ESTONIA.—Hariduse ja Sotsiaalministeerium. *Töökaitse eestis, 1931: Tööinspektorite 1931 a aruannete kokkuwõte. Tallinn, 1932. 64 pp., illus.*

Annual report on labor protection in Estonia during 1931, including a summary of the reports of factory inspectors and statistical tables showing complaints made by workers and their employers, industrial conflicts, industrial accidents and diseases, etc. Printed in Estonian with summary and table heads in French.

—— Riigi Statistika Keskbüroo. *Eesti põllumajandus, 1932. Tallinn, 1933. 207 pp., maps.*

The yearbook contains statistical information in regard to agriculture in Estonia, in 1932, including wages of farm hands. Table of contents and table heads are in French as well as Estonian.

FRANCE.—Bureau de la Statistique Générale. *Statistique annuelle des institutions d'assistance, 1930. Paris, 1933. lxvi, 71 pp.*

Statistics of the assistance given in France in 1930 to the aged and permanently incapacitated, the hospital and medical care of the sick, maternity and infant care, care of the insane, and aid to large families.

GERMANY.—Reichsarbeitsministerium. *Jahresberichte der Gewerbeaufsichtsbeamten und Bergbehörden für die Jahre 1931 und 1932. Berlin, 1933.* [*Various paging.*]

Annual reports of factory and mine inspectors in the various German States for 1931 and 1932, including information on accidents and accident prevention, industrial diseases and their prevention, hours of labor, condition of work places, etc.

—— Reichsversicherungsamt. *Gesundheitsfürsorge in der Invalidenversicherung, 1932. Berlin, 1933. 86 pp., charts, map.*

Annual report on public health care in 1932 by the Invalidity Insurance Administration in Germany, including a general review of the voluntary contributions of the insured to the invalidity insurance fund, preventive measures, etc.

GREAT BRITAIN.—Department of Overseas Trade. *Report on economic conditions in Italy (dated July 1933), by R. M. A. E. Turner. London, 1933. 194 pp.*

This report, by the commercial counselor of the British Embassy at Rome, includes data on labor legislation, social insurance, employment and unemployment, employment offices, relief work, wages, cost of living, and relations between capital and labor.

—— Ministry of Labor. Advisory Committee on Draft Regulations [under Unemployment Insurance (No. 3) Act, 1931]. *Second report. London, 1933. 10 pp.* (*Cmd. 4407.*)

—— —— National Advisory Council for Juvenile Employment (Scotland). *Fourth report. London, 1933. 10 pp.*

The report is devoted to the attitude of the council toward the recommendations made by the Royal Commission on Unemployment Insurance in respect to the insurance of juvenile employment. The majority approve of making the age for entering insurance coincide with the age for leaving school, of crediting unemployment-insurance contributions to those who voluntarily continue in full-time school attendance beyond the school-leaving age, and of making attendance at instructional centers a condition for the receipt of insurance benefit by all under the age of 18. The principal ground of the minority's disagreement is that they disapprove of lowering the age of entry into insurance, fearing that it may militate against raising the school-leaving age, which they consider a far more desirable step.

—— Ministry of Transport. *Report upon the accidents which occurred on the railways of Great Britain during the year 1932. London, 1933. 47 pp.* (*Cmd. 4370.*)

Reviewed in this issue.

INTERNATIONAL LABOR OFFICE. *Studies and Reports, Series B, No. 19: National recovery measures in the United States. Geneva, 1933. 224 pp.* (*World Peace Foundation, American agent, Boston, Mass.*)

The text of laws looking toward recovery in the United States is given in part 1. Part 2 is devoted to the text of the President's Reemployment Agreement, the codes approved under the National Industrial Recovery Act, and a list of such codes.

NETHERLANDS.—Rijksdienst de Werkloosheidsverzekering en Arbeidsbemiddeling. *Jaarverslag, 1931. The Hague, 1932. 124 pp., charts.*

—— —— *Jaarverslag, 1932. The Hague, 1933. 74 pp., charts.*

Annual reports upon the operations of the public unemployment insurance system and employment service in the Netherlands during 1931, including information on corresponding legislation, financial statements, etc.

NEW SOUTH WALES.—Department of Labor and Industry. *Report on the working of the Factories and Shops Act, 1912, during the year 1932. Sydney, 1933. 24 pp.*

During the year the number of factories in the State fell from 12,500 to 12,082, while the number of their employees rose from 106,253 to 118,983. Figures given for the metropolitan district show that the increase in employment was general in all classes of industry. "The most noticeable increases were in clothing, 2,536; metal works, 2,227; heat, light, and power, 1,338; printing, 923; food and drink, 871; stone, clay, and glass, etc., 552."

SCOTLAND.—Department of Health. *Fourth annual report, 1932. Edinburgh, 1933. 195 pp. (Cmd. 4338.)*

Some figures relating to contributory old-age pensions and widows' allowances, based on the tables of this report, are given in the Monthly Labor Review for October 1933 (p. 858).

SPAIN.—Presidencia del Consejo de Ministros. Instituto Geografico, Catastral y de Estadistica. *Anuario estadístico de España, 1931. Madrid, 1933. 802 pp., maps, charts. (In 2 volumes.)*

This general statistical annual for Spain includes data on industrial accidents, industrial disputes, social insurance, cost of living, wages, and working hours, in 1931 and earlier years. In the case of industrial disputes and wages, comparative figures are given for many other countries.

STOCKHOLM, UNIVERSITY OF. Institute for Social Sciences. *Wages, cost of living and national income in Sweden, 1860–1930. Stockholm, 1933. Vol. I, The cost of living in Sweden, 1830–1930, 251 pp., charts, map; vol. II, Wages in Sweden, 1860–1930, part 1, Manufacturing and mining, 579 pp., charts, maps.* [*Both volumes in English.*]

The results of investigations carried on as part of a series of studies of wages, cost of living, and national income in Sweden, 1860–1930. Volume III, on national income, is in preparation.

SWEDEN.—Jordbruksdepartementet. *Arbetarfrågan inom det Svenska jordbruket. Stockholm, 1932. 107 pp.*

Deals with the labor problem in agriculture in Sweden, and includes data on wages in the post-war period up to 1929.

SWITZERLAND.—Département fédéral de l'Économie publique. *La législation suisse en matière de réglementation du travail et d'assurances sociales pendant l'année 1932. Berne, 1933. 112 pp. (La Vie Économique, août 1933, 16e supplement.)*

This bulletin contains the text of laws and decrees dealing with unemployment relief and insurance, conciliation and arbitration, and other labor questions, which were promulgated in the different Cantons in 1932.

TUNIS.—Commission d'Études économiques et financières, 1929–31. *Rapports de la sous-commission d'études économiques. Tunis, 1932. Vol. I, 314 pp.; Vol. II, 337 pp.; Vol. III, 284 pp. Charts and maps.*

The three volumes of this report for Tunis cover, respectively, agricultural, mining, and fishing industries; domestic and foreign commerce, transportation systems, port facilities, and public utility systems; and labor and education, hygiene and assistance, and cheap dwellings.

YUGOSLAVIA.—Opšta Državna Statistika. *Statistički godišnjak, 1930, Knjiga II. Belgrade, 1933. 471 pp. (In Croatian and French.)*

This general statistical annual for Yugoslavia gives data for 1930 and earlier years. It includes information on industrial accidents, industrial disputes, operations under the compulsory social insurance law, work of labor exchanges, and cooperative societies.

Unofficial

AMERICAN MINING CONGRESS. Coal Division. *1933 yearbook on coal-mine mechanization. Washington, D.C., 439 Munsey Building, 1933. 276 pp., maps, diagrams, illus.*

In accordance with annual custom, the progress made in coal-mine mechanization during the year is here reviewed, with attention given not only to mechanized loading and conveyor systems but to machine cutting, drilling, etc. Includes proceedings of tenth annual convention of Practical Coal Operating Men at Pittsburgh, Pa., May 8–12, 1933.

BRISTOL, LEVERETT D. *Industrial health service. Philadelphia, Lea & Febiger, 1933. 170 pp.*

The writer presents in condensed form the more important facts and problems regarding the health of industrial workers. The first section deals with the requirements of a well-rounded program for individual industries, the second consists of a working outline of instructions on health for the use of supervisory employees, and the third part contains information regarding health measures for individual employees and might serve as a basis for a company health education program.

BUREAU OF RAILWAY NEWS AND STATISTICS. *Railway statistics of the United States of America, for the year ended December 31, 1932, compared with the official reports for 1931 and recent statistics of foreign railways. Chicago, 1933. 136 pp., charts, illus.*

Includes data on number and compensation of railway employees in the United States and foreign countries, and on railway accidents in the United States.

CHAMBER OF COMMERCE OF THE UNITED STATES. Department of Manufacture. *Unemployment reserve legislation. Washington, 1933. 23 pp.*

This report reviews the various legislative proposals for unemployment insurance in the different States and contains the recommendations of the committee on different phases of proposed measures.

COMMUNITY COUNCIL OF PHILADELPHIA. *Publication No. 5: Personal loans in unemployment relief. Philadelphia, 311 South Juniper Street, 1933. 74 pp.*

CONGRESS OF THE TRADE UNIONS OF THE U.S.S.R. *The Soviet trade unions on the threshold of the second five-year plan. Speeches and resolutions, ninth congress. Moscow, Cooperative Publishing Society of Foreign Workers in the U.S.S.R., 1933. 216 pp., charts.*

Data from this volume appear in the article on "Basis of wage payments in the Soviet Union" in this issue of the Monthly Labor Review.

CROWTHER, SAMUEL. *America self-contained. Garden City, N.Y., Doubleday, Doran & Co., Inc., 1933. 340 pp.*

DUBOIS, FLORENCE. *A guide to the statistics of social trends in the United States. Vol. II in a report, to the President's Research Committee on Social Trends, on Social Statistics in the United States, by Stuart A. Rice, with the assistance of Florence DuBois. Ann Arbor, Edward Brothers, Inc., 1933. 125 pp.*

EDGEWORTH, K. E. *The industrial crisis—its causes and its lessons. London, George Allen & Unwin, Ltd., 1933. 207 pp.*

FLORINSKY, MICHAEL T. *World revolution and the U.S.S.R. New York, Macmillan Co., 1933. 264 pp.*

A study of the central doctrine of Communist theory—world revolution. In this study the doctrine is examined, its difficulties of development through the hectic first years of revolution are traced, and the international aspects of the new attitute of the U.S.S.R. and its probable outcome both at home and abroad are discussed.

FREDERICK, J. GEORGE. *A primer of "new deal" economics. New York, Business Bourse, 1933. 322 pp.*

GOODE, FENIMORE C. *Unemployment relief—the housing program: Is slum clearance to be abandoned by the Federal Government? A study of the problem of the lower east side of New York City. New York, Fenimore C. Goode, Brown, Wheelock, Harris & Co., Inc., 22 East 40th Street, 1933. 38 pp., plans. (Mimeographed.)*

GREGORY, T. E. *Gold, unemployment, and capitalism. London, P. S. King & Son, Ltd., 1933. 308 pp.*

HADER, JOHN J., and LINDEMAN, EDUARD C. *Dynamic social research. New York, Harcourt, Brace & Co., 1933. 231 pp.*

This study is concerned primarily with research methods with particular reference to the phase of industrial management embodied in employee-representation plans.

HAUSLEITER, LEO. *The machine unchained: Revolution in the world economic system from the first steam engine to the crisis of plenty. New York, D. Appleton-Century Co., Inc., 1933. 376 pp., diagrams.*

HEYMAN, GEORGES. *Les allocations familiales en Belgique. Commentaire de la loi du 4 août 1930, portant généralisation des allocations familiales. Brussels, Maison Ferd. Larcier, Mme. O. Renson, successeur, 1931. 426 pp.*

Includes a discussion of the juridical and technical principles of family allowances, a general comment on the act of 1930 universalizing such allowances, and an examination of the various provisions of the law.

——— ——— ——— *Premier supplément: L'amélioration du régime légal. Brussels, Maison Ferd. Larcier, Mme. O. Renson, successeur, 1933. 68 pp.*

INFORMATION BUREAU ON WOMEN'S WORK. *Ohio wage earners in laundries and dry-cleaning establishments, 1914–1932, by Amy G. Maher. Toledo, Ohio, 2418 Robinwood Avenue, [1933?]. 11 pp., charts.*

INTERNATIONAL TRANSPORT WORKERS' FEDERATION. *Report on activities and financial report for years 1930 and 1931, and proceedings of international congress and sectional conferences held in connection therewith at Prague, August 7–13, 1932. Amsterdam, 1932. 328 pp., illus.*

LEAP, WILLIAM LESTER. *Red Hill—Neighborhood life and race relations in a rural section. Charlottesville, Va., 1933. 165 pp., map. (Publications of the University of Virginia, Phelps-Stokes Fellowship Papers, No. 10.)*

"This account of social conditions and race relations in a rural area has the merit of a study based on the complete enumeration of the populations studied with reference to a number of individual and family characteristics. It is the belief of the persons concerned with the study that the area studied is more or less typical of the Piedmont section of Virginia north of the tobacco belt."

MACK, RUSSELL H. *The cigar manufacturing industry. Philadelphia, University of Pennsylvania Press, 1933. 140 pp., charts.*

A study of the factors of instability affecting production and employment in the cigar industry, with special attention to the influences of demand, supply, organization and development of the industry, and technological changes.

MASSACHUSETTS STATE COLLEGE. Agricultural Experiment Station. *Bulletin No. 294: Recreational and forestry uses of land in Massachusetts, by David Rozman. Amherst, 1933. 20 pp.*

The study deals with the condition of abandoned farm land in Massachusetts and points out the place of recreational and forestry uses of such land in a land-utilization program for the State.

METROPOLITAN LIFE INSURANCE CO. Industrial Health Section. *Silicosis. New York, 1933. 32 pp., illus.*

This pamphlet contains a summary of the effects of exposure to silica dust, a list of the manufacturing processes which offer exposure to the dust, and a discussion of preventive measures and protective devices.

NATIONAL BOARD OF FIRE UNDERWRITERS. *National electrical code: Regulations for electric wiring and apparatus as recommended by the National Fire Protection Association. American standard, approved September 1, 1933, by American Standards Association; effective November 1, 1933. New York, 85 John Street; Chicago, 222 West Adams Street; San Francisco, Merchants Exchange Building, 1933. 304 pp., diagrams.*

Reviewed in this issue.

NATIONAL CHILD LABOR COMMITTEE. *Publication No. 367: When children are injured in industry: Report of a follow-up study of 167 children injured in industrial accidents in Tennessee, Illinois, and Wisconsin. New York, 419 Fourth Avenue, 1933. 43 pp.*

NATIONAL FEDERATION OF FEDERAL EMPLOYEES. *Methods of computing annuities and other essential information in regard to retirement act of May 29, 1930. Washington, 1933. 52 pp.*

A handbook explaining the methods of calculating the total allowances for superannuation and disability retirement, and for involuntary separation from the service, method of computing accumulated deductions from the salaries and of converting them into annuities, with a chapter of general information as to credits for past service, age groups, optional retirement, redepositing refunds, and similar matters, under the provisions of the Federal employees' retirement act of 1930.

NELEPIN, A. *Wages in capitalist countries and in the Soviet Union. Moscow, Cooperative Publishing Society of Foreign Workers in the U.S.S.R., 1932. 64 pp. (In English.)*

Data from this study appear in the article on "Basis of wage payment in the Soviet Union" in this issue of the Monthly Labor Review.

ORPHELINAT DE LA COOPÉRATION DE PRODUCTION. *Compte-rendu du 34e exercice, année 1932; statuts, reglement.* [*Paris, 1933*?] *48 pp.*

Annual report, for 1932, of the Orphanage of Productive Cooperation, an organization formed and maintained by the workers' productive associations of France. It gives aid to orphans (and half orphans) of any person who has been employed in a cooperative workshop affiliated with the above organization. The aid consists of a cash allowance, medical supervision, vacations at the orphanage's holiday home, assistance in obtaining apprenticeship in some trade, and a marriage settlement of 1,000 francs. The allowance is paid until the child reaches 15 years (or 17 years if serving an apprenticeship), but even beyond that age the organization maintains helpful contact with the child.

During its 34 years of existence the orphanage has aided 652 children and has spent for their assistance the sum of 84,663 francs.

POLAKOV, WALTER N. *The power age, its quest and challenge. New York, Covici-Friede, 1933. 247 pp.*

The several chapters of this book include the following: The rise of the machine age; Rising productivity; Labor power; and Productivity of labor.

PRINCETON UNIVERSITY. Industrial Relations Section. *Company retraining programs. Princeton, 1933. 23 pp. (Mimeographed.)*

This study covers the use of retraining in meeting present employment problems, particularly in view of the emphasis placed on spreading employment by the N.R.A.

RICE, STUART, A. *Next steps in the development of social statistics. Ann Arbor, Mich., Edwards Bros., Inc., 1933. 119 pp.*

SOCIETY OF INDUSTRIAL ENGINEERS. Committee on Significance of Technocracy. *Report: Economic significance of technological progress. New York, 1933. 32 pp.*

TAYLOR, MAURICE. *The social cost of industrial insurance. New York, Alfred A, Knopf, 1933. 421 pp.*

A comprehensive study of the question of industrial insurance. The writer questions the social value of this form of insurance and outlines a number of alternative projects of different types, including both private and governmental measures.