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This Issue in Brief

The substitution of the dial telephone system for the manual system decreases employment opportunities for operators by about two-thirds, according to a study made by the United States Bureau of Labor Statistics. By the end of 1930, about one-third of the telephones in the United States were of the dial type. If the output of calls per operator had remained the same in 1930 as in 1921, the number of operators necessary for handling the calls in 1930 for the Bell Operating Cos. alone would have been 69,421 more than the number actually in service. (Page 235.)

Technological changes in the motor-vehicle industry have caused important changes in the relative importance of various occupations. The adoption of new processes has introduced new occupations and has also resulted in some of the older occupations becoming almost unnecessary. The outstanding occupational changes appear in connection with machining operations, bench work, painting, and machine-tool maintenance. (Page 248.)

More than 31,000 persons were being cared for in 1930 in 28 public homes for the aged, indigent, or chronically ill, according to reports to the United States Children's Bureau. These were city or county homes serving a population of 13,364,989 in 26 large urban districts, representing 16 States and the District of Columbia. In all but 2 of the 26 metropolitan areas the almshouse population was greater at the beginning of 1931 than at the beginning of 1930. The resident population of the 145 private homes reporting showed no appreciable change from 1930 to 1931. The reports showed that at the end of 1930 they were running at or close to full capacity. (Page 253.)

Cost of living in the United States was 3 per cent lower in December, 1931, than in the preceding June, and 9.3 per cent lower than in December, 1930, as determined by the United States Bureau of Labor Statistics in its semiannual survey in 32 cities. The index number of cost of living for December, 1931, is 145.8, based on the cost in 1913 as 100. (Page 463.)

An unemployment survey of Buffalo, N. Y., made in November, 1931, gave the following information regarding the number and employment status of the workers of that city: Of the males able and willing to work, 24.3 per cent were unemployed and 23.2 per cent were employed part time. Of the females able and willing to work, 21.1 per cent were unemployed, and 16.3 per cent were employed part time. Of the wholly unemployed males, 43 per cent had been out of work for one year or over; the least unemployment among males was in the age group 35 to 40 years. The most unemployment and the least full-time employment were among the native colored group. (Page 262.)

Approximately 624,000 workers, constituting about 40 per cent of Chicago's working population, were unemployed on October 15, 1931, the Illinois Department of Labor estimates in its Labor Bulletin of November, 1931. The estimate is based on the United States Census of Unemployment in that city for January, 1931, and on the monthly volume of employment index for the manufacturing industries of Chicago. (Page 281.)

The importance of recreation during the present period of abnormal unemployment was stressed at the annual recreation congress which met at Toronto last fall. The subject was uppermost throughout the conference, and the discussions developed a number of recommendations dealing with the ways in which the recreational facilities of the country can be used in providing employment as well as in encouraging and keeping up the morale of those seeking employment. (Page 279.)

The peak in the earnings of office workers in New York State factories was reached in October, 1930, while the first real setback in the upward trend since 1914 took place in 1931, according to the last annual survey of earnings of factory office workers in that State made by the State department of labor in October, 1931. With the exception of 1915 and 1922, the survey for every other year since 1914 (the date of the first survey) has shown an increase. Weekly earnings in October, 1931, averaged \$35.49 as compared with \$37.48 in October, 1930, a decrease of over 5 per cent. Men averaged \$46.22 per week in comparison with \$23.25 for women. (Page 370.)

Comparatively little is known of the toxic effects upon workers of exposure to the dusts and resins of different woods. Many species of wood, particularly those growing in the Tropics, contain active poisons, but systematic study of the properties of these woods has been difficult because many tropical woods have not been accurately classified and many which are quite different botanically have been marketed under the same commercial name. Various forms of skin affections are the most frequent results of exposure, but serious systemic effects may also result from work with a large number of these woods. (Page 301.)

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The Dial Telephone and Unemployment

BY THE end of 1930, nearly one-third of the telephones of the United States were classed as dial instead of manual. The telephones of the commercial telephone companies numbered 12,281,-816 manual, 5,420,261 dial, and 201,794 unclassified. The dial system is in use throughout the country in tiny 3-line private branch exchanges and in small unattended rural exchanges as well as in the great multi-office exchanges of metropolitan centers.

The number of operators at the end of 1930 employed by the Bell Operating Cos. (which owned 86.4 per cent of the manual and 91.8 per cent of the dial telephones) was 143,979. The average number of calls per operator per month in 1921 (when 2.7 per cent of the telephones had already been converted to the dial basis) was 10,640.8. If the output of calls per operator had remained the same in 1930, the number of operators necessary for handling the calls made in 1930 would have been 213,400—that is, 69,421 more than the number actually in service in the Bell Operating Cos. Similar results are apparent among the independent companies. Complete conversion to the dial system means a loss of about two-thirds of the employment opportunities afforded by manual operation. The period of change to the dial is accompanied by increases in the number of employees of certain classes, but other technological improvements which eliminate jobs apparently more than counteract these increases. Taking 1921 as a basis and estimating the number of all employees necessary in 1930 if the output per employee had remained as in 1921, the net loss of employment opportunities in the Bell Operating Cos. alone is 71,844.

Mechanism of the Dial Telephone

IF ONE were to visit a small automatic exchange of the Strowger step-by-step variety, with only a hundred lines, he would see little that is complicated or mysterious. He would first observe several relatively conspicuous objects which, on inquiry, would prove to have auxiliary functions. The question would naturally arise, "What is the 'brain' of the exchange—that is, how is a called number recognized and how is a connection made between the calling party's line and the line of the party who is called?"

The "brain" of the mechanism (the part that corresponds to the plugs and the jacks of a manual board) is a small assembly of parts known as a connector bank. A connector is an automatic switch—a switch that is energized by the movement of the dial and not by the hand of the operator. These automatic switches are arranged in a

bank with 10 rows or levels and with 10 switches to the row. The rows are arranged in a semicircle, forming, roughly, half a cylinder. Associated with each line is also a shaft with a pair of wipers, which are used (somewhat as the cord plugs of the manual board are used) for bringing the line of a calling party into connection with the line of a called party by means of contact with the connector of the called party's line.

Leaving the central office for a moment and going to one of the telephones of the exchange, we call the number 63. The "6" (the tens digit on the dial) corresponds to the sixth row or level of switches in the connector bank. When "6" is dialed, the wiper shaft of the calling telephone goes into action (electrically energized, of course) and is lifted to the sixth level in the connector bank. The "3" (the units digit on the dial) corresponds to the third set of contacts in each level (in this case, in the sixth level). When "3" is dialed, therefore, the wiper shaft rotates within the connector bank at the sixth level of the bank till the wipers reach the third pair of contacts.

If the line of telephone 63 is busy, a lock prevents intrusion, and a signal ("busy tone" or "busy buzz") is returned to the calling subscriber. If the line is not busy, contact is established and the called subscriber's telephone rings. Talking current is automatically supplied. The replacing of the telephones at the end of the conversation automatically releases the switch and restores the mechanism to the idle status.

Even in the simplest P. A. X. (private automatic exchange) there are additional arrangements, such as code signals to attract the attention of a called person who is in another office when being called. In the rural unattended automatic exchange there are trunk lines, represented by digits on the dial, for calling an operator at an attended exchange, for emergency calls, for long distance, etc. But the central feature of the automatic exchange of not more than a hundred lines is the assembly of parts (connectors and wipers) known as the connector bank.

From the simple machine switchboard, just described, to the automatic equipment of a large urban central office, there is a rapidly increasing complexity. In an exchange of more than a hundred lines there are selector switches for choosing the hundred group (represented by the hundreds digit on the dial). In order to reduce the number of selector switches, line switches are used. Trunking arrangements in multi-office exchanges require additional devices. In the panel system, which is said to have certain advantages for large offices, there are decoders and decoder frames which are described as "mechanical card indexes" providing "memory" for the automatic "senders." In a word, the machinery of the dial system, although basically simple, is too intricate in detail for clear non-technical description.

Transition to the Dial System

THE first commercially used automatic switchboard was installed at La Porte, Ind., in 1892. In 1902 there were 54 automatic offices, 53 of which were operated by independent companies. Government statistics, before 1930, fail to distinguish between manual and dial telephones. An estimate in 1922 placed the total number of automatic telephones at 513,628, or 5.1 per cent of the total of 14,662,316.

In the same year (1922) the number of dial telephones of the Bell Operating Cos. was 337,868, or only 3.6 per cent of a total of 9,461,351. But by 1930 the Bell Operating Cos. had overtaken and passed the independent companies in per cent of change to the dial system. At the end of 1930, 5,420,261, or 30.6 per cent of the total of 17,702,077 telephones (excluding unclassified telephones), were of the dial type while the Bell telephones by the end of 1930 had become 31.9 per cent dial—4,976,941 of a total of 15,583,101.

All of the 24 Bell companies have some automatic central offices. Independent companies operate automatic equipment in 32 States. The extension of the dial system to country districts is indicated by the fact that by April 1, 1931, there had been 211 installations of dial equipment of less than 500 lines, controlled by independent companies alone. A characteristic rural network includes a number of unattended dial offices connected by trunk lines with an operating center, which may be either dial or manual. Often the unattended offices are also connected with each other by trunk lines, so that a subscriber in one community can dial directly to a subscriber in another community.

Loss of Employment Opportunities in Selected Areas

BEFORE a general analysis of the whole industry was undertaken, a somewhat detailed study was made of several exchanges and companies. The information secured fell mainly under three heads: (1) The transition to the dial system as indicated by number of telephones classified as manual and dial; (2) changes in output in terms of local exchange calls and toll calls; and (3) changes in the total number of employees and in the numbers of specified classes particularly affected by the dial system.

The procedure followed and the nature of the information secured are illustrated by the following condensed and abbreviated schedule (Table 1).

TABLE 1.—TELEPHONES, TELEPHONE CALLS, AND PERSONNEL OF A SINGLE-OFFICE EXCHANGE NOW 98 PER CENT DIAL

Item	1925	1926	1927	1928	1929	1930
Telephones:						
Manual.....	18,644	20,042	380	478	487	466
Dial.....			20,880	22,173	22,945	22,450
Average number of calls per month:						
Local exchange.....	3,368,989	3,575,102	3,438,496	4,195,446	3,953,536	4,019,404
Toll.....	60,321	65,302	73,381	87,540	83,007	93,177
Personnel:						
Experienced switchboard operators.....	214	244	186	157	123	120
Operators in training.....	74	35	1	0	6	4
Central office installation and maintenance men.....	13	13	29	19	18	25
All employees (all classes):						
Male.....	102	155	147	115	123	113
Female.....	307	297	213	179	166	160
Total.....	409	452	360	294	289	273

The companies commonly use the term "station" for "telephone." There are several kinds of telephones, but unless otherwise indicated, the term as used in this article refers to the so-called company station. Company telephones include a very large proportion of all telephones.

In 1930, of a total of 18,438,165 telephones reported to the Interstate Commerce Commission, 17,903,844 were company telephones.

It is highly desirable to reduce output to a standardized unit. In the telephone industry the output consists of connections made; that is, "calls" or messages. Of course, the message is not actually transmitted; a talking circuit is established and the subscribers transmit their own messages. On a revenue basis, connections are classed as local exchange calls and toll calls. There are many varieties of both types—for example, the flat-rate single-office call, the party-line call, etc. But the obstacles in the way of reducing the different kinds of calls to a common denominator made necessary a simple classification under the familiar heads local exchange calls and toll calls.

The classes of employees most directly affected by technological changes have been those described in company groupings as experienced switchboard operators and operators in training. In manual systems there is normally a large labor turnover. Often as high as 40 per cent of an operating force resign in the course of a year. In years of rapid expansion not only resignations of operators but increases in the demand for service have made necessary a large force of newly recruited operators. They are on the pay rolls and are regularly employed at switchboards, and must therefore be classed as a regular part of the operating force.

The difficulty of maintaining normal service during the preparation for change to dial operation makes necessary a temporary increase in the number of operators. After the change the proportion of operators retained varies widely, the main factor being the proportion of toll calls, because these continue to require operators.

Central-office installation and maintenance men are affected by the change to the dial system, because of a temporary increase in numbers during the period of installation of the dial equipment and because of a possible permanent increase in the labor necessary for the maintenance of automatic central offices. For a time a disproportionate number is employed in the installation as opposed to the maintenance of the new equipment. Most companies employ, for a time, a relatively large number of workers for the maintenance of the new equipment in order to have a margin of safety for the transitional period, and there is a tendency to reduce the number as soon as the men become familiar with the new mechanism and as soon as the minimum number for efficient operation is ascertained. Thus far the question as to whether or not the dial system will cause any considerable permanent increase in the number of central-office installation and maintenance men can not be answered with assurance.

It is apparent that changes in the number of opportunities for employment can not be measured merely by noting the number of employees before and after a given technological change. Consider the case of the exchange covered by Table 1. This exchange employed 288 operators in 1925, before the change to the dial system, and 124 in 1930, after the change. Superficially, the number of operators displaced would seem to be the difference between 288 and 124—that is, 164. But in the meantime the number of telephones had increased; and the 6-year interval was marked, also, by an increase of 19 per cent in the number of local exchange calls and of more than 54 per cent in the number of time-consuming toll calls, which continue to require operators even after the change to the dial basis. The prob-

lem, therefore, assumes this form: If the manual system had remained and if there had been no increase of output per operator, how many operators would have been required to render the increased amount of service?

Reverting to the exchange just mentioned, there was an increase in the number of central-office installation and maintenance men from 13 in 1925 to 25 in 1930. Here again, as in the case of operators, the change in volume of employment is not the difference between 13 and 25, but the difference between the number actually in service in 1930 and the number which would have been necessary if the business had expanded on a manual basis.

The usual method of calculating changes in the productivity of labor is to correlate the changes in the number of units of labor (preferably man-hours) with changes in the number of units of output. In this case there are two main units of output, the local exchange call and the toll call. In view of the difficulties of weighting or reducing them to a common denominator, they are merely added, though this, of course, fails to give full weight to the output side of the labor-output equation, for toll calls obviously require more time.

In the study of selected exchanges and companies various types were included. Some of the results are incorporated in the following very much abbreviated tabulation, in which the exchanges are arranged according to size (as measured by telephone calls). The size ranges from 335,480 to 2,846,749 calls. In each case the local exchange and toll calls are simply added, for an unweighted total.

TABLE 2.—CHANGES IN EMPLOYMENT OPPORTUNITIES FOR OPERATORS, AS MEASURED BY PRODUCTIVITY IN TERMS OF TELEPHONE CALLS (UNWEIGHTED), IN SELECTED EXCHANGES AND COMPANIES

Exchange or company	Per cent of dial tele-phones after change to dial system	Per cent of increase in tele- phone calls during transi- tion period	Number of operators			Loss in employ-ment oppor- tunities for operators	
			Before change to dial system	After change to dial system	If opera- tors had in- creased in same ratio as calls	Esti- mated num- ber	Per cent
No. 1.....	84.4	¹ 14.7	33	15	28	13	46.4
No. 2.....	96.7	10.9	60	27	67	40	59.7
No. 3.....	100.0	53.1	33	16	51	35	68.6
No. 4.....	100.0	134.2	42	24	98	74	² 75.5
No. 5.....	11.3	171.4	119	270	323	53	16.4
No. 6.....	100.0	13.8	166	63	189	126	66.7
No. 7.....	72.5	26.2	99	75	125	50	40.0
No. 8.....	100.0	48.0	169	80	250	170	68.0
No. 9.....	100.0	60.6	154	94	247	153	61.9
No. 10.....	100.0	36.7	228	114	312	198	63.5
No. 11.....	100.0	24.0	165	15	205	190	² 92.7
No. 12.....	100.0	114.0	127	19	272	253	² 93.0
No. 13.....	100.0	33.8	213	95	285	190	66.7
No. 14.....	98.0	19.9	288	124	345	221	64.1
No. 15.....	95.6	34.6	455	111	612	501	³ 81.9
No. 16.....	100.0	46.4	232	17	340	323	² 95.0
No. 17.....	100.0	23.0	456	182	561	379	67.6
No. 18.....	100.0	12.1	591	310	663	353	⁴ 53.2
No. 19.....	70.0	50.5	740	560	1,114	554	49.7
No. 20.....	48.0	18.3	2,705	1,656	3,200	1,546	48.3

¹ Decrease.

² Large displacement due to small proportion of toll calls.

³ Large displacement due to specialized nature of business.

⁴ Small displacement due to part-time and similar labor policies and to recency of change to dial.

In the table preceding the large variations in the rate of increase are due in part to variations in the length of the period of transition to the dial system. The shortest period represented in the table is three years. In some cases the transition has extended over several years and in some cases it is still in progress.

In Nos. 1 and 2 the manual telephones (15.6 per cent and 3.3 per cent, respectively, of the total number) are telephones of rural communities requiring a relatively large number of operators, in proportion to calls, for 24-hour service.

In No. 5, on the contrary, the manual telephones are in the urban operating centers, and the dial telephones, only 11.3 per cent of the total, are in rural unattended offices. The large per cent of increase in number of calls (171.4) is due in part to natural growth over a period of several years, in part to improved rural service due to the dial system, and in part to the acquisition of new properties. But the basic operating conditions were similar. The per cent of dial telephones was only 11.3, but the per cent of loss of employment opportunities for operators was 16.4. This was due largely to the fact that the installation of the dial system in even the smallest unattended exchange eliminates three operators for the three 8-hour shifts, not counting the time of relief and emergency operators.

Nos. 11, 12, and 16 show strikingly the importance of toll calls in relation to number of operators. In each of these cases the toll calls are handled either entirely or in large part by another company. In consequence, the functions remaining to the operators are limited to information and emergency calls and certain other special services. The per cent of loss of employment opportunities for operators in these three cases runs from 92.7 to 95. If operators of the companies handling tolls were included, obviously these figures would be lower.

It is apparent that the per cent of loss of employment opportunities varies widely, even in the cases of 100 per cent conversion to the dial system. But if we omit exchanges with exceptional conditions, especially those with an abnormal proportion of toll calls, which continue to require operators, we find that under full dial operation the number of operators required fluctuates around one-third of the number that would have been necessary under manual operation. This proportion (stated inversely in the last column under "per cent of loss of employment opportunities for operators") appears in Nos. 3, 4, 6, 8, 9, 10, 13, 14, and 17 of the above table. No. 18, which is 100 per cent dial, shows only 53.2 per cent in the last column. This is due not so much to an exceptionally large proportion of toll calls as to an exceptional labor policy on the part of the company. The exchange was converted to the dial basis after the beginning of the business depression in 1929, and the number of surplus operators was so large that natural turnover and openings in other exchanges failed to meet the situation. Many operators were therefore retained, especially on a part-time basis, who would normally not be on the pay roll. Also, the recency of the change had not allowed time for adaptation to normal dial operation.

An important conclusion, then, is that under normal operating conditions, complete conversion to the dial system means an average displacement of about two-thirds of the operators. As the telephone-using public becomes more fully accustomed to dial operation the ratio of displacement may be expected to rise somewhat. It must be

noted, also, that the recent trend has been rapidly toward the automatic handling of the simpler types of toll calls. This trend, if it continues, will further reduce the proportion of operators needed after the change to the dial.

Loss of Employment Opportunities in the Industry as a Whole

GENERAL statistics adapted to the purpose of this inquiry are available only for the Bell Operating Cos. In 1930 these companies owned 86.4 per cent of the manual telephones classified as "company stations" and 91.8 per cent of the dial telephones. They originated 86.4 per cent of local exchange calls and 90.4 per cent of toll calls. On their pay rolls were 88.3 per cent of the workers in the employ of commercial telephone companies.¹

The independent companies took the lead in the change to the dial system, and they have generally maintained their positions by efficient and economical operation. It is a reasonable presumption that the effects of technological changes among the independent companies are similar in extent as well as in nature to the effects in the Bell System.

It is a generally recognized fact in the telephone industry that an exchange which is installing dial equipment requires a larger number of operators during the period of preparation for the change (or "cut over") to the dial. That is, in exchanges undergoing this transition the average number of telephones per operator declines till the change has been completed. This means that if we take the system as a whole, but include only the manual telephones, we should expect a decline in the average number of manual telephones per operator. But this is not the case. The average number of manual telephones per operator in 1921 was 72.7, and in 1930, 73.6.

If the average number of telephone calls per telephone had declined, this might explain why the operators have been able to maintain a virtually constant average as to number of telephones per operator. But instead of declining, the number of calls per telephone has risen. There was a noticeable increase in the monthly average number of local exchange calls per telephone (137.83 in 1921 and 140.27 in 1930) and a marked increase in the monthly average of time-consuming toll calls per telephone (4.51 in 1921 and 5.45 in 1930).

In sum, operators have materially increased their efficiency independently of the dial system during the past 10 years. The resulting increased productivity per operator has combined with the change to dial operation to reduce the number of operators necessary for handling the total number of calls demanded by subscribers. What are some of the changes, other than the transition to the dial system, which account for increased productivity per operator?

Although we are now concerned with analyzing the effects of technological changes on employment in the entire industry, it will be helpful to think in terms of the problem of personnel of a particular exchange. Here is an exchange with about 3,900 manual telephones, about 5,000,000 local exchange calls per month, and about 200,000 toll calls per month. What is the minimum number of operators needed? The answer involves, on the one hand, the problem of keeping constantly available to the users of about 3,900 telephones the facilities of the exchange for making connections; and, on the

¹ Figures are derived from data furnished by Interstate Commerce Commission (totals) and American Telephone & Telegraph Co. (Bell Operating Cos.).

other hand, the problem of actually making about 5,000,000 local exchange connections and about 200,000 toll connections each month. In order that the services of the exchange may be available to all at all hours, it is necessary at times to have on duty more operators than are kept busy by the connections actually demanded. But during much of the time the volume of calls is large enough to make it possible to allocate to each operator approximately as many calls as she can handle efficiently.

We may assume that the switchboard equipment is modern and flexible, permitting ready shifting of line terminals and ready contraction and expansion of the number of telephones assigned to a given operating position. With equipment of this type, the problem of keeping the number of operators at a minimum is chiefly the problem of maintaining at as high a level as possible the number of calls per operator. The natural ambition of the managers of exchanges to maintain a high level has led in recent years to several important improvements.

Among such changes is the very simple device known as "restricted repetition"—that is, the repetition by the operator of numbers being called, only in case of uncertainty. The number of calls per operator, in the case of ordinary local calls during the peak of traffic, has in this way been increased about 10 per cent.

"Straightforward trunking," a method of handling trunked calls by A and B operators in multi-office exchanges, has increased the number of calls of this type, during the busy hour, about 7 per cent.

Probably the most important changes have occurred in the handling of toll calls. From 1922 to 1930 the average number of minutes required to establish a toll connection was reduced from about 12 to about 2 minutes. The difference, of course, is not a net saving of operating time. In 1930, 82 per cent of the toll calls were made without the calling subscriber hanging up his receiver.

Toll calls over distances up to about 30 miles (and frequently up to 60 miles) are now handled usually by the same operating methods as are used for making local exchange connections. By 1929 the toll calls thus handled (by the Bell Operating Cos.) numbered about 650,000,000 as compared with about 300,000,000 handled by the toll-board method of operation. To facilitate this trend, various improvements have been made. Between points with heavy toll traffic direct trunk lines have been installed. By 1929, 80 per cent of the toll messages handled by the Bell Operating Cos. were handled by direct circuits without intermediate switching; 17 per cent required only one intermediate switch; and only 3 per cent required more than one intermediate switch. For handling the messages which require switching, a reorganization of the switching facilities of the Bell System included the establishment of 8 regional switching centers and 147 primary outlets. All toll offices in the entire system are connected with at least one of the more important switching centers, and any two toll offices can be connected either directly or by means of a minimum number of switches. Quality of transmission is maintained by an elaborate system of repeaters. A saving of time, especially on the part of the calling subscriber, has been effected by the "combined line and recording" plan for concentrating as far as possible, in the hands of a single operator, the work of making a toll connection.²

² American Telephone & Telegraph Co., Annual Report, 1930, pp. 4, 29; and Bell System Technical Journal, January, 1930, pp. 35-44, 57-64: "Telephone Communication System of the United States," by B. Gherardi and F. B. Jewett.

Many improvements have been made, but toll calls remain comparatively complicated and time consuming, requiring, for example, in extreme cases, as many as 20 operators for their completion. To use the telephone call as a unit of output without some form of weighting of the types of calls which require more time means obviously an incomplete picture of output. But changes in the number of calls, even in a crude, unweighted form, when correlated with changes in number of employees, indicate more adequately than do changes in number of telephones the effects on volume of employment of technological changes other than the introduction of the dial system. During the "busy hours," the number of operators on duty in a given office is determined directly not by the number of telephones which an operator can ordinarily manage, but by the number of calls she can answer per minute or per hour. This in turn is affected vitally by the technological changes (other than the introduction of the dial system) which have just been described.

While the full extent of increased efficiency—that is, of productivity per operator—and of the accompanying loss of employment opportunities can be measured only by weighting the more time-consuming types of calls, the use of the unweighted call as a basic unit of output in the following table gives a conservative approximation of the effect of other factors combined with the transition to dial operation.

TABLE 3.—CHANGES IN NUMBER OF EMPLOYMENT OPPORTUNITIES FOR OPERATORS, IN THE BELL OPERATING COS., 1921-1930, AS MEASURED BY PRODUCTIVITY IN TERMS OF TELEPHONE CALLS (UNWEIGHTED)

Year	Per cent dial telephones formed of total	Number of telephone calls originated per month			Number of operators in service	Telephone calls per operator		Number of operators required on basis of 1921 output	Loss of employment opportunities for operators	
		Local exchange	Toll	Total (unweighted)		Number (unweighted)	Per cent of increase over 1921		Estimated number	Per cent
1921	2.7	1,220,671,711	39,947,656	1,260,619,367	118,470	10,641	-----	118,470	-----	-----
1922	3.6	1,339,084,737	45,361,288	1,384,446,025	126,080	10,981	3.2	130,107	4,027	3.1
1923	5.6	1,493,178,513	49,768,681	1,542,947,194	138,435	11,146	4.7	145,003	6,568	4.5
1924	8.7	1,585,420,196	54,365,214	1,639,785,410	139,891	11,722	10.2	154,103	14,212	9.2
1925	12.5	1,694,318,694	63,044,437	1,757,363,131	148,856	11,806	11.0	165,153	16,297	9.9
1926	15.5	1,815,407,885	71,120,712	1,886,528,597	150,753	12,514	17.6	177,291	26,538	15.0
1927	18.7	1,896,001,798	78,416,363	1,974,418,161	150,301	13,136	23.5	185,551	35,250	19.6
1928	21.8	2,012,971,131	86,132,848	2,099,103,979	153,260	13,696	28.7	197,269	44,009	22.3
1929	26.2	2,165,801,042	93,893,143	2,259,694,185	161,669	13,977	31.4	212,361	50,692	23.9
1930	31.9	2,185,811,832	84,944,233	2,270,756,065	143,979	15,771	48.2	213,400	69,421	32.5

In 1921, the year taken as the base in Table 3, a beginning had been made in the change to dial operation; but even so, the results indicated in the table are not without significance. If the productivity of operators as measured conservatively by unweighted telephone connections made by them had remained the same as in 1921, the number of operators necessary in 1930 to make the number of connections required in 1930 would have been 213,400 instead of the number actually in service, i. e., 143,979. That is to say, if the number of connections demanded in 1930 had been made manually

on the basis of the output per operator prevailing in 1921, 69,421 additional operators would have been needed. The per cent of loss of employment opportunities, as measured in this way, has followed somewhat closely, it will be noted, the per cent of telephones that were dial-operated in each of the years included. Thus, in 1930 the per cent of dial telephones was 31.9 and the per cent of loss of employment opportunities was 32.5. With the extension of the dial program, the per cent of loss of opportunity will not increase so rapidly, since operators for long-distance calls and for many special services continue to be required.

Technological changes have most noticeably affected the telephone operators; but the output of the industry is, of course, a joint product of the work of all classes, and a well-rounded view requires inclusion of all, and especially of the classes most directly concerned with the installation and maintenance of plant equipment. The machine switchboard is under the care of the central-office installation and maintenance men. The dial system requires alterations also in connection with those parts of the plant which are in charge of the groups known as line and construction installation and maintenance men and cable and conduit construction and maintenance men. Each of these classes was separately included in the statistics of changes in number of employees. No attempt was made to study the effects of such labor-saving devices as have recently been introduced in the digging of trenches, the handling of poles, etc., as such changes are not peculiar to the telephone industry. But if there have been any marked increases in the amount of labor required in these groups, due to change to the dial system, the increases ought to be recognized.

The method used in estimating changes in volume of employment in other groups is substantially the same as was applied in the case of the operators. The principal final output of the work of all classes is telephone service.

From 1921 to 1930 the total number of calls (unweighted) originated per month in the Bell Operating Cos. increased 80.13 per cent. In Table 4 this per cent of increase has been used to calculate the number of employees in selected classes and in all classes that would have been required in 1930 to render the increased amount of service had there been no increased productivity per employee. By subtracting these numbers from the numbers actually in service in 1930 we have an estimate, on the basis of productivity in terms of telephone calls, of the changes in employment opportunities due to increased productivity, which, in turn, was due largely to technological improvements.

Table 4 reveals a strikingly close approximation of the net loss of employment opportunities for all classes (71,844) with the loss of opportunities for operators only (69,421).

The Bell Operating Cos., at the end of December, 1930, owned 86.4 per cent of all company manual stations and 91.8 per cent of all company dial stations and had on their pay rolls 88.3 per cent of all telephone company employees. Therefore, in order to include the independent companies it is necessary to increase by approximately 10 per cent the results obtained in the preceding tables based on Bell companies.

TABLE 4.—CHANGES IN NUMBER OF EMPLOYMENT OPPORTUNITIES, BELL OPERATING COS., 1921 TO 1930, AS MEASURED BY PRODUCTIVITY IN TERMS OF TELEPHONE CALLS (UNWEIGHTED)

Class of employees	Number of employees			Estimated gain or loss in employment opportunities
	1921	1930		
		Actual	On basis of increase of telephone calls (80.13 per cent)	
Operators.....	118, 470	143, 979	213, 400	-69, 421
Central-office installation and maintenance men.....	11, 441	23, 373	20, 609	+2, 764
Line and construction installation and maintenance men.....	22, 497	32, 686	40, 524	¹ -7, 838
Cable and conduit construction and maintenance men.....	6, 363	12, 174	11, 462	+712
Other classes.....	59, 959	109, 942	108, 003	+1, 939
Total.....	218, 730	322, 154	393, 998	-71, 844

¹ Decline due largely to protective wires by cabling.

An exact calculation of changes in the number of employment opportunities based on the changing productivity of labor requires the use of a uniform and constant unit of labor equated with a uniform and constant unit of output. The estimates in the preceding tables are therefore not exact, but it is believed that they are conservative in the sense of failing to record the full effects of technological changes on the decline of employment opportunities in the telephone industry.

In the first place, the computations overestimate the amount of labor and underestimate the amount of output. Up to 1930, changes in hours per day and in length of vacations, absence from duty, etc., were negligible. But in 1930 there was frequent resort to part-time employment, furloughs without pay, and similar arrangements for retaining as many employees as possible and at the same time reducing work time and costs of operation. The economic depression finds free expression in reduced units of output but not in units of labor unless labor units are reduced to a man-hour basis.

In the second place, the output side of the equation is incomplete because of the difficulty of weighting the more time-consuming types of calls, and because of the omission of all forms of output except calls. A recent account by a telephone engineer listed 12 "special services" and additional "by-products," and these in some cases not only have considerable revenue-producing value but consume a considerable fraction of employees' work time. In this connection, note should be made of the very large use of labor for capital expansion, in recent years. The investments in fixed capital (plant and equipment) by companies reporting to the Interstate Commerce Commission increased from \$1,853,944,975 at the end of 1921 to \$4,445,139,058 at the end of 1930. The accompanying relatively large use of labor for an exceptional expansion of the capital investment finds no corresponding increase in the volume of output during the same period, as measured by telephone calls.

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A final reason for considering the data conservative, as an estimate of labor displacement resulting from technological changes, is the fact that because of the availability of comparable statistics, the year 1921 is taken as a base, although already in that year there were 236,036 dial telephones in the Bell Operating Cos. alone. In 1921 the average number of manual telephones per operator in the Bell companies was 72.7. Dividing the number of dial telephones in 1921 (236,036), by this number, we find that already, in 1921 the displacement of operators due to the dial system in the Bell System alone was approximately 3,247.

The effects of important improvements in a large number of private branch exchanges are excluded entirely from the above estimates.

Of course the validity of the calculations of displacement on the basis of productivity depends on the assumption that the expansion of the industry in terms of units of output would have occurred to approximately the same extent if the technological changes had not been made. If the depression of 1929 had not intervened, the demands for service would ultimately have outrun the limits of the manual system. But there seems to be no reason to believe that between 1921 and 1930 the increased number, either of telephones or of telephone calls, was due in any appreciable degree to the dial system or to labor-saving methods of operation. Expansion naturally accompanied the general growth of business and particularly the speeding up of the tempo of life.

Meeting the Problem of Displacement

THE problem of what to do with surplus employees became acute only after the beginning of the business depression in 1929. The dial system was inaugurated and has been carried forward as part of a policy of scientific study and long-term planning which has included a serious attempt to meet the problems of labor arising out of conversion to automatic operation. In this matter the telephone industry may safely be said to have been exceptional, though in this field as well as in other industries the intensification of the problem of surplus labor by industrial crisis seems not to have been foreseen or provided for.

During the period of business expansion before 1929, technological displacement led directly to relatively little unemployment. The normal turnover in the operating force was very large, running as high as 40 per cent. Operators not needed in one central office could be transferred to another, or could usually find employment elsewhere, and such transfers or changes were facilitated by the thorough organization of the telephone industry. In consequence, the decline of employment opportunities in the telephone industry before 1929 was obscured partly by resignations and rapid turnover, partly by transfers to other offices of the telephone industry, and partly by the absorption of the displaced workers by other industries.

Since 1929 the problem has been handled in a manner indicated in some degree by a public announcement made by a telephone company official in November, 1931, concerning plans for a projected "cut over" to dial. "The dial employment problem is especially difficult," it was stated, "and for a long time we have only felt able to express the hope that it could be solved without a lay-off, plus a determination to avoid one if possible. However, with the greater anxiety felt by the whole

community that employment should not be diminished, and the further study we have given the situation, we now feel warranted in promising employment to all our regular employees involved." It was stated that this would not apply to temporary employees (the general policy preceding a cut over being the engagement of operators on a temporary basis) and that part-time work by regular employees might be necessary for putting the plan into effect.

It is to be noted that the arrangements described for meeting the employment problem growing out of technological improvements, particularly the conversion to dial operation, are concerned only with surplus labor on the pay rolls of the telephone companies. The larger problem of the total decline in employment opportunities naturally lies beyond the scope of policy of a single organization or industry and merges with the general social problem of unemployment.

Effect of Technological Changes upon Occupations in the Motor-Vehicle Industry

THE effects of technological changes upon occupations in the motor-vehicle industry are indicated in the accompanying table and chart, which are based on the classification of wage earners by occupations as made by the Bureau of Labor Statistics in its 1922, 1925, 1928, and 1930 studies of wages and hours of labor in that industry.

In 1922 the workers in all the occupations involved in body building were classified as body builders, and all specialized sheet-metal workers were classified as sheet-metal workers, skilled. In 1925 these were divided to show detail for the respective occupations within each group. The 1922 figures for body builders and sheet-metal workers, skilled, are shown in the table but are not indicated on the chart. Changes in the industry have necessitated some minor changes in other classifications from time to time, as well as the introduction of a few entirely new classified groups. The same method of compilation was applied in each study and, with few exceptions, the studies covered identical plants.

The following table shows the number of wage earners scheduled in each occupation in each study and the per cent which the number in each occupation is of all wage earners scheduled in the respective study:

NUMBER AND PER CENT OF WAGE EARNERS IN EACH OCCUPATION, 1922, 1925, 1928, AND 1930

Occupation	Number of employees				Per cent of total			
	1922	1925	1928	1930	1922	1925	1928	1930
Apprentices.....	300	544	1,167	831	0.5	0.4	0.8	0.6
Assemblers, axle.....	763	1,946	2,716	2,307	1.4	1.4	1.8	1.7
Assemblers, body frame.....		3,091	3,268	2,668		2.1	2.1	2.0
Assemblers, chassis and final.....	4,635	10,654	13,475	9,160	8.2	7.4	8.8	6.8
Assemblers, chassis frame.....	364	1,115	1,125	665	.7	.8	.7	.5
Assemblers, motor.....	2,149	4,899	4,940	4,721	3.8	3.4	3.2	3.5
Automatic operators, lathe and screw machine.....	1,673	2,628	1,842	1,769	3.0	1.8	1.2	1.3
Balancers.....				137				.1
Bench hands, machine shop.....	2,190	2,474	2,220	1,608	3.9	1.7	1.4	1.2
Body builders.....	1,604				2.8			
Boring mill operators.....	392	828	1,129	1,202	.7	.6	.7	.9
Bumpers.....		323	358	398		.2	.2	.3
Crane operators.....		145	217	212		.1	.1	.2
Cutters, cloth and leather.....		237	217	328		.2	.1	.2
Die setters.....		274	224	523		.2	.2	.4
Ding men.....		209	235	201		.1	.2	.2
Door hangers.....		659	672	523		.5	.4	.4
Drill press operators.....	3,487	8,787	8,652	6,683	6.2	6.1	5.6	5.0
Gear cutter operators.....	497	1,331	1,121	1,144	.9	.9	.7	.9
Grinding machine operators.....	2,577	5,431	5,427	5,150	4.6	3.8	3.5	3.8
Hammermen, forge shop.....	388	1,040	850	1,148	.7	.7	.6	.9
Other forge-shop employees.....	656	1,661	1,833	1,621	1.2	1.2	1.2	1.2
Hardeners.....	667	945	720	1,116	1.2	.7	.5	.8
Helpers.....	1,042	3,044	4,102	1,894	1.9	2.1	2.7	1.4
Inspectors.....	3,005	8,113	8,082	7,327	5.3	5.6	5.3	5.4
Labors.....	6,028	16,697	15,654	11,387	10.7	11.6	10.2	8.4
Lacquer rubbers.....		709	1,501	1,868		.5	1.0	1.4
Lathe operators.....	2,962	6,301	5,553	4,358	5.3	4.4	3.6	3.2
Letterers, stripers, and final touch-up, hand.....	762	990	676	547	1.4	.7	.4	.4
Stripers, mechanical.....				72				.1
Machinists.....	1,291	3,604	3,465	3,432	2.3	2.5	2.3	2.5
Metal finishers.....		3,397	4,606	5,404		2.4	3.0	4.0
Metal panelers.....		1,655	1,947	1,646		1.2	1.3	1.2
Milling-machine operators.....	1,605	3,569	3,231	2,803	2.9	2.5	2.1	2.1
Millwrights.....				833				.6
Molders, belt, drip, etc.....		266	672	362		.2	.4	.3
Painters, general.....	2,114	1,950	2,163	1,112	3.8	1.4	1.4	.8
Paint sprayers.....	177	993	1,600	1,726	.3	.7	1.0	1.3
Pattern makers.....				477				.4
Planer and shaper operators.....	165	308	401	257	.3	.2	.3	.2

NUMBER AND PER CENT OF WAGE EARNERS IN EACH OCCUPATION, 1922, 1925, 1928, AND 1930—Continued

Occupation	Number of employees				Per cent of total			
	1922	1925	1928	1930	1922	1925	1928	1930
Platers.....		181	358	302		0.1	0.2	0.2
Polishers and buffers.....	564	1,095	2,030	1,783	1.0	.8	1.3	1.3
Punch and press operators.....	1,096	4,519	4,368	4,596	2.0	3.1	2.8	3.4
Sand blasters, etc.....	480	954	1,026	696	.9	.7	.7	.5
Sanders and rough-stuff rubbers.....		1,937	2,734	2,383		1.3	1.8	1.8
Sewing-machine operators.....	606	1,491	1,089	1,284	1.1	1.0	.7	1.0
Sheet-metal workers.....	1,304	3,150	2,497	3,071	2.3	2.2	1.6	2.3
Sheet-metal workers, skilled.....	779				1.4			
Straighteners.....		628	531	629		.4	.3	.5
Testers, final.....	666	741	538	337	1.2	.5	.4	.3
Testers, motor and transmission.....	489	1,433	749	778	.9	1.0	.5	.6
Tool and die makers.....	1,097	3,689	3,523	5,175	2.0	2.6	2.3	3.8
Top builders.....	1,428	4,570	4,377	4,485	2.5	3.2	2.8	3.3
Trim bench hands.....	384	947	1,054	1,534	.7	.7	.7	1.1
Varnish rubbers.....	501	553	357	146	.9	.4	.2	.1
Welders and braziers, hand.....		783	1,197	1,153		.5	.8	.9
Welders, machine.....		677	825	1,411		.5	.5	1.1
Woodworking-machine operators.....		1,942	1,815	1,264		1.4	1.2	.9
Other skilled occupations.....	1,674	3,779	5,623	3,050	3.0	2.6	3.7	2.3
Other employees.....	3,748	10,476	13,210	11,214	6.7	7.3	8.6	8.3
Total.....	56,309	144,362	153,962	134,912	100.0	100.0	100.0	100.0

The chart indicates the trend in employment in the various occupational classifications as shown by the per cent that the number in each classified occupation is of the total number of wage earners covered in each study. The chart presents many interesting implications and indicates certain employment trends that are taking place with regard to various phases of manufacture.¹

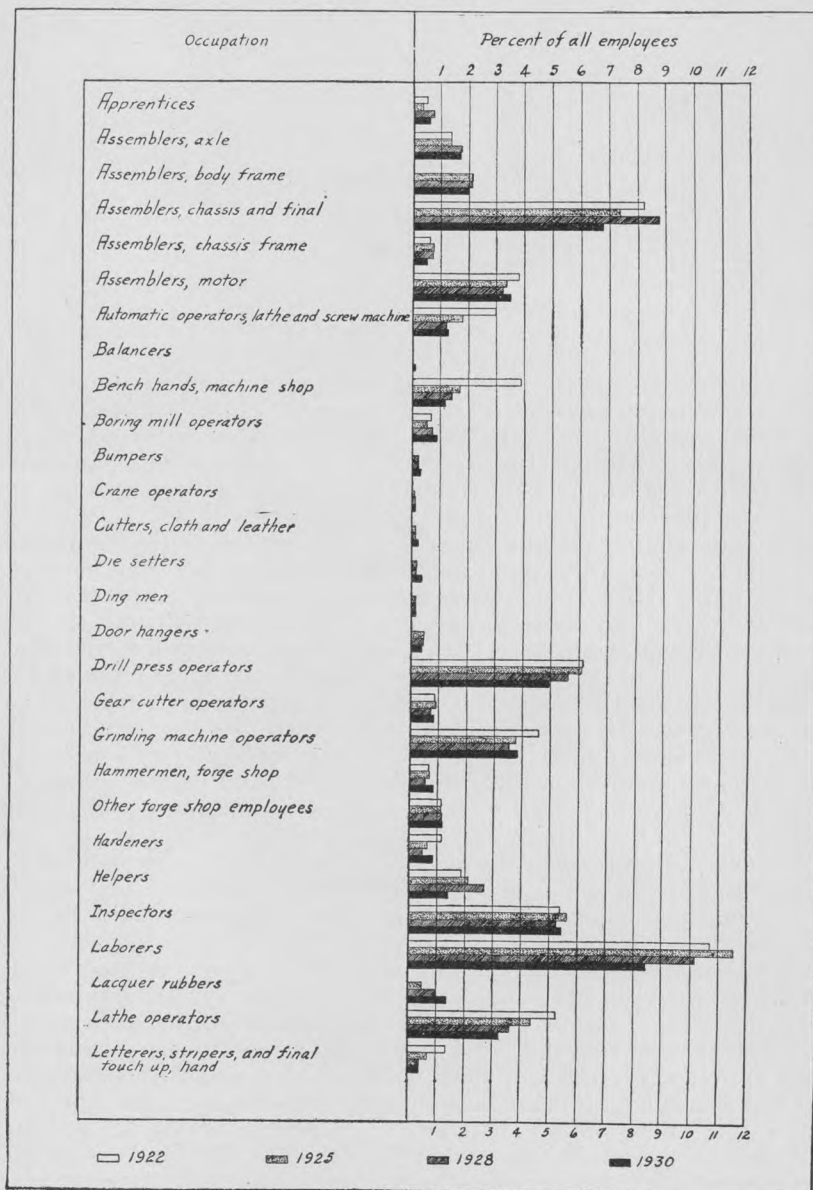
The outstanding changes appear in connection with machining operations, bench work, paint shops, and machine-tool maintenance. On the basis of the comparative number of workers employed, the chart indicates that there has been a considerable reduction in the amount of bench work since 1922; that there has been a rather consistent decrease in the comparative number of employees required for the operation of drill presses, lathes, milling machines, planers and shapers, and woodworking machines; that there has been an increase in the number required to operate boring mills and presses; that although automatic operators decreased in 1925 and 1928 as compared with 1922, there had been a slight increase at the time of the 1930 study.

The decided decrease in the amount of bench work as evidenced by comparison of the four studies implies greater standardization, better production methods, and less necessity for fitting in preparation for assembly.

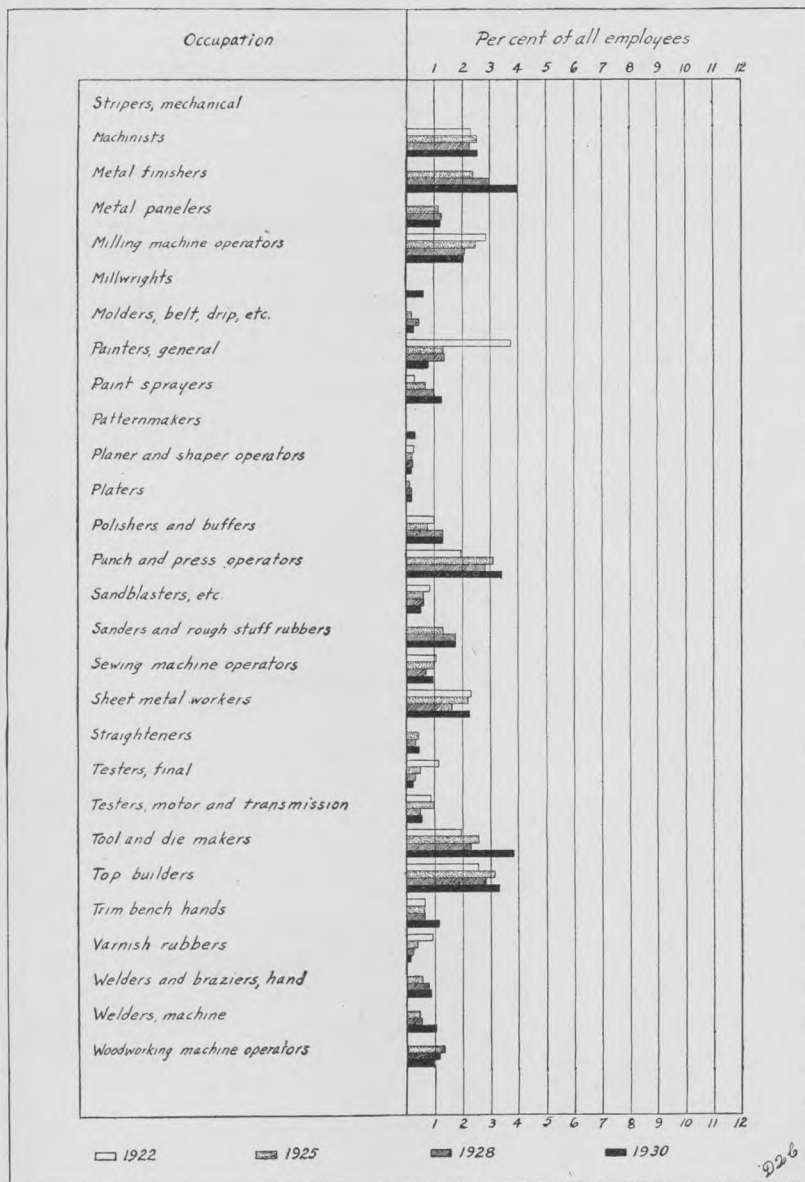
The gradual but general adoption since 1923 of pyroxylin lacquers as a finishing material has caused decided fluctuation in the paint-shop and finishing occupations in the industry. It has affected such groups as letterers, strippers, and final touch-up, metal finishers, painters, paint sprayers, sanders and rough-stuff rubbers, and varnish rubbers and has brought into being a new group who put the final polish on the lacquer finish and are designated lacquer rubbers by the bureau. The number employed as letterers, strippers, and final touch-up, painters, and varnish rubbers have been diminished considerably,

¹ No detailed study has recently been made of machines, processes, labor-saving devices, or schemes in the motor-vehicle industry by the bureau, but such a study is contemplated for the near future. An article entitled "Workers, machinery, and production, in the motor vehicle industry" appeared in the October, 1924, Monthly Labor Review. It gave in detail the improvements in design and productive capacity in terms of output per wage earner of a large number of specified machines, processes, and shop practices.

OCCUPATIONAL CHANGES IN MOTOR VEHICLE INDUSTRY, 1922 TO 1930



OCCUPATIONAL CHANGES IN MOTOR VEHICLE INDUSTRY, 1922 TO 1930—Continued



while the number employed as lacquer rubbers, metal finishers, paint sprayers, and sanders and rough-stuff rubbers have decidedly increased. The process of paint striping was being performed in 1930 in many plants by the use of instruments. This semimechanical process, which requires much less skill than the hand method, is a new one and is indicated in 1930 as stripers, mechanical.

In the forge shop and the stamping departments, respectively, a slight increase is shown for hammermen and a more decided one for punch and press operators. These conditions appear to be partially responsible for a rather decided increase in the comparative number of tool and die makers reported. It is also probable that the high percentage employed as tool and die makers in 1930 is partially the result of an effort by employers in general, during the present depression, to perpetuate their maintenance and repair organizations with a view to being well equipped when business conditions improve.

It is also interesting to note the extent to which more modern welding methods are finding a place in the industry. This is evidenced by the number of welders and braziers, hand, which includes welders using hand welding equipment in repairing broken cast-iron, steel, or aluminum stock and equipment, and also welders, machine, which includes all of the mechanical methods of welding, such as bar, butt, flash, intermittent spot, and continuous seam used in normal processes of production.

Number of Aged in Public and in Private Institutions, 1930

By GLENN STEELE, UNITED STATES CHILDREN'S BUREAU

IT IS nine years since a Federal census was taken of the number of indigent in public institutions provided for their care. In its *Paupers in Almshouses, 1923*, the United States Bureau of the Census provided an enumeration so classified as to give statistics on the aged dependents in county or city homes throughout the United States. Comprehensive information on the population and cost of almshouses in 1923-24 is also available from a report of the United States Bureau of Labor Statistics on the *Cost of American Almshouses* (Bulletin No. 386). In the absence of later figures of national scope, it has been necessary to look to much less comprehensive statistics for recent findings relating to the extent of public institutional care of the aged. Keen interest has been manifested in such findings, both because of the increased number of dependent aged and because factual data on public care have been most useful in the study to determine future policies that should be pursued to insure old-age security.

The census of 1930 showed that there were 6,633,805 persons 65 years of age and over in the United States, and that there were 1,700,590 more such persons in 1930 than in 1920. The effects of increased longevity and the reduction of immigration are seen in the increased proportion that persons aged 65 years or over constitute of the total population of the United States. This proportion advanced from 4.66 per cent in 1920 to 5.40 per cent in 1930. The incidence of dependency in this age group is unknown, although various estimates have been made.

The Social Work Year Book of 1929, summing up results of various studies on the subject, found that "most authoritative surveys indicate that nearly one-third (65 years of age or over) are dependent." These studies were made before the beginning of the business depression and it may be assumed that the subsequent drop in employment has advanced the proportion needing assistance, not only as it has affected wage earners in the group but as it has deprived others of family support.

Public Care of the Aged

INCREASED public effort to meet the problem has been indicated in the marked advance in public outdoor relief for persons of all ages, shown by recent statistics available for urban areas,¹ in the development of old-age pension systems provided under State legislation,² and in expanding action for the retirement of superannuated public employees.

There is a question as to whether there has been any general and recent upward swing in the trend of public institutional care for the aged in the country as a whole. Some interesting evidence applicable only to urban conditions has been made available through a collection

¹ Monthly Labor Review, April, 1931, pp. 20-28: *Cost of Family Relief in 100 Cities, 1929 and 1930*; and U. S. Children's Bureau report, *Relief Expenditures, January-September, 1931*.

² Monthly Labor Review, June, 1931, pp. 1-14: *Operation of Public Old-age Pension Systems in the United States, 1930*.

of data begun by the joint committee for the registration of social statistics.³

Of 173 homes for the aged, indigent, or chronically ill which were reporting to the joint committee on January 1, 1930, 28 were city or county homes serving a population of 13,364,989 in 26 large urban districts, representing 16 States and the District of Columbia.

More than 31,000 persons were inmates of these homes during 1930. An age classification was not secured whereby definite statistics of the number of aged in the group could be given, but it is assumed that the inmates were preponderantly old people.

Eighty per cent of the total dependents in almshouses were above 50 years of age, according to the census of 1923. Comparison of the 1923 figures with previous enumerations showed that the county or city homes were gradually being depopulated of the younger dependents, usually defective, as special institutions for their care were provided.

Instructions to the almshouses reporting in 1930 requested that defectives housed separately in special wings or buildings should not be reported, but that if some defective individuals were in the general almshouse population their numbers could be included in the reports.

In Table 1 the number of inmates during 1930 in institutions in each of the 26 metropolitan areas from which reports were received is shown, together with the rates per thousand population, 65 years of age and over. The number of inmates in each home was calculated by adding to the enumerated institutional population of January 1, 1930, the admissions during the year. Persons who were admitted during 1930, discharged, and subsequently readmitted were counted but once, except in Detroit and Washington, D. C., where readmissions could not be eliminated from the count.

The rates based on population serve to show the extent to which public care of the aged and the indigent by the institutional method prevails in the various communities. Obviously, they do not afford a basis for intercity comparisons of dependency, as many aged dependents are either cared for in their own homes by public outdoor relief or are provided for by private homes and agencies.

In Cleveland, whose city home has the relatively low rate of 25.8 persons per 1,000 population 65 years of age and over, much has been done by private effort to maintain the needy aged in their own surroundings. Under two large endowments in that city, \$213,408 was expended during 1930 for direct relief to 458 persons of advanced age. Other old people were cared for under the general program of outdoor relief, largely private.

The high rate shown for Duluth, 155.8, is chiefly due to the hospital service for the poor provided by one of the homes reporting from that area. It was found that the average length of time inmates of this county hospital were kept under care during the year was 46 days. This indicated a much greater turnover of cases than was usual for county homes. In Omaha, where the rate of persons served was also relatively high, reports were from the county hospital in which the average period of care during 1930 was 84 days. With the exception

³ Representing the local community research committee of the University of Chicago, cooperating with the National Association of Community Chests and Councils. The work of this committee was transferred to the U. S. Children's Bureau on July 1, 1930. Although the bureau will continue to assemble from large metropolitan areas social statistics dealing with child welfare and related fields, the statistical information regarding old-age institutional care which has been assembled will not be covered by its reports.

of these two areas, the community rates reported were all below 100 inmates per 1,000 population 65 years of age and over, ranging from 8.6 in Minneapolis to 81.7 in New Haven.

TABLE 1.—NUMBER OF COUNTY OR CITY HOMES REPORTING, NUMBER OF INMATES, AND NUMBER PER 1,000 POPULATION 65 YEARS OF AGE AND OVER, 1930

Metropolitan area	Number of institutions reporting	Area served by homes	Inmates in 1930	
			Number	Per 1,000 population 65 years of age and over
Berkeley, Calif.	1	Alameda County	1,958	64.9
Buffalo, N. Y.	1	Erie County	1,179	30.2
Canton, Ohio	1	Stark County	450	37.1
Chicago, Ill.	1	Cook County	6,639	41.0
Cincinnati, Ohio	1	Hamilton County	1,352	35.8
Cleveland, Ohio	1	City	832	25.8
Dayton, Ohio	1	Montgomery County	561	34.6
Denver, Colo.	1	Denver County	234	11.8
Detroit, Mich.	1	Wayne County	8,373	(¹)
Duluth, Minn.	2	St. Louis County	1,418	155.8
Harrisburg, Pa.	1	Dauphin County	481	48.5
Kansas City, Mo.	2	Jackson County	1,186	44.3
Lancaster, Pa.	1	Lancaster County	390	25.0
Minneapolis, Minn.	1	Hennepin County	264	8.6
Newark, N. J.	1	City	843	47.7
New Haven, Conn.	1	City	747	81.7
Omaha, Nebr.	1	Douglas County	1,857	145.4
The Oranges, N. J.	1	Essex County (in part)	91	(²)
Richmond, Va.	1	City	422	52.1
Sharon, Pa.	1	Mercer County	159	26.9
Sioux City, Iowa	1	Woodbury County	177	31.9
Springfield, Ill.	1	Sangamon County	309	44.5
Springfield, Mass.	1	City	237	28.8
St. Paul, Minn.	1	Ramsey County	409	23.1
Washington, D. C.	1	District of Columbia	³ 710	(¹)
Wichita, Kans.	1	Sedgwick County	236	30.9

¹ Not computed because number of inmates included persons discharged and readmitted.

² Rate not computed.

³ Number cared for during fiscal year 1930-31.

For the purpose of comparing the statistics of 1930 with those of a former year, the reports made by almshouses to the United States Bureau of Labor Statistics for its study of 1923-24 were used, except in the case of Cincinnati. The report for that city for 1923 was secured through the courtesy of the Helen Trounstone Foundation. The number of inmates reported by each almshouse in the earlier study was usually an average for the year 1923, but in a few instances enumerations as of particular dates in 1923 or 1924 were reported. The figures for 1930 were set up by corresponding methods, either averages or enumerations of the institutional population being used to correspond to the earlier data.

The figures for Washington, D. C., were for a period extending into 1931, a daily average being reported for the fiscal year ending in June. This was comparable to the institutional population reported for the fiscal year ending June 30, 1923. Statistics of both studies are presented in Table 2.

The rates calculated per 100,000 population for each period show that Canton, Detroit, Richmond, and Springfield, Mass., had fewer almshouse inmates in proportion to population in 1930 than in 1923. In Canton and Detroit there were more persons in almshouses in 1930 than in the former period, but the increases had not kept pace with the increases in population in those two cities. Thus, in 4 of

the 20 areas for which comparable rates are shown, the 1930 rates were lower than those of 1923, and in 16 areas the rates were higher. Of the latter, Springfield, Ill., Minneapolis, Duluth, Sioux City, New Haven, and Washington, D. C., had the largest increases in rates per 100,000 population, according to the statistics for the two periods. However, in Minneapolis the rate in both periods was below that of other cities. In Duluth the statistics represent the county farm but not the county hospital. The figures for Washington are interesting, as they are reported from a home used almost solely for the aged. The average number of those under care in this institution for the fiscal year ending June 30, 1923, was 67 per 100,000 population as compared with an average of 97 per 100,000 population in the home during the fiscal year 1930-31, an increase in rate of 45 per cent.

TABLE 2.—AVERAGE NUMBER ¹ OF INMATES IN COUNTY OR CITY HOMES AND RATE PER 100,000 POPULATION, 1923 AND 1930

Metropolitan area	Inmates in county or city homes			
	Average number ¹		Per 100,000 population ²	
	1923 ³	1930	1923	1930
Berkeley, Calif.	(4)	760	(4)	160.0
Buffalo, N. Y.	586	753	86.4	98.8
Canton, Ohio	280	306	145.5	138.0
Chicago, Ill.	(4)	3,911	(4)	98.2
Cincinnati, Ohio	625	814	118.7	138.1
Cleveland, Ohio	(4)	601	(4)	66.7
Dayton, Ohio	261	339	112.8	124.0
Denver, Colo.	123	173	46.0	60.1
Detroit, Mich.	2,278	2,728	160.4	144.4
Duluth, Minn. ⁴	222	381	107.9	186.2
Harrisburg, Pa.	186	235	118.3	142.2
Kansas City, Mo.	602	813	149.4	172.8
Lancaster, Pa.	119	187	65.5	95.0
Minneapolis, Minn.	84	183	18.7	35.3
Newark, N. J.	(4)	432	(4)	97.7
New Haven, Conn.	246	360	151.3	221.3
Omaha, Nebr.	318	385	148.4	165.2
The Oranges, N. J.	(4)	63	(4)	(4)
Richmond, Va.	206	179	117.4	97.9
Sharon, Pa.	(4)	85	(4)	85.6
Sioux City, Iowa	67	106	70.2	104.3
Springfield, Ill.	93	190	89.3	170.0
Springfield, Mass.	122	106	89.4	70.7
St. Paul, Minn.	189	292	73.0	101.8
Washington, D. C.	304	7473	66.9	97.2
Wichita, Kans.	78	136	72.7	99.8

¹ Except for Canton, Harrisburg, New Haven, and Richmond, for which enumeration of inmates on a particular day is given.

² Estimated as of July 1, 1923, and enumerated as of Apr. 1, 1930.

³ From reports made to U. S. Bureau of Labor Statistics, except for number of inmates in Cincinnati reported by Helen Trounstone Foundation.

⁴ Reports not available or not on a base comparable with 1930.

⁵ Report of one home excluded.

⁶ Rate not computed.

⁷ Daily average, fiscal year ending June 30, 1931.

Complete figures for the year 1931 are not yet available from registration reports, but enumerations of inmates in city or county homes on the first day of 1931 have been reported from 26 areas, and are compared in Table 3 with the enumerations on the first day of 1930.

TABLE 3.—NUMBER OF INMATES IN COUNTY OR CITY HOMES JANUARY 1, 1930 AND 1931, AND NUMBER AND PER CENT OF INCREASE OR DECREASE

Metropolitan area	Number of inmates Jan. 1—		Increase		Metropolitan area	Number of inmates Jan. 1—		Increase	
	1930	1931	Number	Per cent		1930	1931	Number	Per cent
Springfield, Mass.	100	131	31	31.0	Lancaster, Pa.	204	227	23	11.3
Wichita, Kans.	117	148	31	26.5	Springfield, Ill.	200	218	18	9.0
Duluth, Minn.	436	551	115	26.4	Washington, D. C.	1 453	1 490	37	8.2
Cincinnati, Ohio.	791	977	186	23.5	The Oranges, N. J.	62	67	5	8.1
Buffalo, N. Y.	750	885	135	18.0	Sioux City, Iowa.	105	111	6	5.7
Sharon, Pa.	85	98	13	15.3	Detroit, Mich.	2,904	3,031	127	4.4
Newark, N. J.	432	497	65	15.0	Dayton, Ohio.	356	370	14	3.9
St. Paul, Minn.	279	319	40	14.3	Berkeley, Calif.	757	786	29	3.8
Kansas City, Mo.	804	915	111	13.8	Richmond, Va.	163	169	6	3.7
New Haven, Conn.	317	360	43	13.6	Canton, Ohio.	296	306	10	3.4
Minneapolis, Minn.	170	190	20	11.8	Cleveland, Ohio.	591	606	15	2.5
Harrisburg, Pa.	235	262	27	11.5	Chicago, Ill.	3,960	3,941	2 19	2.5
Omaha, Nebr.	377	420	43	11.4	Denver, Colo.	174	166	2 8	2 4.6

¹ Enumeration as of Jan. 31.² Decrease.

An array of the percentages of change shows that in all metropolitan areas but two, populations of county or city homes were larger at the commencement of 1931 than at the beginning of the preceding year. However, as populations on particular dates are subject to slight changes of no significance, the service in the last 10 areas listed may be considered as having been practically upon the same scale at the beginning of each year.

Reports on bed facilities available from institutions in 24 areas (shown in Table 4) give some further index of the recent trend of public institutional care of the aged.

TABLE 4.—NUMBER OF BEDS IN COUNTY OR CITY HOMES, JANUARY 31, 1930 AND 1931 AND INCREASE OR DECREASE

Metropolitan area	Number of beds		
	Jan. 31, 1930	Jan. 31, 1931	Increase or decrease
Berkeley, Calif.	776	789	+13
Buffalo, N. Y.	819	1,129	+310
Chicago, Ill.	4,100	4,100	—
Cincinnati, Ohio.	866	1,009	+143
Cleveland, Ohio.	609	620	+11
Dayton, Ohio.	373	393	+20
Denver, Colo.	175	175	—
Detroit, Mich.	2,828	3,405	+577
Duluth, Minn.	490	490	—
Harrisburg, Pa.	1 308	296	-12
Kansas City, Mo.	808	908	+100
Lancaster, Pa.	200	200	—
Minneapolis, Minn.	200	215	+15
Newark, N. J.	1 440	515	+75
New Haven, Conn.	500	500	—
Omaha, Nebr.	415	415	—
The Oranges, N. J.	75	75	—
Richmond, Va.	200	200	—
St. Paul, Minn.	290	290	—
Sioux City, Iowa.	115	135	+20
Springfield, Ill.	150	150	—
Springfield, Mass.	105	133	+28
Washington, D. C.	518	518	—
Wichita, Kans.	120	160	+40

¹ On Jan. 1.

From the foregoing data it may be seen that in the following 19 areas there was evidence of increase in almshouse populations, either from higher rates of service in 1930 than in 1923 or from fairly significant increases in institutional population from January 1, 1930, to January 1, 1931: Buffalo, Cincinnati, Dayton, Denver, Duluth, Harrisburg, Kansas City, Mo., Lancaster, Newark, Minneapolis, New Haven, Omaha, Sharon, Sioux City, Springfield, Ill., Springfield, Mass., St. Paul, Washington, and Wichita.

While conditions varied considerably in the communities represented, the conclusions point to increasing rather than decreasing trends in county or city home care in large urban centers. In view of the increased number of aged and the urgent needs during the period of economic depression beginning late in 1929 this finding is not unexpected. Outdoor relief, both public and private, has been greatly increased, and by its means a few large cities—notably Chicago and Cleveland—apparently have been able to alleviate distress without recourse to additional almshouse commitments. In the majority of cities in the study, however, in spite of large expansion in outdoor relief programs, almshouse populations were increased from 1930 to 1931.

Another factor of importance which should be noted is that, although legislation for public pensions to the aged has been increasing, and has been adopted by 17 States, relief through this medium was not effective in 1930 in any of the metropolitan areas reporting except Berkeley.

While it is too early to trace the effect of recent legislation of this type upon the older form of institutional care, advocates of public measures which will give financial assistance to the aged in their own homes look forward to the elimination of public institutional care for the able-bodied aged. In a conference on the care of the aged held under the auspices of the Graduate School of Social Service Administration of the University of Chicago, in March, 1930, Dr. I. M. Rubinow, director of the conference, stated:

Not all the public poorhouses, almshouses, or county homes are quite as gruesome as others; but except the comparatively small percentage of those for whom institutional care is necessary, institutionalization of able-bodied aged is frequently unnecessary, cruel, and not infrequently unnecessarily expensive. The psychologic effects of life in these concentration camps for the aged should offer a most interesting subject of investigation, but even without it, in a purely empirical way, every social worker is familiar with the stubborn resistance of most old folks against commitment to an institution.⁴

Financial reports received from county or city homes in 14 areas gave the annual costs of operation. These expenditures for maintenance have been related to the total number of days' service to institution inmates during 1930 in order to derive cost per day's care. (Table 5.) The rates varied, being as low as 41 cents per day in Cleveland and Springfield, Ill., and reaching \$1.84 in Lancaster. No attempt can be made to analyze the differences in community expenditures per day's care, as information on the character of the care given was not reported.

⁴ Deutsch Foundation. Proceedings of the Conference on Care of the Aged, 1930. Chicago, University of Chicago Press, 1931, p. 10.

TABLE 5.—ANNUAL COST OF OPERATION, TOTAL DAYS' CARE GIVEN, AND AVERAGE COST PER DAY'S CARE, IN COUNTY OR CITY HOMES, 1930

Metropolitan area	Annual cost of operation	Number of days of care given	Average cost per day's care	Metropolitan area	Annual cost of operation	Number of days of care given	Average cost per day's care
Berkeley, Calif.-----	\$438, 013	278, 594	\$1. 57	Lancaster, Pa.-----	\$136, 858	74, 484	\$1. 84
Buffalo, N. Y.-----	359, 518	276, 844	1. 30	Omaha, Nebr.-----	167, 540	156, 141	1. 07
Canton, Ohio-----	73, 595	108, 640	. 68	The Oranges, N. J.-----	30, 375	22, 849	1. 33
Cleveland, Ohio.-----	89, 103	219, 458	. 41	Sioux City, Iowa-----	24, 877	38, 154	. 65
Dayton, Ohio-----	73, 163	123, 682	. 59	Springfield, Ill.-----	29, 490	71, 625	. 41
Duluth, Minn.-----	129, 864	172, 485	. 75	Springfield, Mass.-----	47, 720	38, 516	1. 24
Kansas City, Mo.-----	249, 623	308, 972	. 81	Wichita, Kans.-----	24, 710	50, 905	. 49

Private Homes for the Aged

PRIVATE homes reporting institutional care of adults under the registration of social statistics during 1930 were chiefly homes for the aged, although a few institutions for chronic invalids submitted reports. It was not the purpose to include homes that charged an admission fee of \$1,000 or more.

Statistics of 145 homes in 23 metropolitan areas were tabulated. In 18 of these areas all the homes listed made returns. Homes failing to report were in Cleveland, Denver, Lancaster, and Richmond, one in each city, and in Chicago where the smaller homes were not completely covered. Omissions are considered minor except for Denver, in which an important private institution failed to report.

Of the 145 institutions, the sectarian homes, 64 in number, formed the largest group. The nonsectarian homes included homes for various nationality groups, private benevolent institutions, and others of which a few were homes for incurables.

Only residents of the metropolitan areas reporting were considered in the count of inmates. Nonresidents in regional homes or other institutions receiving inmates from different localities were not included. Therefore, in Table 6 the service reported is that given to the designated districts of each community. The total institutional population for the year 1930 in each home was arrived at by adding to the enumerated population of January, 1930, the new admissions during the year.

The rate per 1,000 population, 65 years and over, calculated for each area, shows that New Orleans had the most extensive private home care in proportion to its aged population. There is no public home for aged people in that city. Cincinnati was the only other city listed that had a rate of more than 50 inmates in private homes per 1,000 population of 65 years of age and over. Rates for Buffalo, Kansas City, Minneapolis, Richmond, and St. Paul, were somewhat similar, ranging from 21.7 in St. Paul to 30.8 in Richmond. In the other cities the number of aged inmates in private homes during 1930 was below 20 per 1,000 population of advanced age. The rates for Chicago and Denver would have been increased by complete reporting.

TABLE 6.—NUMBER OF PRIVATE HOMES REPORTING, NUMBER OF INMATES, AND NUMBER PER 1,000 POPULATION, 65 YEARS OF AGE AND OVER, 1930

Metropolitan area	Description of area	Number of homes reporting	Number of inmates during 1930 ¹	Number per 1,000 population, 65 years of age and over
Bridgeport, Conn.	Bridgeport, Fairfield, and Stratford	3	83	9.7
Buffalo, N. Y.	Erie County (in part)	10	929	24.8
Canton, Ohio	City and environs	1	22	4.1
Chicago, Ill.	City	20	1,966	14.6
Cincinnati, Ohio	Hamilton County	18	2,013	53.3
Cleveland, Ohio	Cuyahoga County (in part)	9	394	9.0
Columbus, Ohio	Franklin County	1	15	.7
Dayton, Ohio	Montgomery County	2	61	4.5
Denver, Colo. ²	Denver County	3	167	8.4
Des Moines, Iowa	City	1	13	1.6
Detroit, Mich.	Detroit, Hamtramck, Highland Park, and the Grosse Points.	9	784	17.3
Duluth, Minn.	City	2	100	18.3
Harrisburg, Pa.	Dauphin, Perry, and Cumberland Counties (in part).	1	42	3.3
Kansas City, Mo.	City	7	524	24.1
Lancaster, Pa.	Lancaster city and township	1	10	2.0
Minneapolis, Minn.	Minneapolis and Edina	11	613	22.3
Newark, N. J.	City	4	209	11.8
New Haven, Conn.	do	3	153	16.7
New Orleans, La.	City and environs	15	1,363	68.6
Omaha, Nebr.	City	5	207	17.6
Richmond, Va.	Henrico and Chesterfield Counties	5	328	30.8
Springfield, Mass.	Springfield and towns of Longmeadow and West Springfield.	3	97	10.3
St. Paul, Minn.	Ramsey County	11	384	21.7

¹ Includes only those inmates who were residents of area specified.² Report of 1 important agency not included.

Comparison of Private and Public Care

A COMPARISON of the extent of private and public home care in each community is interesting but can be presented for only 15 metropolitan areas. The number of total days' care given during 1930 in institutions for the aged to residents of these communities is shown in Table 7, with figures on the amount and proportion of this care furnished by public and by private homes.

TABLE 7.—NUMBER AND PERCENTAGE OF DAYS' CARE GIVEN TO RESIDENTS BY PUBLIC AND BY PRIVATE HOMES FOR THE CARE OF THE AGED

Metropolitan area	Days' care given				
	Total	By public homes		By private homes	
		Number	Per cent of total	Number	Per cent of total
Buffalo, N. Y.	535,385	276,844	51.7	258,541	48.3
Canton, Ohio	61,824	54,320	87.9	7,504	12.1
Chicago, Ill.	1,967,762	1,365,189	69.4	602,573	30.6
Cincinnati, Ohio	836,234	301,158	36.0	535,076	64.0
Cleveland, Ohio	340,984	219,458	64.4	121,526	35.6
Dayton, Ohio	142,028	123,682	87.1	18,346	12.9
Denver, Colo. ¹	106,899	62,359	58.3	44,540	41.7
Detroit, Mich.	1,209,082	993,265	82.2	215,817	17.8
Duluth, Minn.	157,107	129,570	82.5	27,537	17.5
Kansas City, Mo.	440,612	287,942	65.4	152,670	34.6
Minneapolis, Minn.	243,528	58,260	23.9	185,268	76.1
New Orleans, La.	371,160			371,160	100.0
Omaha, Nebr.	217,197	156,141	71.9	61,056	28.1
Springfield, Mass.	69,238	37,660	54.4	31,578	45.6
St. Paul, Minn.	227,848	107,097	47.0	120,751	53.0

¹ Report of 1 important agency not included.

In making this comparison, information on days' care is preferred to persons cared for, as it provides for consideration of the duration of care, a factor not accounted for when population comparisons are made. In all but four areas the public homes provided the largest amount of service. Eliminating New Orleans, which had no public home, there were, in fact, but three areas—Cincinnati, Minneapolis, and St. Paul—where days' care given by private homes in 1930 exceeded days' care provided by public institutions. Possibly Denver would be added to this list, if complete returns from private homes in that area had been received. The conclusions must, of course, be interpreted with an understanding that although some inmates are not aged, in homes of both types, the proportion of such inmates is larger in the public institutions.

The enumerations of inmates in private homes reported for 1930 and 1931 on the first day of January, when compared, disclosed no appreciable change by 1931 of the number of old persons under care in any reporting area. The rates of increase computed were not more than 7 per cent in any area, except Duluth, where private-home population increased 17 per cent. Such information as was reported on capacity, as of December, 1930, indicated that the private homes were running at or close to full capacity. Most private homes have waiting lists, and vacancies caused by discharge or death are soon filled. For this reason, there is little fluctuation in private-home population, except when facilities or policies are changed. Various requirements for admission, such as religious affiliations, nationality, character, health, or ability to pay an entrance fee, limit the numbers eligible for care in many private homes.

UNEMPLOYMENT AND ITS RELIEF

Unemployment in Buffalo, N. Y., November, 1931, and Comparison with November, 1929 and 1930

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Introduction

THIS, the third annual study of unemployment in Buffalo, was conducted during the first week of November, 1931, and is similar to previous studies made in Buffalo in November, 1929, and November, 1930.¹ This article presents certain of the more important findings of the 1931 Buffalo study and compares them with the results of the two earlier studies. In general outline the Buffalo studies are similar to a series of five studies made in Columbus, Ohio, in the years 1921 to 1925, inclusive.¹

The first of the three Buffalo studies was under the auspices of the New York State Department of Labor, while the two later ones were under the joint auspices of that department and the Buffalo Foundation. The task of selecting the areas to be enumerated was undertaken by the Buffalo Foundation. That organization was able to bring to bear upon the problem a wealth of previous information and experience concerning the city of Buffalo and the composition of its population. Nine areas were selected as reasonably representative of the city and certainly more satisfactory than any random selection of blocks could be expected to be. The data were obtained by house-to-house visits within these nine areas in each year, the actual enumeration being done by students of State Teachers College and of the University of Buffalo, assisted in 1929 by students of Canisius College and in 1930 and 1931 by a number of volunteers, trained social workers, and experienced paid enumerators. The field workers were given detailed printed instructions, supplemented by oral discussion, and their work was closely supervised. The data were gathered as of Monday, November 4, in 1929, as of Monday, November 3, in 1930, and as of Monday, November 2, in 1931.

Data were requested for all males 18 years of age or over (except those in school) and for all females 18 years of age or over who were usually employed in gainful occupations. Thus, all housewives were omitted, as were also all women who worked outside the home on a part-time basis in addition to their housework. The schedule used in 1930 and 1931 called for information for each person as to relation to head of household, sex, age, nativity, present or last employer, indus-

¹ Results of the 1929 Buffalo study appeared as Special Bulletin No. 163 of the Bureau of Statistics and Information of the New York State Department of Labor and as the seventy-second number of the Foundation Forum of the Buffalo Foundation. The 1930 Buffalo study is presented as Special Bulletin No. 167 of the Division of Statistics and Information and as the seventy-third number of the Foundation Forum. Figures for 1931 are shown in Special Bulletin No. 172 of the Division of Labor Statistics and in the seventy-fifth number of the Foundation Forum. Details of the Columbus studies may be found in United States Bureau of Labor Statistics Bul. No. 409. The Labor Review for February, 1930, presented a comparison of the 1929 Buffalo study and the five Columbus studies, while a comparison of the Buffalo figures for 1929 and 1930 was given in the Labor Review for January, 1931.

try and occupation, employment status, and whether able to work and willing to work. In regard to employment status each person was classified according to whether he was employed full time, or if employed less than full time, what fraction of the usual full time, or if unemployed, how long had such unemployment continued and why was he out of work. The schedule for 1929 was essentially the same except for the omission of the inquiries concerning whether able to work and willing to work and except also that the inquiry as to age was added after the study had been begun in 1929 and data of age were obtained for but part of the unemployed rather than for all persons as in the later studies. As indicated in the 1930 study, the questions concerning whether able to work and whether willing to work were included as an experiment. Answers to these questions when taken in conjunction with the reported reason for idleness assisted in classifying the unemployed into the major categories—(1) able and willing to work, (2) temporarily unable to work, (3) permanently unable to work, and (4) unwilling to work. Two years' use of the schedule in its present form has shown its simple but practical qualities.

Summary of Results

THE more important findings of the Buffalo studies may be listed as follows:

1. Of the males who were able and willing to work, 6.2 per cent were unemployed in 1929, 17.2 per cent were unemployed in 1930, and 24.3 per cent were unemployed in 1931. The proportion of males unemployed of those able and willing to work was thus over one and one-half times as great in 1931 as in 1930 and nearly four times as great in 1931 as in 1929. (Table 3.)

2. In 1929, 7.1 per cent of the males able and willing to work were employed part time. This figure rose in 1930 to 18.6 per cent and in 1931 to 23.2 per cent. Thus, the proportion of the males able and willing to work who were employed part time was about one and one-third times as great in 1931 as in 1930 and over three times as great in 1931 as in 1929. (Table 3.)

3. Of the females who were able and willing to work the proportion unemployed was about one and one-half times as great in 1931 as in 1930 and six times as great in 1931 as in 1929. (Table 3.)

4. At each successive study there was not only a larger proportion of men employed part time, but the part-time employment represented a smaller fraction of full time. (Table 3.)

5. Unemployment had been of decidedly longer duration at the time of the 1931 study than at the time of the 1930 study. In turn, unemployment had been of longer duration in 1930 than in 1929. (Table 8.)

6. Considering the males able and willing to work, by age groups, it was found that the least unemployment was present among those from 35 to 45 years of age in 1930 and among those from 35 to 40 years of age in 1931. In each year the proportion unemployed in each age group increased steadily as the groups considered were either younger or older. (Table 5.)

7. As previously found, it was again true in 1931 that the most unemployment and the least full-time employment were among the native colored group, while the least unemployment and the most full-time employment were among the native whites.

8. The greatest proportions of unemployment and part-time employment of males were present in the manufacturing and mechanical industries in each year. The industry groups which employed large numbers of males and which showed the most unemployment and underemployment were building trades, manufacture and servicing of automobiles, parts, and tires, and manufacture of iron and steel and their products. In 1931 the manufacture of airplanes was first classified as a separate industry and showed a large proportion of males unemployed. The greatest proportion of full-time employment was present among males engaged in professional service, the self-employed (other than building contractors), and government employees. Nearly every important industry group showed a greater proportion of males unemployed and underemployed at each successive study. (Table 9.)

9. While comparable data for 1929 are not available, the figures for 1930 and 1931 reveal a rather remarkable stability of the small proportions of the males enumerated who were either unable or unwilling to work. (Table 6.)

Scope of Studies

IN 1929 the enumeration included 15,164 persons of both sexes; in 1930 information was obtained for 14,002 persons; in 1931 reports were received for 15,625 persons. In the 1930 study the addresses visited were those from which information was received in 1929. While such an arrangement is desirable for the sake of comparability, it is obvious that the total number of households (and persons) thus enumerated in 1930 must be smaller than in 1929. In order to offset a further dwindling of the size of the sample in 1931, the same addresses were visited as in 1930 and in addition approximately 10 per cent additional houses were visited in each area. These shifts in the size of the sample have introduced no selective error, as may be seen from a consideration of the sex, nativity, and industrial distribution of those enumerated each year.

In 1929, 81.3 per cent of the persons enumerated were males; in 1930, 80.6 per cent were males; and in 1931, 80.7 per cent were males.

At the time of writing, the 1930 census data of the nativity distribution of occupied persons in Buffalo are not available and it is understood will not be ready until April, 1932. If the nativity distribution of the persons enumerated in the 1931 Buffalo study be compared with the nativity distribution of the occupied persons 18 years of age or over shown by the 1920 census, it is found (as would be expected) that the proportion of native whites included in this study was considerably higher than was shown by the census and the proportion of foreign born was correspondingly lower in this study than in the census. Comparing the nativity distribution of those enumerated in the three Buffalo studies reveals no striking points of contrast. There was, however, a slight increase in the proportion of native colored in 1930 and a decline in 1931.

In this rather brief presentation of findings no data are shown for the nine individual areas enumerated. A consideration of the number of persons enumerated in each area reveals that each area contributed nearly the same proportion of persons to the total enumerated each year.

Table 1 presents, for each of the three studies, the industry distribution of all persons enumerated of both sexes. The percentage columns for each year show relatively little shifting in the industrial composition of the population enumerated in the three studies. For the 1931 study the group "trade and transportation—other" was subdivided to show separate data for "bank and brokerage" and for "insurance and real estate." Likewise, in 1931 the classification "manufacturing and mechanical pursuits—other" was subdivided to show separate data for "lumber and furniture" and for "airplanes."

TABLE 1.—INDUSTRY DISTRIBUTION OF PERSONS ENUMERATED, 1929, 1930, AND 1931
[This table does not include 18 persons in 1931, 58 persons in 1930, and 138 persons in 1929 not reporting as to industry group]

Industry group	1931		1930		1929	
	Number	Per cent	Number	Per cent	Number	Per cent
Professional	579	3.7	533	3.8	562	3.7
Clerical (not otherwise specified)	99	.6	36	.3	116	.8
Domestic and personal service	972	6.2	912	6.5	777	5.2
Government employees (other than teachers)	1,139	7.3	913	6.6	919	6.1
Trade and transportation	4,803	30.8	4,304	30.9	4,487	29.9
Retail and wholesale trade	1,963	12.6	1,706	12.2	1,693	11.3
Telephone and telegraph	238	1.5	251	1.8	254	1.7
Railway, express, gas, electric light	1,824	11.7	1,609	11.6	1,757	11.7
Water transportation	89	.6	100	.7	87	.6
Bank and brokerage	179	1.2				
Insurance and real estate	239	1.5	638	4.6	696	4.6
Other	271	1.7				
Manufacturing and mechanical pursuits	6,719	43.1	6,181	44.3	6,961	46.3
Building trades, contractors	341	2.2	309	2.2	347	2.3
Building trades, wage earners	826	5.3	770	5.5	884	5.9
Clay, glass, and stone products	100	.6	116	.8	98	.6
Food and kindred products	666	4.3	594	4.3	627	4.2
Iron, steel, and their products	1,468	9.4	1,299	9.3	1,456	9.7
Metal products, other than iron and steel	194	1.2	193	1.4	211	1.4
Paper, printing, and publishing	332	2.1	331	2.4	290	1.9
Wearing apparel and textiles	448	2.9	433	3.1	522	3.5
Automobiles, parts, and tires	997	6.4	950	6.8	1,068	7.1
Lumber and furniture	320	2.1				
Airplanes	197	1.3	1,186	8.5	1,458	9.7
Other	830	5.3				
Labor (not otherwise specified)	27	.2	42	.3	78	.5
Self-employed	1,098	7.0	895	6.4	1,063	7.1
Miscellaneous	171	1.1	128	.9	63	.4
Total, all industries	15,607	100.0	13,944	100.0	15,026	100.0

Employment Status

IN 1930 and 1931 it was possible to make a more detailed classification of the unemployed than was done in 1929. The classification in which an unemployed person was placed was determined by the reason given for the fact that he was unemployed at the time of the enumeration, rather than the reason for losing his last job. In the vast majority of cases these two reasons were one and the same.

Table 2 shows, by sex, the employment status of all persons enumerated in 1931.

Because of the greater numerical importance of males, many comparisons of employment conditions shown by the three studies are restricted to that sex. Comparing the figures for the three studies, it appears that 50.2 per cent of all males enumerated in 1931 were working full time, as against 61.4 per cent in 1930 and 82.4 per cent in 1929. Part-time employment only was had by 22.1 per cent of all males enumerated in 1931, as against 17.8 per cent in 1930 and 6.8 per cent in 1929. Those able to work but unable to find employment formed 23.2 per cent of all males enumerated in 1931, 16.5 per cent in

1930, and 5.9 per cent² in 1929. It is interesting to note that the males unable or unwilling to work constituted a relatively constant proportion of those males enumerated at the time of each study (4.5 per cent in 1931, 4.3 per cent in 1930, and 4.9 per cent in 1929).

TABLE 2.—EMPLOYMENT STATUS OF PERSONS ENUMERATED, BY SEX, 1931
[This table does not include one male not reporting as to cause of unemployment]

Employment status	Number			Per cent		
	Males	Fe- males	Both sexes	Males	Fe- males	Both sexes
Employed full time.....	6,325	1,874	8,199	50.2	62.3	52.5
Employed:						
Part time.....	2,793	487	3,280	22.1	16.1	21.0
Two-thirds but less than full time.....	952	145	1,097	7.5	4.8	7.0
One-half but less than two-thirds.....	1,033	190	1,223	8.2	6.3	7.8
One-third but less than one-half.....	420	72	492	3.3	2.4	3.2
Less than one-third.....	379	79	458	3.0	2.6	2.9
Fraction not reported.....	9	1	10	.1	(1)	.1
Unemployed.....	3,496	649	4,145	27.7	21.6	26.5
Able and willing to work.....	2,927	633	3,560	23.2	21.1	22.8
Temporarily unable to work.....	92	16	108	.7	.5	.7
Permanently unable to work.....	228	-----	228	1.8	-----	1.4
Unwilling to work.....	249	-----	249	2.0	-----	1.6
Total.....	12,614	3,010	15,624	100.0	100.0	100.0

¹ Less than one-tenth of 1 per cent.

TABLE 3.—EMPLOYMENT STATUS OF ALL PERSONS ABLE AND WILLING TO WORK,
BY SEX, 1929, 1930, AND 1931

Employment status	Number			Per cent		
	1931	1930	1929	1931	1930	1929
<i>Males</i>						
Employed full time.....	6,325	6,930	10,157	52.5	64.2	86.7
Employed part time.....	2,793	2,007	833	23.2	18.6	7.1
Two-thirds but less than full time.....	952	856	374	7.9	7.9	3.2
One-half but less than two-thirds.....	1,033	764	310	8.6	7.1	2.6
One-third but less than one-half.....	420	261	79	3.5	2.4	.7
Less than one-third.....	379	109	32	3.1	1.0	.3
Fraction not reported.....	9	17	38	.1	.2	.3
Unemployed.....	2,927	1,863	^a 724	24.3	17.2	^a 6.2
Total.....	12,045	10,800	11,714	100.0	100.0	100.0
<i>Females</i>						
Employed full time.....	1,874	1,958	2,517	62.6	73.2	91.1
Employed part time.....	487	326	148	16.3	12.2	5.4
Two-thirds but less than full time.....	145	113	48	4.9	4.2	1.7
One-half but less than two-thirds.....	190	139	62	6.4	5.2	2.3
One-third but less than one-half.....	72	47	18	2.4	1.8	.7
Less than one-third.....	79	24	12	2.6	.9	.4
Fraction not reported.....	1	3	8	(b)	.1	.3
Unemployed.....	633	391	^a 97	21.1	14.6	^a 3.5
Total.....	2,994	2,675	2,762	100.0	100.0	100.0
<i>Both sexes</i>						
Employed full time.....	8,199	8,888	12,674	54.5	66.0	87.5
Employed part time.....	3,280	2,333	981	21.8	17.3	6.8
Two-thirds but less than full time.....	1,097	969	422	7.3	7.2	2.9
One-half but less than two-thirds.....	1,223	903	372	8.1	6.7	2.6
One-third but less than one-half.....	492	308	97	3.3	2.3	.7
Less than one-third.....	458	133	44	3.0	1.0	.3
Fraction not reported.....	10	20	46	.1	.1	.3
Unemployed.....	3,560	2,254	^a 821	23.7	16.7	^a 5.7
Total.....	15,039	13,475	14,476	100.0	100.0	100.0

^a This is the "slack work" classification for 1929.

^b Less than one-tenth of 1 per cent.

² This is the "slack work" classification for the 1929 study.

Only those persons who were reported as able and willing to work at the time of the enumeration in each year are covered in Table 3, thus excluding all persons who were temporarily or permanently unable to work as well as all persons who were unwilling to work.

In 1931 nearly one out of every four men able and willing to work was unable to find employment, nearly one out of every four had only part-time employment, and just over two out of every four were employed full time.

Partly because they are more largely employed in clerical occupations, women showed a greater proportion of full-time employment and a smaller proportion of part-time employment and unemployment than did men. In 1931 slightly more than one-fifth of the females who were able and willing to work were unable to secure employment, almost exactly one-sixth were employed part time, and five-eighths were employed full time.

Table 4 shows the proportion of employment and the proportion of unemployment among the persons enumerated in 1929, 1930, and 1931 who were able and willing to work. In constructing this table part-time employment was expressed in terms of equivalent full time.

TABLE 4.—EQUIVALENT FULL-TIME EMPLOYMENT OF ALL PERSONS ENUMERATED (BOTH SEXES) WHO WERE ABLE AND WILLING TO WORK,¹ 1929, 1930, AND 1931

Year	Per cent of time em- ployed	Per cent of time unem- ployed	Total
1931-----	67.3	32.7	100.0
1930-----	77.1	22.9	100.0
1929-----	92.1	7.9	100.0

¹ Part time was reduced to its full-time equivalent. Thus, 6 men working "two-thirds but less than full time" would be equivalent, in point of time employed, to 5 men fully employed and 1 unemployed.

Because of space limitations no tables are included in this report dealing with the employment status of heads of households, and no tables are here shown of employment status by nativity groups or of employment status in the nine areas studied. Detailed tables of these data are to be found in the New York State Department of Labor bulletin. Briefly stated, it was found that in each year the male heads of households who were able and willing to work showed a smaller proportion unemployed and a larger proportion employed part time and full time that did all males who were able and willing to work. A comparison of the employment status by nativity groups of the males who were able and willing to work could be made for 1930 and 1931 only, as the 1929 figures of employment status by nativity groups include all those enumerated rather than only those able and willing to work. In both 1930 and 1931 unemployment was greatest for the native colored and least for the native whites and full-time employment was greatest for the native whites and least for the native colored. Part-time employment was least for native whites in both years, but was greatest for native colored in 1930 and for foreign born in 1931.

In the 1930 and 1931 studies age data were requested for all persons enumerated whether employed or unemployed. Table 5 presents figures of employment status by age groups for the males who were able and willing to work at the time of the 1931 enumeration.

TABLE 5.—EMPLOYMENT STATUS OF MALES ABLE AND WILLING TO WORK, BY AGE GROUPS, 1931

[This table does not include eight males not reporting as to age]

Age group (years)	Number				Per cent			
	Em- ployed full time	Em- ployed part time	Unem- ployed	Total	Em- ployed full time	Em- ployed part time	Unem- ployed	Total
Under 20.....	147	56	205	408	36.0	13.7	50.3	100.0
20 and under 25.....	596	272	513	1,381	43.2	19.7	37.1	100.0
25 and under 30.....	698	290	343	1,331	52.4	21.8	25.8	100.0
30 and under 35.....	804	344	278	1,426	56.4	24.1	19.5	100.0
35 and under 40.....	1,000	449	319	1,768	56.6	25.4	18.0	100.0
40 and under 45.....	875	417	306	1,598	54.8	26.1	19.1	100.0
45 and under 50.....	759	330	280	1,369	55.4	24.1	20.5	100.0
50 and under 55.....	580	286	226	1,092	53.1	26.2	20.7	100.0
55 and under 60.....	365	148	136	649	56.2	22.8	21.0	100.0
60 and under 65.....	280	108	149	537	52.1	20.1	27.8	100.0
65 and under 70.....	144	65	94	303	47.5	21.5	31.0	100.0
70 and over.....	71	26	78	175	40.6	14.8	44.6	100.0
Total.....	6,319	2,791	2,927	12,037	52.5	23.2	24.3	100.0

The percentage data of this table show for each age group the proportion of that group who were employed full time, employed part time, and unemployed. From these figures, which cover 12,037 males who were able and willing to work, it appears that the percentage of unemployed was least among those males 35 to 40 years of age; and although the proportion unemployed was only slightly higher for those 30 to 35 and those 40 to 60, the percentage unemployed increased steadily according as the groups considered be either younger or older. The greatest proportion of unemployed was found in the very young and in the very old groups.

It was found in 1930 that the minimum proportion of unemployed was among the males 35 to 45 years of age and that from this low point the percentage unemployed of each age group increased steadily as the groups considered were either younger or older. If the data of Table 5 be compared with the figures for 1930 it is seen that in each age group a larger proportion of the males who were able and willing to work were unemployed in 1931 than in 1930.

As shown by Table 5, the greatest proportion of males employed part time was found among those aged from 30 to 55, while the proportion of those employed part time was least among the youngest and oldest groups. The greatest proportion of full-time work was found among the central age groups while the smallest proportion of full-time work was found among the youngest and oldest groups.

The more detailed report in the New York State Department of Labor bulletin contains a table showing for each year the proportion of those persons employed part time who were working each specified fraction of part time. These figures reveal that at the time of each successive study a larger proportion of males was employed "one-third but less than one-half time" and "less than one-third time," and that a smaller proportion of males was employed "one-half but less than two-thirds time" and "two-thirds but less than full time."

Cause of Unemployment

TABLE 6 presents data of employment status and cause of unemployment of all males enumerated in 1930 and 1931 and shows each classification of the unemployed males as a percentage of all males enumerated in each year. The year 1929 is also given, although a less detailed classification of causes of unemployment was used in that year.

TABLE 6.—EMPLOYMENT STATUS AND CAUSE OF UNEMPLOYMENT OF ALL MALES ENUMERATED, 1929, 1930, AND 1931

[This table does not include one male in 1931 and 1930 not reporting as to cause of unemployment]

Employment status and cause of unemployment	Number			Per cent		
	1931	1930	1929	1931	1930	1929
Employed full time.....	6,325	6,930	10,157	50.2	61.4	82.4
Employed part time.....	2,793	2,607	833	22.1	17.8	6.8
Unemployed.....	3,496	2,349	1,328	27.7	20.8	10.8
Able and willing to work.....	2,927	1,863		23.2	16.5	
Slack work.....	2,861	1,785	1 724	22.7	15.8	1 5.9
Forced retirement.....	39	57		.3	.5	
Miscellaneous.....	27	21		.2	.2	
Temporarily unable to work.....	92	94		.7	.8	
Sickness.....	72	66		.6	.6	
Injury.....	20	28		.1	.2	
Permanently unable to work.....	228	166		1.8	1.5	
Sickness.....	97	96		.8	.9	
Injury.....	49	25	604	.4	.2	4.9
Old age.....	80	42		.6	.4	
Miscellaneous.....	2	3		(²)	(²)	
Unwilling to work.....	249	226		2.0	2.0	
Voluntary retirement.....	238	209		1.9	1.9	
Lazy or indifferent.....	10	15		.1	.1	
Miscellaneous.....	1	2		(²)	(²)	
Total.....	12,614	11,286	12,318	100.0	100.0	100.0

¹ This is the "slack work" classification of 1929.

² Less than one-tenth of 1 per cent.

Considering the figures for 1931, it appears that the unemployed males who were able and willing to work constituted 23.2 per cent of all males enumerated; those males who were idle because of slack work, 22.7 per cent; and those who were unemployed because of forced retirement, 0.3 per cent. It is quite possible that some elderly men who were actually unemployed because of forced retirement reported themselves as unemployed because of slack work. The distinction between these causes should be looked upon as one of degree since, as prosperous times appear, many of those "forcibly retired" may be reabsorbed into industry.

Of all males enumerated, 0.7 per cent were unemployed because of temporary sickness or injury, while 1.8 per cent were permanently unable to work because of sickness, injury, or old age. Only 2 per cent were unwilling to work, 1.9 per cent because of voluntary retirement and 0.1 per cent because of laziness or indifference. There is some latitude for opinion in classifying a particular sickness or injury as "temporary" or "permanent." Even a skilled physician can not be sure that a temporary case may not become permanent or that a person adjudged permanently sick or disabled may not recover. Neither is it always possible to determine unquestionably whether an individual is unable to work because of permanent sickness or because of the feebleness of old age. "Old age" does not arrive at a particular day and hour. Old age, for many, as a cause of unemployment,

arrives when work fitted to their years and physical condition can no longer be had. Preceding this is a period of "odd jobs" or "slack work," and finally the wage earner discovers that he is "old." Retirement of a voluntary sort frequently follows along the same line of experience, except that it is coupled with the ability to secure some support from accumulated property, from other members of the family, or from organizations.

Table 6 shows a rather remarkable stability of the proportion of the males enumerated who were either unable or unwilling to work in each of the two years 1930 and 1931.

Detailed data of the unemployed males in 1929, 1930, and 1931, by cause of unemployment, are shown in Table 7. In this table each group of the unemployed males is expressed as a percentage of those males unemployed from all causes in each year.

TABLE 7.—CAUSE OF UNEMPLOYMENT OF ALL UNEMPLOYED MALES ENUMERATED, 1929, 1930, AND 1931

[This table does not include one male in 1931 and one male in 1930 not reporting as to cause of unemployment]

Cause of unemployment	Number			Per cent		
	1931	1930	1929	1931	1930	1929
Able and willing to work.....	2,927	1,863		83.7	79.3	
Slack work.....	2,861	1,785		81.8	76.0	
Forced retirement.....	39	57	1724	1.1	2.4	154.5
Miscellaneous.....	27	21		.8	.9	
Temporarily unable to work.....	92	94		2.6	4.0	
Sickness.....	72	66		2.0	2.8	
Injury.....	20	28		.6	1.2	
Permanently unable to work.....	228	166		6.6	7.1	
Sickness.....	97	96		2.8	4.1	
Injury.....	49	25	604	1.4	1.1	45.5
Old age.....	80	42		2.3	1.8	
Miscellaneous.....	2	3		.1	.1	
Unwilling to work.....	249	226		7.1	9.6	
Voluntary retirement.....	238	209		6.8	8.9	
Lazy or indifferent.....	10	15		.3	.6	
Miscellaneous.....	1	2		(²)	.1	
Total.....	3,496	2,349	1,328	100.0	100.0	100.0

¹ This is the "slack work" classification of 1929.

² Less than one-tenth of 1 per cent.

In 1931 the unemployed males who were able and willing to work amounted to 83.7 per cent of all unemployed males; those unemployed because of slack work formed 81.8 per cent; and those forcibly retired, 1.1 per cent. The males usually employed but temporarily unable to work constituted 2.6 per cent of the total; those permanently unable to work, 6.6 per cent; and those unwilling to work, 7.1 per cent.

Comparing the data of Table 7 for 1930 and 1931 it may be seen that the proportion of the unemployed males who were unable to find jobs because of slack work was greater in 1931 than in 1930. With the exception of those males permanently unable to work because of injury and old age, all groups unable or unwilling to work were proportionally smaller in 1931 than in 1930. That those permanently unable to work because of injury and old age were a larger proportion of the unemployed males in 1931 than in 1930 may be due to the fact that elderly men and partially disabled men who were employed during prosperous times were displaced by younger and more able-bodied men, that a certain number of these elderly and disabled men had become discouraged by the long-continued unsuccessful search for

work, and that they finally concluded that their age or disability had rendered them permanently unemployable.

As the proportion of the unemployed males who were able and willing to work but unable to secure employment increased markedly each year, it follows that the proportion of those unable or unwilling to work must fall. Thus in 1929 there were 45.5 per cent of the unemployed males who were unable or unwilling to work, in 1930 there were 20.7 per cent, and in 1931 there were 16.3 per cent.

In comparing the persons unemployed for various reasons at the time of the three studies it should be noted that those classified in 1930 and 1931 as able and willing to work but unable to locate jobs because of slack work, forced retirement, or miscellaneous reasons³ are essentially equivalent to those classified as unemployed because of slack work in 1929. A very minor qualification is necessary, inasmuch as a few persons reported simply as retired in 1929 may have been forcibly retired. The number of these, however, would appear to be quite small, since even in 1931 the males reported as forcibly retired constituted but 0.3 per cent of all males enumerated. A very small number of persons who were out of work but who had not yet begun to look for work were classified as "able and willing to work, but unemployed for miscellaneous reasons" in 1930 and 1931.³ Such persons in 1929 were merely classed with certain others (who were not able and willing to work) as unemployed because of "miscellaneous causes." That this group is very unimportant is shown by the fact that all of those males in 1931 who were able and willing to work and unemployed for miscellaneous reasons were but 0.2 per cent of all males enumerated.

Duration of Unemployment

THE duration of unemployment in 1929, 1930, and 1931 of the unemployed males who were able and willing to work is shown in Table 8. Data of the duration of unemployment of those unemployed persons who were unable or unwilling to work are not shown in this report.

TABLE 8.—DURATION OF UNEMPLOYMENT OF ALL UNEMPLOYED MALES ABLE AND WILLING TO WORK,^a 1929, 1930, AND 1931

[This table does not include 1 male in 1931, 12 males in 1930, and 14 males in 1929 not reporting as to duration of unemployment]

Duration of unemployment	Number			Per cent		
	1931	1930	1929	1931	1930	1929
Under 2 weeks.....	75	79	112	2.6	4.3	15.8
2 and under 4 weeks.....	145	147	158	5.0	7.9	22.2
4 and under 10 weeks.....	371	389	216	12.7	21.0	30.4
10 and under 20 weeks.....	392	331	87	13.4	17.9	12.3
20 and under 30 weeks.....	342	264	44	11.7	14.3	6.2
30 and under 40 weeks.....	189	147	22	6.4	7.9	3.1
40 and under 52 weeks.....	153	103	5	5.2	5.6	.7
52 weeks and over.....	1,259	391	66	43.0	21.1	9.3
Total.....	2,926	1,851	710	100.0	100.0	100.0

^a This is the "slack work" classification for 1929.

³ Those able and willing to work but unemployed for miscellaneous causes include such cases as employees who, because of a wage cut or other reasons, had given up their jobs and who were about to seek other employment and self-employed persons who, because of unsatisfactory business conditions, had abandoned their undertakings and were about to seek employment.

Of the males who were able and willing to work but who were not able to find employment, 7.6 per cent had been unemployed less than 4 weeks in 1931, 20.3 per cent had been unemployed less than 10 weeks, and 43 per cent had been unemployed a year or longer.

Although no table of duration of unemployment for the unemployed females who were able and willing to work is shown in this article, 7.4 per cent had been unemployed less than 4 weeks in 1931, 22.3 per cent had been unemployed less than 10 weeks, and 36.7 per cent had been unemployed a year or longer.

Cumulating certain of the figures of Table 8 shows that the duration of unemployment of those males desiring work had been generally longer in 1931 than in 1930 and longer in 1930 than in 1929. Slightly fewer than one-third of the unemployed males had been out of work 10 weeks or more in 1929, while two-thirds had been out of work 10 weeks or more in 1930 and nearly four-fifths had been out of work 10 weeks or more in 1931. Just under one-tenth had been out of work a year or more in 1929, one-fifth had been unemployed a year or more in 1930, and over two-fifths had been unemployed a year or more in 1931.

Among the females who were able and willing to work, unemployment had been of longer duration at the time of each successive study. The number of females who were out of work was small in 1929; but it increased each year, and unemployment had been of slightly longer duration in 1930 than in 1929 and of decidedly longer duration in 1931 than in 1930.

Industry Groups and Employment Status

TABLE 9 shows a comparative summary of employment status by industry groups for those males able and willing to work in 1930 and 1931. As previously explained, the industry group "trade and transportation—other" was divided to show separate data for "bank and brokerage" and "insurance and real estate" in 1931. Likewise, in 1931 the industry group "manufacturing and mechanical pursuits—other" was divided to show separate data for "lumber and furniture" and for "airplanes." Considering first the situation in 1931 for the industry groups employing large numbers of males, the data show that of the males able and willing to work the greatest proportion unable to find work was in the building trades, which showed 50.5 per cent of the wage earners and 36.2 per cent of the contractors unemployed. Next in order was the manufacturing and servicing of automobiles, parts, and tires, with 40.7 per cent unable to find work; manufacturing of airplanes, with 33.3 per cent; manufacturing of iron and steel and their products, with 29 per cent; manufacturing of food and kindred products, with 20.4 per cent; domestic and personal service with 19 per cent; retail and wholesale trade, with 18.9 per cent; and the railway, express, gas, and electric light group, with 18.7 per cent of the males who were able and willing to work, unemployed. The smallest proportion of unemployed among the males able and willing to work was in the professional service group, which was followed in order by the self-employed (other than building contractors) and Government employees.

Of those males who were able and willing to work the greatest proportion able to obtain only part-time employment (considering only industry groups employing large numbers of males) was found in the manufacture of iron and steel and their products, which showed

51.0 per cent on part time. The percentage of males employed part time in relation to those able and willing to work was 31.4 per cent for building-trades contractors, 26.4 per cent in the railway, express, gas, and electric light group, 25.1 per cent in the manufacturing and servicing of automobiles, parts, and tires, and 23.5 per cent for wage earners in the building trades. All other important industry groups showed less than 20.0 per cent on part time. The smallest proportions of the males able and willing to work who were employed part time were in professional service, retail and wholesale trade, and self-employed (other than building contractors).

Of the industry groups employing large numbers of males, full-time employment was least in 1931 in the manufacture of iron and steel and their products, which showed 20.0 per cent of the males who were able and willing to work employed full time. Following, in order, came building trades, wage earners, 26.0 per cent; building trades, contractors, 32.4 per cent; manufacture and servicing of automobiles, parts, and tires, 34.2 per cent; manufacture of airplanes, 54.7 per cent; and railway, express, gas, electric light, 54.9 per cent. All other important groups showed more than 60.0 per cent of the males able and willing to work to be employed full time. The greatest proportions of full-time employment were found in the groups professional service, self-employed (other than building contractors), and Government employees.

Considering the two major industry groups, the data for 1931 show that of the males enumerated in the trade and transportation group as able and willing to work, 63.5 per cent were employed full time, 18.1 per cent were employed part time, and 18.4 per cent were unemployed. Of the males in manufacturing and mechanical pursuits who were able and willing to work, 36.3 per cent were employed full time, 31.8 per cent were employed part time, and 31.9 per cent were out of work.

Comparing the employment status of males who were able and willing to work in 1930 and in 1931 (Table 9) reveals that, with the sole exception of paper, printing, and publishing, every industry group showed a greater proportion of males unemployed in 1931 than in 1930. It also appears that the proportion of males employed full time was less in every industry group in 1931 than in 1930 and that the proportion employed part time was greater in 1931 than in 1930 for every industry group except water transportation and automobiles, parts, and tires. The data of Table 9 show, further, that the industry groups having the greatest proportion of unemployed males among those able and willing to work were in general the same in each year, these being the building trades, automobiles, parts, and tires, and iron and steel and their products. The smallest proportions of males unemployed and the largest proportions of males employed were shown by the same industry groups in the two years. These were professional service, self-employed (other than contractors), Government employees, and telephone and telegraph service.

No tables are presented in this article showing the employment status of females by industry groups; however, of the industry groups which employed large numbers of females it was found in 1931 that in the manufacture of wearing apparel and textiles 34.6 per cent of the females able and willing to work were out of work, 37.4 per cent were employed part time, and 28.0 per cent were employed full time. In domestic and personal service 32.5 per cent of the females able and

willing to work were unemployed, 9.6 per cent were on part time, and 57.9 per cent were employed full time. In retail and wholesale trade 19.2 per cent of the females able and willing to work were out of work, 10.8 per cent were on part time, and 70.0 per cent were employed full time.

TABLE 9.—COMPARATIVE SUMMARY OF EMPLOYMENT STATUS OF ALL MALES ABLE AND WILLING TO WORK, BY INDUSTRY GROUP, 1930 AND 1931

[This table does not include 9 males in 1931 and 31 males in 1930 not reporting as to industry group]

Industry group	Per cent in 1931				Per cent in 1930			
	Em- ployed full time	Em- ployed part time	Unem- ployed	Total	Em- ployed full time	Em- ployed part time	Unem- ployed	Total
Professional.....	88.3	4.2	7.5	100.0	92.9	2.4	4.7	100.0
Clerical (not otherwise specified).....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Domestic and personal service.....	63.8	17.2	19.0	100.0	75.2	8.6	16.2	100.0
Government employees (other than teachers).....	73.7	12.7	13.6	100.0	85.5	6.2	8.3	100.0
Trade and transportation.....	63.5	18.1	18.4	100.0	75.8	11.4	12.8	100.0
Retail and wholesale trade.....	70.3	10.8	18.9	100.0	77.8	8.3	13.9	100.0
Telephone and telegraph.....	76.3	8.6	15.1	100.0	87.3	2.9	9.8	100.0
Railway, express, gas, electric light.....	54.9	26.4	18.7	100.0	72.9	15.7	11.4	100.0
Water transportation.....	51.9	14.3	33.8	100.0	54.5	16.2	29.3	100.0
Bank and brokerage.....	87.2	.8	12.0	100.0				
Insurance and real estate.....	79.8	10.1	10.1	100.0	82.2	6.2	11.6	100.0
Other.....	63.8	17.9	18.3	100.0				
Manufacturing and mechanical pursuits.....	36.3	31.8	31.9	100.0	49.6	28.2	22.2	100.0
Building trades, contractors.....	32.4	31.4	36.2	100.0	44.2	22.1	33.7	100.0
Building trades, wage earners.....	26.0	23.5	50.5	100.0	47.0	17.9	35.1	100.0
Clay, glass, and stone products.....	48.2	25.9	25.9	100.0	65.6	21.9	12.5	100.0
Food and kindred products.....	65.7	13.9	20.4	100.0	74.3	13.3	12.4	100.0
Iron, steel, and their products.....	20.0	51.0	29.0	100.0	41.3	39.9	18.8	100.0
Metal products, other than iron and steel.....	18.4	58.1	23.5	100.0	25.5	55.0	19.5	100.0
Paper, printing, and publishing.....	68.7	20.3	11.0	100.0	69.0	19.4	11.6	100.0
Wearing apparel and textiles.....	42.1	35.9	22.0	100.0	46.2	32.8	21.0	100.0
Automobiles, parts, and tires.....	34.2	25.1	40.7	100.0	39.2	33.1	27.7	100.0
Lumber and furniture.....	37.2	26.7	36.1	100.0				
Airplanes.....	54.7	12.0	33.3	100.0	58.4	23.3	18.3	100.0
Other.....	44.9	30.7	24.4	100.0				
Labor (not otherwise specified).....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Self-employed.....	78.9	10.9	10.2	100.0	88.0	6.1	5.9	100.0
Miscellaneous.....	10.6	3.2	86.2	100.0	28.9	5.3	65.8	100.0
Total, all males.....	52.5	23.2	24.3	100.0	64.2	18.6	17.2	100.0

¹ Percentages not calculated because of small numbers involved.

The data of employment status by industries in 1929 were not tabulated in such a way that it is possible to show for separate industries the employment status of those able and willing to work, exclusive of those few who were unable or unwilling to work. Comparative data would therefore necessarily include not only those males able and willing to work but also those unable and unwilling to work. From such figures (not here printed) it may be seen that the important industry groups in each year which showed the greatest proportions of unemployment for males were building trades, iron and steel, and automobiles, parts, and tires and that the industry groups showing least unemployment and most full-time employment were professional service, self-employed (other than contractors), and Government employees. It also appears that at each successive study a larger proportion of males were reported as unemployed in each important industry. Each industry (with the one important exception of automobiles, parts, and tires) also showed a greater proportion of males employed part time in each successive year and each industry showed a smaller proportion of males employed full time at each successive study.

Conclusion

THE winter of 1931 has been frequently termed "the third winter of unemployment." A consideration of the figures shown in this report for November of each of the years 1929, 1930, and 1931 leads us to look at the figures for 1929 in retrospect and to realize that what was thought to be rather severe unemployment at the time now appears as a relatively mild dislocation of industry. Unluckily we lack any earlier figures which might give us a basis of comparison with a "normal" period. Continuing such studies as this for additional years and extending them to other cities should yield valuable data which, if properly used, may assist in social planning to alleviate the suffering incident to unemployment and to aid in the development of measures to reduce involuntary unemployment and underemployment to a minimum.

Vocational Training and Unemployment

THE present national vocational-education program is in active operation in the 48 States, the Territory of Hawaii, and Porto Rico. The vocational education act of 1917, under which this program is conducted, made provision for the promotion of such education of less than college grade in agriculture, trades and industries, and home economics, to meet the obvious needs existing at that time. No financial provision, however, was made by the act for the salaries of commercial teachers and supervisors. In recent years, although the system established under this law of 1917 is still covering the groups for which it was set up, new problems have arisen in the vocational education field which press for solution. These facts are pointed out in Bulletin No. 159 of the Federal Board for Vocational Education, entitled "Vocational training and unemployment." Various sections of this publication are summarized below.

Employment adjustment of adults.—At present in many States there is a more or less permanent unemployment problem, especially in the ranks of adult workers. When such workers are suddenly thrown out of their jobs as the result of the installation of new types of machines, or the adoption of new processes, or for certain other reasons, it is necessary to provide for their obtaining other employment. Under existing conditions these displaced wage earners are having more and more difficulty in obtaining new positions without some preliminary training.

Scope of preparatory training under the act.—Apart from new conditions resulting from technological unemployment, the training of young people immediately before they leave full-time school in order that they may have some special preparation for entrance into the various wage-earning fields is a permanent function of any public vocational education program, and for this youthful group the standards now provided under the Federal vocational education act should be continued, according to the bulletin under review. This preliminary training, however, is clearly impracticable to meet the requirements of adults who have lost their jobs and must obtain whatever aid they can as quickly as possible. With dependent families, a very large percentage of these displaced workers can not afford to devote more than two or three weeks to intensive full-time

training to fit them for some specific employment available for them if they receive such training. It is suggested, therefore, in the bulletin, "that existing trade-preparatory schools or courses admit unemployed adults for thorough training in some specialized unit, in preparation for available jobs, to the extent to which their facilities permit and the need has been indorsed by a local representative advisory committee. The Federal board believes that any other procedure would probably be detrimental to the best interests of all parties concerned."

Part-time training for the young group.—With the primary purpose of safeguarding the educational interests of workers between 14 and 18 years of age, the Federal vocational education act provides for part-time education. Certain standards were definitely incorporated in the law for this particular group. According to Bulletin No. 159 of the Federal board, such safeguards are necessary as long as society allows youth to leave school to go to work before completing what is generally regarded as a desirable minimum of education for citizens of the United States.

It is suggested by the Federal board that it is quite possible to throw open existing part-time schools and courses to unemployed adults for thorough training in certain specialized units by way of preparation for available jobs, as far as the facilities of these schools allow and the need has received the indorsement of a local representative advisory committee. The Federal board holds "that any other procedure would probably be detrimental to the best interests of all parties concerned."

Extension training for adults.—The third educational function under the Federal act is the upgrading of adult workers. No special restrictions are made for the evening classes of adult farmers, but in the trade and industrial education established under the law the instruction to be offered to adult workers in evening classes is limited to that which is supplementary to their daily occupations. Any permanent vocational-education program on a public basis should, the Federal board believes, preserve such a standard in providing education to aid workers with regular employment to become more efficient in such employment, to become more versatile in their particular trade, or to prepare for promotion in the general line of work in which they are engaged. Furthermore, "To the extent to which adult workers take advantage of the opportunities provided in the evening school to upgrade themselves and become more resourceful and better qualified in their occupations, they are protecting themselves against the loss of their jobs due to technological advances in their occupations. It is one of the primary functions of the evening school to render this sort of service."

Results secured.—At present the funds made available to the States under the Federal vocational education act are being used for the general purposes outlined in the preceding paragraphs. Moreover, the States and local communities are expending far more for the same purposes than is required to match the allotments of the Federal Government. The country-wide program is serving about 1,000,000 citizens per annum. This number, however, constitutes only a small part of the service that could be given, if money were available, "in the way of providing opportunities for individuals to learn to work efficiently at jobs which would be within their reach if they had the necessary training."

Availability of vocational training service.—Each of the 48 States, the Territory of Hawaii, and Porto Rico, has either a vocational-education director or a person who exercises the functions of such a director. In addition each of these cooperating units has a corps of supervisors for each field of vocational education.

In brief, there is a nation-wide body of professionally qualified persons employed by the States and local communities whose services are available for working out training problems connected with technological unemployment. Besides, the Federal Board for Vocational Education has an organization of both men and women, especially equipped in each field of vocational education, from which State and local communities may obtain various types of aid. It is, therefore, pointed out in the bulletin that there is no reason why any community in this country, which has training problems relating to the adjustment of employment, can not obtain from the State and Federal vocational education boards certain types of advisory service and aid in the solution of such problems.

Limitations of existing service.—Under the provisions of the Federal act for vocational education, direct training service is limited to day preparatory training, part-time training, and the evening extension program. Since the problem of providing a special training service for technologically unemployed workers was not definitely visualized in drafting the vocational-education measure, it does not include one class of service which seems to be required for certain individuals displaced from industry. In illustration, various skilled workers who have lost their jobs as a result of technological changes are eager to receive training in order that they may secure suitable employment. Meanwhile, having family responsibilities, these men have taken casual or fill-in jobs, such as delivery work, truck driving, or canvassing, to tide themselves over the emergency. The only time that most of them have to receive training in a vocational school is in the evening, and under the Federal act Federal funds can not be used for instruction in evening schools for trade-changing, or trade-preparatory purposes.

A frank consideration of the problem reveals but one practical possibility at this time: A local community may offer occupation preparatory or job-changing courses in evening vocation classes to meet a definite need as a purely local activity. Where this is done, classes would be financed entirely from local or State funds, or both. It is not possible to use Federal funds provided under the Federal act for such classes. It may, nevertheless, be entirely justifiable and legitimate for a local community to support certain classes of this type from local funds as a matter of local service.

This is not a new departure in the administration of vocational classes, especially in the field of commerce. A very large number of cities maintaining evening schools have conducted evening commercial classes of a preparatory nature as a local activity, and have not been hampered because of the fact that there is no provision under the Smith-Hughes Act for aiding commercial evening classes out of Federal funds.

Indirect service available.—In addition to the direct service available to unemployed persons through contact with or enrollment in vocational schools of the various types discussed above, very substantial services are being rendered indirectly through (1) assistance in plant training; (2) instructor training for foremen; (3) improving foremanship and supervision in industry; (4) cooperation with em-

ployment authorities; (5) maintaining inventories of job opportunities; and (6) promoting cooperation between employers and employees.

Training program not a panacea for unemployment.—The bulletin calls attention to the fact, however, that even the best training program that could be established for any occupation or group of occupations would not be effective if jobs were not available for the men trained. Where there are job opportunities and men could and would be hired for these vacancies if they were able to meet the requirements, a training program can render a very valuable service.

Suggestions for local communities concerning the organization and operation of special-training programs in behalf of unemployed groups.—As a preliminary to determining the types of training to be offered, the scope of training and the degree of service which can be rendered to individuals by any training program, unemployed persons are classified by the Federal board in 10 groups: (1) Competent workers unemployed as a result of the depression; (2) those whose trades have been largely mechanized; (3) workers who have not kept up to date; (4) specialized workers; (5) older workers; (6) those from fields of work which are normally overcrowded; (7) unskilled labor; (8) unstable and migratory workers; (9) the unemployable; and (10) the physically handicapped.

In reply to numerous inquiries, the Federal Board for Vocational Education makes the following suggestions to local communities which may wish to establish a special training program for the unemployed in the present crisis. These suggestions are based on observations of and experience with numerous types of organizations set up throughout the United States within the past 14 years to meet special requirements and conditions, consideration being given to the characteristics of the different groups of unemployed to be aided by such a program in the existing emergency.

(1) Any special local community program for vocational education should be highly flexible in its administrative organization. The training service should not be separate and apart, but integrated with some particular subdivision of the regular school system, for example, a junior or a senior high school. A vocational emergency training school should probably be in active operation from 8 a. m. to 10.30 p. m., regardless of regular school vacations.

(2) A vocational school for special training should not be carried on in a regular school building. If necessary, almost any community of reasonable size should be able to utilize at a nominal rent some vacant loft-type or industrial-plant type of building. The main objective of the training school should be the provision of specific training in short, specialized units and often with borrowed equipment which can be returned upon the completion of the training unit. In order to be of the greatest service, the school could make arrangements with local employers and send instructors to plants rather than to endeavor to conduct all the training in the school building.

(3) Country-wide experience in offering vocational education under manifold conditions has shown that a necessary safeguard to the program is the use of local representative advisory committees, including equal numbers of responsible employers and employees in the different fields of work in which training is offered by the school.

(4) Instructors selected for this training center should be occupationally competent and be generally recognized as able workers in their industrial or commercial fields.

(5) To be successful, the training center must train for definite pay-roll jobs which are available and on which the individuals in training can be placed after they have attained a certain employment level.

(6) Because of the great differences in mentality, education, and experience among the individual members of the groups of unemployed who may apply for vocational training, instruction can be given to the highest advantage only on an individual or small-group basis. From the outset there must be full recognition of the need of such instruction and of the probably greater per capita cost.

(7) Emphasis is given to the necessity of restricting the instruction in the various short units to the requisite job practices and to information essential for employment.

Application of Principles to All Fields

IN THE judgment of the Federal Board for Vocational Education, the general type of organization and special service outlined in this bulletin is applicable to any field of vocational training.

An Example of Emergency Vocational Training

THE Miami public, with the aid of the Florida State Board for Vocational Education, has started special vocational classes for hotel workers. Such classes offer opportunities for local people to obtain training for employment in the winter in hotel occupations. Formerly many of the hotels made it a practice to bring experienced help from the Northern cities.

The classes were conducted in a hotel which was scheduled to open in December, 1931. An intensive plan of instruction was carried out with an enrollment of 112 men and women, training being offered for housework, dining room service, and front office jobs. The instructors had had a long and successful experience in hotel work. The courses were arranged to cover three weeks each. The association of local hotel men backed the scheme and promised to employ those who successfully completed the training.

When the first announcement was made of this educational project more than 900 men and women applied for the training. The instructors interviewed and selected prospective trainees in about the same way as workers are hired.

These courses will be repeated as often as required at Miami to prepare as many persons as can be placed in positions. Later on, other instruction units may be given.

Daytona Beach was reported as being ready to institute a similar training scheme in advance of the winter season.

Importance of Recreation in the Present Unemployment Situation¹

THE eighteenth annual recreation congress which met at Toronto in October devoted much attention to the consideration of the special responsibilities and opportunities facing the community recreation movement as a result of the present unemployment situa-

¹ Recreation, New York, December, 1931. The Eighteenth Annual Recreation Congress and Unemployment.

tion. The subject was uppermost throughout the conference and many requests were received for specific data relating to local recreation service for the unemployed. As a result of these requests a summary statement showing the types of activities carried on in different cities was published in the December issue of *Recreation*. No attempt was made to give complete data from all the cities reporting; the effort was rather to show the possibilities for using unemployed persons in local recreation work and for the provision of recreation opportunities for the unemployed.

One of the first measures adopted in most cities is the use of unemployed labor in the extension and improvement of recreation areas, facilities, and buildings. Unskilled labor can be used successfully in much of this work, and in order to develop the greatest opportunities for use of this type of labor, efforts should be directed towards securing new areas for recreation purposes either through bond issues and appropriations, donations of land by individuals, or the leasing or free use of vacant areas for sufficiently long periods to justify improvement. Approximately one-third of the municipal park and recreation acreage of the country has been shown by a recent study to have been donated by public-spirited citizens. In addition many real estate firms have, in recent years, set aside land in new subdivisions for permanent park and recreation use. In some instances cities have been obliged to refuse desirable areas because of lack of funds for improvements, with the probable permanent loss of the land for recreation purposes. It is said that a cooperative plan can be worked out in such instances between the city, the realtor, and the unemployment committee. In such a case the realtor may donate the land, the unemployment committee provides the labor for its improvement, and the city may supervise its improvement and provide leadership where this is required. Unemployed labor has been successfully employed in the construction and beautification of recreation areas and may be used in many types of development.

In most cities the "white collar" worker presents a special problem to the emergency unemployment committees. In some instances these workers have been effectively used as supplementary recreation leaders and supervisors. The employment of workers in such positions must depend upon careful selection as regards previous experience and natural ability and it is essential also that provision should be made for special intensive training of such workers. Those with special abilities may be used effectively with arts and crafts groups and in the carrying out of musical or dramatic activities. In such specialized work it is necessary for the recreation department to furnish reasonably adequate supervision.

The use of existing outdoor and indoor recreation facilities has been greatly increased as a result of the recreational needs of the unemployed, and in many cities the need for opening new centers and expanding activities has been evident, although in many instances the budgets have not been increased to provide for the needed expansion. However, in many localities greater use can be made of school buildings, church centers, and other buildings without great additional expense, and frequently the special expense for light, heat, and janitor service may be provided by the school board or other agency as a direct contribution to the unemployment recreation program.

In addition to the extension of the existing recreation services it is said that there is need in many cities for establishing special centers for the daytime use of the unemployed. There is some question of the advisability of encouraging the unemployed to spend their time together in large groups, although where they feel they must keep in touch with the employment office it is obviously better to provide a place where they may be comfortable and find something to occupy their leisure time. Vacant stores, rooms of fraternal organizations, and other clubrooms, which can be secured without cost, may be used for this purpose, if they are conveniently located. It may be necessary, also, in some cities to provide recreation centers in connection with lodging houses. Among the activities successfully inaugurated in such centers are participation in music and the provision of musical programs, provision of reading material and various games, and special entertainment programs and moving pictures.

Unemployment in Chicago, October, 1931

ON OCTOBER 15, 1931, there were approximately 624,000 persons unemployed in Chicago, according to an estimate of the Illinois Department of Labor, published in its Labor Bulletin of November, 1931. This number constituted 40 per cent of Chicago's gainful workers as reported by the United States Census of April, 1930.

The estimate is based on the United States census of unemployment in Chicago for January, 1931, and on the monthly volume of employment index for the manufacturing industries of that city, which the Illinois division of statistics and research considers "is valid for all nonagricultural classes of employment as a whole."

The steps in making the estimates are given in detail below:

1. Number of gainful workers in Chicago, April, 1930 (assumed to be same for January, 1931)-----	1, 558, 949
2. Number of gainful workers not at work and not drawing pay in Chicago (classes A to F), January, 1931, census-----	457, 946
3. Number of gainful workers at work or drawing pay in Chicago, January, 1931 (1-2)-----	1, 101, 003
4. Employment index (Chicago manufacturing), Jan. 15, 1931-----	77. 2
5. Employment index (Chicago manufacturing), Oct. 15, 1931-----	64. 6
6. Per cent change in employment, Jan. 15, 1931, to Oct. 15, 1931, shown by index-----	- 16. 3
7. Decrease in number of gainful workers at work or drawing pay, Jan. 15, 1931, to Oct. 15, 1931, computed from January, 1931, census and index (3×6)-----	179, 464
8. Number of gainful workers not at work and not drawing pay (classes A to F), Oct. 15, 1931, computed from January, 1931, census and index (2+7)-----	637, 410

In January, 1931, classes A and B (persons out of a job and looking for a job or on lay-off without pay) constituted 98 per cent of the unemployed gainful workers in Chicago, and it is assumed that on October 15, 1931, such classes formed the same proportion of the number of persons in classes A to F. The estimated number of persons in classes A and B on October 15, 1931, is therefore 624,260.

Recommendations of Massachusetts Commission on Stabilization of Employment

THE major recommendations of the Special Commission on Stabilization of Employment of Massachusetts, set forth in its preliminary report¹ to the legislature, provide for the creation of a planning board of five members to develop a 5-year plan for State building and construction under the jurisdiction of the Commonwealth, and for licensing private employment agencies and placing such agencies under the supervision of the department of labor and industries.

In recommending a planning board the commission lays before the legislature a definite plan of action, as follows: When an emergency is found to exist and is declared by the governor of the State, the general court shall authorize "an amount of 5-year short-term notes, callable after one year, equal to 10 per cent of the estimated total of the 5-year plan—or an amount sufficient to pay for half of one year's program." With these funds in hand the planning board will undertake to have a quantity of work done in the current year of emergency, the amount to be not over 50 per cent in excess of the planned work for the year in question. Such action, it is stated, may be taken in one or more successive years, thus making it possible to deal with a depression of more than one year's duration. For example, if the 5-year plan of the State called for an expenditure of \$50,000,000 for the whole period, in any year that an emergency was found to exist construction to the value of \$15,000,000 might be initiated, representing the \$10,000,000 authorized for normal construction needs plus the \$5,000,000 worth of work allowed in the emergency.

Employment Trends in Minnesota

ON THE basis of a study of employment trends in the three chief cities of Minnesota, the authors of a report recently issued by the University of Minnesota² have drawn certain conclusions as to the extent of unemployment in the State as a whole and the degree to which certain industries and groups of workers have been affected. In using the information relative to employment trends in three cities as reflecting the situation for the State it is emphasized that outside these cities the State is almost entirely rural in character.

Changes in Total Employment

ON THE basis of the figures available, the grand total of employment showed an increase of 2.2 per cent from 1927 to 1928 and a decrease of the same percentage from 1928 to 1929. For the first seven months of 1930, as compared with the same period in 1929, the loss in employment was 7 per cent. Estimates for July, 1931, compared with July, 1930, indicate that a further decrease of 14 per cent occurred.

During the period 1927 to 1929 the sample shows that woman workers increased from 20 per cent of the total employed to 22 per

¹ Massachusetts. Special Commission on the Stabilization of Employment. Preliminary report, December, 1931.

² University of Minnesota. Employment Stabilization Research Institute. Employment Trends in St. Paul, Minneapolis, and Duluth, by William H. Stead and Dreng Bjornaraa.

cent. During the first part of 1930 woman workers were also found to hold their own slightly better than men, the drop in employment having been 6.4 per cent for women as against 7 per cent for men. It was also noted that the men maintained a high level of employment throughout the summer, while the women enjoyed extra employment in the holiday trades during December.

Changes in the Various Industrial Groups

DIVIDING the workers into six major industrial groups, the changes in employment as between 1927 and 1929 and during the first seven months of 1930, as compared with the same period in 1929, are shown in the table following.

CHANGE IN EMPLOYMENT IN SIX MAJOR INDUSTRIES OF MINNESOTA

Industry group	Per cent of change	
	1927 to 1929	1929 to 1930 ¹
Wholesale.....	-7	-4-5
Retail.....	+30	-10-11
Manufacturing.....	+1	-8
Public utilities.....	-2-3	-4-5
Construction ²	-18	-2-3
Miscellaneous.....	-9-10	-6-7

¹ Comparison is between first 7 months of each year.

² St. Paul and Duluth only.

The pronounced increase in employment in retail trade (30 per cent) between 1927 and 1929 is evidence of the growth in employment in personal service. Attention is also called to the relatively small decrease in employment in construction between the first seven months of 1929 and 1930 (2 to 3 per cent). This, it is stated, is accounted for by the fact that Duluth had developed certain construction projects.

The seasonal movements of employment in the respective industrial groups covered showed considerable diversity. Fluctuation in the wholesale group showed no seasonal movement and the highest rate of fluctuation amounted to less than 5 per cent. In manufacturing, a steady growth was found from a low in January or February to a peak in October, 7 to 8 per cent above the low. Retail trade showed both spring and fall peaks, and public utilities (including transportation) a 11 to 12 per cent fluctuation, from a low in February to a peak in June or July. The miscellaneous division showed a rise of 4 to 5 per cent, between the low point, which occurred during May and the high point in the late fall. The greatest seasonal variation occurred in construction, or 37 to 38 per cent in the summer as compared with the winter months.

Changes in Occupational Groups

DIVIDING the data into six major occupational groups, skilled, semiskilled, unskilled, sales, clerical, and miscellaneous, the report states that employment in the skilled and semiskilled groups declined by about 5 per cent between 1927 and 1929, while that in the unskilled group declined only 2 to 3 per cent. It is further stated that

"this seems to suggest greater pressure from technical and structural changes on the upper two groups." A general increase in employment was apparent from 1927 to 1929 in the sales group (4 per cent), the clerical group (5 per cent), and the miscellaneous group (1 to 2 per cent).

In calling attention to the fact that distributive employments in this sample show an increase at the same time that industrial employment has been decreasing, the study under review brings out the fact that if the rate of gain of distributive employment continues and the growing field of personal service is included, a growth of total employment is possible in spite of the decline in manufacturing employment.

In contrasting employment in the first six months of 1930 with that in the same period during 1929, the following losses are recorded: Skilled employment, 3 to 4 per cent; semiskilled, 6 per cent; unskilled, 11 to 12 per cent; miscellaneous, 2 to 3 per cent; clerical, 4 to 5 per cent; and sales, 7 to 8 per cent. Thus, in this later period, 1929 and 1930, a decline in all occupational groups took place. However, the decline in employment in manufacturing industries taken together was 7 per cent, while that in the distributive industries was 5 per cent.

Unemployment in Foreign Countries

THE following table gives detailed monthly statistics of unemployment in foreign countries, as shown in official reports, from January, 1930, to the latest available date.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES¹

Date (end of month)	Australia		Austria	Belgium				Canada
	Trade-unionists unemployed		Compul-sory in-surance, number unem-ployed in re-ciept of benefit	Unemployment insurance societies				Per cent of trade-unionists unem-ployed
	Number	Per cent		Wholly unem-ployed		Partially unem-ployed		
				Number	Per cent	Number	Per cent	
1930								
January.....	(2)	-----	273, 197	22, 542	3. 5	25, 782	4. 0	10. 8
February.....	(2)	-----	284, 543	16, 085	2. 6	31, 222	4. 9	11. 5
March.....	63, 144	14. 6	239, 094	14, 030	2. 2	28, 469	4. 5	10. 8
April.....	(2)	-----	192, 477	13, 715	2. 2	36, 065	5. 8	9. 0
May.....	(2)	-----	162, 678	12, 119	1. 9	38, 761	6. 1	10. 3
June.....	80, 595	18. 5	150, 075	12, 226	1. 9	41, 336	6. 5	10. 6
July.....	(2)	-----	153, 188	15, 302	2. 4	48, 580	7. 7	9. 2
August.....	(2)	-----	156, 145	17, 747	2. 8	51, 649	8. 2	9. 3
September.....	90, 279	20. 5	163, 894	23, 693	3. 8	61, 623	9. 9	9. 4
October.....	(2)	-----	192, 778	27, 322	4. 3	54, 804	8. 5	10. 8
November.....	(2)	-----	237, 745	38, 973	6. 1	76, 043	12. 0	13. 8
December.....	104, 951	23. 4	294, 845	63, 585	9. 3	117, 167	17. 0	17. 0
1931								
January.....	(2)	-----	331, 239	77, 181	11. 1	112, 734	16. 2	16. 0
February.....	(2)	-----	334, 041	81, 750	11. 7	121, 906	19. 4	15. 6
March.....	113, 614	25. 8	304, 084	81, 305	11. 3	125, 972	17. 7	15. 5
April.....	(2)	-----	246, 845	70, 377	10. 0	110, 139	15. 6	14. 9
May.....	(2)	-----	208, 852	56, 250	7. 9	97, 755	13. 8	16. 2
June.....	118, 424	27. 6	191, 150	62, 642	8. 9	101, 616	14. 4	16. 3
July.....	(2)	-----	194, 364	64, 644	9. 1	116, 747	16. 3	16. 2
August.....	(2)	-----	196, 321	70, 893	9. 9	120, 669	16. 8	15. 8
September.....	120, 694	28. 3	202, 130	74, 175	10. 3	119, 433	16. 6	18. 1
October.....	(2)	-----	228, 101	82, 811	11. 3	122, 773	16. 8	18. 3
November.....	(2)	-----	273, 658	93, 487	13. 3	134, 799	19. 2	18. 6
December.....	118, 732	28. 0	329, 595	128, 000	17. 0			

See footnotes at end of table.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Czechoslovakia			Danzig (Free City of)	Denmark		Estonia	Finland			
	Number of unem- ployed on live register	Trade-union in- surance funds— unemployed in receipt of benefit			Number of unem- ployed registered	Trade-union unem- ployment funds— unemployed			Number unem- ployed remaining on live register	Number of unem- ployed registered	
		Number	Per cent			Number					Per cent
1930											
January.....	73,891	39,199	3.6	19,282	55,876	20.3	5,608	12,696			
February.....	86,156	40,550	3.6	21,153	59,363	21.0	4,580	11,545			
March.....	88,005	45,567	4.0	20,376	47,109	15.6	3,575	10,062			
April.....	79,721	42,664	3.7	18,371	33,471	11.8	2,227	7,274			
May.....	77,069	41,098	3.8	16,232	27,966	9.4	2,065	4,666			
June.....	73,464	37,853	3.4	14,975	24,807	8.7	910	3,553			
July.....	77,309	46,800	4.1	15,330	26,200	9.3	762	4,026			
August.....	88,005	52,694	4.7	15,687	26,232	9.0	1,039	5,288			
September.....	104,534	57,542	5.3	16,073	27,700	9.0	1,414	7,157			
October.....	122,379	61,213	5.5	17,307	32,880	11.4	3,282	10,279			
November.....	155,203	65,904	5.9	20,272	44,200	15.3	5,675	10,740			
December.....	239,564	93,476	8.3	24,429	71,100	24.6	6,163	9,336			
1931											
January.....	313,511	104,580	9.5	27,081	70,961	24.2	5,364	11,706			
February.....	343,972	117,450	10.0	28,192	73,427	26.0	4,070	11,557			
March.....	339,505	119,350	10.0	27,070	67,725	22.1	2,765	11,491			
April.....	296,756	107,238	8.9	24,186	45,698	15.3	2,424	12,663			
May.....	249,686	93,941	7.6	20,686	37,856	12.3	1,368	7,342			
June.....	220,038	82,534	6.6	19,855	34,030	11.3	931	6,320			
July.....	209,233	82,759	6.6	20,420	36,369	11.8	634	6,790			
August.....	214,520	86,261	6.9	21,509	35,060	11.8	933	9,160			
September.....	228,383	³ 84,671	6.8	22,922	35,871	12.1	2,096	12,176			
October.....	253,518	³ 88,600	6.9	24,932	47,196	16.0	5,425	14,824			
November.....	336,874	-----	-----	28,966	66,526	22.3	7,554	-----			
December.....	480,775	-----	-----	-----	91,216	30.4	-----	-----			

Date (end of month)	France	Germany					
	Number unem- ployed in receipt of benefit	Number of unem- ployed registered	Trade-unionists				Number unem- ployed in receipt of benefit
			Wholly unem- ployed		Partially unem- ployed		
			Number	Per cent	Number	Per cent	
1930							
January	1,484	3,217,608	1,004,787	22.0	501,950	11.0	2,482,648
February	1,683	3,365,811	1,076,441	23.5	593,380	13.0	2,655,723
March	1,630	3,040,797	995,972	21.7	576,153	12.6	2,347,102
April	1,203	2,786,912	926,831	20.3	553,098	12.1	2,081,068
May	859	2,634,718	895,542	19.5	552,318	12.0	1,889,240
June	1,019	2,640,681	896,465	19.6	578,116	12.6	1,834,662
July	856	2,765,258	930,777	20.5	631,903	13.9	1,900,961
August	964	2,883,000	984,384	21.7	670,466	14.8	1,947,811
September	988	3,004,000	1,011,820	22.5	677,627	15.1	1,965,348
October	1,663	3,252,000	1,061,570	23.6	693,379	15.4	2,071,730
November	4,893	3,683,000	1,167,930	26.0	721,658	16.1	2,353,980
December	11,952	4,384,000	(²)	31.7	(²)	16.9	2,822,598
1931							
January	28,536	4,887,000	(²)	34.2	(²)	19.2	3,364,770
February	40,766	4,972,000	(²)	34.5	(²)	19.5	3,496,979
March	50,815	4,756,000	(²)	33.6	(²)	18.9	3,240,523
April	49,958	4,358,000	(²)	31.2	(²)	18.0	2,789,627
May	41,339	4,053,000	(²)	29.9	(²)	17.4	2,507,732
June	36,237	3,954,000	(²)	29.7	(²)	17.7	2,353,657
July	35,916	3,976,000	(²)	31.0	(²)	19.1	2,231,513
August	37,673	4,215,000	(²)	33.6	(²)	21.4	2,376,580
September	38,524	4,355,000	(²)	35.1	(²)	22.2	2,483,364
October	51,654	4,623,480	(²)	36.6	(²)	22.0	2,534,952
November	92,157	5,059,773	(²)	38.9	(²)	21.8	2,771,985
December	147,009	5,668,187	-----	-----	-----	-----	-----

See footnotes at end of table.

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STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Great Britain and Northern Ireland				Great Britain	Hungary		
	Compulsory insurance				Number of persons registered with employment exchanges	Trade-unionists unemployed		
	Wholly unemployed		Temporary stoppages			Christian (Budapest)	Social-Democratic	
	Number	Per cent	Number	Per cent			Number	Per cent
1930								
January.....	1,183,974	9.8	336,474	2.8	1,491,519	1,161	21,533	14.5
February.....	1,211,262	10.0	371,840	3.1	1,539,265	1,120	21,309	14.8
March.....	1,284,231	10.6	409,785	3.4	1,677,473	983	21,016	14.6
April.....	1,309,014	10.8	451,506	3.8	1,698,386	906	20,139	13.7
May.....	1,339,595	11.1	516,303	4.2	1,770,051	875	19,875	13.6
June.....	1,341,818	11.1	569,931	4.7	1,890,575	829	18,960	13.0
July.....	1,405,981	11.6	664,107	5.5	2,011,467	920	19,081	13.2
August.....	1,500,990	12.4	618,658	5.1	2,039,702	847	21,013	14.5
September.....	1,579,708	13.1	608,692	5.0	1,114,955	874	22,252	16.0
October.....	1,725,731	13.9	593,223	4.8	2,200,413	999	22,914	16.7
November.....	1,836,280	14.8	532,518	4.3	2,274,338	975	23,333	17.0
December.....	1,853,575	14.9	646,205	5.3	2,392,738	935	24,648	17.9
1931								
January.....	2,044,209	16.5	618,633	5.0	2,613,749	953	26,191	19.1
February.....	2,073,578	16.7	623,844	5.0	2,627,559	965	27,089	19.8
March.....	2,052,826	16.5	612,821	5.0	2,581,030	996	27,092	(2)
April.....	2,027,896	16.3	564,884	4.6	2,531,674	1,042	27,129	(2)
May.....	2,019,533	16.3	558,383	4.5	2,596,431	843	26,131	(2)
June.....	2,037,480	16.4	669,315	5.4	2,629,215	751	23,660	(2)
July.....	2,073,892	16.7	732,583	5.9	2,662,765	876	26,329	(2)
August.....	2,142,821	17.3	670,342	5.4	2,732,434	941	28,471	(2)
September.....	2,217,080	17.9	663,466	5.3	2,879,466	932	28,716	-----
October.....	2,305,388	18.1	487,591	3.8	2,755,559	1,020	28,998	-----
November.....	2,294,902	18.0	439,952	3.4	2,656,088	-----	-----	-----
December.....	2,262,700	17.7	408,117	3.2	2,568,882	-----	-----	-----
Date (end of month) *	Irish Free State		Italy		Latvia	Netherlands		
	Compulsory insurance—unemployed		Number of unemployed registered		Number unemployed remaining on live register	Unemployment insurance societies—unemployed		
	Number	Per cent	Wholly unemployed	Partially unemployed		Number	Per cent	
1930								
January.....	31,592	11.1	466,231	23,185	9,263	56,535	13.9	
February.....	(2)	-----	456,628	26,674	8,825	50,957	12.5	
March.....	(2)	-----	385,432	28,026	6,494	34,996	8.6	
April.....	26,027	9.2	372,236	24,305	3,683	28,421	6.9	
May.....	(2)	-----	367,183	22,825	1,421	26,211	6.3	
June.....	(2)	-----	322,291	21,887	779	23,678	5.5	
July.....	23,393	8.2	342,061	24,209	607	29,075	6.7	
August.....	(2)	-----	375,548	24,056	573	32,755	7.6	
September.....	(2)	-----	394,630	22,734	1,470	35,532	8.2	
October.....	20,775	(2)	446,496	19,081	6,058	41,088	9.6	
November.....	22,990	(2)	534,356	22,125	8,608	46,807	11.8	
December.....	25,622	(2)	642,169	21,788	10,022	72,191	16.5	
1931								
January.....	26,167	(2)	722,612	27,924	9,207	103,728	23.4	
February.....	28,681	(2)	765,325	27,110	8,303	99,753	22.2	
March.....	26,825	(2)	707,486	27,545	8,450	80,525	17.7	
April.....	25,413	(2)	670,353	28,780	6,390	68,860	14.3	
May.....	23,970	(2)	635,183	26,059	1,871	60,189	12.2	
June.....	23,016	(2)	573,593	24,206	1,584	59,573	11.7	
July.....	21,427	(2)	637,531	25,821	2,169	69,026	13.3	
August.....	21,647	(2)	693,273	30,636	4,827	70,479	15.3	
September.....	21,897	(2)	747,764	29,822	7,470	72,738	15.7	
October.....	23,427	(2)	799,744	32,828	13,605	85,966	18.4	
November.....	26,353	(2)	878,267	30,967	-----	80,382	17.0	
December.....	-----	-----	982,321	-----	-----	127,516	24.0	

See footnotes at end of table.

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STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	New Zealand		Norway			Poland	Rumania
	Trade-unionists unemployed		Trade-unionists (10 unions) unemployed		Number unemployed remaining on live register	Number unemployed registered with employment offices	Number unemployed remaining on live register
	Number	Per cent	Number	Per cent			
1930							
January	(2)		7,786	19.0	22,549	241,974	12,622
February	4,348	8.5	7,851	18.9	22,974	274,708	15,588
March	(2)		7,503	17.8	22,533	289,469	13,045
April	(2)		6,701	15.8	19,829	271,225	13,412
May	5,884	10.9	5,239	12.2	16,376	224,914	25,096
June	(2)		4,700	10.8	13,939	204,982	22,960
July	(2)		4,723	10.8	11,997	193,687	23,236
August	7,197	13.5	5,897	13.4	12,923	173,627	24,209
September	(2)		7,010	15.7	17,053	170,467	39,110
October	(2)		8,031	18.0	20,363	165,154	36,147
November	8,119	15.5	9,396	21.4	24,544	209,912	42,689
December	(2)		11,265	25.5	27,157	299,797	36,212
1931							
January	(2)		11,692	26.3	28,596	340,718	38,804
February	(2)		(2)		29,107	358,925	43,270
March	4 29,434		11,213	24.9	29,095	372,536	48,226
April	4 37,598		(2)		28,477	351,679	41,519
May	4 36,921				25,206	313,104	33,484
June	4 42,523				22,736	274,942	28,093
July	4 46,359				20,869	255,179	29,250
August	4 48,396				22,431	246,380	22,708
September	4 51,018				27,012	246,426	22,969
October	4 51,408		8,415	19.2	29,340	255,622	28,800
November					32,078	259,676	
December						289,100	

Date (end of month)	Saar Territory	Sweden		Switzerland				Yugo-slavia
	Number unemployed registered	Trade-unionists unemployed		Unemployment funds				Number of unemployed registered
		Number	Per cent	Wholly unemployed		Partially unemployed		
				Number	Per cent	Number	Per cent	
1930								
January	11,307	45,636	14.2	10,523	4.4	10,710	4.4	8,508
February	11,949	45,460	13.2	9,971	4.1	11,445	4.7	9,437
March	8,882	42,278	12.5	7,882	2.6	12,642	4.2	9,739
April	7,522	38,347	11.1	5,203	2.1	12,755	5.3	12,052
May	7,362	28,112	8.3	5,356	2.2	13,129	5.4	8,704
June	6,330	28,956	8.1	5,368	1.7	17,688	5.7	6,991
July	7,095	27,170	7.8	4,751	1.9	15,112	6.2	7,236
August	7,099	28,539	8.1	5,703	2.3	19,441	7.9	6,111
September	7,527	34,963	9.8	7,792	2.5	26,111	8.3	5,973
October	9,013	43,927	12.2	7,399	3.0	23,309	9.4	6,609
November	12,110	57,070	15.3	11,666	4.7	25,793	10.5	7,219
December	15,245	86,042	22.9	21,400	6.6	33,483	10.4	9,989
1931								
January	18,921	69,437	19.8	20,551	8.3	30,977	12.5	11,903
February	20,139	66,923	18.4	20,081	7.9	30,879	12.2	14,424
March	18,292	72,944	19.3	18,991	5.4	41,880	12.4	12,029
April	18,102	64,534	17.5	10,389	4.0	27,726	10.6	11,391
May	14,886	49,807	13.2	9,174	3.5	26,058	9.9	6,929
June	15,413	45,859	12.1	12,577	3.6	34,266	9.7	4,431
July	17,685	46,180	12.4	12,200	3.3	39,000	11.3	6,672
August	20,205	48,590	12.7	9,754	3.6	33,346	12.4	7,466
September	21,741	54,405	13.7	15,188	4.0	42,998	11.2	7,753
October	24,685	65,469	16.4	18,000	4.8	47,200	13.2	10,070
November	28,659	79,484	19.9	25,200	(2)	(2)	(2)	10,349

¹ Sources: League of Nations—Monthly Bulletin of Statistics; International Labor Office—International Labor Review; Canada—Labor Gazette; Great Britain—Ministry of Labor Gazette; Austria—Statistische Nachrichten; Australia—Quarterly Summary of Australian Statistics; Germany—Reichsarbeitsblatt, Reichs Arbeitsmarkt Anzeiger; Switzerland—Wirt. u. Social. Mitteilungen, La Vie Economique; Poland—Wiedemosci Statystyczne; Norway—Statistiske Meddelelser; Netherlands—Maandschrift; Sweden—Sociala Meddelanden; Denmark—Statistiske Efterretninger; Finland—Bank of Finland Monthly Bulletin; France—Bulletin du Marché du Travail; Hungary—Magyar Statisztikai Szemle; Belgium—Revue du Travail; New Zealand—Monthly Abstract of Statistics; U. S. Department of Commerce—Commerce Reports; and U. S. Consular Reports.

² Not reported.

³ Provisional figure.

⁴ New series of statistics showing unemployed registered by the employment exchanges. Includes not only workers wholly unemployed but also those intermittently employed.

⁵ Strike ended. Provisional figure.

Relief Works in Central Germany ¹

TWO practical schemes for the occupation of a part of the unemployed workers of Central Germany have been put into effect in a number of cities and towns. They are described in the following paragraphs.

Workshops for young unemployed workers.—The towns of Bitterfeld, Geiseltal, Weissenfels, and the city of Halle have organized workshops for the voluntary occupation of unemployed young persons. These shops are supported by the municipal authorities in charge of the labor situation, and the equipment, consisting of machinery, tools, and waste scrap and raw materials, is donated by several of the factories in each of these towns. The enrollment in each of the workshops varies from 50 to 200 boys and young men, and provision is being made for enlargement and the addition of new shops. The workers receive no wages, although some of the shops provide meals at a minimum cost. The workers may keep the articles which they make in the shops. The products, however, can not be sold, and therefore the establishment of these institutions offers little, if any, competition to the handicraft trades. Electricity and fuel are furnished free by the municipality, and small sums are given by the labor offices in the towns for the moderate operating expenses of the shops. It is reported that the young men show interest in their work and that the psychological benefit which they receive from being occupied daily in useful work, instead of walking the streets, repays many times the very small amount of money which the shops require for maintenance and operation.

Voluntary labor service.—In addition to the above plan, the "Voluntary Labor Service" movement is making headway in central Germany. Public and private enterprises in several towns and cities, such as Weimar and Altenburg, have drawn up projects to be carried out by small groups of voluntary workers. These projects are of such a nature that they could not, under present conditions, be carried out by private contract at the regular wages paid to laborers. For example, a group of 40 young unemployed have accepted voluntary service of this nature in grading the aviation field in Weimar. The necessary tools for the work are loaned by the city, and each of the volunteers receives 2 marks (47.6 cents)² per day plus breakfast, dinner, and a coupon worth 60 pfennigs (14.3 cents) for use in purchasing other food and clothing at reduced prices. The latter amount can be paid to the worker in cash, if he so desires, at the end of the period of labor. The working day aggregates seven hours, and the workers live in heated barracks near the aviation field. The payment of unemployment relief to these workers, of course, ceases during the period of service, but the income which they receive totals somewhat more than the relief. A similar scheme, which will require 100 voluntary workers for three months, was recently put into effect in Dankmarshausen. Likewise, a project will be started in Altenburg which will require 8,000 working-days for completion.

¹ Report of Paul J. Reveley, United States vice consul, Leipzig, Germany, Nov. 2, 1931.

² Conversions into United States currency on basis of mark=23.8 cents.

Measures Against Unemployment in Trieste Province, Italy¹

IN THE city and Province of Trieste the local intersyndicate committee of the Fascist Provincial Federation recently held a meeting to discuss the question of unemployment relief. The committee was composed of delegates from the industrial, agricultural, commercial land-transport, shipping, real estate, handicraft, and professional syndicates.

The committee adopted certain resolutions containing the proposed measures against unemployment and invited the various syndicates to make arrangements, in their respective fields, for assisting the unemployed during the coming winter, as proposed by the committee.

The decisions reached by the various syndicates (workers and their employers) are as follows:

(1) When overtime work is absolutely necessary in any concern, factory, or firm, unemployed labor will be utilized for it.

(2) No work is to be permitted on official holidays.

(3) Workmen on leave of absence or vacation are to be replaced by the unemployed.

(4) The economic condition of all employees or laborers is to be investigated. All those who have more than one source of income—i. e., those who have two jobs, private sources of income or pensions, or who own real estate, shops or businesses, even if under another name—are to be eliminated.

(5) Only one member of a family may be employed by a firm if the head of the family is employed by the same concern.

(6) Labor is not to be brought in from other districts except when highly specialized labor is required. Foreign labor is to be absolutely excluded.

(7) A percentage of their wages is to be contributed by the employees for unemployment relief, the amount being deducted by employers either weekly or monthly and remitted by them to the Fascist Syndicate of Industries in Trieste, for deposit in the relief fund.

(8) Normal working hours are to be reduced from 8 to 7 hours per day during the 5 months beginning November 1, 1931.

(9) Contract work is to be permitted only on rare occasions and then only with the approval of the syndicates.

(10) All firms are to employ the greatest possible number of workmen.

(11) No subleasing of work is to be permitted to contractors.

(12) A percentage of all sums collected by the union through the settlement of industrial disputes is to be deposited in the relief fund.

(13) All requisitions for workmen are to be made through the official employment bureau.

(14) All firms who employ boys or apprentices in excess of 10 per cent of all workers employed must replace the excess by heads of families without other means of support.

(15) Labor shifts are to be instituted in order to permit rotation of workers and thus insure employment for at least three days each week to each worker. (This is to be done only in case work is limited and dismissals are contemplated.)

¹ Data are from report of Rollin R. Winslow, United States consul at Trieste, Italy, dated Oct. 20, 1931.

(16) Members of the family of the owner of a firm must not be employed in a manual capacity in the firm.

(17) One day's work per week, beginning November 1, 1931, is to be eliminated in bakeries.

With reference to decision (7), above, employees in firms dealing in building equipment, foodstuffs, and wearing apparel, and those engaged in theaters must contribute 3 per cent of their wages for the relief fund. Those engaged in paper, printing, chemical, textile, or tobacco businesses, or metallurgical and gas, water, or electric works or industries must contribute 1 per cent of their wages.

Unemployment in Japan, September, 1931

THE unemployment situation in Japan was worse in the early fall of 1931 than in the latter half of 1930, according to the November 26, 1931, issue of the *Trans-Pacific*. The Statistical Bureau of the Japanese Home Ministry reports that the number of factories in the Empire at the close of September, 1931, was 60,529, as compared with 71,215 in the same period of the preceding year—a decrease of more than 10,000, while the number of workers dropped from 1,999,116 to 1,839,773—approximately 159,000. The shrinkage in volume of employment is becoming more pronounced in large factories, but the small factories are taking on additional workers.

The number of mine workers reported for September, 1931, was 258,469, or 28,494 less than for the corresponding month of 1930. This decrease of approximately 10 per cent was due to the closing down of mining operations. The average number of mine workers per mine declined from 270 to 240. In 1919, when the peak of employment was reached in the mining industry, the mine workers numbered 465,000.

Various other industries are menaced by increased depression resulting from the high money rate subsequent to the gold efflux and the decline of Sino-Japanese trade after the Manchurian difficulty. In 1931 there were many bankruptcies among the large factories in and outside of Tokyo, the Metropolitan Police Board reports, the number of large factories under the jurisdiction of that body decreasing from 637 at the close of September, 1930, to 563 at the end of September, 1931, while the number of workers declined from 102,000 to 92,000.

While large factories are decreasing in number, small factories have been increasing. In April, 1929, small factories, each employing less than 10 men, numbered 39,848. Within two years and a half the number of such factories gained by 5,914 to 45,762 at present in and about Tokyo.

These factories are carrying on business on a small scale and are employing experienced workmen dismissed from large factories. These small factories are employing these trained workmen at cheaper wages. Some experienced workmen, when dismissed by factories, change their residences to factories and carry on business on the smallest scale possible, employing two or three workmen. Parts of machinery and general merchandise are manufactured by these small factories.

About 200 of these small factories were springing up each month when the report under review was prepared. In the fall of 1931 most of them were engaged in manufacturing under contract with large factories where the workers now in the small factories were formerly employed. The *Trans-Pacific* states that over 50 per cent of these new factories disappear shortly after they have been set up.

Census of Unemployment in Continental Portugal

A CENSUS of unemployed persons made in continental Portugal on August 1, 1931, shows that 38,225 persons were at that time unemployed, according to a report dated November 28, 1931, from William W. Brunswick, American consul at Lisbon. The civil status of the unemployed is given as follows:

	Number unemployed
Unmarried	18,429
Married	17,909
Widowers	1,290
All others	597
Total	38,225

Supplementing the information with regard to total number unemployed is the table following, showing the number of persons dependent upon each of the unemployed persons registered and the total dependents.

NUMBER OF DEPENDENTS OF UNEMPLOYED PERSONS

Number of dependents	Persons unemployed	Total dependents
None	10,432	-----
1	4,581	4,581
2	6,051	12,102
3	6,024	18,072
4	4,486	17,944
5	2,895	14,475
6	3,756	22,536
Total	38,225	89,710

On the basis of this table the average number of dependents per unemployed person is 2.3 persons. A further finding of interest in this study is the length of the period of unemployment, as follows:

Period of unemployment—	Number unemployed
Less than 1 month	7,256
Between 1 and 2 months	8,011
Between 2 and 3 months	6,013
Between 3 and 4 months	3,808
Between 4 and 5 months	1,842
Between 5 and 6 months	1,607
Over 6 months	9,403
Indefinite	285
Total	38,225

The largest single group of unemployed persons falls in the class of those unemployed over six months. However, three-fourths of the unemployed had been without work for less than six months at the time the survey was made.

PRODUCTIVITY OF LABOR

Changes in Productivity of Anthracite and Bituminous Coal-Mine Workers

RECENT publications of the Bureau of Mines, United States Department of Commerce,¹ show the changes that are taking place with regard to output per man per day in anthracite and bituminous coal mines of the United States. From the statistics available two tables are here reproduced showing the changes that have occurred in the industry as a whole and in the individual coal-producing States.

Table 1 shows that in the 20-year period, 1911 to 1930, productivity in the anthracite industry has been falling off slightly while in the bituminous industry an upward movement has taken place.

TABLE 1.—COAL PRODUCED FROM DEEP MINES PER MAN EMPLOYED UNDERGROUND PER DAY WORKED, 1911 TO 1930, IN NET TONS¹

Year	Anthracite ²	Bituminous	Year	Anthracite ²	Bituminous
1911.....	2.75	4.01	1921.....	2.70	4.86
1912.....	2.69	4.24	1922.....	2.87	4.98
1913.....	2.67	4.16	1923.....	2.70	5.15
1914.....	2.67	4.28	1924.....	2.53	5.17
1915.....	2.78	4.49	1925.....	2.60	5.09
1916.....	2.74	4.57	1926.....	2.53	5.07
1917.....	2.89	4.51	1927.....	2.58	5.11
1918.....	2.94	4.62	1928.....	2.60	5.26
1919.....	2.81	4.64	1929.....	2.64	5.42
1920.....	2.93	4.80	1930.....	2.63	5.61

¹ In making this computation certain estimates had to be made of the division of workers above and below ground and of the production of strip pits in the years 1911 to 1913. The probable error introduced by these estimates is too small to impair the value of the averages.

² Beginning with 1923, a small tonnage of culm-bank coal handled through breakers and hitherto counted as fresh-mined coal has been excluded, and the figures are therefore not exactly comparable with earlier years. The difference, however, is small.

Thus in 1930 anthracite workers employed underground were producing 2.63 tons per day worked as compared with 2.75 tons in 1911. In bituminous coal mining, on the other hand, output per underground worker in 1930 averaged 5.61 tons as against 4.01 tons in 1911, an increase of 39.9 per cent. It is also notable that since 1926 there has been a steady rise in output per man per day in the bituminous mines.

The trend in coal produced per man and average number of days worked per year in 1929 and 1930 is shown for the coal-producing States and for the anthracite and bituminous industries in Table 2.

Figures in Table 2 make it possible to see the differences in output per man per year and per day when workers above ground (including those engaged in stripping coal) are included in arriving at averages and when only underground workers are taken into consideration. With the exception of the averages for Indiana, Kansas, Missouri, Montana, and North Dakota, all of which are States where a high percentage of coal is from stripping operations that have notably

¹ Coal in 1929, by F. G. Tryon and L. Mann, and Supplement to Weekly Coal Report, Bituminous Coal Tables, 1930, by F. G. Tryon and L. Mann.

high output per man (34.2 per cent, 43.1 per cent, 53.7 per cent, 35.2 per cent, and 54.2 per cent of the total product from strip mines, respectively, in 1930), the inclusion of workers above ground serves to lower the average output on both a yearly and a daily basis for both 1929 and 1930.

TABLE 2.—COAL PRODUCED PER MAN AND AVERAGE NUMBER OF DAYS PER YEAR IN 1929 AND 1930

State	Average days worked by mines		Net tons per man above and below ground (including strip coal)				Net tons per man below ground (excluding strip coal)			
			Per year		Per day		Per year		Per day	
	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930
Alabama.....	231	189	712	638	3.08	3.38	820	737	3.55	3.92
Arkansas.....	146	115	394	331	2.70	2.87	445	365	3.05	3.17
Colorado.....	187	169	823	739	4.40	4.38	951	863	5.09	5.11
Illinois.....	177	156	1,069	1,002	6.06	6.42	1,108	1,025	6.26	6.57
Indiana.....	172	157	1,203	1,188	7.00	7.56	1,058	999	6.15	6.36
Iowa.....	195	155	581	493	2.98	3.18	628	535	3.22	3.45
Kansas.....	160	126	579	501	3.63	3.96	467	370	2.92	2.94
Kentucky.....	222	187	1,031	904	4.64	4.83	1,181	1,034	5.32	5.53
Maryland.....	246	197	805	688	3.28	3.50	905	772	3.68	3.92
Michigan.....	217	187	602	511	2.77	2.73	661	556	3.05	2.97
Missouri.....	185	166	717	676	3.87	4.07	477	406	2.58	2.45
Montana.....	189	172	1,493	1,449	7.90	8.45	1,195	1,232	6.32	7.16
New Mexico.....	214	176	811	679	3.79	3.85	953	797	4.45	4.53
North Dakota.....	192	180	1,310	1,351	6.84	7.50	1,067	1,022	5.56	5.68
Ohio.....	201	189	933	882	4.64	4.67	986	948	4.91	5.01
Oklahoma.....	178	148	597	322	3.36	3.49	623	535	3.50	3.61
Pennsylvania bituminous.....	230	198	1,089	956	4.73	4.82	1,231	1,070	5.35	5.40
Tennessee.....	228	196	709	681	3.11	3.48	819	775	3.59	3.95
Texas.....	212	181	838	639	3.95	3.53	707	623	3.33	3.44
Utah.....	211	168	1,492	1,215	7.09	7.23	1,801	1,488	8.54	8.92
Virginia.....	249	200	1,058	932	4.24	4.66	1,249	1,084	5.02	5.47
Washington.....	227	205	856	822	3.77	4.01	1,013	967	4.46	4.72
West Virginia.....	247	204	1,320	1,146	5.34	5.61	1,564	1,333	6.26	6.53
Wyoming.....	230	188	1,386	1,167	6.02	6.20	1,624	1,391	7.06	7.40
Total, bituminous.....	219	187	1,064	948	4.85	5.06	1,186	1,049	5.42	5.61
Pennsylvania anthracite.....	225	208	487	460	2.17	2.21	594	547	2.64	2.63
Grand total.....	221	192	930	834	4.21	4.34	1,059	940	4.79	4.90

¹ Probably too high because of practice of men going into mines to shoot coal and load mine cars on days when tripplers and mines as a whole are not in operation.

It should also be mentioned that the net output per man, taking into consideration workers employed above and below ground, was highest in 1930 in three States where strip mining is prevalent, namely, in Montana (8.45 tons per man per day), Indiana (7.56 tons per man per day), and North Dakota (7.50 tons per man per day).

Considering output per man per day when the averages are based on underground workers only, the highest averages of daily output in 1930 aside from the average for Utah, which is explained in a footnote to Table 2, are those for Wyoming (7.40 tons) and Montana (7.16 tons) and Illinois (6.57 tons). Here again the relatively high averages are at least partially accounted for by special mechanical factors, for in these three States deep-mined coal was loaded mechanically to the extent of 48.6, 62.6, and 48.3 per cent of the total, respectively, in 1930.

When comparing output per man per day below ground for 1929 and 1930 by States it is of interest to find that in every State except Michigan and Missouri the average for the later year is in excess of that for 1929.

INDUSTRIAL AND LABOR CONDITIONS

Labor Camps in California

WHEN the California Commission of Immigration and Housing began its labor camp inspections under the revised camp sanitation act passed in 1915, camp operators had been paying little attention to providing livable quarters for their workers.¹ The first efforts of the commission were along educational lines. Employers had to be persuaded that the proposed improvements were essential for the well-being of the workers and that good camps would result in a more contented and efficient labor force. On the other hand, workers had to be dealt with in order to prevent them from abusing the equipment furnished.

The commission's division of housing and sanitation has promoted the construction of new camps, by assisting operators in selecting sites and preparing plans for such camps, and has also been helpful in connection with the remodeling of old ones. The legislation for labor camps of the State has been based on experience gained through the cooperation of progressive employers who constructed and are constructing labor camps beyond the legislative requirements, which are as follows:

1. Bunkhouses, tents, or other suitable sleeping places must be provided and must be in good structural condition so as to afford shelter and exclude dampness in inclement weather.
2. Suitable bunks or beds shall be provided for employees. A clear space of 20 inches measured from the floor to ceiling must be allowed between beds or bunks. A mattress or equally comfortable bedding must be supplied upon request, a reasonable charge for which may be made by the employer. Ticks or containers must be supplied if straw or other substitute for mattress is used.
3. Dining rooms, kitchens, or other structures where food is cooked, prepared or served, must be clean and sanitary; openings must be screened. Cooking utensils, dishes, knives, forks, spoons, and other things used for eating must be clean, unbroken, and sanitary.
4. Convenient and suitable bathing and toilet facilities must be provided and maintained in a clean and sanitary state.
5. Garbage, kitchen waste, and refuse must be placed in covered receptacles and must be emptied at least daily and contents burned, buried, or otherwise disposed of. Drainage from the kitchen sinks must be carried through covered drains to covered cesspools or septic tanks, or be disposed of by some other satisfactory method.
6. A responsible person must be appointed to keep each camp clean.

Many oil, lumber, and construction camps have the best of toilet and bathing facilities. Beds, mattresses, sheets, pillows, and blankets are furnished, the rooms are swept and cleaned and the beds are made by persons especially hired for this work, and good food is served. Where such conveniences are available a reasonable price is usually charged for them. A large number of camps have reading and club rooms for the workers. Employers find that camps of this kind eliminate various labor problems and make for greater efficiency and steadiness in employees.

¹ California. Department of Industrial Relations. First biennial report, 1927-1930. Sacramento, 1931, pp. 191-197.

Types of Camps

THE California camps may be grouped into two general classes—ranch and industrial. The first group includes camps for the cultivation of asparagus, potatoes, onions, celery, tomatoes, peas, beets, fruit, hops, rice, cotton, citrus fruits, dates, nuts, and grains, also for dairy products. In the second group are the construction, lumber, mining (including coal, oil, and cement), railroad, and cannery camps.

Ranch Camps

MEXICAN labor largely predominates in the harvesting of cotton. The division's agents through meetings with operators and by personal contact have succeeded in having a number of camps built which far surpass any other constructions of this kind in the cotton belt. Wooden structures have been substituted for many of the temporary tent camps. Prosecutions, however, had to be instituted in Fresno, Madera, Kern, Kings, and Tulare Counties. During November, 1927, the Fresno Republican assisted substantially by publishing a series of illustrated articles on both good and bad conditions. Even where there have been prosecutions there has not been much improvement in the labor camps in the rice fields since the 1920 and 1921 season, which were so disastrous.

Sugar-beet growing is being carried on in a considerable portion of the State. One of the more important companies making beet sugar, which formerly operated from 40 to 50 camps in 3 counties, now has only a few camps. Most of the beets are grown by individual farmers in the Sacramento and San Joaquin Delta districts. In the southern section of the State several companies are still operating many camps that must be continuously inspected in order to have them meet at least the minimum requirements. According to the report, the camps operated by Filipino or Mexican contractors constitute a constant problem in the delta region and other localities, as such contractors are ordinarily not able to provide the requisite housing and sanitary facilities.

In the Sacramento, Yolo, Solano, Contra Costa, and San Joaquin asparagus-growing section great improvement is reported. This is particularly true of the cannery camps, to which reference will be made later on. In this region Japanese and Chinese workers used to be the most numerous of all nationals, but at present the Filipinos predominate. Persistent inspection, with prosecutions from time to time, has been effective. The filthy, ramshackle, barnlike structures are being replaced by sanitary camps.

The most difficult of all places to get results is in the Coachella Valley and in Imperial County. Here the labor in the fields is entirely Mexican. The housing conditions are the most primitive and sanitary facilities are about on a par with them. For several years past active campaigns have been carried on and an attempt made to at least obtain the minimum requirements. The attitude of the people generally in this district has been that the Mexicans should not be given better housing than they have in their own country. This is now changing. A few of the produce companies are making permanent improvements, while others are planning future developments. The camps operated by the Pacific Fruit Express, in which Americans are housed, stand out as an example of what could be done in the way of camp construction in Imperial Valley.

The grape, hop, and deciduous fruit camps are operated for short periods. In 1927 a conference was held with the operators in the

Lodi region at which the policy of the division was explained and the requirements for each operator were laid down. Each camp was then visited by an inspector who gave the operator first-hand instruction. Very gratifying results were obtained.

Inspections made in the summer showed that nearly all of the growers in that section had made an effort to comply with the requirements of the division. There are numerous model citrus camps, and the associations owning them deserve, according to the report of the division, to receive special commendation.

General ranch camps are reported as about the most backward in the State, but improvements are being made in them.

Industrial Camps

THE industrial camps include lumber, cement, and oil camps, mines, quarries, packing houses, and all types of construction work, such as highway, railroad, irrigation, and hydroelectric projects.

The camps of the different oil companies are built and operated on a higher standard than any other inspected camps in California. Hydroelectric construction camps rank next and lumber camps third. The hydroelectric companies usually do their own work; that is, it is not done by contract. These companies have cooperated with the division, and their camps are operated in a satisfactory way. By degrees the lumber camps are approaching the standards of the oil and hydroelectric camps. It is interesting to note that the laborers in the oil camps are mainly Americans, while the workers of the hydroelectric and lumber camps are of various nationalities. In construction camps, such as those for irrigation, highway and maintenance-of-way undertakings, the workers are of mixed nationalities, with Mexicans in the majority in the central and southern part of the State.

Several new lumber camps have been set up, and a number of the operators have made improvements in their housing and general conditions. An outstanding exception, however, was one of the most important companies in Humboldt County, whose camps were allowed to deteriorate until the workers living in them began to send in complaints. An inspection showed that the conditions in these camps were very bad, although these work places had been inspected and brought up to standard only a few years ago. The agent of the division called the matter to the attention of the district attorney of Humboldt County and a warrant was issued for the superintendent's arrest. An inspection made a few weeks after showed these camps to be thoroughly clean, with most of their objectionable features eliminated. New housing has now replaced the shattered cabins, while the rating has been changed from bad to good.

In the biennium under review it was again found necessary to prosecute several operators of "gyppo" logging camps.

The mining, quarry, and cement camps have also been improved. In the desert region in the southeastern part of the State there are several active camps. Ordinarily, there are two separate camps—one for Americans and another for the Mexicans—which even to the superficial observer are a great contrast. The housing for the Mexicans is usually haphazard—sheds, lean-tos, with goat pens and corrals in close proximity. The agents of the division have had to deal severely with certain of these companies.

The canning and packing-house companies operating camps have gradually fallen in line with the division's campaign for better housing and adequate sanitary facilities. An interesting development has arisen in the cannery camps. Due to the fact that women are employed in large numbers, the companies have found it necessary to establish nurseries. As there is no law governing this situation, a group of cannery workers requested the division to aid them in setting standards in building, equipment, and service. Rules have been established and various companies in Sacramento County and elsewhere have agreed to them and are carrying them out.

There has been more improvement in the railroad camps, in which conditions were bad, than in any other camps. This is especially the case with the camps for maintenance-of-way men. The full cooperation of the railroad companies has now been secured. This affects their systems not only in California but also in other States. Included in the construction contracts of one of the companies for a major operation is the requirement that camps erected by the contractors should be constructed in compliance with the State law. This provision was agreed upon after conferences with the division.

The division of highways is also cooperating with the division of housing and sanitation. As an example, the building of camps to house convicts doing road work is cited. Moreover, for a number of years there has been a provision in the contracts of the division of highways with road builders, requiring such builders to comply with the camp sanitation act.

Cities which own their water and power systems have also cooperated with the division of sanitation and housing. One of the best illustrations of this was shown in 1928 by the city of Los Angeles. After the Santa Clara Valley flood, resulting from the collapse of the St. Francis Dam, the municipal water and power department found it necessary to set up camps at Barsdale, Fillmore, Piru, and Santa Paula. It was planned to house 100 men in each camp. The crews, however, were made up of from 200 to 300 men each. This, of course, created a chaotic situation so far as accommodations for the workers were concerned, but the division "with the full cooperation of the department of water and power cleared the situation and established proper housing."

Cooperation with Department of Education

THE number of children of school age in the camps and the name and location of the nearest school are reported regularly by the camp department to the department of education.

The population of 2,366 inspected camps in 1929 was 85,928, of whom 17,078 were women and 18,631 were children. In the 6 months ending June 30, 1930, the population of 995 inspected camps was 43,475, of whom 7,882 were women and 7,837 were children.

The classification of inspected camps in 1929 and the first half of 1930 is as follows:

TABLE 1.—NUMBER OF CAMPS OF EACH TYPE INSPECTED IN 1929 AND 1930

Classification	Number of camps	
	1929	1930 (first 6 months)
Construction.....	157	59
Lumber.....	68	35
Mining, oil, gas, quarry.....	128	142
Railroad.....	412	44
Cannery and dry yard.....	107	31
General ranch (fruit, vegetables, berries, nuts, etc.).....	1, 113	630
Cotton.....	284	15
Rice.....	42	1
Dairy.....	13	4
Seed.....	5	
Labor supply.....		10
Power plant.....		6
Icing plant.....		3
Telegraph.....		2
Miscellaneous.....	37	13
Total.....	2, 366	995

Of the camp population of 85,813 for whom nationality was reported in 1929,² and of 42,985 for whom nationality was reported for the first 6 months of 1930,³ the following nationalities were represented by more than 300 persons:

TABLE 2.—NATIONALITIES EMPLOYED IN LABOR CAMPS, 1929 AND FIRST HALF OF 1930

Nationality	Number		Nationality	Number	
	1929	1930 (first half)		1929	1930 (first half)
Americans.....	42, 051	23, 437	Spanish.....	1, 050	1, 022
Mexicans.....	26, 926	8, 971	Germans.....	533	420
Filipinos.....	6, 726	5, 120	Scandinavians.....	524	468
Japanese.....	2, 488	746	Slavonians.....	465	315
Italians.....	1, 254	646	Armenians.....	366	(¹)
Chinese.....	1, 074	(¹)	Hindus.....	357	(¹)
Portuguese.....	1, 064	547	Russians.....	323	(¹)

¹ Less than 300.

Increase in Fees of Private Employment Agencies in New Jersey

A DIVISION of the New Jersey State Bureau of Employment inspects and regulates private employment agencies of all kinds, including domestic, industrial, and commercial agencies, nurses' registries, hotel and resort agencies, and labor commissary camps. This work is done by the director of the bureau, whose only assistant is the farm examiner. The latter's services are available in this connection only for the 5 months of the year when there are not so many farm placements.

² Nationality data not available for 20 camps with a population of 110.

³ Nationality data not available for 11 camps with a population of 490.

Probably the most striking development relative to private employment agencies in the year 1930-31, according to the annual report, given in the September, 1931, issue of the *Industrial Bulletin* published by the New Jersey Department of Labor, was the increase in placement fees made January 1, 1931, by the commercial and clerical placement offices in the cities in the northern section of New Jersey. Thirteen of these agencies were determined to raise their charges to a full week's salary for a clerical position. The division called attention to the successful operation for two years of the scheme suggested by it after the 1928 decision of the United States Supreme Court.¹ When the increase in rates was insisted upon by the private employment offices, the division pointed out the unfairness of raising fees on the basis of what the traffic would bear and the fact that the increase meant a greater burden upon the jobless at a time when they were least able to pay it. There being no legal control of the situation, however, the move for higher fees could not be averted. During the year many inquiries were received from employers, particularly of domestic workers, who felt it was not fair for the agencies to take a fee from both the worker and the employer for the placement of one person. Most people believe that the charge is controlled by the law, but when they are informed of the action of the United States Supreme Court they all agree that this double fee is inequitable. It is estimated that the fees exacted and received by private employment agencies in New Jersey for the total placements effected by them in the year aggregate several hundred thousand dollars.

Moratorium for Wage Earners in Vera Cruz, Mexico

A UNIQUE law became effective on August 22, 1931, in Vera Cruz, by which a moratorium was declared on all debts contracted by laborers or employees with money lenders, according to a report from the American consul, Leonard C. Dawson, at Vera Cruz, dated September 10, 1931. The moratorium is established for a period of three years for the payment of debts contracted by workers or employees who are not earning more than 10 pesos² a day.

The law does not affect American interests, for, as a general rule, the money lenders are Syrians, Poles, Russians, Mexicans, or Spaniards.

It is presumed by the law that all actions brought to attach or garnishee wages fall within the terms of this law unless proof to the contrary is produced by the person bringing the action. The law specifies that the person designated by the defendant as his attorney must be accepted by the court as such.

¹ The Supreme Court of the United States on May 28, 1928, held unconstitutional the fee-fixing provision of the New Jersey private employment agency law in so far as it empowered State officers to fix the price which the employment agent shall charge for his services. (See *Labor Review* for July, 1928, p. 68.)

² The exchange rate of the peso was 33.4 cents in September, 1931.

HEALTH AND INDUSTRIAL HYGIENE

Occupational Hazards from Use of Carbon Tetrachloride

THE health hazards resulting from the industrial use of carbon tetrachloride are discussed in an article by Dr. Elizabeth B. Bricker in *Labor and Industry*, August, 1931, published by the Pennsylvania Department of Labor and Industry.

The types of injury arising from exposure to carbon tetrachloride include skin injuries and injuries to the general health, the kind of injury depending on the method of use of the compound and the kind and degree of the exposure of the individual.

The principal uses for carbon tetrachloride are as a fire extinguishing agent and as a solvent. Because it is noninflammable and its vapors are very heavy it is used for extinguishing small fires, where it acts as a smothering agent by shutting off the supply of oxygen to the fire. When used as a fire extinguisher in small inclosed spaces, gases are generated which can not escape easily and may be concentrated in dangerous quantities. Fatalities from the use of carbon tetrachloride under such conditions have been reported.

The risk of fire from flammable solvents is greatly reduced by the mixture of such solvents with carbon tetrachloride, and it is now commonly used for this purpose. The health hazards when it is used in this way are those arising from the various constituents of the compounds. Carbon tetrachloride is used as a solvent in two ways. It is used to remove fats, oils, and other materials from their combinations, a principal use of this kind being in the dry-cleaning industry, where it is used for the preservation or the restoration of the cloth or other material, or it may be used in the separation of desirable constituents, such as oils, from seeds or bones, the oils being recovered later from the carbon tetrachloride.

The other important use as a solvent is to hold together the ingredients of compounds such as rubber cements, floor and furniture waxes, shoe polishes, etc., so that they may be easily applied, leaving the polish, cement, or other compound in the desired location after the carbon tetrachloride has evaporated.

The affinity for fats, inherent in carbon tetrachloride as a result of its solvent properties, is shown by its effect on the skin of workmen where the work requires contact with this material for any length of time. These effects depend both upon the length of the exposure and the susceptibility of the individual. The effect of carbon tetrachloride on the skin is to cause it to become red and dry, and, if the contact is long continued, to cause cracks in the skin which open the way to infections.

Injuries to the general health from the inhalation of air containing large amounts of carbon tetrachloride range from temporary ill effects to prolonged illness or death. The most common symptoms of exposure to carbon tetrachloride are irritation of the eyes, nose, and throat; nausea; dizziness; headache; confusion; excitement; and, with

prolonged exposure, loss of appetite and mental dullness. Two rapidly fatal cases which are often cited occurred in women, one of whom was subjected to heavy vapors from a machine in which furs were being cleaned and the other to a high concentration of carbon tetrachloride while having her hair shampooed.

The extent of the danger of exposure to small amounts of carbon tetrachloride over long periods of time is not fully determined but until more is known about these effects Doctor Bricker recommends that the following precautions should be used in its handling:

1. It should be used in completely inclosed systems as far as practicable. This is a simple problem in some processes, as in the extraction of fats for their eventual recovery, but more difficult of attainment in others.

2. When completely inclosed processes are not feasible, an exhaust system should be installed with at least one outlet near the floor (as the vapors are heavier than air). This system should be kept in operation constantly as long as the liquid is exposed to the air and for some time after such exposure has ceased so that the room or compartment may be rid of all residual vapors.

3. A careful watch should be kept on all persons who are, in the slightest degree, exposed to the breathing of these vapors. They should preferably be under the care of a physician who is accurately informed on the nature of the material in question. On the slightest indication of ill health arising from the use of this compound, the worker should be transferred to a job in which he is in no way exposed to it.

Occupational Diseases in the Wood Industry

AN ACCOUNT of the effects of exposure of workers to the dusts or resin of different woods is given in the September-October, 1931, issue of the Bulletin of the International Union of Woodworkers (Berlin).

Although it has been demonstrated repeatedly that many species of wood, especially those growing in the Tropics, contain active poisons, the actual number of cases of disease reported from this cause has always been relatively small. The relative infrequency of diseases reported as due to this cause is accounted for by the slow action of many of the poisons, with the result that the cause of the disease is lost sight of, and also by the fact that many physicians are not familiar with the occupational conditions under which the disease was contracted and do not, therefore, associate it with the occupation. It has been difficult to carry out systematic research, because many tropical woods have not been accurately classified and also because many of these woods, although they are quite different botanically, are marketed under the same commercial name either because their appearance is similar or they are alike in some specific technical quality. There is also a difference in individual susceptibility to the poisonous properties in these woods, some persons being entirely immune to their effects, while in others the susceptibility is either constitutional or is gradually acquired by working with the woods.

The most frequent symptoms of poisoning from wood are the various forms of skin diseases. The skin affection may vary from a slight reddish irritation of the skin to a general eczema. Eruptions resembling measles or scarlet fever are often accompanied with intense itching and pain, and when healing takes place there is scaling of the skin, which may be repeated several times. Local lesions generally appear first on all directly exposed parts of the body, but may spread to other parts of the body either through absorption through the skin

or by being carried by the hands. In the more serious cases there may be discharge of pus and scab formation, and in such cases there may be digestive disturbances, including diabetes, kidney complaints, etc., and tuberculosis. Among the other general effects of the poisonous woods are palpitation of the heart, shortness of breath, and dizziness. Persons who have once suffered from eczema may develop a hypersensitiveness, so that even working in a room where the poisonous woods are being handled may cause a return of the disease. In some cases even working with ordinary harmless woods will cause a recurrence, and in such cases the only remedy is complete change of work.

The harmful effect of the poisonous woods is due to the volatile poisonous oils and alkaloids which they contain. In tropical countries their poisonous character is often recognized by the natives, who use them in pulverized form to poison water for the purpose of catching fish or to poison arrows.

Among the woods which are recognized as being poisonous or which are considered potentially harmful because of the elements they contain are the following:

The wood of the date and coconut palms, which has dark stripes on a white ground, and the almost black wood of the Tabago palm are all marketed under the name of zebra wood. These woods are used in mosaic work and for buttons and walking sticks. They are believed to be poisonous but may have been confused with zebrano or zebra wood, which comes from Jamaica.

Moule wood (also known as iroko, odum wood, bang wood, or momangi) is decidedly poisonous, causing irritation of the skin and eyelids. This wood is considered one of the best building and furniture woods from West Africa, being used as a substitute for teak.

Ironwood coming from the West Indies causes vomiting and inflammation of the skin.

The fibrous inner bark of various members of the magnolia family, including the wood of the tulip tree, contains a poisonous alkaloid.

West Indian greenheart, a very hard wood resembling *lignum-vitæ*, contains an alkaloid called bebeerine which causes nausea, diarrhea, and spasms.

A hard yellowish-red wood called *Hydrangea paniculata*, used in making tobacco pipes, is considered to contain a poison which has an irritating effect on the mucous membranes.

Red gum, sometimes called amber wood, or satin walnut, causes blisters on the skin which, however, neither itch nor smart.

A large number of trees belonging to the Leguminosæ family contain poisonous properties. These include Indian rosewood or blackwood, one of the most valuable cabinet woods, which causes itching and urticarial eruption; a hard, yellowish-brown wood—*cytissus alpinus*—which comes from central Europe and contains a powerful poison, cytisine, which may cause inflammation of the throat, nausea, stomach and head aches, retention or suppression of urine, giddiness, and unconsciousness; and partridge or panako wood coming from Brazil and Guiana, which contains an element irritating to the skin. Saponine, which causes inflammation of the skin and general functional disturbances, is found in an East Indian variety of ebony known as siris (or sirsa) wood, in Indian purple or violet wood,

and in African rose or black wood. From West Africa comes a wood of reddish color used for veneering, which is called red-water tree, ordeal tree, or sassy bark. This wood contains a strong poison which affects the heart. This poison is used by the natives for ordeals or for poisoning arrows. It causes nausea, headache, shortness of breath, a slowing down of the heart action, dizziness, and loss of sensation in mucous membranes which are directly exposed to it. The dark coccoloba from Central America used in the manufacture of knife handles, brush tops, and similar articles, may cause irritation of the skin with intense itching.

Satinwood from Guiana and the Antilles and ironwood from Jamaica cause papulo-vesicular eruptions. Other trees of the *Xanthoxylum* or rue family are poisonous, arresting the sensory powers of organic tissues and causing heart paralysis. One of the best known of this species is zebrano or zebra wood from Jamaica. Australian moa or moha wood, a hard kind of teak, is suspected of being poisonous, but there is a possibility of its having been confused with certain Ceylon and Malabar varieties of teak which are also marketed under the name of moa. Indian satinwood is said to be probably the first wood to have received scientific study of its toxic effects. This is a heavy wood of sandy color containing an alkaloid called chloroxylonin which causes intensely itching papulo-vesicular eruptions. The dermatitis may be accompanied by nervous irritability.

The white wood of *Excoecaria agallocha*, belonging to the *Euphorbia* family, contains a corrosive milky juice which may cause dangerous ocular irritation.

A beautiful reddish Indian wood called renghas wood contains a strong poison which causes itching eruptions and even wounds. Severe cases of eruptions have been reported in persons using chairs made from this wood which were several years old. The resin of this wood contains caustic cardol compounds. Another member of this species (*Melanorrhæa curitisii*) causes burning pain, inflammation, pustules, fever, and general disturbances within 24 hours from the beginning of exposure, and its toxic action is so strong it may even cause death. In workers handling the timber it causes ulcers which are difficult to heal. The sumach species of North America, which belong to this family, are also extremely poisonous.

Amboyne wood, a very valuable cabinet wood of reddish-yellow color, causes itching skin lesions.

Teak from Ceylon, which is sometimes marketed as moa or bassia wood and which resembles mahogany, may cause very painful inflammations of the skin accompanied by swelling and the formation of scabs. The poisoning is the result of the action of the non-saturated resinous acids which are present in a free state. Teak or djati, which is the color of chocolate, causes severe skin lesions which may last some weeks.

Ebony from Bombay, Makassar, and Ceylon, belonging to the *Diospyros* group, is likely to cause vesicular eruptions.

African boxwood, which is used in the manufacture of shuttles and musical instruments, contains an alkaloid which causes paralysis of the nerve cells; inflammation of the conjunctiva, respiratory passages, nasal mucous membrane, and larynx; and shortness of breath, headache, and mental depression.

West Indian greenheart, also called green ebony, is used for making walking sticks and for high-grade cabinetwork. Inflammation of the

skin in those handling this wood is caused by the nonsaturated resinous acids which are present in the wood in a free state. Other species of this wood are harmful on account of the alkaloids which they contain.

Other woods which are suspected of being poisonous are East Indian ironwood and the valuable brownish-red ironwood, or king's wood, which comes from Sumatra.

Work of the Union Health Center, New York City

THE Union Health Center¹ was established in 1913 by the Joint Board of Sanitary Control in the Women's Garment Trades and the institution was taken over in 1920 by the International Ladies Garment Workers' Union, at which time the center moved into its own building. In 1925 the dental department was established in a separate building some blocks from the main building. In 1928 the facilities of the organization were opened to all trade-union members and about 30 additional labor organizations became affiliated with it. During that year the Union Health Center was indorsed by the Central Trades and Labor Council. At the present time there are 40 labor organizations affiliated with the institution.

The Union Health Center was organized for the purposes of providing medical and dental services at a reasonable cost to members of organized labor and their families, and also to give health information to and spread health education among these workers. The services rendered include medical clinics held twice daily, a dental department which is the largest industrial clinic in New York City, special clinics under specialists in different branches of surgery and medicine, a completely equipped physiotherapeutic department where light and thermal treatments are given by a specialist, a chemical laboratory equipped to make the various kinds of tests, an X-ray department, and a completely furnished drug store where prescriptions are compounded at a cost ranging from 25 to 50 cents each. Additional health care is provided through arrangements made for the care of the sick and convalescent in sanitariums and other institutions. The Union Health Center also conducts the physical examinations required by many of the unions for membership, and has charge of the certification for cash sick benefits of members of those unions which have sickness insurance.

The center is a nonprofit organization. Fees of \$1 to \$1.50 for medical attention are charged to members of affiliated unions, and a slight additional charge is made to members of nonaffiliated unions. If members of affiliated unions are unemployed they receive free treatment when it is requested by the secretaries of their unions.

An example of the work accomplished is found in the report for the dental department. Since 1917 this department has treated 47,424 patients, who made 305,649 visits. The total income for the period of approximately 14 years was \$784,946.57. It is said that the department has been investigated a number of times by official and unofficial organizations, and that it has been found to give honest dental work at reasonable charges to those most in need of it.

¹ The Union Health Center. The health department of organized labor. 1913-1931. New York, 131 East Seventeenth Street, 1931.

INDUSTRIAL ACCIDENTS AND SAFETY

Safety Codes for the Prevention of Dust Explosions

MEASURES for the elimination or reduction of the dust explosion hazards in eight groups of industrial establishments are presented in Bulletin No. 562 of the United States Bureau of Labor Statistics, now in press. Another code, included in this bulletin, provides for the use of inert gas for the prevention of fire and explosion.

Dust explosions have been responsible for a series of disasters involving large losses of life and property extending over a long period of years. It is only recently, however, that the seriousness of this hazard has been generally recognized and measures for its control undertaken. Following extensive research into the phenomena of dust explosions by the Bureau of Chemistry of the United States Department of Agriculture, the National Fire Protection Association organized, in January, 1922, a committee on dust-explosion hazards charged with the preparation of recommended regulations for the prevention of fires and dust explosions in establishments subject to this hazard. This committee was formed with the cooperation of the United States Department of Agriculture, the present joint sponsors thus having been closely associated in this work since the inception of the project.

The committee of the National Fire Protection Association on dust-explosion hazards proceeded with the preparation of the regulations which form the basis of Bulletin No. 562, the reports of the committee being adopted by the association and published as the recommended regulations of the National Fire Protection Association. These standards as prepared were also adopted by the National Board of Fire Underwriters.

In 1926 the dust-explosion hazards committee of the National Fire Protection Association was reorganized to qualify as a sectional committee of the American Engineering Standards Committee. This reorganization consisted merely in adding the representatives of a few organizations which had not previously participated in the work. Following this, the codes adopted by the committee and by the National Fire Protection Association and the United States Department of Agriculture were officially approved as "Tentative American Standards" by the American Engineering Standards Committee and published in Bulletin No. 433 of the United States Bureau of Labor Statistics. Subsequently the codes were advanced to the status of "American Standard" by the American Standards Association, additional codes were prepared, and original codes revised to keep pace with developments in industry. Bulletin No. 562 includes all the codes developed on the subject to date as follows:

- For the prevention of dust explosions in starch factories.
- For the prevention of dust explosions in flour and feed mills.
- For the prevention of dust explosions in terminal grain elevators.
- For sugar and cocoa pulverizing systems.

For the prevention of dust ignitions in spice-grinding plants.

For the prevention of dust explosions in wood-flour manufacturing establishments.

For the installation of pulverized-fuel systems.

For the prevention of dust explosions in coal pneumatic cleaning plants.

For the use of inert gas for fire and explosion prevention.

The safety codes for spice-grinding plants, for wood-flour manufacturing establishments, and for the use of inert gas are new codes, while the others were revised as experience indicated to be advisable and to cover new factors.

The code for the prevention of dust ignitions in spice-grinding plants has been prepared as a guide to safe practice in the construction and operation of such plants. It is stated that no serious dust explosions have occurred during the normal operation of spice-grinding plants, but the existing hazard to both life and property prompted the preparation of the regulations.

The code for the prevention of dust explosions in wood-flour manufacturing establishments was prepared to reduce the hazards inherent in the manufacture of wood flour, particularly the hazard of its ignition and the propagation of a resultant fire. Proper construction of the building and prevention of floating dust are stressed.

The code for the use of inert gas for fire and explosion prevention contains general essentials and average necessary specifications to make a workable code. It provides for reducing the oxygen contents of air, through mixing it with inert gas to a point where combustion can not occur, within inclosures where flammable liquids, gases, or dusts are used or handled, such as ovens, driers, machinery and apparatus, bins, or vaults.

The research work of the United States Bureau of Chemistry and Soils, Department of Agriculture, indicates that practically all types of combustible dusts when mixed with air in proper proportions can be readily ignited by external sources of heat or flame. The importance of this industrial problem can more nearly be appreciated when it is realized that a recent census of manufactures shows that at least 28,000 industrial plants, employing over 1,324,000 persons and manufacturing products of an annual value in excess of \$10,000,000,000, are subject to the hazard of dust explosions. It has been only in recent years that direct attention has been given to the determination of the causes of industrial plant dust explosions and the development of control measures. Large losses of life, property, and foodstuffs are occurring annually from explosions of this character. Many of the explosions are occurring in lines of industry in which dust explosions have not previously taken place. The extension to larger operating scale, and the utilization of by-products and waste materials, resulting in the accumulation of large quantities of explosive dusts, have greatly increased the hazard. The introduction of new manufacturing processes, as well as new types of mechanical equipment, have added to the importance of dust explosion prevention.

Several illustrations in the bulletin show the tremendous destruction caused by dust explosions in establishments which did not come up to the requirements of the safety codes, and the small damage where the establishments were constructed according to the code regulations.

LABOR LAWS AND COURT DECISIONS

Legislation Regulating Rates of Wages of Employees on Public Works

SEVERAL of the States and the Congress of the United States have from time to time enacted labor legislation affecting contractors and subcontractors engaged in the construction of public works. This legislation has concerned the limitation of the number of hours of workmen and preference and wage provisions. One type of preference is that extended to local contractors, local materials, and locally manufactured products. Another type is the employment preference of one workman over another. A positive type of such legislation is that limiting employment to citizens of the United States, or to citizens or residents of the State in which the work is to be executed, while a negative type is that prohibiting the employment of aliens. Laws designating the rates of wages to be paid employees on public works are another attempt on the part of the State to regulate employment conditions.

In recent years the subject of wage fixing or the payment of the prevailing wage rate has received much attention, due to the large amount of public funds which have been appropriated for the construction of public works. Some of the laws which have been enacted were declared unconstitutional by the courts, either because of their violating the right of contract or because of discriminatory provisions.

The legislation attempting to fix a minimum wage for employees of contractors engaged upon public works may be divided into two classes: (1) Those having a provision that not less than the current or prevailing rate of per diem wages in the locality where the work is performed shall be paid to workmen; and (2) those which fix a stated minimum rate.

During the past several years the "current rate of wages" provision has received attention by the highest court in the land, an Oklahoma statute being held unconstitutional by the United States Supreme Court on January 4, 1926, in the case of *Connally v. General Construction Co.* (269 U. S. 385). The statute was held void for uncertainty. The court reasoned that a criminal statute which either forbids or requires the doing of an act in terms so vague that men of common intelligence must guess at its meaning and may differ as to its application lacks the first essential of "due process of law."

Following the decision of the United States Supreme Court in the Oklahoma case, two cases arose in New York State. (*Morse v. Delaney*, 218 N. Y. S. 571, affirmed 218 N. Y. S. 826, and *Campbell v. City of New York*, 216 N. Y. S. 141, affirmed 219 N. Y. S. 131.) The New York law was upheld in the lower courts and the cases were then taken to the Court of Appeals of New York, which, on February 23, 1927, upheld the constitutionality of the New York statute. That court, in referring to the *Connally* case, said that "the decision was merely this, that in its application to that employer, the statute,

which is very similar to our own, was too obscure and indefinite to sustain a charge of crime." Referring to the cases before the court for decision, the court said:

We are met in the case at hand by a problem of a different order. There is no question before us now of punishment for crime. There is merely a question of the regulation of a form of contract. The legislature has said that contractors working for the State or for its civil subdivisions shall bind themselves by a promise which is criticized as indefinite and meaningless. Plainly the Constitution of the United States has nothing to say about regulations of that kind. The fourteenth amendment does not embody a provision that municipal contracts shall be perspicuous and definite. * * * The form of contract being lawful to the extent that it repeats the provisions of the statute, there is no occasion to determine the remedies, criminal or civil, that will be available to the municipality if the claim shall be made hereafter that those provisions have been violated. [*Campbell v. City of New York*, 155 N. E. 628, affirmed in U. S. Supreme Court, 277 U. S. 573.]

Within two months following this decision by the Court of Appeals of New York, the State legislature amended section 220, chapter 50, of the Laws of 1921, by defining "prevailing rate of wage" and "locality." (Acts of 1927, ch. 563.) This act apparently was passed to make the prevailing rate of wages act of New York meet the test as to uncertainty laid down in *Connally v. General Construction Co.*

The *Campbell* case was taken to the Supreme Court of the United States, which court, on April 23, 1928, in a decision without an opinion dismissed the case on the authority of other decisions of the Supreme Court which held that the power of the State and its agencies over municipal corporations within its territory is not restrained by the provision of the fourteenth amendment. (*City of New York v. Campbell*, 277 U. S. 573.) In 1930 the Legislature of the State of New York made the prevailing rate of wage law applicable to work in the elimination of railroad grade crossings.

The Congress of the United States (71st Cong., 3d sess.) passed an act (46 Stat. L. 1494, ch. 411) which was approved March 3, 1931, providing for the payment of the prevailing rate of wages in every contract in excess of \$5,000 "in the construction, alteration, and repair of any public buildings of the United States." In order to effect the purposes of this act, President Hoover in an Executive order (No. 5778) dated January 19, 1932, ordered that in every contract hereafter entered into within the terms of the prevailing rate of wage law there shall be added to the requirement of the act the following stipulations:

It is expressly understood and agreed that the aforesaid wages shall be paid unconditionally in full not less often than once a week and in lawful money of the United States, to the full amount accrued to each individual at time of payment and without subsequent deduction or rebate on any account.

It is expressly understood and agreed that for the purpose of said act every person, while performing work of a laborer or mechanic on the public work covered by this contract, is to be regarded as employed as a laborer or mechanic by the contractor or subcontractor, regardless of any contractual relationship alleged to exist between the contractor or subcontractor and such laborer or mechanic.

It is understood and agreed that the pay rolls of the contractor and all subcontractors and agreements made by the contractor or subcontractor or any other party relating to the employment of laborers or mechanics, or the performance of the work of laborers and mechanics on said building, and to the wages or compensation to be paid therefor, are to be open to inspection by the contracting officer at such times as the latter may elect, provided that such inspection shall not interfere with the proper and orderly prosecution of the work, and that a

clearly legible statement of the rates payable as aforesaid under this contract shall be posted by the contractor in a prominent and easily accessible place at the site of the work so that such statement may be seen at any time by persons engaged on the work.

It is further expressly understood and agreed that if it should be found by the contracting officer that any laborer or mechanic employed by the contractor or any subcontractor on the public work covered by this contract has been or is being paid a rate of wages less than the prevailing rate of wages, as aforesaid, the Government may, by written notice to the contractor, terminate his right to proceed with the work, or such part of the work as to which there has been a failure to pay said prevailing wages. In such event, it is understood and agreed that the Government may take over the work and prosecute the same to completion by contract or otherwise, and that the contractor and his sureties shall be liable to the Government for any excess cost occasioned the Government thereby.

This order shall apply to all such contracts for which bids are hereafter invited.

During the year 1931, several States (Alaska, California, Illinois, Montana, New Jersey, Pennsylvania, Texas, Washington, and Wisconsin) enacted legislation governing the payment of wages to employees engaged on public works. In several cases the law was modeled on the Federal act. The laws of the States which have enacted legislation on the subject of the payment of wages to employees on public works are here reproduced, including the laws of those States which have been declared unconstitutional by the courts.

The opinions of the court in the Arizona and Oklahoma cases have been noted heretofore in the publications of the Bureau of Labor Statistics.

Alaska

ACTS OF 1931

CHAPTER 68

SECTION 1. *Rate of wage.*—That every contractor or subcontractor performing work on any public construction within the Territory of Alaska shall pay not less than the prevailing rate of wages for work of a similar nature in the region in which the work is done.

SEC. 2. *Subcontracts.*—All subcontracts performed on any public construction shall be, or may be, reduced to a basis of day labor for the purpose of determining whether or not such subcontractor or contractors have been paid at not less than the prevailing scale of wage.

SEC. 3. *Determination of wage.*—The Territorial Board of Road Commissioners for the Territory of Alaska is hereby given the authority to say what constitutes the prevailing wage; determine whether or not this law is being violated, and, should this law be violated, the attorney general shall, when so instructed by the Territorial Board of Road Commissioners for the Territory of Alaska, take immediate steps to enforce the provisions of this act.

SEC. 4. *Schedule.*—All contractors or subcontractors coming under the purview of this act shall, before the 10th day of each month, file with the Territorial Board of Road Commissioners, a schedule for the previous month, setting forth in detail the number of men employed, and wages paid on such work, and furnish such other information as the Territorial Board of Road Commissioners for the Territory of Alaska may request.

SEC. 5. *Validity of act.*—Should any part of this act be declared invalid, it shall not invalidate the remainder of the act.

SEC. 6. *Effective date.*—An emergency is hereby declared, and this act shall be in full force and effect immediately upon its passage and approval.

Arizona

REVISED CODE OF 1928

CHAPTER 24

SECTION 1350. *Wage rate, etc.*—* * * Not less than the current rate of per diem wages in the locality where the work is performed shall be paid to persons doing manual or mechanical labor so employed by or on behalf of the State or of any of its political subdivisions. Persons doing manual or mechanical labor employed by contractors or subcontractors in the execution of any contract with the State or with any of its political subdivisions shall be deemed to be employed by or in behalf of the State or of such subdivisions thereof.

[This act was declared unconstitutional in 1931 in the case of *State v. J. J. Garfield Building Co.*, 3 Pac. (2d) 983. See Labor Review for January, 1932, p. 49.]

California

ACTS OF 1931

CHAPTER 397

SECTION 1. *Wage rate.*—Not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the work is performed, and not less than the general prevailing rate of per diem wages for legal holiday and overtime work, shall be paid to all laborers, workmen, and mechanics employed by or on behalf of the State of California, or by or on behalf of any county, city and county, city, town, district, or other political subdivision of the said State, engaged in the construction of public works, exclusive of maintenance work. Laborers, workmen, and mechanics employed by contractors or subcontractors in the execution of any contract or contracts for public works with the State of California, or any officer or public body thereof, or in the execution of any contract or contracts for public works with any county, city and county, city, town, township, district, or other political subdivision of said State, or any officer or public body thereof, shall be deemed to be employed upon public works.

SEC. 2. *Determination of rate.*—The public body awarding any contract for public work on behalf of the State of California, or on behalf of any county, city and county, city, town, township, district, or other political subdivision thereof, or otherwise undertaking any public works, shall ascertain the general prevailing rate of per diem wages in the locality in which the work is to be performed for each craft or type of workman or mechanic needed to execute the contract, and shall specify in the call for bids for said contract, and in the contract itself, what the general prevailing rate of per diem wages in the said locality is for each craft or type of workman needed to execute the contract; also the general prevailing rate for legal holiday and overtime work, and it shall be mandatory upon the contractor to whom the contract is awarded, and upon any subcontractor under him, to pay not less than the said specified rates to all laborers, workmen, and mechanics employed by them in the execution of the contract. The contractor shall forfeit as a penalty to the State or political subdivision, district, or municipality on whose behalf the contract is made or awarded, \$10 for each laborer, workman, or mechanic employed, for each calendar day, or portion thereof, such laborer, workman, or mechanic is paid less than the said stipulated rates for any work done under said contract by him, or by any subcontractor under him, and the said public body awarding the contract shall cause to be inserted in the contract a stipulation to this effect. It shall be the duty of such public body awarding the contract, and its officers and agents, to take cognizance of complaints of all violations of the provisions of this act committed in the course of the execution of the contract and, when making payments to the contractor of moneys becoming due under said contract, to withhold and retain therefrom all sums and amounts which shall have been forfeited pursuant to the herein said stipulation and the terms of this act: *Provided, however*, That no sum shall be so withheld, retained, or forfeited, except from the final payment, without a full investigation by either the division of labor statistics and law enforcement of the State department of industrial relations or by said awarding body; and *Provided further*, That in all cases of contracts with assessment or improvement districts where full payment is made in the form of a single warrant, or other evidence of full payment, after completion and acceptance of the work, the

awarding body shall accept from the contractor in cash a sum equal to, and in lieu of, any amount required to be withheld, retained, or forfeited under the provisions of this section, and said awarding body shall then release the final warrant or payment in full. It shall be lawful for any contractor to withhold from any subcontractor under him sufficient sums to cover any penalties withheld from him by the awarding body on account of the said subcontractor's failure to comply with the terms of this act, and if payment has already been made to him the contractor may recover from him the amount of the penalty or forfeiture in a suit at law.

SEC. 3. *Records to be kept.*—The contractor and each subcontractor shall keep, or cause to be kept, an accurate record showing the names and occupations of all laborers, workmen and mechanics employed by him, in connection with the said public work, and showing also the actual per diem wages paid to each of such workers, which records shall be open at all reasonable hours to the inspection of the public body awarding the contract, its officers and agents, and to the chief of the division of labor statistics and law enforcement of the State department of industrial relations, his deputies, and agents.

SEC. 4. *Definitions.*—Construction work done for irrigation, utility, reclamation, improvement, and other districts, or other public agency or agencies, public officer or body, as well as street, sewer and other improvement work done under the direction and supervision or by the authority of any officer or public body of the State, or of any political subdivision, district, or municipality thereof, whether such political subdivision, district, or municipality thereof, operates under a freeholders' charter heretofore or hereafter approved or not, also any construction or repair work done under contract, and paid for in whole or in part out of public funds, other than work done directly by any public utility company pursuant to order of the railroad commission or other public authority, whether or not done under public supervision or direction, or paid for wholly or in part out of public funds, shall be held to be "public works" within the meaning of this act. The term "locality in which the work is performed" shall be held to mean the city and county, county or counties in which the building, highway, road, excavation, or other structure, project, development, or improvement is situated in all cases in which the contract is awarded by the State, or any public body thereof, and shall be held to mean the limits of the county, city and county, city, town, township, district, or other political subdivisions on whose behalf the contract is awarded in all other cases. The term "general prevailing rate of per diem wages" shall be the rate determined upon as such rate by the public body awarding the contract, or authorizing the work, whose decision in the matter shall be final. Nothing in this act, however, shall be construed to prohibit the payment to any laborer, workman, or mechanic employed on any public work as aforesaid of more than the said general prevailing rate of wages, nor shall anything in this act be construed to permit any overtime work in violation of section 653c of the Penal Code.

SEC. 5. *Violations.*—Any officer, agent, or representative of the State of California, or of any political subdivision, district, or municipality thereof, who willfully shall violate, or omit to comply with, any of the provisions of this act, and any contractor or subcontractor, or agent or representative thereof, doing public work as aforesaid, who shall neglect to keep, or cause to be kept, an accurate record of the names, occupation and actual wages paid to each laborer, workman, and mechanic employed by him, in connection with the said public work or who shall refuse to allow access to same at any reasonable hour to any person authorized to inspect same under this act, shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine of not exceeding \$500, or by imprisonment, not exceeding six months or by both such fine and imprisonment in the discretion of the court.

SEC. 6. *Constitutionality.*—If any section, sentence, clause, or part of this act is for any reason held to be unconstitutional, such decision shall not affect the remaining portions of this act. The legislature hereby declares that it would have passed this act, and each section, sentence, clause, or part thereof, irrespective of the fact that one or more sections, sentences, clauses, or parts be declared unconstitutional.

Delaware

REVISED CODE, 1915

2161. SECTION 46. *Wage rate.*—The wages to be paid for a legal day's work, as hereinbefore defined, to all classes of such laborers, workmen, or mechanics, upon all such public work or upon any material to be used upon or in connection there-

with, shall not be less than the prevailing rate for a day's work in the same trade or occupation in the locality in the State where such public work, on, about, or in connection with which such labor is performed, in its final or completed form, is to be situated, erected, or used. Each such contract hereafter made shall contain a stipulation that each such laborer, workman, or mechanic employed by such contractor, subcontractor, or other person on, about, or upon such public work shall receive such wages as hereinbefore provided. Each contract for such public work hereafter made shall contain a provision that the same shall be void and of no effect unless the person or corporation making or performing the same shall comply with the provisions of sections 44 to 47, inclusive, of this chapter; and no such person or corporation shall be entitled to receive any sum, nor shall any officer, agent, or employee of the municipal corporation of the city of Wilmington pay the same, or authorize its payment, from the funds under his charge or control, to any such person or corporation, for work done upon any contract which in its form or manner of performance violates the provisions of sections 44 to 47, inclusive, of this chapter.

[This act applies only to the city of Wilmington.]

Hawaii

REVISED LAWS OF 1925

SECTION 178 (as last amended 1929, Act No. 86). *Wage rate*.—The minimum pay of laborers on public works throughout the Territory of Hawaii shall be not less than \$3 per day.

Idaho

COMPILED STATUTES, 1919

SECTION 2324 (as amended 1923, ch. 93). *Wage rate*.—* * * *Provided, further*, that not less than the current rate of per diem wages in the locality where the work is performed shall be paid to the laborers, workmen, mechanics, and other persons so employed by or on behalf of the State of Idaho, or any county, city, township, or other municipality of said State; and laborers, workmen, mechanics, and other persons employed by contractors or subcontractors in the execution of any such contract or contracts with the State of Idaho, or with any county, city, township, or other municipality thereof, shall be deemed to be employed by or on behalf of the State of Idaho, or of such county, city, township, or other municipality thereof, and any person who certifies up for payment the salary or wages of any laborer, workman, mechanic, or other person working for the State of Idaho, or for any county, city, township, or other municipality therein, at a greater number of hours per day than the number put in at actual labor by such person, shall be guilty of a misdemeanor.

Illinois

ACTS OF 1931

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SECTION 1. *Wage rate*.—That every contract to which the State or any political division or subdivision thereof, including departments, counties, townships, villages, municipalities and, also, districts, boards, and commissions created pursuant to law, is a party and which requires or involves the employment of laborers or mechanics in the construction, alteration, and/or repair of any public work, for or on behalf of the State or any of its political divisions and subdivisions as aforesaid, shall contain a provision to the effect that the rate of wage for all laborers and mechanics employed by the contractor or any subcontractor on the public work covered by the contract shall be not less than the prevailing rate of wages for work of a similar nature in the city, town, village, or other civil division of the State in which the public work is located, and that no laborer or mechanic employed on the public work covered by the contract shall be required or permitted to work more than eight hours in any one calendar day, except in cases of extraordinary emergency caused by fire, flood, or danger to life and property, and except such extra time as may be necessary in the placing or loading of materials or in the starting or placing of any equipment necessary to permit the working of the 8-hour period, or such extra time as may be required to properly finish or protect any perishable work laid during the above-mentioned 8-hour period, or the repairing of or cleaning or housing of necessary equipment, such extra time to be

paid for at overtime rates, and a further provision that in case any dispute arises as to what are the prevailing rates of wages for work of a similar nature applicable to the contract which can not be adjusted by the contracting officer of the State or political division or subdivision thereof as aforesaid, the matter shall be referred to the director of the department of labor for determination and his decision thereon shall be conclusive on all parties to the contract except as provided in section 4.

SEC. 2. *Determination of rate.*—It shall be the duty of the public body having authority to contract for the public work in each case to ascertain the prevailing rate of wages as referred to herein, by such investigations as such public body may deem necessary, and to state such prevailing rate of wages in the advertisement for proposal for the public work. For the purposes of this act, the rate thus ascertained and stated shall be deemed to be the prevailing rate of wages as relating to the particular public work provided for in said proposal: *Provided*, That should not less than 10 taxpayers of the political subdivision affected in a signed complaint question the wage so determined, the matter shall be referred to an appeal board appointed in the manner and with the powers set forth in section 4 of this act, and the finding of such appeal board shall immediately be made known to those who are bidding upon the work.

SEC. 3. *Violations.*—Every contract entered into pursuant to section 1 of this act shall contain a clause to provide that if the contractor or subcontractor shall refuse or fail to pay not less than the prevailing rate of wage as provided in said section 1, the difference between such prevailing rate of wages and the wages actually paid to the mechanics or laborers shall be deducted from the amount to be paid to the contractor under the terms of the contract. The amount so deducted shall revert to the unappropriated funds of the State, or of the contracting political division or subdivision thereof, as the case may be: *Provided*, That every contract entered into pursuant to this act shall contain a clause providing that for a second violation of such contract by the refusal or neglect to pay not less than the prevailing rate of wages provided for in the contract as required by the act, or for a second violation of that part of the contract relating to working hours as provided in section 1 of the act, the contract on which said violation has occurred shall be declared forfeited. Such violation shall be sufficient cause to bar any contractor under any prequalification law or regulation governing contracts for public work.

SEC. 4. *Investigation.*—The director of labor may, upon his own initiative and shall upon a signed complaint of not less than 10 taxpayers investigate any public work to ascertain whether the contract therefor has been made and is being complied with in accord with the provisions of this act. Upon finding any violation of this act or of any contract made hereunder, the director of labor shall direct the enforcement of section 3 hereof: *Provided*, That an appeal from any finding and decision of the director of labor may be taken within 10 days from the date of said finding and decision to an appeal board to be convened on call of the said director. Such appeal board shall, in each case, consist of three members, to be appointed by the governor from a list of persons to be submitted by the public body which is a party to the contract, by the president of the concerned contractors group designated by the director of public works and buildings, and by the president of the largest federated body of organized labor in the State designated by the director of labor. The finding of all appeal boards shall be subject to such review by the courts as justice may require.

SEC. 4a. *Act not applicable.*—This act shall not apply to the manufacture or transportation, loading or unloading, of articles and materials produced elsewhere than at the site where the public work is under construction, alteration, or repair.

SEC. 5. *Preexisting contract.*—This act shall not affect any contract existing on July 1, 1931.

[This act was declared unconstitutional by the Illinois Supreme Court in the case of *Mayhew v. Nelson* (178 N. E. 921). A digest of this case will appear in the March, 1932, *Labor Review*.]

Kansas

REVISED STATUTES, 1923

SECTION 44-201 (as amended 1931, ch. 214). *Wage rate.*—"The current rate of per diem wages" for the intents and purposes of this act shall be the rate of wage paid in the locality as hereinafter defined to the greater number of workmen, laborers, or mechanics in the same trade, occupation, or work of a similar nature. In the event that it be determined that there is not a greater number in the

same trade, occupation, or on similar work paid at the same rate, then the average rate paid to such laborers, workmen, or mechanics, in the same trade, occupation, or work shall be the current rate. The "locality" for the purpose of this act shall be the county wherein the physical work is being performed: *Provided*, That where cities of the first or second class are located in said counties, each such city shall be considered a locality. Eight hours shall constitute a day's work for all laborers or other persons employed by or on behalf of the State of Kansas or any municipality of said State, except in cases of extraordinary emergency which may arise, in time of war, or in cases where it may be necessary to work more than eight hours per calendar day for the protection of property or human life. Laborers or other persons so employed, working to exceed eight hours per calendar day, shall be paid on the basis of eight hours constituting a day's work. Not less than the current rate of per diem wages in the locality where the work is performed shall be paid to laborers or other persons so employed. And laborers and other persons employed by contractors or subcontractors in the execution of any contract or contracts with the State of Kansas or any municipality thereof shall be deemed to be employed by or on behalf of the State or such municipality so far as the hours of work and compensation herein provided are concerned. That the contracts hereafter made by or on behalf of the State of Kansas or by or on behalf of any county, city, township, or other municipality of said State with any corporation, person, or persons which may involve the employment of laborers, workmen, or mechanics shall contain a stipulation that no laborer, workmen [workman], or mechanic in the employ of the contractor, subcontractor, or other person doing or contracting to do the whole or a part of the work contemplated by the contract shall be permitted or required to work more than eight hours in any one calendar day except in cases of extraordinary emergency (as defined in this act); such contracts shall contain a provision that each laborer, workman, or mechanic employed by such contractor, subcontractor, or other person about or upon such public work shall be paid the wages herein provided.

Kentucky

STATUTES (CARROLL'S), 1930

SECTION 4329. *Wage rate.*—* * * Such employees may receive such compensation per day as may be allowed by the fiscal court: *Provided*, That every able-bodied man employed to do manual or day labor under the provisions of this chapter on the public roads shall receive the prevailing wages of the vicinity in which the work is to be done, which shall not be less than \$1 nor more than \$3 per day, according to services rendered, except in the case of necessary skilled labor, foremen, and assistant engineers, who shall receive not more than \$5 per day: *Provided*, That a day's work shall consist of not less than eight hours of actual labor.

[This act applies only to employment on public roads.]

Maryland

PUBLIC LOCAL LAW—CODE OF 1888

ARTICLE 4

SECTION 31a (as amended 1910, ch. 94, p. 642). *Hours of labor, wage rate, etc.*—* * * *Provided, further*, That not less than the current rate of per diem wages in the locality where the work is performed shall be paid to laborers, workmen, or mechanics employed by contractors or subcontractors in the execution of any contract or contracts in any public work within the city of Baltimore.

Massachusetts

GENERAL LAWS, 1921

CHAPTER 149

SECTION 26 (as amended 1931, ch. 377). *Wage rate.*—* * * The wages for a day's work paid to mechanics and teamsters employed in the construction, addition to, or alteration of public works as aforesaid shall be not less than the customary and prevailing rate of wages for a day's work in the same trade or occupation in the locality where such public works are under construction or

being added to or altered: *Provided*, That no town in the construction, addition to, or alteration of public works shall be required to give preference to veterans, not residents of such town, over citizens thereof. This section shall also apply to regular employees of the Commonwealth or of a county, town, or district when such employees are employed in the construction, addition to, and alteration of public works for which special appropriations are provided. Any person or contractor who knowingly and willfully violates this section shall be punished by a fine of not more than \$100.

SEC. 27. *Disputes as to wages*.—In case of any dispute as to such customary and prevailing rate of wages the department shall investigate the wages paid in the trade or occupation in the locality in which such public works are under construction and decide what rate of wages shall be paid.

Montana

ACTS OF 1931

CHAPTER 102

SECTION 1. *Wage rate*.—In all contracts hereafter let for State, county, municipal, and school construction, repair, and maintenance work under any of the laws of this State there shall be inserted in each of said contracts a provision by which the contractor must give preference to the employment of bona fide Montana residents in the performance of said work, and that the said contractor must further pay the standard prevailing rate of wages in effect as paid in the county seat of the county in which the work is being performed, and no contract shall be let to any person, firm, association, or corporation refusing to execute an agreement with the above-mentioned provisions in it: *Provided*, That, in contracts involving the expenditure of Federal aid funds this act shall not be enforced in such a manner as to conflict with or be contrary to the Federal statutes prescribing a labor preference to honorably discharged soldiers, sailors, and marines, and prohibiting as unlawful any other preference or discrimination among citizens of the United States.

SEC. 2. *Definition*.—"Labor" is hereby defined to be all services performed in the construction, repair, or maintenance of all State, county, municipal, and school work and does not include engineering, superintendence, management, or office or clerical work.

A bona fide resident of Montana is hereby declared to be a person who at the time of his said employment and immediately prior thereto has lived in this State in such a manner and for such time as is sufficient to clearly justify the conclusion that his past habitation in this State has been coupled with intention to make it his home. Sojourners, or people who come to Montana solely in pursuance of any contract or agreement to perform such labor, shall under no circumstances be deemed to be bona fide residents of Montana within the meaning and for the purpose of this act.

SEC. 3. *Violations*.—If any person, firm, or corporation shall fail to comply with the provisions of this act the State, county, municipal, or school officers who have executed the contract shall retain \$500 of the contract price as liquidated damages for the violation of the terms of the contract and said money shall be credited to the proper funds of the State, county, municipal, or school districts. In all contracts entered into under the provisions of this act at least \$500 of the contract price shall be withheld at all times until the termination of the contract.

SEC. 4. *Saving clause*.—If any part of this act shall be held to be unconstitutional such decision shall not affect the validity of any other provisions of this act.

SEC. 5. *Repealing clause*.—All acts and parts of acts in conflict herewith are hereby repealed.

SEC. 6. *Effective date*.—An emergency existing therefor, which emergency is hereby declared to exist, this act shall take effect and be in force and effect from and after its passage and approval.

Nevada

REVISED LAWS, 1912

SECTION 3481 (as amended 1929, ch. 44). *Wage rate*.—On all public works carried on in the erection of public buildings by or for the State of Nevada, or by any individual, firm, company, or corporation under contract with the State of Nevada, unskilled labor shall be paid for at a rate of not less than \$4 per 8-hour day for each male person over the age of 18 years who shall be employed at such

New Jersey

ACTS OF 1931

CHAPTER 242

SECTION 1. *Wage rate, etc.*—That every contract in excess of \$5,000 in amount, to which the State or any political subdivision thereof is a party, which requires or involves the employment of laborers or mechanics in the construction, alteration, and/or repair of any public buildings of the State or any political subdivision thereof within the geographical limits of the State shall contain a provision to the effect that the rate of wage for all laborers and mechanics employed by the contractor or any subcontractor on the public buildings covered by the contract shall be not less than the prevailing rate of wages for work of a similar nature in the city, town, village, or other civil division of the State in which the public buildings are located, and a further provision that in case any dispute arises as to what are the prevailing rates of wages for work of a similar nature applicable to the contract which can not be adjusted by the contracting officer, the matter shall be referred to the commissioner of labor for determination and his decision thereon shall be conclusive on all parties to the contract: *Provided*, That in case of national emergency the governor is authorized to suspend the provisions of this act.

SEC. 2. *Effective date.*—This act shall take effect 30 days after its passage but shall not affect any contract then existing or any contract that may thereafter be entered into pursuant to invitations for bids that are outstanding at the time of the passage of this act.

New York

ACTS OF 1921

CHAPTER 50

SECTION 220. *Hours and wages.*—[Subdivisions (1) and (2) limit a legal day's work to eight hours on public contracts.]

(3) *Wage rate.*—The wages to be paid for a legal day's work, as hereinbefore defined, to laborers, workmen, or mechanics upon such public works, or upon any material to be used upon or in connection therewith, shall be not less than the prevailing rate for a day's work in the same trade or occupation in the locality within the State where such public work on, about, or in connection with which such labor is performed in its final or completed form is to be situated, erected, or used and shall be paid in cash. Such contracts shall contain a provision that each laborer, workman, or mechanic employed by such contractor, subcontractor, or other person about or upon such public work shall be paid the wages herein provided.

(4) (As last amended 1931, ch. 786.) *Employees exempted.*—This section shall not apply to—

- (a) Stationary firemen in State hospitals;
 - (b) Other persons regularly employed in the State institutions, except mechanics;
 - (c) Engineers, electricians, and elevator men in the division of public buildings of the department of public works during the annual session of the legislature;
 - (d) Employees engaged in the construction, maintenance, and repair of highways and in waterworks construction outside the limits of cities and villages.
- The provisions of this subdivision shall not be operative or effective upon any work described therein performed by employees, other than employees engaged in supervisory labor, under a contract hereafter executed for which requests for bids are advertised after this act takes effect and prior to December 1, 1932.

(5) (Subdivision 5 repealed and new subdivision 5 added, 1927, ch. 563.) *Definitions.*—(a) The "prevailing rate of wage," for the intents and purposes of this article, shall be the rate of wage paid in the locality as hereinafter defined to the majority of workmen, laborers, or mechanics in the same trade or occupation. In the event that it be determined that there is not a majority in the same trade or occupation paid at the same rate, then the rate paid to the greater number in such trade or occupation shall be the prevailing rate: *Provided*, Such greater number constitutes at least 40 per centum of the laborers, workmen, or mechanics engaged in such trade or occupation; in the event there is less than 40 per centum of laborers, workmen, or mechanics engaged in the same trade or occupation in the same locality paid the same rate, then the average rate paid to such laborers, workmen, or mechanics in the same trade or occupation shall be the prevailing rate.

(b) The "locality" for the purposes of this article shall be the town, city, village, or other civil division of the State wherein the physical work is being performed.

(c) The "fiscal officer," as used herein, shall be deemed to be, on public work performed by or on behalf of the State or a county or a village, or other civil division of the State except a city, the industrial commissioner; and on public work performed by or on behalf of a city, the comptroller or other analogous officer of such city.

(6) (Subdivisions 6, 7, 8, 9 added 1927, ch. 563.) *Filing of schedule.*—The fiscal officer may, and on the written request of any interested person shall, require any person or corporation performing such public work to file with such fiscal officer a schedule of the wages to be paid to such laborers, workmen, or mechanics. Any such person or corporation shall, within 10 days after the receipt of written notice of such requirement, file with the fiscal officer such schedule of wages.

(7) *Investigation.*—The fiscal officer as herein defined may, on his own initiative, and must, on a verified complaint in writing of any person interested, cause an investigation to be made to determine the prevailing rate of wages in the same trade or occupation in the locality within the State where such public work is being performed, or the hours of labor performed by the workmen, laborers, and mechanics employed on such public work, or both. The fiscal officer or his agents, examiners, and inspectors may examine or cause to be examined the books and records pertaining to the rate of wages paid to the laborers, workmen, and mechanics on said public work and the hours of labor performed by such laborers, workmen, and mechanics on said public work.

(8) *Hearings.*—Before proceeding under a complaint presented as provided in subdivision 7, or before making any order or determination upon an investigation made upon his own initiative, the fiscal officer shall order a hearing thereon at a time and place to be specified and shall give notice thereof, together with a copy of such complaint or the purpose thereof, or a statement of the facts disclosed upon such investigation, which notice shall be served personally or by mail on any person or corporation affected thereby; such person or corporation shall have an opportunity to be heard in respect to the matters complained of at the time and place specified in such notice, which time shall be not less than five days from the service of the notice personally or by mail. The fiscal officer in such investigation shall be deemed to be acting in a judicial capacity and shall have the right to issue subpoenas, administer oaths, and examine witnesses. Such subpoenas shall be issued and served as provided in the civil practice act and shall have the same effect as if issued out of a court of record of the State. Such investigation and hearing shall be expeditiously conducted, and upon such hearing and investigation the fiscal officer shall determine the issues raised thereon and shall make and file an order in his office stating such determination, and forthwith serve a copy of such order, with a notice of the filing thereof, upon the parties to such proceeding, personally or by mail. Upon the entry of such order affecting either the hours of labor or rate of wages any party to the proceeding aggrieved thereby may review the said proceedings by a writ of certiorari within 30 days from the notice of the filing of the said order in the office of the fiscal officer. When a final determination has been reached, if the determination is in favor of the complainant and involves or relates to the rate of wages paid on such public work, the complainant or any other person affected may within three months after the service of notice of the filing of said final order institute an action against the person or corporation found violating this act for the recovery of the difference between the sum actually paid and the amount which should have been paid as determined by said final order, from and after the date of the filing of said verified complaint or of filing report of investigation made on his own initiative with the fiscal officer, as hereinbefore provided.

(9) *Violations.*—When a final determination has been rendered, any person or corporation that willfully refuses thereafter to pay the prevailing rate of wages so determined or willfully employs on such public work, laborers, workmen, or mechanics more than the hours per day determined by said order, until modified by order of the fiscal officer or court, and thereby violates the provisions of this section shall be guilty of a misdemeanor and upon conviction shall be punished, for a first offense by a fine of \$500 or by imprisonment for not more than 30 days, or by both such fine and imprisonment; for a second offense by a fine of \$1,000, and in addition thereto the contract on which the violation has occurred shall be forfeited; and no such person or corporation shall be entitled to receive any sum, nor shall any officer, agent, or employee of the State or of a municipal corporation

pay the same or authorize its payment from the funds under his charge or control to any such person or corporation for work done upon any contract, on which the contractor has been convicted of second offense in violation of the provisions of this section.

ACTS OF 1930

CHAPTER 804.—*Hours of labor, wages, grade crossings*

[This act amends ch. 50, Acts of 1921 (ch. 31, Consol. L.) by adding a new article (8-A).]

SEC. 225. [Makes applicable the 8-hour day on grade crossing elimination work.]

SEC. 226. *Wage rate.*—The wages to be paid for a day's work of eight hours as referred to hereinbefore, to laborers, workmen, or mechanics upon such public works shall be not less than the prevailing rate for a day's work in the same trade or occupation in the locality within the State where such public work on, about, or in connection with which such labor is performed in its final or completed form is to be situated, erected, or used and shall be paid in cash. Every contract for such elimination work, hereafter entered into, shall contain a provision that each laborer, workman, or mechanic employed by a contractor, subcontractor, or other person about or upon such public work, shall be paid the wages herein provided.

SEC. 227. *Enforcement of act.*—The procedure for ascertaining and determining the hours of labor and the prevailing rate of wage shall be as prescribed by section 220 of this chapter, except that the "fiscal officer," referred to therein shall in every instance, for the purposes of this article be the State industrial commissioner.

Upon the entry of any order of the industrial commissioner affecting either such hours of labor or rate of wages, any party to the proceeding aggrieved thereby may make application for certiorari within 30 days from the notice of the filing of such order in the office of the industrial commissioner. If such order is not reviewed by certiorari or is so reviewed and confirmed and the determination is in favor of the complainant and involves or relates to the rate of wages paid on such public work, the complainant or any other person affected may within three months after the service of notice of the filing of such order, or the determination upon certiorari if the order is reviewed, institute an action against the person or corporation found violating this article for the recovery of the difference between the sum actually paid and the amount which should have been paid as determined by such order for the period following the date of the filing with the industrial commissioner of the complaint or of the report of investigation made by the industrial commissioner on his own initiative.

When an order of the industrial commissioner has been made, any person or corporation that willfully refuses thereafter to pay the prevailing rate of wages determined by said order or willfully employs on such public work, laborers, workmen, or mechanics more than the hours per day determined by such order until such order has been changed by the industrial commissioner or by the court after adjudication upon the merits, shall be guilty of a misdemeanor and upon conviction shall be punished, for the first offense by a fine of \$500 or by imprisonment for not more than 30 days, or by both such fine and imprisonment; for a second offense by a fine of \$1,000 or by imprisonment for not more than 90 days or by both such fine and imprisonment, and after conviction of a second offense no such person or corporation shall be entitled to receive any sum of money nor shall any officer, agent, or employee of the State or of a municipal corporation or of a board or commission appointed pursuant to law pay the same or authorize its payment from the funds under his charge or control to any such person or corporation or to any other person or corporation for or on account of work done upon any such contract.

Oklahoma

COMPILED STATUTES, 1921

SECTION 7255. *Wage rate, etc.*—* * * *Provided further*, that not less than the current rate of per diem wages in the locality where the work is performed shall be paid to laborers, workmen, mechanics, prison guards, janitors in public institutions, or other persons so employed by or on behalf of the State, or any county, city, township, or other municipality, and laborers, workmen, mechanics, or other

persons employed by contractors or subcontractors in the execution of any contract or contracts with the State, or with any county, city, township, or other municipality thereof, shall be deemed to be employed by or on behalf of the State, or of such county, city, township, or other municipality.

[This law was declared unconstitutional by the United States Supreme Court on January 4, 1926, in the case of *Connally v. General Construction Co.*, 269 U. S. 385. See Bureau of Labor Statistics Bul. No. 417, p. 139.]

Pennsylvania

ACTS OF 1931

Act No. 144

[Amends the Administrative Code of 1929, P. L. 177]

SECTION 522. *Wage rate.*—The specifications upon which contracts are entered into by the Commonwealth for the construction, alteration, or repair of any public work shall, as far as possible, contain the minimum wage or wages which may be paid by the contractor or his subcontractors for the work performed by laborers and mechanics employed on such public work, and such laborers or mechanics shall be paid not less than such minimum wage or wages.

Every contract entered into upon such specifications shall stipulate a penalty of an amount equal to twice the difference between the minimum wage contained in said specifications and the wage actually paid to each such laborer or mechanic for each day during which he has been employed at a wage less than that prescribed in said specifications. Every officer or person designated as inspector of the work to be performed under any such contract, or to aid in the enforcing of the fulfillment thereof, shall, upon observation or investigation, report to the department, board, or commission which made the contract award, all violations of minimum wage stipulations, together with the name of each laborer or mechanic who has been paid less than that prescribed by the specifications, and the day or days of such violation. All such penalties shall be withheld and deducted, for the use of the Commonwealth from any moneys due the contractor, by the officer or person whose duty it shall be to authorize the payment of moneys due such contractor, whether the violation of the minimum wage stipulation of the specifications is by the contractor or by any of his subcontractors.

Porto Rico

ACTS OF 1923

Act No. 11

SECTION 1 (as amended 1925, Act No. 54). *Wage rate, etc.*—In all public works constructed in Porto Rico, whether by contract or by administration, where the insular government, any municipality of Porto Rico, or any commission or board approved by virtue of law, is an interested party, and where it may be necessary to employ laborers, workmen, or mechanics, these shall not be permitted or compelled to work more than eight hours daily in any natural day, excepting in cases of extraordinary emergency caused by fire, inundation, or danger to lives or property; and every laborer, workman, or mechanic employed in any insular or municipal public work shall receive not less than \$1 for each legal day's work performed.

Texas

REVISED CIVIL STATUTES, 1925

ARTICLE 5166. *Wage rate.*—* * * Not less than the current rate of per hour wages for like work in the locality where the work is being performed shall be paid to the laborers, workmen, mechanics, or other persons so employed by or on behalf of the State, or for any county, municipality, or other legal or political subdivision of the State, county, or municipality, and every contract hereafter made for the performance of work for the State, or for any county, municipality, or other legal or political subdivision of the State, county, or municipality, must comply with the requirements of this chapter. Nothing in the foregoing article shall prevent any person, or any officer, agent, or employee of a person or corporation, or association of persons from making mutually satisfactory contracts as to the hours of labor, at the rates of pay as herein provided.

ACTS OF 1931

CHAPTER 46

SECTION 1. *Wage rate.*—Hereafter the State highway commission in letting contracts for the construction, maintenance, or improvement of any designated State highway, shall be authorized to require that all contracts for any such work, contain a provision that no person will be employed, by the contractor, to perform manual labor in the course of the construction, maintenance or improvement of any such highway at a wage of less than 30 cents per hour, and that any violation of any such provision of the contract by the contractor, subcontractor, or other person subject to such provision of the contract, shall authorize the commission to withhold from any money due the contractor a sufficient sum to pay any person such minimum wage for any labor performed, or the commission may, for the benefit of any such person, recover such sum on the bond of the contractor, if it does not have in its possession money owing the contractor, applicable for such purposes. That citizens of the United States and of the county wherein the work is being proposed shall always be given preference in such employment: *Provided also,* That all other departments, bureaus, commissions and institutions of the State of Texas in all construction work of every character requiring employment of day labor shall likewise be authorized and empowered to exercise the same authority herein conferred on the State highway commission.

SEC. 2. *Advertising for bids.*—Hereafter, in advertising for bids for the construction, maintenance, or improvement of any designated State highway, the commission, in the event it desires to exercise the authority herein conferred to require a provision for such minimum wage, shall so state in the advertisement, so that all bidders may be aware of such requirement in submitting bids for such work.

SEC. 3. *Effective date.*—The fact that there are a great number of people of the State out of employment and of necessity have to work at whatever wage is offered, and that some contractors on public work are requiring laborers to work at less than it costs to live, creates an emergency and an imperative public necessity that the constitutional rule requiring all bills to be read on three several days in each house, be, and the same is, hereby suspended, and that this act take effect and be in force from and after its passage; and it is so enacted.

Washington

ACTS OF 1931

CHAPTER 1.—*Establishment of public utility districts*

SECTION 8. *Wage rate.*— * * * Every contractor and subcontractor performing any work for said public utility districts or local utility districts within said public utility district shall pay or cause to be paid to its employees on such work or under such contract or subcontract not less than the minimum scale fixed by the resolution of the commission prior to the notice and call for bids on such work. The commission, in fixing such minimum scale of wages shall fix the same as nearly as possible to the current prevailing and going wages within the district for work of like character.

[Initiative provision passed at general election November 4, 1930; proclamation signed by the governor December 3, 1930.]

Wisconsin

ACTS OF 1931

CHAPTER 269

SECTION 1. *Rate of wage, etc.; public buildings.*—(1) Each contract hereafter made for the erection, construction, or remodeling of any public building to which the State or any department thereof, is a party shall contain a stipulation that no laborer, workman, or mechanic in the employ of the contractor or of any subcontractor, agent, or other person, doing or contracting to do all or a part of the work, shall be paid less than the prevailing wage rate in the same or most similar trade or occupation in the county wherein such public building is situated, which rate shall be set forth specifically in the contract.

(2) The prevailing wage rate in any trade or occupation in any county shall be the rate paid to a majority of all persons employed in such trade or occupation

in such county, or if there is no rate at which a majority are employed then the prevailing wage rate shall be the rate which is paid to a larger number of employees than any other rate paid in such county for work in such trade or occupation.

(3) Before bids are asked for any work to which this section is applicable, the department or officer having the authority to prescribe the specifications, shall request the industrial commission to ascertain the prevailing wage rate in all trades and occupations required in the work under contemplation in the county in which the work is to be done. Unless it shall within the year have made a determination of the prevailing wage rate in such trades or occupations in such county, the industrial commission shall thereupon conduct a public hearing in such county and make such further investigations as may be necessary to enable it to ascertain the prevailing wage rate for each such trade or occupation. It shall make its determination within 30 days after receipt of the request and shall file the same with the department or officer applying therefor.

(4) Any officer or employee of the State who shall publish any specifications or execute any contract for the erection, construction, or remodeling of any public building to which the State or any department is a party without complying with this section and any contractor, subcontractor, or agent thereof who, after executing a contract in compliance with this section, shall pay to or permit any agent or subcontractor to pay any laborer, workman, or mechanic in his or their employ a lesser wage for work done under such contract than the prevailing wage rate as set forth in the contract shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine not exceeding \$200 or by imprisonment for not more than six months, or by both such fine and imprisonment.

(5) It shall be the duty of the industrial commission to enforce the provisions of this section. To this end it may demand, and it shall be the duty of every contractor and subcontractor to furnish to the commission, copies of any or all pay rolls and may examine all records relating to the wages paid laborers, workmen, or mechanics on work to which this section is applicable.

SEC. 2. *Effective date.*—This act shall take effect upon passage and publication.

CHAPTER 432

SECTION 1. *Rate of wage, etc., State highway.*—(1) Every contract to which the State is a party for the construction or improvement of any highway shall contain a stipulation that no laborer in the employ of the contractor or of any subcontractor, agent, or other person doing or contracting to do all or a part of the work shall be permitted to work a longer number of hours per day or be paid a lesser rate of wages than the prevailing hours of labor and rate of wages in the county or counties where the work is to be done, as set forth specifically in the contract.

(2) The industrial commission shall annually ascertain and determine the prevailing hours of labor and the prevailing wage rate for common labor and for such other classes of labor as the highway commission may deem advisable in all counties in which any highway construction is contemplated during the ensuing season. The highway commission shall notify the industrial commission of its contemplated construction program as soon as this shall have been determined upon and the industrial commission shall within 30 days thereafter advise the highway commission what are the prevailing hours of labor and the prevailing wage rate for common labor and for such other classes of labor as may have been specified in the request of the highway commission in all counties in which highway construction is contemplated. If a contemplated construction project extends into more than one county, the prevailing hours of labor and the prevailing wage rates shall be ascertained and determined jointly for the several counties into which the project extends, so that there shall be but one standard for the entire project.

(3) By the term "prevailing hours of labor" is meant the hours of labor per day worked by a larger number of workmen of the same grade employed within the county or counties (if the contemplated highway improvement extends into more than one county) than are employed for any other number of hours per day. By the term "prevailing wage rate" is meant the rate of pay per hour or per day paid to a larger number of workmen engaged in the same grade of labor at outdoor work within such county or counties than any other rate of pay. In no event, however shall the "prevailing wage rate" for any class of labor be deemed to be less than a reasonable and living wage.

(4) Before making its determination of the prevailing hours of labor and prevailing wage rate for common labor and such other classes of labor as may be specified by the highway commission in all of the several counties in which highway construction is expected to be carried on during the ensuing season, the indus-

trial commission shall conduct one or more public hearings of which notice shall be given at least 10 days in advance in the official State paper. It shall also be the duty of the industrial commission to conduct such investigations as may be necessary to keep itself advised at all times as to the hours of labor and wage rates in all parts of the State for all classes of labor commonly employed in highway construction work.

(5) In the event that the highway commission shall deem the determination of the industrial commission as to the prevailing hours of labor and prevailing wage rates in any county to have been incorrect, it may appeal to the governor, whose determination shall be final.

(6) The prevailing hours of labor and the prevailing wage rate for common labor and for such other classes of labor as the highway commission shall deem advisable shall be specifically set forth in the specifications, advertisements, and contracts for each highway construction contract to which the State is a party.

(7) Any contractor, subcontractor, or agent thereof who, after executing a contract in compliance with this section, shall employ or knowingly permit any laborer, workman, or mechanic to work a longer number of hours per day or pay or knowingly permit to be paid to any such laborer, workman, or mechanic a lesser wage rate than the prevailing hours of labor and the prevailing wage rate as set forth in the contract, shall be guilty of a misdemeanor and upon conviction shall be punished by a fine not exceeding \$200, or by imprisonment for not more than six months, or by both such fine and imprisonment. Upon a second conviction hereunder, in addition to such penalty, the contract on which the violation shall have occurred shall be forfeited and the contractor or subcontractor so convicted of a second offense shall not be entitled to receive any further payment under such contract.

(8) It shall be the duty of the highway commission to enforce the provisions of this section. To this end it may demand, and it shall be the duty of every contractor and subcontractor to furnish to the commission, copies of any or all pay rolls and may examine all records relating to the wages paid laborers, workmen, or mechanics on work to which this section is applicable.

SEC. 2. *Effective date.*—This act shall take effect upon passage and publication.

CHAPTER 441

SECTION 1. *Rate of wage, etc., county sewerage work.*—The commissioners of the metropolitan sewerage commission created by chapter 554 of the Laws of 1921 and the commissioners of the sewerage commission created by chapter 608 of the Laws of 1913 operating in counties which have a population of 500,000 or more, shall establish a minimum wage scale for all employees and laborers of such commissions which shall not be less than the prevailing wage paid to similar employees of the county and municipalities of such county. The commissioners of such commissions shall insert in all contracts for work to be done for the commissions a provision requiring that a minimum wage scale be paid by contractors on all work done for such commissions, which minimum wage scale so established shall not be less than the prevailing wage scale paid by contractors doing work for the county and municipalities of such county.

SEC. 2. *Effective date.*—The provisions of this act in so far as they affect the commissioners of the sewerage commission created by chapter 608 of the Laws of 1913 shall take effect upon passage and publication. The provisions of this act affecting the commissioners of the metropolitan sewerage commission created by chapter 554 of the Laws of 1921 shall take effect January 1, 1932.

United States

SEVENTY-FIRST CONGRESS, THIRD SESSION, 1931

CHAPTER 411 (46 U. S. Stat. L. 1494).—*Rate of wages—Public building contracts*

That every contract in excess of \$5,000 in amount, to which the United States or the District of Columbia is a party, which requires or involves the employment of laborers or mechanics in the construction, alteration, and/or repair of any public buildings of the United States or the District of Columbia within the geographical limits of the States of the Union or the District of Columbia, shall contain a provision to the effect that the rate of wage for all laborers and mechanics employed by the contractor or any subcontractor on the public buildings covered by the contract shall be not less than the prevailing rate of wages for work of a similar nature in the city, town, village, or other civil division of the State in

which the public buildings are located, or in the District of Columbia, if the public buildings are located there, and a further provision that in case any dispute arises as to what are the prevailing rates of wages for work of a similar nature applicable to the contract which can not be adjusted by the contracting officer, the matter shall be referred to the Secretary of Labor for determination and his decision thereon shall be conclusive on all parties to the contract: *Provided*, That in case of national emergency the President is authorized to suspend the provisions of this act.

SEC. 2. *Effective date.*—This act shall take effect 30 days after its passage but shall not affect any contract then existing or any contract that may thereafter be entered into pursuant to invitations for bids that are outstanding at the time of the passage of this act.

Employment Contract With Artist Held Not Breached By Making Objections or Suggestions

IN AN action by a motion-picture actress for breach of employment contract due to her objections and suggestions concerning the production of scenes, the District Court of Appeal for the Second District of California held that such objections and suggestions were in the interest of her employer and contemplated by the contract. (*Goudal v. Cecil B. DeMille Pictures Corporation*, 5 Pac. (2d) 432.)

The contract of employment covered a period of one year, beginning May 19, 1925, with the option to the corporation of four yearly extensions of the contract, each yearly extension to be at a specified substantial increase in compensation. The actress entered upon her duties and the corporation twice exercised its option, extending the period of employment to May 18, 1928. However, on September 10, 1927, she was discharged, and thereupon filed suit against her employer to recover damages for the alleged wrongful discharge.

The basic question before the court was whether such termination of the employment was wrongful or whether it was justified by the acts of the respondent violative of the terms of the contract. The Superior Court of Los Angeles County found that there had been no violation of the contract and that her discharge was not justified, and the corporation appealed to the district court of appeal for the second district.

The claim that respondent failed or refused to perform her parts as requested, thereby violating the contract, was based upon many instances. The company cited occasions when respondent, instead of "unquestioningly performing as directed by the director in charge, called attention to inconsistencies, inaccuracies, possible improvements or lack of artistic quality in the performance called for as they appeared to her." If the director did not make the suggested change, the actress took the question up with the president of the corporation and in a substantial number of instances he agreed with her and the changes were made.

In deciding whether such action on the part of the actress was a breach of the contract, the court said:

Suggestions and even objections as to the manner of enacting the various scenes, when made in good faith, were in the interest of the employer; in fact, it appears from the testimony that they were welcomed and encouraged in many instances, and, prior to commencing work, the president of appellant informed respondent that he did not want mannikins to work for him, that he wanted thinking people, and that, if she would explain to him why she wanted to do a thing in a particular way, he would appreciate it. By the very working of the contract "it is agreed that the services of the artist herein provided for are of a

special, unique, unusual, extraordinary, and intellectual character." Even without the evidence contradicting that of appellant, the trial court was more than justified in finding that it was not true that respondent had refused or failed to perform her part of the contract.

Another ground urged as justifying her discharge was that she was late, on certain occasions, in arriving on the sets at the time designated by her employer. The court felt that this was explained, however, by her testimony to the effect that, with the approval of her employer, she had voluntarily assumed additional duties, relating to the costumes, and therefore the delay was caused in performing her employer's business. The court also pointed out that the alleged breaches of the contract consist largely of incidents prior to May, 1927, when the corporation, for the second time, had exercised its option to continue and extend the contract for another year. The court said that the "exercise of the option may be considered as a declaration by act that the past conduct of the artist was not such conduct as was intended by the contracting parties as a justification for the termination of the contractual relations."

The charge of failure by her to seek other employment was not sustained by the court, because it was not shown by the corporation that by exercise of diligence the actress could have secured employment. The court, however, did approve the deduction of the sum of \$3,000 received by the actress for other employment during the period.

The judgment awarding \$34,531.23 as damages for the breach of the contract was therefore affirmed.

Employee Supplying Coal to Engine Held Not Engaged in Interstate Commerce

THE test whether an employee, when injured, is engaged in interstate commerce, is whether he was engaged in interstate "transportation" or in work so closely related thereto as to be practically a part thereof, according to the United States Supreme Court in the case of *Chicago & N. W. R. Co. v. Bolle* (52 Sup. Ct. 59).

From the facts in the case it appears that Eugene Bolle was employed by the Chicago & North Western Railway Co. to fire a stationary engine which was utilized to generate steam for the purpose of heating the passenger depot and other structures used for general railroad purposes at Waukegan, Ill. The steam was also used to heat passenger coaches while standing in the yard and sometimes the steam was used to prevent the freezing of turntables used in both interstate and intrastate commerce.

On the occasion in question the stationary engine was temporarily out of order and Bolle had been using a locomotive engine as a substitute. In the course of his work he had to accompany the engine along with three engines used in interstate commerce, to a place about 4 miles distant to obtain a supply of coal. He was seriously injured while coal was being placed upon one of the engines and he filed suit against his employer to recover damages for the injury under the Federal employers' liability act.

After three trials in the State courts, the final decision of the appellate court was appealed to the United States Supreme Court for review.

The Supreme Court followed its decision in the case of *Shanks v. Delaware, Lack. & West. R. Co.* (239 U. S. 556), in which the test referred to above was used.

Continuing the opinion reversing the judgment of the lower court in favor of Bolle, Mr. Justice Sutherland said, in part:

It will be observed that the word used in defining the test is transportation, not the word commerce. The two words were not regarded as interchangeable but as conveying different meanings. Commerce covers the whole field of which transportation is only a part; and the word of narrower signification was chosen understandingly and deliberately as the appropriate term. The business of a railroad is not to carry on commerce generally. It is engaged in the transportation of persons and things in commerce; and hence the test of whether an employee at the time of his injury is engaged in interstate commerce, within the meaning of the act, naturally must be whether he was engaged in interstate transportation, or in work so closely related to such transportation as to be practically a part of it.

Plainly, the respondent in the present case does not bring himself within the rule. At the time of receiving his injury, he was engaged in work not incidental to transportation in interstate commerce, but purely incidental to the furnishing of means for heating the station and other structures of the company. His duty ended when he had produced a supply of steam for that purpose. He had nothing to do with its distribution or specific use. Indeed, what he produced was not used or intended to be used, directly or indirectly, in the transportation of anything. It is plain that his work was not in interstate transportation, and was not so closely related to such transportation as to cause it to be practically a part of it.

Assumption of Risk Held Defense Under Federal Employers' Liability Act

A SECTION hand who assumes the risk of hazard incident to cutting steel rails without protection of his eyes will not be allowed to recover damages in an action brought under the Federal employers' liability act, according to a recent decision of the United States Supreme Court. (*Chesapeake & Ohio R. Co. v. Kuhn*, 52 Sup. Ct. 45.)

On February 9, 1926, William Kuhn, an experienced section hand was engaged with others in repairing a sidetrack leading from the main line of the Chesapeake & Ohio Railway to a steam shovel. It became necessary to shorten two steel rails some 6 or 8 inches. The process used was first to cut the rail with a cold chisel and then strike it with a heavy hammer. The men took turns in striking the rail, and none of them wore goggles, asked for them, or objected to the method of operation. While Kuhn was standing by, awaiting his turn to strike, a steel chip from the chisel or rail struck and destroyed his eye.

Kuhn filed suit against the company for damages in the court of common pleas, Pike County, Ohio. He alleged that the accident resulted from its negligence in "ordering him to use a defective sledge hammer and chisel; failing to promulgate and enforce proper rules concerning the upkeep of tools ordinarily used, to furnish guards or goggles for workmen's eyes, to provide a reasonably safe place for him to work."

The jury rendered a verdict in favor of the employee and it was affirmed by the court of appeals. The Ohio Supreme Court denied a review, and the case was carried to the United States Supreme Court.

In reversing the decision of the lower court, Mr. Justice McReynolds, speaking for the court, said:

We think the evidence clearly discloses that Kuhn's injury resulted from the ordinary hazards of his employment, which he fully understood and voluntarily assumed. There was no complaint, no promise by his superior to mitigate the obvious dangers. The trial judge should have directed a verdict for the railway company.

In cases like this, where damages are claimed under the Federal employers' liability act (45 U. S. C. A., secs. 51-59), defense of the assumption of the risk is permissible and where the undisputed evidence clearly shows such assumption the trial judge should direct a verdict for the defendant. Moreover, in proceedings under that act, wherever brought, the rights and obligations of the parties depend upon it and applicable principles of common law as interpreted and applied in the Federal courts. [Cases cited.]

The court of appeals acted upon the erroneous theory that it should follow the views of the supreme court of the State rather than those of this court in respect of questions arising under the liability act. That statute, as interpreted by this court, is the supreme law to be applied by all courts, Federal and State

Recovery Under Compensation Act Held Bar to Action for Wrongful Death

AN ADMINISTRATRIX proceeding under the workmen's compensation provisions of the Washington statute is estopped from suing for the death of an employee engaged in the intrastate commerce business of a railroad, according to a recent decision of the Supreme Court of Washington. (*Kidder v. Marysville & A. R. Co., et al.*, 300 Pac. 170).

Under chapter 28 of the Washington Session Laws of 1917 and the amendments thereto, if a common carrier by railroad is engaged in both interstate and intrastate business, its employees engaged in intrastate business do not come under the provisions of the act providing for compensation, but there is thereby created as to them a statutory right of action practically identical with that which the Federal act provides for employees of railroads engaged in interstate commerce.

It appears that Kidder, the deceased employee, was in the employ of a logging railroad at the time of his death. The administratrix presented to the industrial insurance division of the department of labor and industries her claim for compensation for the death of her husband. This claim was allowed, the department finding that Kidder came to his death "in the course of employment within the jurisdiction of the division of industrial insurance on or about the 24th day of March, 1927; that at the time of the injury, as alleged, the workman was engaged in work within the jurisdiction of the division of industrial insurance."

The administratrix was awarded \$5,911.75, payable in monthly installments of \$35 and \$150 for funeral expenses. These monthly payments were accepted by the widow from June, 1927, until a few days before the trial of this action, October, 1929. It seems the widow had filed a petition for a rehearing, contending that the statute referred to above (which placed liability upon a common carrier engaged in both intrastate and interstate commerce, for injuries to persons engaged in intrastate commerce) applied rather than the compensatory provisions of the statute. She had previously sued

the railroad company, claiming that she was entitled to recover under the Federal employers' liability act, but the court upheld the ruling of the department of labor to the effect that the logging railroad in question was a private intrastate carrier and therefore not within the scope of the Federal act. The department of labor had classified the railroad for many years under the State workmen's compensation act and assessed percentages upon its pay roll.

After considering the facts and the remedies available, the court reversed the judgment in favor of the widow and instructed the trial court to dismiss the action. The court said:

We are satisfied that by her conduct and by the adjudication made by the department upon her claim, respondent is estopped from maintaining this action under the State statute above referred to, and that it must be held that she is limited to the remedy which she sought by way of a claim for compensation, her rights under that branch of the statute having been definitely and finally fixed and determined by the proper officers of the department. No appeal was taken from this adjudication, respondent accepted the benefits thereof, and the same has become final.

COOPERATION

Status of Building and Loan Associations in 1930

THE table below, from data furnished by the United States Building and Loan League, shows, by States, the development of these associations in 1930. These figures represent a decrease of 575 in number of associations in the United States since 1929, but an increase of 225,545 in membership and of \$128,964,939 in assets.

TABLE 1.—CONDITION OF BUILDING AND LOAN ASSOCIATIONS, 1930, BY STATES

State	Number of associations	Members	Total assets	State	Number of associations	Members	Total assets
Alabama.....	40	41,340	\$29,434,882	New Hampshire.....	29	17,670	\$13,793,064
Arizona.....	9	7,250	4,838,421	New Jersey.....	1,561	1,198,177	1,211,941,913
Arkansas.....	66	72,717	44,737,088	New Mexico.....	18	5,350	5,111,330
California.....	209	600,000	510,520,490	New York.....	307	595,865	440,729,014
Colorado.....	68	121,854	60,034,372	North Carolina.....	235	95,915	92,192,374
Connecticut.....	44	38,000	26,166,906	North Dakota.....	20	20,000	13,385,735
Delaware.....	43	19,700	15,488,721	Ohio.....	791	2,583,767	1,244,266,926
District of Columbia.....	24	75,253	75,404,000	Oklahoma.....	82	255,000	139,804,195
Florida.....	68	13,500	17,828,835	Oregon.....	31	52,000	30,569,103
Georgia.....	37	16,731	6,039,453	Pennsylvania.....	3,445	1,540,585	1,371,223,429
Idaho.....	14	8,565	5,639,876	Rhode Island.....	8	44,480	31,541,252
Illinois.....	933	945,500	470,073,267	South Carolina ¹	150	34,000	27,000,000
Indiana.....	398	429,447	306,870,182	South Dakota.....	23	10,274	6,350,585
Iowa.....	74	65,343	49,708,190	Tennessee.....	41	25,100	18,399,386
Kansas.....	155	210,283	132,362,649	Texas.....	154	184,760	134,743,150
Kentucky.....	161	182,900	118,328,259	Utah.....	24	95,263	55,642,704
Louisiana.....	102	200,930	182,358,292	Vermont.....	14	6,325	4,749,000
Maine.....	36	30,000	25,000,000	Virginia.....	92	66,730	60,439,644
Maryland ¹	1,150	330,000	220,000,000	Washington.....	73	298,844	108,261,370
Massachusetts.....	227	513,431	562,718,248	West Virginia.....	63	58,800	36,252,147
Michigan.....	67	210,722	167,199,813	Wisconsin.....	188	304,861	290,625,985
Minnesota.....	78	106,038	42,514,855	Wyoming.....	12	18,400	9,820,096
Mississippi.....	47	30,000	20,462,006	Total.....	11,767	12,336,754	8,824,119,159
Missouri.....	242	282,031	210,920,602	Hawaii.....	10	14,174	4,492,766
Montana.....	27	45,163	21,235,125	Grand total.....	11,777	12,350,928	8,828,611,925
Nebraska.....	83	225,000	148,706,763				
Nevada.....	4	2,890	2,076,372				

¹ Estimated.

Table 2 shows the development of these associations since 1920. It is seen that while there has been a decrease in number of associations each year since 1927, the membership and assets have shown a continuous increase year after year.

TABLE 2.—DEVELOPMENT OF BUILDING AND LOAN ASSOCIATIONS, 1920 TO 1930

Year	Number of associations	Membership	Assets	Mortgage loans outstanding
1920.....	8,633	4,962,919	\$2,519,914,971	(¹)
1921.....	9,255	5,809,888	2,890,761,621	(¹)
1922.....	10,009	6,864,144	3,342,530,953	² \$900,000,000
1923.....	10,744	7,202,880	3,942,939,880	² 1,280,000,000
1924.....	11,844	8,554,352	4,765,937,197	² 1,460,000,000
1925.....	12,403	9,886,997	5,509,176,154	5,085,009,639
1926.....	12,626	10,665,705	6,334,103,807	5,852,689,591
1927.....	12,904	11,336,261	7,178,562,451	6,584,818,419
1928.....	12,666	11,995,905	8,016,034,327	7,336,124,154
1929.....	12,342	12,111,209	8,695,154,220	7,787,405,383
1930.....	11,767	12,336,754	8,824,119,159	(¹)

¹ No data.

² Estimated.

Establishment of a Cooperative Hospital in Oklahoma

THE November, 1931, issue of *Cooperation* (New York) contains an account of a cooperative hospital recently opened in Elk City, Okla.

The prime mover in the formation of the new enterprise was a physician who had practiced in Beckham County for 20 years.

The prospects of the new project were favored by the fact that the people of Beckham County had had considerable experience with cooperative enterprises. There were already in existence there seven cooperative cotton gins, a cooperative creamery, and a cooperative store. There was also a cooperative association with half a dozen branch stores in Beckham and Rogers Mills Counties.

The first step toward the cooperative hospital was taken in 1929, with the calling together of a meeting of leading cooperators of the district. This meeting was receptive to the idea and organization work started. Stock was sold at \$50 a share. The stock market crash in 1929 put added difficulties in the way of the organizers, but the work went on. Talks were given at the annual meetings of the cotton gin associations and members were accepted on the basis of a payment of \$10 down and a promissory note for the other \$40 per share.

With the amount so collected and some borrowed money the hospital was built. It is described as a fireproof modern structure 120 by 40 feet, two stories high, and containing 40 rooms.

The formal opening was held August 14, 1931, and was the occasion for a celebration attended by cooperators from all parts of western Oklahoma.

The hospital, it is stated, is "owned and controlled by the patients and prospective patients." In order to guarantee democracy of control, the members are divided into districts. They hold district meetings, discuss their problems, and send delegates to a central meeting.

The new enterprise and its basis of operation are described in the account as follows:

"The benefits which are to accrue to stockholders are a stock dividend of 8 or 10 per cent on the investment and a patronage dividend based on patronage. In addition to these, additional benefits are incorporated in the agreement which we signed with purchases of stock. No operation is to cost any member, or member of his family, more than \$50, regardless of the kind of surgical operation it is. All other medical and surgical bills shall be discounted 50 per cent. Also it was agreed that dental bills were to be discounted 25 per cent and prescription bills 33½ per cent. These benefits were incorporated after an agreement had been reached with a druggist, two dentists, and two doctors. They were the principal incentives for the purchase of stock. These discounts are a temporary expedient to make the plan attractive. It is our object to hire as soon as practical competent men, physicians, and surgeons and specialists, on a full-time salary basis, and have them do the work for our stockholders and members without any charge at all. Their salaries may be paid from a premium paid each year by every member. We could not do this at the start for it was not possible to get a premium from prospective stockholders in addition to the price of stock which they purchased. The depression has kept us from getting enough money on our stock notes to build with and we had to borrow \$15,000 to pay for the building.

"If I were to do this over again I would not sell stock except for cash—at least half cash and half note. I would also incorporate in the agreement that a premium for the support of the hospital and staff is to be paid each year. As a preliminary step in that direction it was decided at the last stockholders' meeting to allow members, who wish to do so, to pay \$10 a year as premium for which they and their families may have hospital care for \$2 per day. It was further agreed that this plan be put into operation only after 500 stockholders at least have paid the \$10. The usual charge per day is \$5. It was also decided to cut other hospital bills in half for those paying the \$10 premium. At present we are charging \$3 per day for room, board, and nursing care.

"Our hospital is built so that another story may be added, which will increase our capacity 30 more beds. It is hoped we may be able to collect enough money on our stock notes to do this this fall. It is imperative that we do this, and if it were possible to borrow the money we would do it now. The farmers in this country have been thoroughly liquidated and conditions are deplorable. If we can not collect enough money to build the additional story needed we may not be able to accommodate all the sick people who need to be cared for and in that event we shall find ourselves in an embarrassing situation. It is to be hoped this will not be the case.

"To give an illustration of how our hospital works: A woman has just left the hospital, happy and satisfied with this experience. She was confined. Our charge for confinement is \$15. The delivery-room charge was \$2.50. She was in the hospital five days. At \$3 a day that was \$15. Total cost of confinement with best hospital facilities was \$32.50.

"Our staff is highly competent and our members enthusiastic and loyal. We believe we shall succeed.

"It is planned, as soon as we are able to expand, to employ full-time dentists as well as doctors, to have our own drug business, and to add undertaking to our services. All of these things depend upon the ability of the people to cooperate. We feel that the people of this country can do everything for themselves if they will only awaken to an understanding of the possibilities of cooperation, and apply themselves to the solution of their problems."

WORKERS' EDUCATION AND TRAINING

Report of Federal Board for Vocational Education, 1930-31

VOCATIONAL education programs are financed from Federal funds, State funds, and funds provided by local communities. The contribution from State and local funds for each Federal dollar of expenditure was as follows in the years specified: 1925-26, \$2.54; 1926-27, \$2.65; 1927-28, \$2.77; 1928-29, \$2.99; 1929-30, \$3.04; and 1930-31, \$3.03.¹ The expenditures from Federal funds for the fiscal year ending June 30, 1931, were \$7,978,929, and from State and local funds, \$24,160,263, making a total of \$32,139,192, an increase of \$2,230,293 over the preceding year. Figures for 1931 as used in this article, are provisional and subject to final audit.

Various items of the combined Federal, State, and local expenditures in 1930-31 are given below:

	Amount expended
Vocational agricultural education.....	\$9, 977, 116
Vocational trade and industrial education, not including part-time general continuation schools.....	9, 505, 460
Trade and industrial part-time general continuation schools.....	5, 303, 082
Vocational home economics education.....	4, 751, 274
Vocational teacher training.....	2, 602, 260
Total.....	32, 139, 192

There were 7,944 agricultural and 3,423 home economics schools or reimbursement units federally aided in 1930-31. The organization of the work of trade industrial classes and schools varies so from community to community that the information regarding the number of reimbursement units for such education is of little significance.

In the year 1930-31 the number of teachers of vocational courses in vocational schools federally aided was 26,859, of whom 8,651 were females. The total enrollment in vocational schools and courses in that year was 1,125,236. In the table following this enrollment is recorded separately for federally aided schools and for schools operating under State plans and having the standards established for federally aided schools but which have not received direct financial aid from Federal funds.

¹ United States. Federal Board for Vocational Education. Fifteenth annual report, 1931. Washington, 1931.

ENROLLMENT IN VOCATIONAL SCHOOLS OPERATED UNDER APPROVED STATE PLANS FOR THE YEAR ENDING JUNE 30, 1931

Type of school	Agricultural	Trade and industrial	Home economics	Total
Schools federally aided:				
Evening.....	85,688	168,822	124,263	378,773
Part-time.....	6,471	342,513	33,541	382,525
Trade extension.....	6,471	47,471	33,541	87,483
General continuation.....		295,042		295,042
All-day.....	131,794	80,541	70,362	282,697
Day unit.....	11,361			11,361
All types.....	235,314	591,876	228,166	1,055,356
Schools not federally aided:¹				
Evening.....	1,626	7,343	10,203	19,172
Part-time.....		606	9,206	9,812
Trade extension.....		382	9,206	9,588
General continuation.....		224		224
All-day.....	409	2,531	37,944	40,884
Day unit.....	12			12
All types.....	2,047	10,480	57,353	69,880
Total:				
Evening.....	87,314	176,165	134,466	377,945
Part-time.....	6,471	343,119	42,747	392,337
Trade extension.....	6,471	47,853	42,747	97,071
General continuation.....		295,266		295,266
All-day.....	132,203	83,072	108,306	323,581
Day unit.....	11,373			11,373
All types.....	237,361	602,356	285,519	1,125,236
Total increase or decrease compared with preceding year:				
Evening.....	+23,362	+4,460	+28,628	+56,450
Part-time.....	+1,585	-39,291	+11,708	+25,998
Trade extension.....	+1,585	+2,008	+11,708	+15,301
General continuation.....		-41,229		-41,229
All-day.....	+17,673	+3,964	+7,125	+28,762
Day unit.....	+1,416			+1,416
All types.....	+44,036	-30,797	+47,461	+60,700

¹ Reports of enrollments for these schools in some States are incomplete or entirely lacking.

In the section of the report headed "Unemployment and vocational training" the board states:

With the more general causes of unemployment vocational education can not deal directly, but it is concerned with the unemployed worker himself, whatever the cause of his unemployment may be. In so far as vocational training for some available employment can be made effective for him or for any group of workers unemployed, to fit them for useful employment under new conditions, such training provides a partial remedy for the problem of unemployment in its broader social aspects.

Unemployment, therefore, clearly imposes definite responsibility upon the Federal and State boards for vocational education, and upon local school authorities as administrative agencies for promoting and conducting vocational training in the fields of agricultural, industrial, and commercial employments.

Included in the various subjects of bulletins and reports issued by the Federal board during 1930-31 are: Training objectives in vocational education in agriculture with suggestions as to ways and means of attaining these objectives; analysis of special jobs in quality milk production; supervised or directed practice in evening agricultural schools; organization and teaching procedure to be followed in evening agricultural schools—on marketing, livestock, grain, cream or butter, fluid milk, and cotton; present practices in vocational industrial teacher-training institutions; fire fighting; trade preparatory training for small cities and rural communities.

Vocational Rehabilitation

THE year ending June 30, 1931, was characterized by important developments and marked accomplishments in the field of vocational rehabilitation of the physically handicapped, according to the fifteenth annual report of the Federal Board for Vocational Education. Despite the industrial depression, the number of rehabilitations exceeded that of the preceding 12 months by 13 per cent. A person is not considered as rehabilitated until after a follow-up to find out whether he is able to perform satisfactorily the job in which he has been placed. During the year 1931 there were 5,192 persons so rehabilitated in the States and in the District of Columbia. There were, however, 869 additional persons trained and placed on jobs for which they had been equipped but who on June 30, 1931, were still being followed up. If this group be added to the other, the total is 6,061. Moreover, 2,455 others had been trained but not placed in jobs because of the abnormal industrial conditions in 1931. The record for the year under review, therefore, was 8,516 disabled persons fitted for employment. Furthermore, 23,935 disabled persons were in course of rehabilitation—the largest live roll carried during the board's administration.

During the year 1931 the States and the District of Columbia expended from Federal funds \$932,517.90 and from State funds \$956,581.10 for purposes covered by the Federal act. The combined expenditures from State and Federal funds were \$1,889,099.² An analysis of these costs of the rehabilitation service shows that the average cost per case in the country in 1931 was \$311.68. This figure is computed by dividing the combined expenditures from State and Federal funds for purposes covered by the Federal act by the number of persons that were placed in employment during the year. If, however, the divisor were increased by the number of persons who were trained and awaiting placement, the cost per case is \$221.83.

In the year under review much was done toward educating employers as to the advantages of employing physically handicapped persons. Establishments are finding that it pays to take on such workers. In 1930-31 one of the largest industries in the United States studied two groups of workers in one of its plants—one of handicapped workers and the other of workers who had no physical handicaps. In all other respects these two groups were comparable. The survey, covering a year's work experience, showed that those in the handicapped group were in general "more regular in attendance, more stable in employment, and more faithful in the performance of their work." Despite their handicaps, or rather because of them, such workers seemed to make more satisfactory employees than those who had not the urge which comes from having a disability.

The findings emphasized the fact that with proper vocational guidance and training physically handicapped persons "can be and are being transformed from liabilities into assets through the investment of public funds—Federal, State, and local—in this constructive social service."

In 1927 the staff of the Federal board in cooperation with State workers investigated the postrehabilitation experiences of the majority of the persons who had been rehabilitated in the 1920-1924 period under the national vocational rehabilitation program. This survey showed that such persons "were carrying on satisfactorily,

² Does not include local funds.

that in many instances they had progressed in occupational status, and that their experiences as a group showed great if not greater stability in employment than that of comparable groups of able-bodied persons."

Opportunity School of South Carolina

IN 1921 the South Carolina Department of Education decided to meet the needs of the uneducated industrial workers of the State by starting an experimental college vacation school for them. The school of the South Carolina division of the Daughters of the American Revolution, which is located at Tamasee in the Blue Ridge foothills, was selected for the venture. The course lasted four weeks and during that time was given to 19 girls and women living at the school and to the same number of boys and girls, men and women, living in the surrounding country, who came by day and night for the fundamentals of education, which had never previously been offered to them.¹

This school was literally begun on a barrel of flour—contributed by a sympathetic wholesale merchant of Laurens—and unmeasured faith. It was run the four weeks on still more faith, good sportsmanship on the part of the teachers and boarders, and a rare spirit of service and cooperation from the community, the department of education and the many optimistic citizens cheering from the side lines.

So successful was the first month's trial school that after the 1922 session, the "Opportunity School" (for this was the name that grew out of the pupils' attitude towards the chance they were being given) became established beyond peradventure and has become a distinct part of the adult program of the Palmetto State.

In 1923 a similar school for boys and men was held at Due West, S. C. The girls' school has had four different homes. In 1930, however, both schools were conducted at Greater Erskine, the dormitories of the Woman's College being made available for the girl workers. Until these schools were started, only those already enrolled in day schools or those educated beyond the grades were able to attend the summer schools.

The opportunity schools are cooperative projects which are state-wide in their appeal, backing, and clientele. The teachers' salaries of \$100 each are paid by the department of education. The dean and directors of the boys' activities receive a slightly higher compensation. The money required for the maintenance of these schools is contributed by the church, clubs, patriotic associations, textile officials, philanthropic individuals, and whenever practicable by the students themselves, who are glad to pay part on all scholarships when their financial condition permits.

During their brief existence, up to the time the present report was prepared, the schools have had an enrollment of 1,558, including only students over 14 years of age who have not gone beyond the seventh grade in the public schools. The students, of course, vary as in regular college groups, some being alert, others phlegmatic; some with native keenness, others with scant mental endowment. Their common backgrounds are early deprivations, the indifference of parents, or an increasing desire to equip themselves better for life. Adjustment to these new educational activities is at times difficult. From the rising hour (which is two hours later than is usual for them) until

¹ Workers' Education Bureau, *Workers' Education* (a quarterly journal of American workers' education), New York, December, 1930, pp. 6-10; *Adventuring in Adult Education*, by Wil Lou Gray.

the 10.30-light bell, the days are replete with surprises. There are courtesies to be shown, table manners to be considered, and dozens of other adjustments to be made in connection with dormitory life.

As for entrance requirements, the less a prospective pupil knows, provided he has a good body, a good mind, and good morals, the more cordial is his welcome by South Carolina to the opportunity school.

While the main instructions are in the three R's, there are various side lines. In addition to the essentials, there are special lessons and lectures every day. Among the subjects are gardening, shrub planting, interior decoration, home making, thrift, budgeting, manual training, serving, cooking, health, manners, civics, citizenship, taxes, simple science, letter writing, newspaper reading and reporting, singing, supervised play, folk dancing, and dramatics. For these educational opportunities, together with board, laundry, books, school supplies, medical attention, and medicine, the total cost to each student is \$20. This amount, however, does not include transportation, which varies according to the county from which the pupil comes. Various counties and textile centers send contingents in busses without charge to the students. For eight years a mill president sent annually 32 operatives from his four plants. The Gossett scholarships are allocated to those pupils who manifest a desire to advance or to the younger boys and girls who plead most earnestly for the privilege.

Every summer session has its interesting developments. Among those in 1930 are the following: In that year the Carolina Insurance Co. granted a loan fund for scholarships. The offer was accepted by the student body, which voted to allow pupils to borrow the money without interest until October 15. On October 10 one of those who had availed himself of this convenience wrote: "I wish to thank you for your kindness in making it possible for me to come up to school again this year. (It was his fifth.) I have had a hard time saving it, though, for we have been working only three days a week since I came home. But, if a fellow will try, he can find a way."

A girl in her early twenties says: "I never get through telling my friends what a great and grand school the 'Opportunity School' is. I also appreciate all the things you made possible for us while there. If we are not all better, bigger men and women, boys and girls, it is our fault, not yours."

A boy from the lower part of the State, one who is old for his years, was so pleased with Erskine College he asked if there were any way that he might come there some time as a regular student. Doctor Grier, the president, some years before had made a standing offer of a scholarship to the first "Opportunity" boy who would qualify for entrance. When Johnny heard this he dreamed college, talked college, and planned college day and night, and made immediate arrangements by paying a fee of \$5 to enter Textile Institute at Spartanburg. This school is run in conjunction with a cotton mill which permits the pupils to work two weeks and go to school two weeks. He borrowed the rest of his entrance money from the loan fund and set his sail for September 1. Much to Johnny's chagrin the financial depression set in in full force during August and the head master wrote him not to come to Spartanburg as the mill had so curtailed it could not take on any more workers until further notice. He believes this is only temporary, for he writes: "I still have high ambitions to go to Erskine some time. I have been expecting to hear something definite from Textile. When I do hear I shall either use or return the loan you let me have. I have been studying regularly since we left Due West. My mother and sister are also going to night school now. I think it is a catching disease."

The opportunity schools are not in favor of all work and no play. Every student is taught to sing—at least, each one has a chance at this form of recreation. The yearly commencement is always a many-angled object lesson, showing the fun, frolic, work and achievements in the four weeks' session. In the summer of 1930 the dean of the boys' school wrote a pageant, *Your Plant and My Plant*, which dealt with cotton in connection with the working lives of the students. Their school life was woven into the pageant through the dresses the girls had made, through songs, folk dances, speeches, and references to South Carolina's resources, history, and industries. The boys carried transparencies representing local mills and the spinning and weaving of "good cloth to clothe the world." Spencer Miller, jr., secretary of the Workers' Education Bureau of America, delivered an address at these closing exercises.

The supervisor of adult schools in South Carolina, the author of the article under review, declares: "Each year we try to profit by the mistaken steering of the past and trim our sails to a more desired haven. Loyal pupils and loyal friends have made our college vacation schools for workers the flower of the adult work in South Carolina." The supervisor claims, however, that the pupils of that State are no more responsive to such advantages than the students of other States. She also points out that the two Presbyterian college plants utilized for the opportunity schools are no more suitable for such purposes than hundreds of others which are not used at all during the summer months.

In 1929, Dr. L. R. Alderman, specialist in adult education, United States Bureau of Education, visited South Carolina's opportunity schools. He expressed the hope that every State in the Union would in the near future open its closed colleges during the summer "to all who were thirsting for something better than they had known."

INDUSTRIAL DISPUTES

Strikes and Lockouts in the United States in December, 1931

DATA regarding industrial disputes in the United States for December, 1931, 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 1927, 1928, 1929, and 1930, the number of workers involved and man-days lost for these years and for each of the months, January, 1930, to December, 1931, 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, 1930, TO DECEMBER, 1931, AND TOTAL NUMBER OF DISPUTES, WORKERS, AND MAN-DAYS LOST IN THE YEARS 1927 TO 1930

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: Total.....	734	-----	349,434	-----	37,799,394
1928: Total.....	629	-----	357,145	-----	31,556,947
1929: Total.....	903	-----	230,463	-----	9,975,213
1930: Total.....	653	-----	158,114	-----	2,730,368
1930					
January.....	45	21	9,240	5,316	184,730
February.....	52	40	37,480	6,683	438,570
March.....	49	38	15,017	5,957	291,127
April.....	64	41	6,379	5,840	189,828
May.....	66	29	9,329	4,386	185,448
June.....	59	34	14,011	8,311	144,117
July.....	78	30	14,308	4,815	141,647
August.....	51	33	15,902	7,131	142,738
September.....	72	44	16,337	13,778	208,184
October.....	47	36	10,858	16,007	335,916
November.....	44	29	4,390	7,759	273,608
December.....	26	7	4,863	5,144	194,455
1931					
January.....	56	20	10,147	2,927	181,031
February.....	52	34	19,984	12,512	228,329
March.....	45	27	26,121	28,139	422,545
April.....	60	39	26,442	22,604	769,720
May.....	106	49	27,588	15,735	402,437
June.....	81	51	18,437	17,071	506,097
July.....	67	54	49,574	58,995	666,309
August.....	76	43	10,977	17,003	1,213,120
September.....	110	59	35,859	37,164	491,024
October.....	70	41	33,548	28,696	1,038,063
November ¹	52	35	13,679	14,363	355,406
December ¹	42	44	5,197	4,935	189,704

¹ Preliminary figures subject to change.

Occurrence of Industrial Disputes, by Industries

TABLE 2 gives, by industry, the number of strikes beginning in October, November, and December, 1931, and the number of workers directly involved.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN OCTOBER, NOVEMBER, AND DECEMBER, 1931

Industrial group	Number of disputes beginning in—			Number of workers involved in disputes beginning in—		
	October	November	December	October	November	December
Bakers.....		2			18	
Barbers.....	2	2	2	535	38	1,050
Brewery and soft-drink workers.....		1			6	
Broom and brush workers.....	2			22		
Building trades.....	14	9	13	432	1,415	455
Chauffeurs and teamsters.....	3		5	107		313
Clothing.....	15	13	8	1,686	703	1,131
Food workers.....	1		2	21		910
Furniture.....	3			38		
Glass workers.....	2			292		
Hotel and restaurant workers.....	2	2		146	59	
Jewelry workers.....	2			26		
Leather.....			1			48
Longshoremen and freight handlers.....	3			5,712		
Lumber, timber, and mill work.....		4	1		290	500
Metal trades.....		3	1	26	52	70
Miners.....	5	7	2	1,037	2,644	488
Motion-picture operators, actors, and theatrical workers.....	2	1	1	14	6	6
Paper and paper-goods workers.....	1			14		
Printing and publishing.....	3		2	50		65
Steamboatmen.....	1			42		
Stone.....			1			40
Municipal workers.....			1			7
Telegraph and telephone workers.....		1			40	30
Textiles.....	6	4	1	23,341	346	
Tobacco.....		3			8,062	
Other occupations.....	1		1	7		84
Total.....	70	52	42	33,548	13,679	5,197

Size and Duration of Industrial Disputes, by Industries

TABLE 3 gives the number of industrial disputes beginning in December, 1931, classified by number of workers and by industries.

TABLE 3.—NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN DECEMBER, 1931, CLASSIFIED BY NUMBER OF WORKERS AND BY INDUSTRIAL GROUPS

Industrial group	Number of disputes beginning in December, 1931, involving—			
	6 and under 20 workers	20 and under 100 workers	100 and under 500 workers	500 and under 1,000 workers
Barbers.....				1
Building trades.....	5	8	1	
Chauffeurs and teamsters.....	1	3	1	
Clothing.....	2	4	1	1
Food workers.....			1	1
Leather.....		1	1	
Lumber, timber, and mill work.....				
Metal trades.....		1		1
Miners.....		1		
Motion-picture operators, actors, and theatrical workers.....	1	1	1	
Printing and publishing.....	1			
Stone.....		1		
Municipal workers.....	1			
Telegraph and telephone workers.....				
Textiles.....		1		
Tobacco.....		1		
Other occupations.....				
Total.....	11	22	5	4

In Table 4 are shown the number of industrial disputes ending in December, 1931, by industries and classified duration.

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN DECEMBER, 1931, BY INDUSTRIAL GROUPS AND CLASSIFIED DURATION

Industrial group	Classified duration of strikes ending in December, 1931				
	One-half month or less	Over one-half and less than 1 month	1 month and less than 2 months	2 months and less than 3 months	7 months and less than 8 months
Barbers.....			1		
Building trades.....	6		3		
Chauffeurs and teamsters.....	1				
Clothing.....	2		1	2	
Food workers.....	1				
Furniture.....			2		
Longshoremen.....				1	
Lumber, timber, and millwork.....	1		1		
Metal trades.....	1	1			
Miners.....	1		1		
Motion-picture operators, actors, and theatrical workers.....	1				1
Printing and publishing.....	1				
Stone.....	1				
Municipal workers.....	1				
Telegraph and telephone workers.....				1	
Textiles.....	1				
Tobacco.....					
Total.....	18	1	9	4	1

Conciliation Work of the Department of Labor in December, 1931

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the conciliation service, exercised his good offices in connection with 45 labor disputes during December, 1931. These disputes affected a known total of 5,141 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.

On January 1, 1932, there were 39 strikes before the department for settlement and in addition 38 controversies which had not reached the strike stage. The total number of cases pending was 77.

LABOR DISPUTES HANDLED BY THE CONCILIATION SERVICE DURING THE MONTH OF DECEMBER, 1931

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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
Berge-Rose Coal Co., Old Forge, Pa.	Strike.....	Miners.....	Wage cut.....	Adjusted—wages increased; workers returned.	1931 Dec. 4	1931 Dec. 9	400	5
Wood pattern makers, Quincy, Ill.	Controversy.....	Pattern makers.....	Wage cut, asked shorter hours.....	Pending.....	Dec. 2		34	75
Henry S. Row Co., Philadelphia, Pa.	Strike.....	Painters.....	Alleged violation of union agreement.	Unclassified—settled before arrival of commissioner.	Dec. 1	Dec. 13	40	-----
Terrazzo workers and other crafts, Chicago, Ill.	Controversy.....	Terrazzo workers.....	Jurisdiction of certain kinds of work.	Pending.....	Dec. 3		(1)	-----
Durable Tool & Die Corporation, New York City.	Strike.....	Tool and die makers.	Conditions and overtime work without pay.	Adjusted—allowed 10 per cent increase and 48-hour week; no overtime work.	Dec. 1	Dec. 4	70	-----
J. P. Keating, contractor, Boston, Mass.	.....do.....	Laborers.....	Paid 62½ cents per hour; prevailing wage 80 cents.	Adjusted—referred to State department of labor.	Dec. 2	Dec. 7	5	29
Stone cutters and carvers, Bedford, Ind.	Controversy.....	Stone cutters and carvers.	Wages cut 20 per cent.....	Adjusted—accepted 20 per cent cut; further negotiations on July 1, 1932, and possible restoration of pay at that time.	Dec. 9	Dec. 15	500	1,000
Post office, Palmer, Mass.	.....do.....	Bricklayers' tenders.	Not paying prevailing wage, \$1 per hour.	Adjusted—agreed to pay \$1 per hour to tenders.	Nov. 1	Dec. 8	9	9
Post office, South Milwaukee, Wis.	.....do.....	Bricklayers and laborers.	Not paying prevailing wage; bricklayers receiving 75 cents and laborers 25 cents.	Pending.....	Dec. 4		7	-----
M. B. Karnreich & Co. (Inc.), New York City.	Strike.....	Fur workers.....	Claimed pay for work on election day.	Adjusted—allowed for election day.....	Nov. 23	Nov. 27	18	-----
Spear Underwear Co., New York City.	.....do.....	Underwear makers.	Asked additional help instead of sending work to outside shops.	Pending.....	Nov. 17		40	6
London Dress Co., New York City.	.....do.....	Dressmakers.....	Asked increase for piecework and recognition of N. T. W. I. L.	.....do.....	Nov. 30		68	6
Macaroni factories, New York City.	.....do.....	Macaroni workers.....	Wage cut.....	Adjusted—allowed 8-hour day and 44-hour week without cut in pay.	Dec. 2	Dec. 10	800	-----
Public Roads Building, Ogden, Utah.	Controversy.....	Building.....	Prevailing wage discussion and use of "handy" men in place of mechanics.	Adjusted—prevailing wage paid, same as on post-office building.	Oct. 6	Dec. 7	60	-----
Metropolitan Body Co., Bridgeport, Conn.	.....do.....	Workers.....	Low wages on body work; 9-hour day.	Pending.....	Dec. 10		150	80
Kansas City Welding & Machine Co., Kansas City, Mo.	Strike.....	Machinists.....	Abrogation of existing agreement.	Unable to adjust.....	Aug. 3	Dec. 19	5	-----

Army and Navy Hospital, Hot Springs, Ark.	Controversy	Laborers.....	Prevailing rate alleged to be 43½ cents per hour; receiving 25 cents.	Pending.....	Oct. 25		30	
Christian Science Church, Des Moines, Iowa.	Strike.....	Plasterers.....	Nonunion workers employed....	Unable to adjust.....	Dec. 14	Dec. 31	30	30
K. E. Parker Co., Oakland, Calif.	Controversy	Carpenters and steam fitters.	Alleged using too many apprentices in proportion to journeymen.	Adjusted—condition corrected.....	Nov. 1	Dec. 11	100	
State Hospital Building, Allentown, Pa.	Strike.....	Building.....	Asked that union men be employed.	Adjusted—satisfactory settlement.....	Dec. 9	Dec. 28	1	7
Walsh Bros., contractors, Waverly, Mass.	.....do.....	Bricklayers and plasterers.	Asked employment of local men on 50-50 basis.	Adjusted—job continued pending determination of jurisdiction and other questions.	Nov. 18	Dec. 4	30	35
Watsonstown Sash & Door Co., Watsonstown, Pa.	Controversy	Sash and door workers.	Working conditions.....	Pending.....	Dec. 9		(1)	
Post-office building, Philadelphia, Pa.	.....do.....	Laborers and excavation men.	Refusal to pay prevailing wage.....	.....do.....	Dec. 8		8	
Monroe Dress Co., New York City.	Strike.....	Dressmakers.....	Change in piecework.....	Adjusted—increase from 40 to 42 cents per garment to some, and from 45 to 70 cents to other workers; all returned.	.....do.....	Dec. 10	12	15
Smyles Dress Co., New York City.	.....do.....	.....do.....	Asked increase in piecework.....	Adjusted—allowed 2 cents per garment increase to operators and finishers; 1 cent per garment to pressers.	Dec. 7	Dec. 9	12	
Hill Electric Co., Erie, Pa.	.....do.....	Electricians.....	Refusal to rotate electricians as per union rules.	Adjusted—company agreed to cooperate as far as possible in rotation plan and to employ as many additional men as could be used.	Dec. 22	Dec. 23	7	10
Electric Sales & Service Co., Erie, Pa.	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....	5	6
W. M. Clark Co., New Castle, Pa.	.....do.....	Plumbers.....	Signing of agreement.....	Pending.....	Dec. 19		6	
Kids Nobby Kloties (Inc.), New York City.	.....do.....	Clothing workers.....	Alleged violation of agreement.....	.....do.....	Dec. 16		60	
Veterans' Hospital, American Lake, Wash.	Controversy	Building trades.....	Prevailing wage discussion.....	.....do.....	Nov. 25		75	
Dainty Dress Co., New York City.	Strike.....	Dressmakers.....	Change in piecework rates.....	Adjusted—agreed to make small increases after Jan. 1, 1932.	Dec. 16	Dec. 18	25	
Springer-Cocalis, 21 theaters, New York City.	.....do.....	Machine operators.....	Wages, conditions, and union recognition.	Pending.....	Nov. 12		105	
Sales Mason Co., E. Boston, Mass.	Controversy	Caisson workers on tunnel construction.	Failure to pay prevailing wage and nonunion workers from outside the State.	Adjusted—contractors agreed to pay prevailing wages.	Dec. 15	Dec. 21	(1)	
Department of Commerce Bldg., Washington, D. C.	Strike.....	Ornamental iron and metal workers.	Protest against a decision of the building trades department of the American Federation of Labor.	Adjusted—returned to work for part of contractors; continue protest against the American Federation of Labor decision.	.....do.....	Dec. 30	19	19
Alexandria Print Shop, Alexandria, Va.	Controversy	Employees.....	Wages and agreement; overtime.	Adjusted—temporary agreement made.	Nov. 20	Dec. 14	10	90
Federal penitentiary, Latuna, Tex.	.....do.....	Bricklayers, masons, and plasterers.	Prevailing wage discussion.....	Pending.....	Dec. 15		5	6

¹ Not reported.

LABOR DISPUTES HANDLED BY THE CONCILIATION SERVICE DURING THE MONTH OF DECEMBER, 1931—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
Fish hatchery near Dexter, N. Mex.	Controversy	Carpenters.....	Alleged prevailing rate \$7 per day; carpenters receiving \$5.	Pending.....	1931 Nov. 18	1931	6	
Goldman & Son, New York City.	Strike.....	Fur workers.....	Pay for election day.....	Adjusted—allowed pay for election day.	Nov. 30	Dec. 7	20	
Berman & Smith, New York City.	do.....	Dressmakers.....	Asked increase for piecework and recognition of union.	Adjusted—company discontinued manufacture.	Oct. 4	Dec. 18	25	
Robin Hood Hat Co., New York City.	do.....	Millinery workers.....	Employees required to join millinery workers' union; refused.	Pending.....	Oct. 13		65	
I. & B. Cohen and Bornzon Co., New York City.	Lockout.....	Clothing workers.....	Asked revision of rates on coats.....	do.....	Dec. 18		60	90
Simon Ackerman Co., New York City.	Strike.....	do.....	Wage cuts and working conditions.	do.....	Dec. 21		650	
Graham Construction Co. on post-office building, Eatonton, Ga.	Controversy.	Building.....	Prevailing rates of wages not being paid.	do.....	Dec. 19		15	
Post office, Sandersville, Ga.	do.....	do.....	do.....	do.....	do.....		16	
Norwood-Griffin Co. on post-office building, Madison, Ga.	do.....	do.....	do.....	do.....	do.....		20	
Total.....							3, 623	1, 518

¹ Not reported.

LABOR ORGANIZATIONS AND CONGRESSES

Resolution of International Federation of Teachers' Associations

AT THE annual congress of the International Federation of Teachers' Associations at Stockholm, August 13-18, 1931, a resolution was unanimously adopted voicing that organization's desire to collaborate in achieving a plan of popular education suited to present-day needs.¹ The measure also urged that all children prematurely apprenticed or placed in agricultural, industrial, or commercial work should be given both a compulsory supplementary education in their first adolescent years, with a view to providing a little later on general culture, vocational training, and compulsory continuation courses for these young people. The purpose of these latter courses, which should also be available to adults, should be to continue to develop general cultural, civic and vocational education, and to teach essential theoretical and practical principles.

Meeting of International Association for Social Progress

THE fourth general meeting of the International Association for Social Progress was held in Paris, October 19-22, 1931. The action of the delegates included the adoption of two resolutions, one relative to wages and the other to seasonal unemployment in the building industry.²

The first of these resolutions declared that the object of the association was to further any movement that might better the position of the workers and, therefore, the delegates could not agree to any solution of the wage problem which did not tend to raise the living standard of the masses. A rise in real wages was in part dependent on an expansion in general production which was largely conditioned by the elimination of customs barriers. In a period of economic depression, however, the cutting of real wages was not the proper way to meet difficulties, since it hindered rather than promoted economic recovery. The congress declared that the existing economic crisis could not be brought to an end without the economic cooperation of the nations. The resolution also voiced recognition of the exceptional gravity of the world situation, urged all the national branches of the association to make every effort to influence Governments and public opinion in the various countries in order to forward the international cooperative campaign for the improvement of economic conditions.

The resolution on winter unemployment in the building industry stated that, quite aside from the pressing necessity of carrying out

¹ International Labor Office. Industrial and Labor Information, Geneva, Nov. 16, 1931, p. 259.

² Idem, Nov. 9, 1931, pp. 191 and 210.

great national and international public works, the winter suspension of activities in the building trades is not only inimical to the building workers but is also harmful to the building industry. After noting the successful accomplishments in various countries, particularly in North America, along the lines of winter building, recommendation was made by the congress that the national sections of the association devote their attention to the campaign against seasonal unemployment in the building industry. Action should be called for from public bodies, which often are partly responsible, through the manner in which orders are placed, for adversely influencing fluctuations in the building trades.

Included in the possible means of promoting winter construction would be cuts in "selling prices and transport rates for building materials during the winter, the lowering of taxes affecting building work carried out in winter, and the grant of official subsidies which might be met by establishing a special fund, to cover the excess of expenditure which might result."

It was also recommended that the national branches of the Association for Social Progress unite with the employers' and workers' organizations in the building industry to inform the public of the potentialities and importance of winter building. The association proposes to take up this subject again when additional experience is available.

With reference to its activities in the future, the association has on its program a study of new aspects of the hours-of-work problem and a study of the functions of relief and insurance against social hazards, particularly that of unemployment.

LABOR TURNOVER

Labor Turnover in American Factories, December, 1931

THE Bureau of Labor Statistics presents herewith December labor turnover indexes for manufacturing as a whole and for 10 separate manufacturing industries. The form used for compiling turnover rates by the Bureau of Labor Statistics is the weighted arithmetic mean. The indexes for manufacturing as a whole were compiled from reports made to the bureau from representative establishments in over 75 industries, employing approximately 1,250,000 people; In the 10 industries for which separate indexes are presented, reports were received from representative plants employing approximately 25 per cent of the employees as shown for such industries by the Census of Manufactures of 1927. In the automobile industry schedules were received from firms employing nearly 250,000 people; plants reporting for boots and shoes employed nearly 100,000 people; for brick, nearly 18,000 people; for cotton, over 150,000 people; for furniture, nearly 30,000 people; for iron and steel, over 200,000 people; for men's clothing, about 40,000 people; for sawmills, about 40,000 people; and for slaughtering and meat packing, approximately 75,000 people.

In addition to the quit, discharge, lay-off, total separation, and accession rates the bureau presents the net turnover rate. Net turnover means the rate of replacement. It is the number of jobs that are vacated and filled per 100 employees. In a plant that is increasing its force the net turnover rate is the same as the separation rate, because while more people are hired than are separated from their jobs the number hired above those leaving is due to expansion and can not be justly charged to turnover. On the other hand, in a plant that is reducing its number of employees the net turnover rate is the same as the accession rate, for while more people are separated from the pay roll than hired the excess of separations over accessions is due to a reduction of force, and therefore can not be logically charged as a turnover expense.

Previous to September, 1931, the bureau had been presenting turnover rates on both a monthly and an equivalent annual basis. Beginning with September, 1931, however, monthly rates only will be shown. To determine the equivalent annual rate multiply the monthly rate by the number of times that the days of the current month are contained in the 365 days of the year; that is, in a 31-day month to obtain the equivalent annual rate multiply the monthly rate by 11.77; in a 30-day month multiply the monthly rate by 12.17; and in a 28-day month multiply the monthly rate by 13.04. To obtain the equivalent annual rate for December multiply the monthly rates as shown in Tables 1 and 2 by 11.77.

Table 1 shows for all industries the total separation rate, subdivided into the quit, discharge, and lay-off rates, together with the accession rate and the net turnover rate.

TABLE 1.—AVERAGE LABOR TURNOVER RATES IN SELECTED FACTORIES IN 75 INDUSTRIES

Monthly Rates

Month	Separation rates								Accession rate		Net turn-over rate	
	Quit		Lay-off		Discharge		Total					
	1930	1931	1930	1931	1930	1931	1930	1931	1930	1931	1930	1931
January.....	1.85	0.74	2.70	1.95	0.54	0.19	5.09	2.88	3.95	2.97	3.95	2.88
February.....	1.60	.74	2.50	1.75	.62	.20	4.72	2.69	3.94	2.82	3.94	2.69
March.....	1.94	.94	2.83	1.75	.60	.26	5.37	2.95	4.15	3.67	4.15	2.95
April.....	2.11	1.14	2.57	1.96	.53	.31	5.21	3.41	3.55	3.06	3.55	3.06
May.....	2.01	1.12	2.68	2.43	.48	.28	5.17	3.83	3.28	2.79	3.28	2.79
June.....	1.85	1.02	3.00	3.84	.46	.23	5.31	5.09	2.92	2.41	2.92	2.41
July.....	1.35	1.10	4.17	3.32	.32	.25	5.84	4.67	2.51	3.02	2.51	3.02
August.....	1.40	1.05	3.99	2.40	.36	.22	5.75	3.67	2.71	2.60	2.71	2.60
September.....	1.50	1.16	3.14	4.22	.36	.24	5.00	5.62	3.27	3.58	3.27	3.58
October.....	1.29	1.00	2.88	5.01	.32	.21	4.49	6.22	2.56	2.75	2.56	2.75
November.....	.90	.72	2.77	3.03	.24	.17	3.91	3.92	2.05	3.63	2.05	3.63
December.....	.84	.66	2.74	2.61	.21	.16	3.79	3.43	2.13	3.29	2.13	3.29
Total.....	18.64	11.39	35.97	34.27	5.04	2.72	59.65	48.38	37.02	36.59	37.02	35.65
Average..	1.55	.95	3.00	2.86	.42	.23	4.97	4.03	3.08	3.05	3.08	2.97

Comparing rates for December, 1931, with those for November, 1931, it will be found that the quit, lay-off, discharge, and accession rates for December are all lower than for November, 1931. The December quit and discharge rates are lower than for any month of 1931. The December lay-off rate is lower than for any month since August, 1931. The December, 1931, quit, discharge, and lay-off rates were lower than for December, 1930. The accession rate, however, was much higher in December, 1931 than in December, 1930.

The annual quit, discharge, lay-off, and accession rates for 1931 were all lower than the corresponding rates for 1930. The annual net turnover rate for industry as a whole was 37.02 in 1930 and 35.65 in 1931.

Table 2 shows the quit, discharge, lay-off, accession, and net turnover rates for automobiles, boots and shoes, cotton, iron and steel, foundry and machine shops, furniture, sawmills, and slaughtering and meat packing for the months of December, 1930, November, 1931, and December, 1931; and for brick and men's clothing for the months of November, 1931, and December, 1931.

TABLE 2.—AVERAGE MONTHLY TURNOVER RATES IN SPECIFIED INDUSTRIES

Class of turnover rates	December, 1930	November, 1931	December, 1931	December, 1930	November, 1931	December, 1931	December, 1930	November, 1931	December, 1931
	Automobiles			Boots and shoes			Brick ¹		
Quit.....	0.50	0.85	1.11	0.59	0.87	1.06	-----	0.50	0.29
Discharge.....	.04	.27	.33	.07	.15	.20	-----	.55	.41
Lay-off.....	1.23	6.36	2.52	1.36	4.13	2.43	-----	10.17	15.67
Total separation.....	1.77	7.48	3.96	2.02	5.15	3.69	-----	11.22	16.37
Accession.....	1.80	16.51	13.72	1.61	2.62	3.60	-----	6.70	3.33
Net turnover.....	1.77	7.48	3.96	1.61	2.62	3.60	-----	6.70	3.33
	Cotton manufacturing			Foundries and machine shops			Furniture		
Quit.....	0.52	1.19	1.23	0.18	0.39	.31	0.19	0.49	0.40
Discharge.....	.08	.34	.34	.03	.19	.12	.07	.38	.33
Lay-off.....	.79	3.67	3.96	1.53	3.82	3.68	2.91	5.17	5.02
Total separation.....	1.39	5.20	5.53	1.74	4.40	4.11	3.17	6.04	5.75
Accession.....	1.17	4.15	2.90	.72	1.89	1.95	.56	2.91	3.11
Net turnover.....	1.17	4.15	2.90	.72	1.89	1.95	.56	2.91	3.11
	Iron and steel			Men's clothing ¹			Sawmills		
Quit.....	0.54	0.64	0.54	-----	0.66	0.84	0.31	0.93	0.60
Discharge.....	.05	.06	.05	-----	.07	.09	.08	.27	.26
Lay-off.....	.79	1.80	1.42	-----	5.38	5.44	2.23	8.65	10.66
Total separation.....	1.38	2.50	2.01	-----	6.11	6.37	2.62	9.85	11.52
Accession.....	.57	1.78	.91	-----	1.62	3.66	.71	6.39	4.96
Net turnover.....	.57	1.78	.91	-----	1.62	3.66	.71	6.39	4.96
	Slaughtering and meat packing								
Quit.....	0.62	1.24	1.09	-----	-----	-----	-----	-----	-----
Discharge.....	.30	.36	.42	-----	-----	-----	-----	-----	-----
Lay-off.....	1.44	4.72	6.29	-----	-----	-----	-----	-----	-----
Total separation.....	2.36	6.32	7.80	-----	-----	-----	-----	-----	-----
Accession.....	3.01	8.10	8.26	-----	-----	-----	-----	-----	-----
Net turnover.....	2.36	6.32	7.80	-----	-----	-----	-----	-----	-----

¹Data not collected in 1930.

Of the 10 separate industries for which separate figures are shown, automobiles had the highest accession rate, 13.72. The lowest accession rate (0.91) occurred in the iron and steel industry. The highest quit rate (1.23) was shown by the cotton manufacturing, and the lowest (0.29) by the brick industry. Slaughtering and meat packing registered the highest discharge rate (0.42). The lowest discharge rate (0.05) occurred in the iron and steel industry. Brick-manufacturing had the highest lay-off rate (15.67). The lowest lay-off rate (1.42) was shown by the iron and steel industry. The highest net turnover rate (7.80) was registered by the slaughtering and meat-packing industry. Iron and steel (with 0.91) had the lowest net turnover rate.

Table 3 shows the annual quit, discharge, lay-off, accession, and net turnover rates for automobiles, boots and shoes, cotton manufacturing,

iron and steel, sawmills, and slaughtering and meat packing for the calendar years 1930 and 1931.

TABLE 3.—ANNUAL TURNOVER RATES IN SPECIFIED INDUSTRIES

Class of turnover rates	Automobiles		Boots and shoes		Cotton manufacturing	
	1930	1931	1930	1931	1930	1931
Quit.....	18.27	12.03	22.36	19.11	21.72	16.32
Discharge.....	4.78	3.55	6.60	4.46	6.29	4.53
Lay-off.....	61.06	72.81	28.77	28.74	28.30	32.60
Total separation.....	84.11	88.39	57.73	52.31	56.31	53.45
Accession.....	62.63	72.95	41.90	50.29	41.97	47.38
Net turnover.....	51.27	46.68	39.58	39.32	41.61	46.37
	Iron and steel		Sawmills		Slaughtering and meat packing	
	1930	1931	1930	1931	1930	1931
Quit.....	19.55	9.48	36.06	16.17	26.59	15.61
Discharge.....	3.70	1.24	12.68	5.53	9.17	5.47
Lay-off.....	21.82	21.18	72.41	85.89	64.42	60.18
Total separation.....	45.07	31.90	121.15	107.59	100.18	81.26
Accession.....	35.31	20.12	89.61	81.16	92.21	80.02
Net turnover.....	31.12	19.42	89.25	79.17	86.40	71.42

Comparing the 1931 annual turnover figures with those for 1930, all of the six industries for which figures were compiled for both years showed lower quit and discharge rates during 1931 than during 1930. Automobiles, cotton manufacturing, and sawmills had higher lay-off rates during 1931 than during 1930. Boots and shoes, iron and steel, and slaughtering and meat packing had lower lay-off rates during 1931 than during 1930. The accession rates for automobiles, boots and shoes, and cotton manufacturing were higher during 1931 than during 1930. The accession rates for iron and steel, sawmills, and slaughtering and meat packing were lower during 1931 than during 1930. During 1930, iron and steel registered the lowest quit rate (9.48), the highest (19.11) occurring in the boot and shoe industry. The lowest discharge rate (1.24) also occurred in the iron and steel industry. The highest discharge rate (5.53) was shown by sawmills. The highest lay-off rate (85.89) occurred in the sawmill industry, the lowest (21.18) in the iron and steel industry. The highest accession rate (81.16) occurred in the sawmill industry, and the lowest (20.12) in the iron and steel industry.

The enormity of labor turnover is shown by the fact that two industries—sawmills and slaughtering and meat packing—had a net turnover rate of over 70 during the year 1931. Cotton manufacturing and automobiles had a net turnover rate of between 40 and 50 during 1931, and boots and shoes nearly 40. Iron and steel had by far the best turnover records, the net turnover rate for this industry being less than 20.

HOUSING

Building Permits in Principal Cities of the United States, December, 1931

THE Bureau of Labor Statistics of the United States Department of Labor received reports of building operations from 348 identical cities having a population of 25,000 or over for the months of November, 1931, and December, 1931, and from 297 identical cities for the months of December, 1930, and December, 1931.

The cost figures as shown in the following tables apply to the costs of the buildings 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. The States of Illinois, Massachusetts, New York, New Jersey, and Pennsylvania, through their departments of labor, are cooperating with the United States Bureau of Labor Statistics in the collection of these data.

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 348 identical cities of the United States, by geographic divisions.

TABLE 1.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 348 IDENTICAL CITIES AS SHOWN BY PERMITS ISSUED IN NOVEMBER AND DECEMBER, 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings						New nonresidential buildings (estimated cost)		
	Estimated cost			Families provided for in new dwellings			November, 1931	December, 1931	Per cent of change
	November, 1931	December, 1931	Per cent of change	November, 1931	December, 1931	Per cent of change			
New England.....	\$2,455,350	\$2,020,115	-17.7	469	445	-5.1	\$3,098,530	\$2,514,570	-18.8
Middle Atlantic.....	10,562,657	4,994,766	-52.7	2,392	1,063	-55.6	10,026,591	17,795,496	+77.5
East North Central.....	2,276,567	1,529,677	-32.8	507	302	-40.4	4,807,024	5,228,548	+8.8
West North Central.....	1,489,827	1,262,685	-15.3	397	309	-22.2	2,138,424	3,105,996	+45.2
South Atlantic.....	1,845,462	1,164,123	-36.9	498	281	-43.6	11,700,188	729,360	-93.8
South Central.....	1,698,717	1,052,562	-38.0	439	307	-30.1	3,146,852	4,457,316	+41.6
Mountain and Pacific..	3,474,010	2,751,539	-20.8	990	801	-19.1	3,163,396	4,511,577	+42.6
Total.....	23,802,590	14,775,467	-37.9	5,692	3,508	-38.4	38,081,005	38,342,863	+0.7

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction (estimated cost)			Number of cities
	November, 1931	December, 1931	Per cent of change	November, 1931	December, 1931	Per cent of change	
New England.....	\$1,085,982	\$833,364	-23.3	\$6,639,862	\$5,368,049	-19.2	52
Middle Atlantic.....	5,233,759	4,098,957	-21.7	25,823,007	26,889,219	+4.1	68
East North Central.....	1,785,229	1,228,943	-31.2	8,838,820	7,987,168	-9.9	25
West North Central.....	539,013	956,756	+77.5	4,167,264	5,325,437	+27.8	39
South Atlantic.....	1,610,153	1,015,633	-36.9	15,155,803	2,909,116	-80.8	35
South Central.....	876,882	504,557	-42.5	5,722,451	6,014,435	+5.1	36
Mountain and Pacific..	1,198,719	1,373,335	+14.6	7,836,125	8,636,451	+10.2	348
Total.....	12,329,737	10,011,545	-18.8	74,213,332	63,129,875	-14.9	

The cost of all building operations for which permits were issued in December, 1931, was \$63,129,875. This is 14.9 per cent less than the cost of all building operations during the month of November, 1931.

New residential buildings decreased 37.9 per cent in estimated cost, and additions, alterations, and repairs decreased 18.8 per cent. Projected expenditures for new nonresidential buildings, however, increased seven-tenths of 1 per cent. During December, 1931, 3,598 family dwelling units were provided in new residential buildings. This is a decrease of 38.4 per cent as compared with family dwelling units as provided during November, 1931.

All geographic divisions showed decreases in indicated expenditures for new residential buildings and in the number of families provided for.

Five of the seven geographic divisions registered increases in indicated expenditures for new nonresidential buildings. These increases ranged from 8.8 per cent in the East North Central States to 77.5 per cent in the Middle Atlantic States. Only two geographic divisions showed decreases in the estimated cost of this class of structures. However, the decrease in the South Atlantic States was 93.8 per cent, the contract awarded for the United States Supreme Court building in this geographic division during November, 1931, making the total for that month far above normal.

Increases were shown in projected expenditures for additions, alterations, and repairs in the Mountain and Pacific States and the West North Central States. The other five geographic divisions showed decreases in the cost of repairs.

Four of the seven geographic divisions had increased indicated expenditures for total construction and three divisions had decreases. The increases ranged from a low of 4.1 in the Middle Atlantic States to a high of 10.2 in the Mountain and Pacific States. The smallest decrease (9.9 per cent) was in the East North Central States and the largest decrease (80.8 per cent) was in the South Atlantic States.

Table 2 shows the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 348 identical cities of the United States, by geographic divisions.

TABLE 2.—NUMBER OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 348 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN NOVEMBER, 1931, AND DECEMBER, 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings		New nonresidential buildings		Additions, alterations, and repairs		Total construction	
	November, 1931	December, 1931	November, 1931	December, 1931	November, 1931	December, 1931	November, 1931	December, 1931
New England.....	414	281	925	540	1,784	1,256	3,123	2,077
Middle Atlantic.....	867	519	1,734	1,158	3,812	2,853	6,413	4,530
East North Central.....	446	272	1,910	1,045	2,379	1,694	4,735	3,011
West North Central.....	349	296	749	415	900	617	1,998	1,328
South Atlantic.....	369	246	716	542	2,595	1,902	3,680	2,690
South Central.....	402	277	521	381	1,673	1,223	2,596	1,881
Mountain and Pacific.....	828	634	1,302	1,028	3,259	2,791	5,389	4,453
Total.....	3,675	2,525	7,857	5,109	16,402	12,336	27,934	19,970
Per cent of change.....		-31.3		-35.0		-24.8		-28.5

Permits were issued during December, 1931, for 19,970 building projects. This is a decrease of 28.5 per cent as compared with the number of projects for which permits were issued during November. The number of residential buildings decreased 31.3 per cent; non-residential buildings, 35.0 per cent; and alterations, additions, and repairs, 24.8 per cent, comparing December with November.

Table 3 shows the index number of families provided for and the index numbers of indicated expenditures for new residential buildings, for new nonresidential buildings, for additions, alterations, and repairs, and for total building operations. These indexes are worked on the chain system, with the monthly average of 1929 equaling 100.

TABLE 3.—INDEX NUMBERS OF FAMILIES PROVIDED FOR AND OF THE ESTIMATED COST OF BUILDING OPERATIONS AS SHOWN BY PERMITS ISSUED IN PRINCIPAL CITIES IN THE UNITED STATES, JANUARY, 1930, TO DECEMBER, 1931, INCLUSIVE

[Monthly average, 1929=100]

Month	Families provided for	Estimated cost of—			
		New resi- dential buildings	New non- residential buildings	Additions, alterations, and repairs	Total building operations
1930					
January.....	34.2	29.4	64.3	55.1	46.1
February.....	43.0	34.7	51.8	57.5	44.1
March.....	57.1	47.2	87.1	77.5	66.4
April.....	62.0	51.0	100.1	81.8	73.8
May.....	59.6	48.5	90.7	84.5	69.3
June.....	54.4	45.1	82.5	74.6	63.3
July.....	49.9	44.1	86.7	77.4	64.8
August.....	48.7	43.4	67.2	58.6	54.4
September.....	51.3	44.4	73.8	64.2	58.2
October.....	58.3	44.9	53.5	58.1	49.7
November.....	52.9	42.5	54.4	37.8	46.3
December.....	45.0	37.6	64.3	53.5	50.1
1931					
January.....	39.1	30.8	43.4	55.5	38.9
February.....	40.3	30.3	43.8	48.6	37.9
March.....	53.4	40.7	76.4	58.0	57.1
April.....	64.6	48.6	73.9	65.2	60.6
May.....	51.7	39.8	58.5	53.0	48.8
June.....	43.4	33.4	41.7	56.5	39.4
July.....	35.8	27.6	53.7	57.8	41.7
August.....	36.6	33.5	63.9	48.3	47.3
September.....	30.1	24.8	41.8	41.0	33.5
October.....	33.7	25.4	34.8	39.8	30.8
November.....	23.8	19.0	32.7	33.6	26.2
December.....	14.7	11.8	32.9	27.3	22.3

The index number of families provided for and the index numbers of new residential buildings, additions, alterations, and repairs, and total building operations all reached a low point for the two-year period in December, 1931. The index number for new nonresidential buildings, however, showed a slight increase over November. The charts on pages 354 and 355 show in graphic form the information contained in this table.

Table 4 shows the number and value of contracts awarded for public buildings by the different agencies of the United States Government during the months of November, 1931, and December, 1931, by geographic divisions.

TABLE 4.—CONTRACTS LET FOR PUBLIC BUILDINGS BY DIFFERENT AGENCIES OF THE UNITED STATES GOVERNMENT DURING NOVEMBER AND DECEMBER, 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	November, 1931		December, 1931	
	Number	Cost	Number	Cost
New England.....	4	\$84,648	6	\$292,011
Middle Atlantic.....	14	564,399	11	5,145,865
East North Central.....	12	1,076,727	9	358,476
West North Central.....	4	183,895	3	2,682,490
South Atlantic.....	31	10,864,710	28	406,979
South Central.....	15	932,965	15	767,962
Mountain and Pacific.....	28	730,193	29	2,248,129
Total.....	108	14,437,537	101	11,901,912

During December, 1931, the various agencies of the Federal Government from which reports were received awarded contracts for 101 building operations to cost \$11,901,912. Contracts were issued by the following Federal agencies: United States Capitol Architect; Office of the Quartermaster General, War Department; Bureau of Yards and Docks, Navy Department; Supervising Architect, Treasury Department; United States Veterans' Bureau; and the Office of Public Buildings and Public Parks.

Table 5 shows the value of contracts awarded by the different State governments for public buildings during the months of November, 1931, and December, 1931, by geographic divisions.

TABLE 5.—CONTRACTS AWARDED FOR PUBLIC BUILDINGS BY THE DIFFERENT STATE GOVERNMENTS DURING NOVEMBER AND DECEMBER, 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	November, 1931	December, 1931 ¹
New England.....	\$131,093	\$1,627,557
Middle Atlantic.....	2,957,380	7,835,287
East North Central.....	1,858,459	2,308,755
West North Central.....	1,752,842	17,348
South Atlantic.....	203,000	383,100
South Central.....	810,779	462,172
Mountain and Pacific.....	508,225	212,128
Total.....	8,221,778	12,846,347

¹ Subject to revision.

Contracts awarded by the various State governments during December, 1931, totaled \$12,846,347, an increase of over \$4,000,000 compared with the amount of contracts awarded by the various States during November, 1931.

Whenever a contract is awarded by the Federal Government or by a State government for a building in a city having a population of 25,000 or over, the number or cost of such building is included in the number and cost as shown in the several tables presented herewith.

Table 6 shows the estimated cost of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building construction in 297 identical cities having a population of 25,000 or over for the months of December, 1930, and December, 1931, by geographic divisions.

TABLE 6.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 297 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER, 1930, AND DECEMBER, 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings						New nonresidential build-ings (estimated cost)		
	Estimated cost			Families provided for in new dwellings			Decem-ber, 1930	Decem-ber, 1931	Per cent of change
	Decem-ber, 1930	Decem-ber, 1931	Per cent of change	Decem-ber, 1930	Decem-ber, 1931	Per cent of change			
New England.....	\$5,889,850	\$1,976,915	-66.4	514	434	-15.6	\$8,405,443	\$2,509,845	-70.1
Middle Atlantic.....	22,279,370	4,900,966	-78.0	4,933	1,043	-78.9	13,367,082	17,735,870	+32.7
East North Central.....	4,510,522	1,400,277	-69.0	849	270	-68.2	7,992,946	4,848,547	-39.3
West North Central.....	1,439,879	1,242,185	-13.7	358	304	-15.1	6,059,733	3,105,496	-48.8
South Atlantic.....	1,555,675	1,140,823	-26.7	324	269	-17.0	9,392,093	695,423	-92.6
South Central.....	2,920,149	987,397	-66.2	679	281	-58.6	7,453,052	4,298,900	-42.3
Mountain and Pacific.....	6,173,320	2,387,389	-61.3	1,730	715	-58.7	11,580,139	4,294,811	-62.9
Total.....	44,768,765	14,035,952	-68.6	9,387	3,316	-64.7	64,250,488	37,488,892	-41.7

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction (estimated cost)			Number of cities
	December, 1930	December, 1931	Per cent of change	December, 1930	December, 1931	Per cent of change	
New England.....	\$1,711,738	\$816,487	-52.3	\$16,007,031	\$5,303,247	-66.9	48
Middle Atlantic.....	8,300,094	4,074,527	-50.9	43,946,546	26,711,363	-39.2	64
East North Central.....	3,008,602	1,141,297	-62.1	15,512,070	7,390,121	-52.4	73
West North Central.....	1,177,908	948,956	-19.4	8,677,520	5,296,637	-39.0	24
South Atlantic.....	1,143,112	991,523	-13.3	12,090,880	2,827,769	-76.6	34
South Central.....	883,612	469,454	-46.9	11,256,813	5,755,751	-48.9	26
Mountain and Pacific.....	1,748,232	1,308,571	-25.1	19,501,691	7,990,771	-59.0	28
Total.....	17,973,298	9,750,815	-45.7	126,992,551	61,275,659	-51.7	297

Indicated expenditures for total building construction in these 297 cities decreased 51.7 per cent in December, 1931, as compared with December, 1930. The estimated cost of new residential buildings, of new nonresidential buildings, and of additions, alterations, and repairs all showed decreases comparing December, 1931, with the same month of the previous year; the decreases being 68.6 per cent, 41.7 per cent, and 45.7 per cent, respectively.

The number of family dwelling units provided decreased 64.7 per cent comparing permits issued in these two months.

All geographic divisions showed decreases in new residential buildings, in additions, alterations, and repairs, in the number of families provided for, and in total building operations.

The Middle Atlantic was the only geographic division registering an increase in new nonresidential buildings. Decreases were shown in the other six geographic divisions.

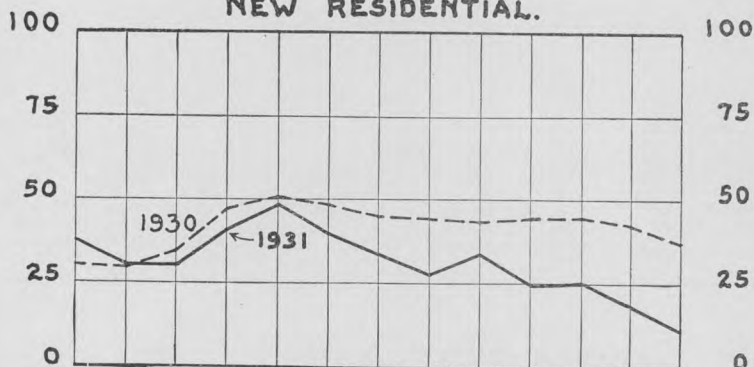
Table 7 shows the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 297 identical cities having a population of 25,000 or over for December, 1930, and December, 1931.

Decreases were shown in the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and in total construction comparing December, 1931, with December, 1930.

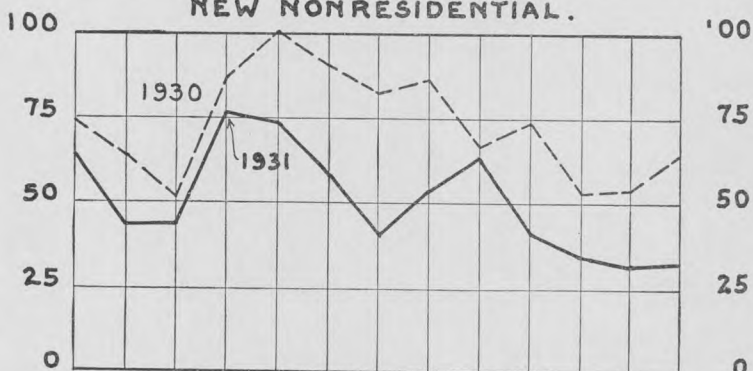
INDEXES OF COST OF BUILDING OPERATIONS.

MONTHLY AVERAGE 1929 = 100.

NEW RESIDENTIAL.



NEW NONRESIDENTIAL.



TOTAL - INCLUDING ALTERATIONS & REPAIRS.

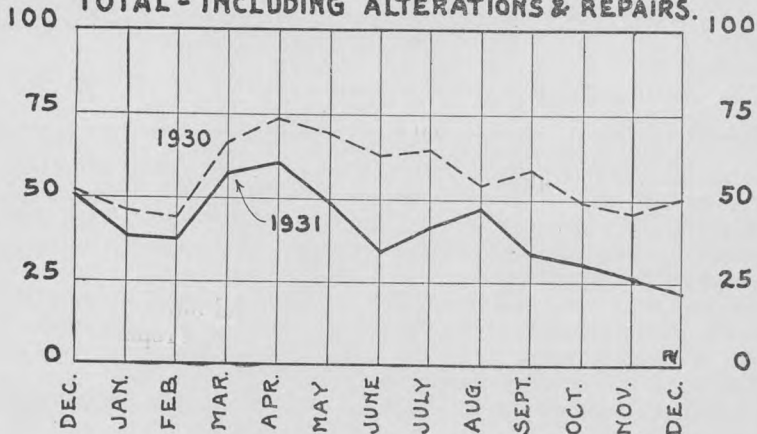


TABLE 7.—NUMBER OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 297 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER, 1930, AND DECEMBER, 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings		New nonresidential buildings		Additions, alterations, and repairs		Total construction	
	December, 1930	December, 1931	December, 1930	December, 1931	December, 1930	December, 1931	December, 1930	December, 1931
New England.....	399	270	598	523	1,175	1,214	2,172	2,007
Middle Atlantic.....	1,063	499	1,389	1,077	2,911	2,790	5,363	4,375
East North Central.....	620	245	1,271	950	1,836	1,590	3,727	2,785
West North Central.....	288	291	472	413	686	615	1,446	1,319
South Atlantic.....	295	234	521	511	1,824	1,851	2,640	2,596
South Central.....	513	251	438	345	1,351	1,084	2,302	1,680
Mountain and Pacific.....	897	555	1,466	969	3,141	2,593	5,504	4,117
Total.....	4,075	2,345	6,155	4,788	12,924	11,746	23,154	18,879
Per cent of change.....		-42.5		-22.2		-9.1		-18.5

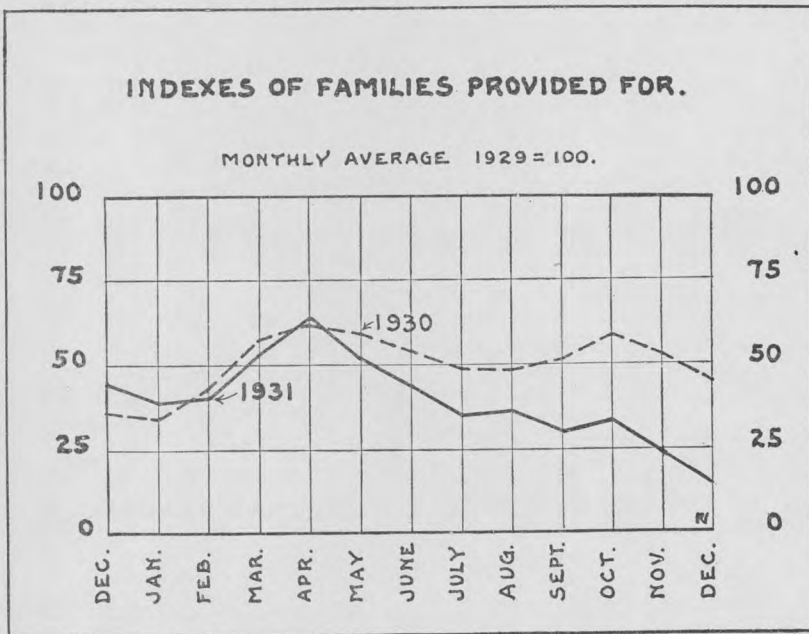


Table 8 shows the estimated cost of new residential buildings, of new nonresidential buildings, of total building operations, together with the number of family dwelling units provided for in new buildings, in each of the 348 cities from which reports were received for both November, 1931, and December, 1931.

Reports were received from 52 cities in the New England States; from 68 cities in the Middle Atlantic States; from 93 cities in the East North Central States; from 25 cities in the West North Central States; from 39 cities in the South Atlantic States; from 35 cities in the South Central States; and from 36 cities in the Mountain and Pacific States.

Permits were issued for the following important building projects during the month of December, 1931: In Boston, Mass., for a building

for the Massachusetts Department of Public Works to cost nearly \$1,200,000; in Brooklyn, N. Y., for a theater building to cost \$450,000 and for a new tuberculosis hospital to cost nearly \$5,000,000; in Poughkeepsie, N. Y., for a State asylum building to cost over \$1,200,000; in the Borough of the Bronx for a school building to cost over \$250,000; in Chicago, Ill., for a nurses' home to cost \$2,000,000; in Oak Park, Ill., for a store and office building to cost \$400,000; in Peoria, Ill., for an institutional building to cost \$325,000 and for a school building to cost over \$450,000; in Minneapolis, Minn., for a school building to cost \$755,000; in Little Rock, Ark., for four store buildings to cost nearly \$900,000; in Nashville, Tenn., for two amusement buildings to cost over \$600,000 and for an office building to cost \$750,000.

Contracts were awarded by the Supervising Architect of the United States Treasury Department for a post office and Federal courthouse in Pittsburgh to cost nearly \$5,000,000; for a hospital for defective delinquents in Springfield, Mo., to cost over \$1,700,000, and for a Federal courthouse in Portland, Oreg., to cost nearly \$1,200,000.

No reports were received from New London (Conn.), West New York (N. J.), Nanticoke (Pa.), Pontiac and Port Huron (Mich.), Zanesville (Ohio), University City (Mo.), Pensacola and West Palm Beach (Fla.), Fort Smith (Ark.), Lexington (Ky.), Monroe (La.), Meridian (Miss.), Muskogee (Okla.), Corpus Christi and Laredo (Tex.), and San Bernardino and Santa Monica (Calif.).

TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER AND DECEMBER, 1931

New England States

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings					
	November, 1931	December, 1931	November, 1931	December, 1931	November, 1931	December, 1931	November, 1931	December, 1931
Connecticut:								
Bridgeport	\$121,700	\$70,300	34	21	\$16,100	\$7,574	\$170,335	\$90,572
Bristol	4,000	6,000	1	1	2,810	1,225	12,896	11,942
Greenwich	133,000	24,000	13	3	6,600	39,900	106,700	77,950
Hartford	80,000	76,300	14	15	40,900	5,365	159,222	113,800
Meriden	21,400	26,200	6	7	71,149	11,850	94,359	41,915
New Britain	12,000	51,000	2	7	41,005	11,890	58,912	69,432
New Haven	68,000	58,000	12	9	176,470	38,275	312,840	141,245
Norwalk	92,200	69,500	17	11	12,950	11,100	114,430	96,706
Stamford	32,000	56,000	5	9	5,680	7,780	44,655	83,980
Torrington	3,000	17,000	1	5	1,750	1,350	7,300	21,125
Waterbury	30,000	10,500	6	2	19,900	12,000	52,240	24,050
Maine:								
Bangor	5,500	4,000	2	1	425	78,087	7,425	83,862
Lewiston	26,000	0	6	0	0	0	30,000	7,000
Portland	26,300	35,500	8	5	5,065	3,400	51,095	47,804
Massachusetts:								
Beverly	44,450	20,200	9	5	1,300	1,150	50,650	29,200
Boston 1	471,000	495,000	79	151	513,335	1,986,402	1,277,072	2,644,859
Brockton	47,000	24,500	11	6	59,930	1,435	133,710	32,994
Brookline	93,500	52,000	9	3	368,520	3,450	465,090	67,065
Cambridge	19,700	0	4	0	415,670	2,250	473,117	11,200
Chelsea	9,000	0	2	0	925	6,000	20,959	10,508
Chicopee	2,000	24,000	1	5	2,900	1,175	5,375	28,275

¹ Applications filed.

TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER AND DECEMBER, 1931—Continued

New England States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings		Novem-ber, 1931	Decem-ber, 1931	Novem-ber, 1931	Decem-ber, 1931
	Novem-ber, 1931	Decem-ber, 1931	Novem-ber, 1931	Decem-ber, 1931				
Massachusetts—Con.								
Everett.....	\$14,000	\$10,000	4	3	\$40,550	\$675	\$55,400	\$17,075
Fall River.....	0	3,500	0	2	2,305	10,885	19,640	21,380
Fitchburg.....	6,500	10,700	2	2	850	1,000	8,600	29,000
Haverhill.....	0	2,200	0	2	154,125	900	165,410	6,275
Holyoke.....	0	0	0	0	10,750	0	40,550	6,850
Lawrence.....	7,000	0	1	0	11,975	14,650	27,260	16,825
Lowell.....	15,300	4,650	5	1	685	975	28,045	11,250
Lynn.....	24,300	19,000	5	5	4,405	7,000	40,735	53,140
Malden.....	19,300	33,865	4	10	12,500	665	49,370	43,257
Medford.....	101,800	35,100	24	7	86,635	6,325	192,810	45,650
New Bedford.....	0	0	0	0	4,450	1,700	16,975	25,250
Newton.....	205,000	160,000	23	20	12,985	12,650	238,591	227,565
Pittsfield.....	92,700	37,500	20	10	29,389	97,625	136,796	150,025
Quincy.....	80,100	65,600	16	17	17,840	10,685	159,399	87,347
Revere.....	11,800	4,000	3	1	1,950	0	24,700	7,400
Salem.....	73,000	5,000	12	1	4,300	4,375	105,730	22,025
Somerville.....	11,000	0	2	0	5,325	29,635	33,875	38,585
Springfield.....	71,450	51,600	19	14	22,490	9,550	100,215	91,260
Taunton.....	0	0	0	0	3,598	700	15,393	3,805
Waltham.....	50,350	6,500	10	1	15,590	1,765	70,015	12,990
Watertown.....	48,300	21,000	9	5	8,250	2,850	67,575	24,225
Worcester.....	67,300	67,300	15	14	19,225	17,000	107,628	176,930
New Hampshire:								
Concord.....	0	0	0	0	4,000	1,000	4,250	2,535
Manchester.....	6,500	17,000	2	3	5,175	710	23,540	35,250
Rhode Island:								
Central Falls.....	0	0	0	0	280	1,022	1,720	1,572
Cranston.....	108,200	88,700	25	22	14,910	6,225	125,235	98,725
East Providence.....	23,900	39,000	5	8	14,925	18,325	49,738	67,225
Newport.....	26,000	4,500	5	1	4,300	4,100	33,210	17,771
Pawtucket.....	2,200	116,100	1	9	3,000	3,160	27,430	122,990
Providence.....	44,600	97,300	14	21	815,535	15,310	953,960	166,378
Woonsocket.....	3,000	0	1	0	2,750	1,250	7,685	1,950
Total.....	2,455,350	2,020,115	469	445	3,098,530	2,514,570	6,639,862	5,368,049
Per cent of change.....	-----	-17.7	-----	-5.1	-----	-18.8	-----	-19.2

Middle Atlantic States

New Jersey:								
Atlantic City.....	0	\$5,000	0	1	\$6,400	\$500	\$39,637	\$25,332
Bayonne.....	0	0	0	0	27,300	575	37,615	2,425
Belleville.....	\$35,000	18,500	4	4	2,350	3,900	38,415	23,200
Bloomfield.....	109,000	85,000	26	17	4,000	4,000	113,000	96,000
Camden.....	8,000	0	2	0	52,285	4,419	93,320	52,234
Clifton.....	23,000	68,500	7	17	15,400	10,350	42,050	84,750
East Orange.....	14,500	6,000	2	1	146,405	5,225	171,645	26,260
Elizabeth.....	26,000	23,000	5	5	17,500	1,800	43,500	24,800
Garfield.....	4,200	3,500	1	1	9,700	400	24,050	10,175
Hoboken.....	0	0	0	0	0	0	13,510	67,510
Irvinton.....	28,600	38,550	8	8	7,475	11,065	42,640	61,400
Jersey City.....	62,000	6,500	32	2	9,790	9,650	95,715	28,100
Kearny.....	22,300	12,000	10	1	2,400	3,100	25,675	15,525
Montclair.....	41,000	41,280	5	3	5,506	14,350	53,876	69,720
Newark.....	199,200	129,500	40	29	63,900	302,522	408,025	484,798
New Brunswick.....	0	8,500	0	2	5,877	50	18,422	59,125
Orange.....	0	6,536	0	1	5,322	0	10,080	6,536
Passaic.....	9,200	4,800	2	1	7,950	18,150	40,714	35,625
Paterson.....	51,700	25,800	14	6	13,941	24,200	90,626	77,600
Perth Amboy.....	12,400	0	1	0	1,075	2,700	14,475	4,200
Plainfield.....	56,200	4,800	7	1	23,550	675	83,098	6,825
Trenton.....	125,000	5,000	16	1	10,070	23,560	194,584	76,288
Union City.....	0	0	0	0	900	650,000	10,885	654,886

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TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER AND DECEMBER, 1931—Continued

Middle Atlantic States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings		November, 1931	December, 1931	November, 1931	December, 1931
	November, 1931	December, 1931	November, 1931	December, 1931				
New York:								
Albany	\$245,400	\$153,100	24	13	\$17,900	\$1,885	\$326,279	\$203,684
Amsterdam	0	0	0	0	500	4,860	3,860	4,860
Auburn	32,100	7,000	3	1	1,500	317,605	37,085	373,862
Binghamton	24,225	8,400	11	2	6,984	8,320	57,789	42,390
Buffalo	69,800	94,700	26	21	220,175	57,925	321,489	199,735
Elmira	22,467	0	7	0	3,325	3,570	29,493	16,253
Jamestown	14,000	7,400	4	2	3,600	1,075	26,980	11,950
Kingston	34,000	13,300	8	4	8,800	2,425	49,463	24,389
Lockport	0	51,800	0	14	519	52,776	1,769	104,576
Mount Vernon	39,800	0	6	0	57,500	2,775	131,530	18,937
Newburgh	0	27,300	0	4	3,800	1,400	22,650	32,550
New Rochelle	41,000	77,100	3	5	36,917	1,850	89,637	80,500
New York City:								
The Bronx ¹	2,026,300	851,000	479	176	4,643,850	415,150	6,828,310	1,622,505
Brooklyn ¹	1,510,900	1,536,000	399	376	1,184,230	7,582,003	3,874,982	9,879,756
Manhattan ¹	1,215,000	0	202	0	286,100	116,850	2,666,864	933,126
Queens ¹	2,257,200	749,700	595	169	1,692,303	674,619	4,863,793	2,025,375
Richmond ¹	299,600	121,400	89	40	12,655	79,555	422,539	226,817
Niagara Falls	70,540	28,400	22	8	7,525	6,799	97,415	50,449
Poughkeepsie	53,500	56,500	9	8	11,925	1,263,575	74,105	1,330,275
Rochester	114,000	42,100	20	8	45,369	20,400	241,124	102,915
Schenectady	30,000	73,500	6	14	8,500	7,525	48,650	90,740
Syracuse	109,700	45,300	22	10	38,700	24,050	159,060	124,710
Troy	59,600	72,600	16	8	421,210	49,750	496,832	135,050
Utica	39,500	43,000	7	8	13,000	750	54,000	45,150
Watertown	23,800	4,500	4	1	1,775	2,750	26,905	12,265
White Plains	46,500	37,000	5	2	16,650	15,300	69,090	71,950
Yonkers	353,450	110,000	48	16	155,165	13,021	550,995	155,416
Pennsylvania:								
Allentown	0	2,000	0	1	9,850	104,039	54,052	125,389
Altoona	3,100	5,200	2	2	2,302	5,013	10,654	11,978
Bethlehem	33,000	0	2	0	2,200	1,200	39,500	3,850
Butler	5,000	0	1	0	200	4,000	5,200	4,000
Chester	5,000	0	1	0	204,100	1,600	209,100	7,200
Easton	2,900	0	1	0	1,275	275	6,089	13,560
Erie	60,100	48,100	15	14	27,250	5,550	97,865	290,690
Harrisburg	18,000	0	3	0	201,800	545	240,515	22,930
Hazleton	0	5,000	0	1	5,698	30,980	8,300	39,720
Johnstown	2,000	5,400	1	2	5,720	2,350	22,495	12,650
Lancaster	12,000	12,000	3	3	3,500	12,150	20,890	31,825
McKeesport	23,500	0	3	0	1,875	17,050	30,440	20,165
New Castle	11,200	13,800	2	2	3,225	750	14,595	14,550
Norristown	0	0	0	0	5,175	540	7,731	3,585
Philadelphia	574,900	4,500	117	1	145,990	677,855	951,385	990,985
Pittsburgh	165,500	134,400	25	16	28,325	5,041,555	572,041	5,228,317
Reading	20,000	20,000	4	1	4,850	2,550	82,437	39,905
Scranton	29,200	24,000	9	6	4,435	4,470	52,175	40,015
Wilkes-Barre	3,575	3,000	1	1	14,425	5,200	28,971	28,467
Wilkesburg	9,000	3,500	2	1	3,750	0	15,200	4,700
Williamsport	0	0	0	0	7,303	2,920	14,140	4,454
York	25,000	10,000	3	1	3,770	15,150	61,847	33,785
Total	10,562,657	4,994,766	2,392	1,063	10,026,591	17,795,496	25,823,007	26,889,219
Per cent of change		-52.7		-55.6		+77.5		+4.1

East North Central States

Illinois:								
Alton	0	0	0	0	\$7,000	\$675	\$13,873	\$17,674
Aurora	\$14,675	\$4,500	4	1	318,437	10,455	334,784	25,070
Belleville	11,470	1,500	5	1	75,365	850	87,560	3,850
Berwyn	10,000	12,000	2	2	2,880	710	12,880	13,410

¹ Applications filed.

TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER AND DECEMBER, 1931—Continued

East North Central States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings					
	November, 1931	December, 1931	November, 1931	December, 1931	November, 1931	December, 1931	November, 1931	December, 1931
Illinois—Continued.								
Bloomington.....	\$7,000	\$2,000	2	1	0	0	\$7,000	\$3,000
Chicago.....	187,550	90,000	31	15	\$595,715	\$2,420,205	1,398,189	2,674,988
Cicero.....	5,800	0	1	0	250	4,200	12,925	4,200
Danville.....	0	0	0	0	24,400	9,250	27,588	16,750
Decatur.....	3,500	3,000	1	1	8,425	10,600	27,575	21,660
East St. Louis.....	28,450	2,500	10	1	8,475	950	39,425	7,125
Elgin.....	3,500	5,000	1	1	1,215	9,875	15,735	22,177
Evanston.....	24,000	20,000	2	2	20,500	7,500	62,000	59,000
Granite City.....	0	0	0	0	0	0	0	0
Joliet.....	7,000	0	2	0	6,900	3,000	86,959	14,850
Maywood.....	0	0	0	0	1,045	79,333	2,695	80,608
Moline.....	3,400	15,000	1	3	2,170	465	7,280	20,448
Oak Park.....	0	18,000	0	1	10,170	402,560	18,965	426,060
Peoria.....	86,930	91,500	14	14	23,630	783,990	140,548	882,290
Quincy.....	3,250	4,600	2	2	1,730	84,462	7,440	91,362
Rockford.....	10,000	3,000	2	1	12,250	4,100	29,000	14,010
Rock Island.....	13,500	4,000	6	1	1,587	480	21,906	6,878
Springfield.....	25,000	47,805	6	9	8,530	28,617	105,502	85,238
Waukegan.....	38,000	26,000	9	7	3,545	10,800	47,705	38,120
Indiana:								
Anderson.....	7,000	5,200	1	2	610	5,525	14,270	13,515
East Chicago.....	0	0	0	0	920	180,720	1,470	183,998
Elkhart.....	6,500	2,000	2	1	63,450	1,515	70,952	4,905
Evansville.....	6,700	0	2	0	5,225	25,265	83,737	28,182
Fort Wayne.....	37,160	5,600	9	1	18,235	89,934	68,439	105,761
Gary.....	16,200	7,000	3	2	7,035	0	27,985	12,550
Hammond.....	5,600	5,000	2	1	72,489	747	84,104	14,447
Indianapolis.....	102,350	98,950	22	19	1,132,234	11,640	1,275,513	138,979
Kokomo.....	500	0	1	0	2,420	440	3,095	1,271
Lafayette.....	0	7,300	0	4	3,000	0	4,200	11,100
Marion.....	0	0	0	0	18,757	3,200	26,156	12,623
Michigan City.....	3,500	2,000	1	1	1,350	50	5,100	5,800
Mishawaka.....	3,000	0	2	0	225	1,150	3,375	1,230
Muncie.....	0	1,000	0	1	40,575	37,622	43,502	45,243
Richmond.....	8,250	0	2	0	800	2,950	10,150	5,800
South Bend.....	6,450	0	3	0	10,867	1,265	26,557	7,255
Terre Haute.....	6,600	0	2	0	2,125	2,300	11,800	7,930
Michigan:								
Ann Arbor.....	10,700	0	3	0	2,325	1,255	23,775	10,556
Battle Creek.....	10,300	0	3	0	16,900	5,800	33,565	13,835
Bay City.....	10,500	0	3	0	1,425	56,300	17,815	58,410
Dearborn.....	45,900	19,500	10	5	1,300	2,650	49,000	23,350
Detroit.....	304,350	172,200	56	33	319,195	77,523	773,423	375,085
Flint.....	14,182	26,447	3	7	12,727	17,839	36,649	61,231
Grand Rapids.....	28,200	30,400	7	7	8,940	33,125	46,410	74,355
Hamtramck.....	0	0	0	0	150	650	1,220	1,625
Highland Park.....	0	0	0	0	260	495	5,380	3,220
Jackson.....	0	2,800	0	1	51,115	5,565	57,225	8,546
Kalamazoo.....	11,800	5,500	4	2	1,170	4,585	18,744	16,502
Lansing.....	0	5,000	0	1	46,385	28,450	65,620	37,550
Muskegon.....	0	0	0	0	8,025	575	10,365	8,280
Saginaw.....	8,900	8,200	5	2	2,215	625	14,963	9,735
Wyandotte.....	11,400	9,200	2	2	1,005	159,332	18,335	169,362
Ohio:								
Akron.....	18,050	8,800	3	3	17,603	4,320	41,368	17,360
Ashtabula.....	13,850	19,000	5	2	1,705	1,308	16,380	21,218
Canton.....	0	0	0	0	2,655	1,105	4,405	1,905
Cincinnati.....	338,700	272,650	71	48	113,605	120,845	547,665	447,880
Cleveland.....	103,500	77,500	33	15	336,800	46,950	554,900	272,925
Cleveland Heights.....	90,800	24,200	13	4	5,160	1,330	99,600	30,265
Columbus.....	34,100	12,000	6	2	13,450	45,450	63,450	86,800
Dayton.....	40,000	36,000	10	5	23,206	24,144	69,704	125,327
East Cleveland.....	0	0	0	0	130	350	1,430	1,620
Elyria.....	2,250	3,000	1	1	2,360	905	6,845	5,030
Hamilton.....	4,000	4,000	1	1	4,355	950	10,790	6,945
Lakewood.....	4,500	8,500	1	2	1,315	10,425	10,640	21,909
Lima.....	0	0	0	0	1,350	75	1,735	495

TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER AND DECEMBER, 1931—Continued

East North Central States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings					
	November, 1931	December, 1931	November, 1931	December, 1931	November, 1931	December, 1931	November, 1931	December, 1931
Ohio—Continued.								
Lorain.....	\$5,400	\$12,500	2	2	\$5,300	\$575	\$11,125	\$13,075
Mansfield.....	7,500	9,000	1	1	6,165	400	15,175	9,910
Marion.....	0	0	0	0	465	2,150	465	2,900
Massillon.....	0	0	0	0	250	76,600	750	76,675
Middletown.....	0	0	0	0	270	34,496	1,020	35,809
Newark.....	5,000	3,500	1	2	760	3,850	5,760	7,350
Norwood.....	26,000	0	5	0	13,570	0	41,420	650
Portsmouth.....	0	0	0	0	5,230	75	7,296	370
Springfield.....	10,300	9,000	2	2	885	850	12,410	11,475
Steubenville.....	3,000	0	1	0	500	6,900	5,700	7,775
Toledo.....	4,000	13,000	1	1	11,585	88,860	24,168	281,329
Warren.....	11,500	0	2	0	16,820	500	39,390	6,455
Youngstown.....	14,400	9,800	4	2	3,245	2,210	54,065	16,840
Wisconsin:								
Appleton.....	17,200	6,700	6	2	22,370	775	45,595	48,375
Eau Claire.....	18,400	19,500	6	4	3,000	3,550	23,500	25,367
Fond du Lac.....	19,500	0	7	0	4,600	990	27,262	4,110
Green Bay.....	11,100	6,500	3	2	4,570	13,965	20,030	24,890
Kenosha.....	15,000	0	1	0	1,950	24,245	44,140	28,415
Madison.....	29,700	31,900	7	7	3,695	34,236	59,668	68,736
Milwaukee.....	225,350	142,150	53	30	935,577	30,910	1,229,578	214,164
Oshkosh.....	0	13,275	0	5	235,050	2,540	236,155	23,215
Racine.....	0	7,000	0	1	10,745	1,175	13,315	13,575
Sheboygan.....	42,300	16,500	9	3	1,375	995	58,717	22,200
Superior.....	3,000	0	1	0	1,715	1,375	5,525	1,980
West Allis.....	9,100	0	2	0	5,965	0	17,251	250
Total.....	2,276,567	1,529,677	507	302	4,807,024	5,228,548	8,868,820	7,987,168
Per cent of change.....		—32.8		—40.4		+8.8		—9.9

West North Central States

Iowa:								
Burlington.....	\$5,000	0	1	0	\$5,350	\$200	\$11,250	\$1,250
Cedar Rapids.....	44,150	\$22,200	6	8	6,685	11,332	77,430	59,227
Council Bluffs.....	3,500	1,000	2	1	3,800	1,300	12,300	2,800
Davenport.....	29,400	17,000	8	5	13,245	610	74,098	22,572
Des Moines.....	58,050	74,800	13	15	34,090	9,185	112,555	87,710
Dubuque.....	46,900	24,000	10	6	3,450	2,348	58,448	34,249
Ottumwa.....	11,500	5,000	3	1	300	16,500	11,800	53,600
Sioux City.....	36,500	37,000	11	9	90,465	41,175	163,415	88,525
Waterloo.....	9,600	17,100	4	4	7,325	71,835	21,850	90,165
Kansas:								
Hutchinson.....	0	8,900	0	4	1,975	2,620	4,105	11,760
Kansas City.....	9,900	4,700	4	4	0	2,000	9,900	9,175
Topeka.....	22,000	4,700	6	3	3,430	4,615	31,585	24,505
Wichita.....	44,000	23,575	8	9	11,255	15,160	65,212	47,443
Minnesota:								
Duluth.....	17,300	26,500	6	7	6,035	7,520	61,945	65,240
Minneapolis.....	474,850	354,325	131	93	41,960	855,235	589,945	1,247,550
St. Paul.....	190,740	104,160	35	21	1,563,900	44,696	1,799,160	269,827
Missouri:								
Joplin.....	0	3,000	0	2	900	0	6,525	7,869
Kansas City.....	70,000	80,500	26	23	62,200	5,200	182,900	437,800
Springfield.....	13,600	9,000	5	2	2,160	1,710,585	20,760	1,805,190
St. Joseph.....	7,100	13,500	3	5	6,530	745	18,705	18,055
St. Louis.....	246,500	170,100	78	44	63,038	38,980	454,868	287,135
Nebraska:								
Lincoln.....	25,800	133,100	5	10	44,510	3,295	72,360	140,755
Omaha.....	53,000	94,900	15	24	54,232	101,410	118,747	210,285
North Dakota:								
Fargo.....	28,000	20,500	8	5	275	500	32,775	28,800

TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER AND DECEMBER, 1931—Continued

West North Central States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings		November, 1931	December, 1931	November, 1931	December, 1931
	November, 1931	December, 1931	November, 1931	December, 1931				
South Dakota:								
Sioux Falls.....	\$42,437	\$13,125	9	4	\$111,314	\$158,950	\$154,626	\$273,950
Total.....	1,489,827	1,262,685	397	309	2,138,424	3,105,996	4,167,264	5,325,437
Per cent of change.....		-15.3		-22.2		+45.2		+27.8

South Atlantic States

Delaware:								
Wilmington.....	\$69,200	\$16,800	15	4	\$24,875	\$20,665	\$320,732	\$49,736
District of Columbia:								
Washington.....	747,350	578,500	149	118	8,825,657	280,488	9,905,058	1,016,546
Florida:								
Jacksonville.....	38,650	39,500	12	12	34,565	9,105	136,640	94,860
Miami.....	43,650	28,300	16	9	79,815	11,200	206,814	90,395
Orlando.....	500	0	1	0	565	2,720	9,070	9,105
St. Petersburg.....	12,700	19,000	6	1	8,500	1,300	37,100	41,244
Tampa.....	7,650	1,650	8	3	4,525	24,340	31,324	50,778
Georgia:								
Atlanta.....	58,700	24,900	25	12	28,923	10,057	198,609	69,073
Augusta.....	23,292	3,390	8	4	15,363	1,454	48,994	10,131
Columbus.....	2,800	3,500	2	3	2,059	475	12,329	9,287
Macon.....	16,500	16,500	1	1	850	900	37,765	45,331
Savannah.....	14,500	16,200	4	5	3,750	1,100	22,530	17,400
Maryland:								
Baltimore.....	426,000	168,000	109	29	595,600	138,200	1,476,700	668,000
Cumberland.....	0	0	0	0	915	725	3,370	1,675
Hagerstown.....	0	4,500	0	3	1,155	445	6,155	5,270
North Carolina:								
Asheville.....	0	2,400	0	2	220	125	6,515	7,110
Charlotte.....	31,530	22,050	13	4	72,475	90	115,383	28,511
Durham.....	19,200	4,900	5	2	0	2,000	21,675	8,720
Greensboro.....	3,500	4,900	2	2	662,078	36,285	672,028	73,314
High Point.....	16,400	15,000	12	7	590	9,375	17,490	31,375
Raleigh.....	2,200	8,300	2	5	234,540	12,555	240,624	21,555
Wilmington.....	13,800	15,100	6	4	600	7,200	18,800	33,300
Winston-Salem.....	6,500	900	3	1	8,310	445	21,353	22,684
South Carolina:								
Charleston.....	5,500	5,500	3	2	0	21,350	16,689	31,842
Columbia.....	56,400	29,100	18	9	953,443	81,510	1,022,610	144,045
Greenville.....	16,000	11,550	4	3	0	1,125	18,665	14,340
Spartanburg.....	1,500	0	1	0	2,350	1,000	5,425	2,055
Virginia:								
Lynchburg.....	4,650	16,000	2	5	16,580	4,350	25,290	29,930
Newport News.....	23,700	4,133	12	2	2,607	1,165	98,855	11,319
Norfolk.....	67,800	22,500	24	8	22,735	3,900	109,180	58,835
Petersburg.....	400	3,200	1	2	30,568	40	31,253	3,240
Portsmouth.....	9,600	0	5	0	390	850	25,445	6,725
Richmond.....	60,790	11,000	12	4	27,177	19,867	115,485	64,883
Roanoke.....	8,500	16,000	2	4	19,855	503	37,390	22,666
West Virginia:								
Charleston.....	14,800	49,350	6	10	3,475	8,439	33,875	81,094
Clarksburg.....	3,000	1,500	1	1	3,378	400	6,378	2,500
Huntington.....	8,100	0	4	0	3,325	1,225	19,830	3,535
Parkersburg.....	0	0	0	0	1,425	8,287	3,870	17,257
Wheeling.....	10,200	0	4	0	6,950	4,100	20,605	9,450
Total.....	1,845,462	1,164,123	498	281	11,700,188	729,360	15,155,803	2,909,116
Per cent of change.....		-36.9		-43.6		-93.8		-80.8

TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER AND DECEMBER, 1931—Continued

South Central States

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings		Novem-ber, 1931	Decem-ber, 1931	Novem-ber, 1931	Decem-ber, 1931
	Novem-ber, 1931	Decem-ber, 1931	Novem-ber, 1931	Decem-ber, 1931				
Alabama:								
Birmingham-----	\$8, 260	\$2, 600	9	3	\$18, 300	\$3, 650	\$120, 903	\$18, 840
Mobile-----	24, 300	11, 000	11	6	11, 550	27, 075	43, 648	43, 897
Montgomery-----	20, 200	14, 800	17	11	10, 825	2, 135	40, 721	26, 635
Arkansas:								
Little Rock-----	17, 000	8, 000	4	5	263, 553	867, 806	288, 929	892, 287
Kentucky:								
Ashland-----	0	0	0	0	744	0	744	3, 700
Covington-----	7, 000	0	2	0	670	135, 845	13, 831	140, 320
Louisville-----	12, 000	67, 500	3	7	40, 470	28, 790	101, 420	106, 615
Newport-----	0	0	0	0	700	20, 400	700	23, 100
Paducah-----	0	3, 000	0	1	2, 100	11, 500	2, 100	14, 500
Louisiana:								
Baton Rouge-----	25, 160	11, 300	5	3	835	655	31, 303	18, 947
New Orleans-----	49, 400	33, 550	17	14	44, 775	11, 505	124, 683	92, 194
Shreveport-----	9, 250	3, 500	9	4	13, 621	372, 432	51, 268	389, 296
Mississippi:								
Jackson-----	11, 910	9, 890	9	5	0	0	49, 004	12, 173
Oklahoma:								
Enid-----	0	11, 100	0	3	0	485	2, 285	14, 760
Oklahoma City-----	89, 500	76, 000	24	11	1, 039, 715	751, 889	1, 141, 025	833, 499
Okmulgee-----	0	0	0	0	400	150	400	150
Tulsa-----	57, 700	60, 840	17	13	57, 405	6, 937	127, 503	82, 203
Tennessee:								
Chattanooga-----	20, 700	34, 000	8	2	19, 770	12, 700	100, 986	68, 025
Johnson City-----	0	500	0	1	1, 650	4, 500	1, 650	5, 800
Knoxville-----	6, 300	4, 800	5	2	6, 420	5, 220	25, 274	15, 780
Memphis-----	27, 950	6, 500	13	5	26, 520	13, 910	151, 840	104, 000
Nashville-----	87, 600	10, 200	14	5	409, 225	1, 364, 500	529, 619	1, 392, 653
Texas:								
Amarillo-----	5, 500	31, 375	2	11	18, 500	8, 791	29, 539	43, 241
Austin-----	68, 665	24, 039	39	22	256, 206	49, 813	402, 021	81, 924
Beaumont-----	7, 250	1, 000	7	1	5, 192	1, 462	21, 871	40, 499
Dallas-----	128, 775	64, 000	52	29	7, 580	230, 895	310, 200	366, 740
El Paso-----	12, 000	9, 700	5	3	2, 646	4, 085	20, 004	17, 175
Fort Worth-----	200, 550	178, 550	28	21	110, 185	43, 825	353, 036	255, 963
Galveston-----	16, 950	18, 950	7	8	313, 354	62, 723	340, 852	87, 521
Houston-----	696, 350	273, 650	85	66	148, 588	73, 500	854, 623	354, 040
Port Arthur-----	0	0	0	0	3, 710	0	11, 422	6, 112
San Angelo-----	0	0	0	0	1, 650	1, 060	4, 185	2, 675
San Antonio-----	77, 722	77, 218	39	41	218, 794	336, 313	312, 103	445, 591
Waco-----	10, 725	5, 000	8	4	41, 750	2, 765	57, 335	9, 115
Wichita Falls-----	0	0	0	0	49, 449	0	55, 424	4, 465
Total-----	1, 698, 717	1, 052, 562	439	307	3, 146, 852	4, 457, 316	5, 722, 451	6, 014, 435
Per cent of change-----		-38. 0		-30. 1		+41. 6		+5. 1

TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, NOVEMBER AND DECEMBER, 1931—Continued

Mountain and Pacific States

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Family provided for in new dwellings		November, 1931	December, 1931	November, 1931	December, 1931
	November, 1931	December, 1931	November, 1931	December, 1931				
Arizona:								
Phoenix.....	\$52,700	\$36,500	10	10	\$250	\$115,340	\$55,346	\$158,220
Tucson.....	46,415	13,900	24	8	67,685	2,800	122,959	31,678
California:								
Alameda.....	19,500	7,000	5	2	5,510	1,465	33,002	19,475
Alhambra.....	77,300	41,500	24	14	6,250	275	88,150	46,075
Bakersfield.....	16,200	9,100	4	3	106,680	2,190	125,965	27,500
Berkeley.....	59,959	13,200	12	5	109,659	1,235	203,308	30,756
Fresno.....	34,857	13,750	9	6	10,640	3,750	70,905	51,963
Glendale.....	125,050	222,800	27	44	37,440	11,400	170,920	245,525
Long Beach.....	147,200	87,550	46	32	29,200	270,365	210,715	385,125
Los Angeles.....	1,276,064	1,076,669	394	357	1,178,306	1,150,501	2,879,858	2,646,863
Oakland.....	171,575	104,250	44	30	181,159	29,280	386,404	198,367
Pasadena.....	32,050	72,400	8	11	10,833	225,173	71,948	320,759
Riverside.....	17,800	28,800	7	5	21,070	61,285	47,827	95,824
Sacramento.....	95,250	62,600	21	13	180,630	23,860	293,232	114,887
San Diego.....	84,100	139,300	24	39	37,910	132,558	201,112	416,914
San Francisco.....	505,950	346,750	129	84	592,516	242,472	1,206,534	729,240
San Jose.....	35,050	27,695	9	6	188,475	18,600	249,100	67,180
Santa Ana.....	40,300	8,500	13	2	30,000	3,400	91,844	17,318
Santa Barbara.....	36,700	28,950	10	8	3,110	118,601	57,720	151,381
Stockton.....	24,750	24,700	5	7	2,450	430,313	38,055	458,578
Vallejo.....	10,400	2,500	2	1	3,150	0	16,945	5,554
Colorado:								
Colorado Springs..	8,325	3,300	3	3	1,550	2,150	20,985	8,430
Denver.....	152,800	111,500	37	26	139,250	74,290	342,115	223,540
Pueblo.....	3,500	0	3	0	2,550	855	8,695	5,755
Montana:								
Butte.....	0	0	0	0	3,020	242,600	3,720	242,600
Great Falls.....	10,250	12,900	3	3	575	150	16,025	17,900
New Mexico:								
Albuquerque.....	24,755	24,500	8	10	10,335	18,955	52,883	57,015
Oregon:								
Portland.....	79,440	64,450	21	15	41,770	1,197,453	176,740	1,363,855
Salem.....	4,720	0	1	0	15,342	660	25,772	5,042
Utah:								
Ogden.....	2,400	0	2	0	0	700	2,500	1,200
Salt Lake City.....	43,800	17,425	8	6	6,301	19,146	67,546	75,049
Washington:								
Bellingham.....	7,500	7,500	3	3	3,475	14,900	14,525	24,910
Everett.....	0	0	0	0	895	430	2,450	1,255
Seattle.....	136,300	111,250	45	40	112,770	42,200	336,580	250,012
Spokane.....	57,550	16,400	15	4	16,500	7,620	89,555	42,016
Tacoma.....	33,500	14,000	14	4	6,140	44,605	54,185	98,690
Total.....	3,474,010	2,751,539	990	801	3,163,396	4,511,577	7,836,125	8,636,451
Per cent of change.....		-20.8		-19.1		+42.6		+10.2

Hawaii

Honolulu.....	\$112,821	\$107,387	65	39	\$8,915	\$167,391	\$146,745	\$288,617
Per cent of change.....		-4.8		-40.0		+87.8		+96.7

WAGES AND HOURS OF LABOR

Wage-Rate Changes in Manufacturing Industries in December, 1931

OF THE 16,150 manufacturing establishments from which data concerning wage changes were requested, 15,875 establishments, or 98.3 per cent of the total, reported no wage-rate changes during the month ending December 15, 1931. These 15,875 establishments employed 2,680,525 workers in December, 1931, or 98.2 per cent of the 2,729,901 employees in all establishments from which wage-rate changes were requested.

Decreases in rates of wages were reported by 275 establishments, or 1.7 per cent of the total number of establishments reporting. These decreases, averaging 9.3 per cent, affected 49,376 employees, or 1.8 per cent of all employees in the establishments reporting.

WAGE CHANGES OCCURRING BETWEEN NOVEMBER 15 AND DECEMBER 15, 1931

Industry	Estab- lish- ments report- ing	Total number of em- ployees	Number of establish- ments reporting—			Number of employees having—		
			No wage changes	Wage in- creases	Wage de- creases	No wage changes	Wage in- creases	Wage de- creases
All manufacturing indus- tries.....	16, 150	2, 729, 901	15, 875		275	2, 680, 525		49, 376
Per cent of total.....	100	100	98.3		1.7	98.2		1.8
Slaughtering and meat packing.....	206	87, 177	201		5	86, 288		889
Confectionery.....	315	37, 957	313		2	37, 653		304
Ice cream.....	311	10, 023	307		4	9, 989		34
Flour.....	418	16, 082	416		2	15, 904		178
Baking.....	789	59, 519	782		7	59, 073		446
Sugar refining, cane.....	14	7, 935	13		1	7, 281		654
Cotton goods.....	515	184, 793	467		48	164, 473		20, 320
Hosiery and knit goods.....	339	81, 326	331		8	80, 039		1, 287
Silk goods.....	251	49, 464	243		8	48, 457		1, 007
Woolen and worsted goods.....	181	44, 772	170		11	41, 172		3, 600
Carpets and rugs.....	27	14, 513	25		2	14, 415		98
Dyeing and finishing textiles.....	130	35, 031	116		14	30, 916		4, 115
Clothing, men's.....	328	53, 066	327		1	52, 880		186
Shirts and collars.....	106	15, 478	105		1	15, 428		50
Clothing, women's.....	380	25, 306	379		1	25, 286		20
Millinery and lace goods.....	140	12, 561	134		6	12, 330		231
Iron and steel.....	189	191, 196	188		1	190, 196		1, 000
Cast-iron pipe.....	38	7, 761	38			7, 761		
Structural-iron work.....	168	20, 254	166		2	20, 121		133
Foundry and machine-shop products.....	1, 073	154, 224	1, 059		14	151, 976		2, 248
Hardware.....	99	24, 103	98		1	23, 935		168
Machine tools.....	144	15, 713	142		2	15, 679		34
Steam fittings and steam and hot-water heating apparatus.....	103	21, 474	103			21, 474		
Stoves.....	133	14, 531	131		2	14, 474		57
Lumber, sawmills.....	628	64, 429	619		9	62, 588		1, 841
Lumber, millwork.....	328	18, 944	319		9	18, 619		325
Furniture.....	418	46, 540	402		16	44, 996		1, 544
Leather.....	137	20, 981	131		6	19, 546		1, 435
Boots and shoes.....	274	85, 814	263		11	83, 373		2, 441
Paper and pulp.....	341	64, 442	332		9	63, 198		1, 244
Paper boxes.....	298	23, 280	296		2	23, 191		89
Printing, book and job.....	614	52, 350	608		6	51, 666		684
Printing, newspapers.....	427	73, 646	423		4	73, 425		221

WAGE CHANGES OCCURRING BETWEEN NOVEMBER 15 AND DECEMBER 15, 1931—
Continued

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage changes	Wage increases	Wage decreases	No wage changes	Wage increases	Wage decreases
Chemicals.....	165	33,244	165	-----	-----	33,244	-----	-----
Fertilizers.....	205	6,960	202	-----	3	6,725	-----	235
Petroleum refining.....	101	42,940	101	-----	-----	42,940	-----	-----
Cement.....	111	14,697	109	-----	2	14,570	-----	127
Brick, tile, and terra cotta.....	686	21,730	680	-----	6	21,397	-----	333
Pottery.....	110	14,945	108	-----	2	14,800	-----	145
Glass.....	185	37,798	184	-----	1	37,749	-----	49
Stamped and enameled ware.....	84	13,263	84	-----	1	13,263	-----	-----
Brass, bronze, and copper products.....	159	27,609	157	-----	2	27,598	-----	11
Chewing and smoking tobacco and snuff.....	26	8,854	26	-----	-----	8,854	-----	-----
Cigars and cigarettes.....	191	45,486	190	-----	1	45,480	-----	6
Automobiles.....	217	219,866	216	-----	1	219,851	-----	15
Carriages and wagons.....	46	589	45	-----	1	580	-----	9
Car building and repairing, electric railroad.....	459	24,814	456	-----	3	24,702	-----	112
Car building and repairing, steam railroad.....	498	77,498	497	-----	1	77,438	-----	60
Agricultural implements.....	76	7,340	75	-----	1	7,316	-----	24
Electrical machinery, apparatus, and supplies.....	217	132,783	212	-----	5	132,320	-----	463
Pianos.....	53	3,546	50	-----	3	3,422	-----	124
Rubber boots and shoes.....	8	11,687	8	-----	-----	11,687	-----	-----
Automobile tires and inner tubes.....	37	43,813	36	-----	1	43,772	-----	41
Shipbuilding.....	82	33,660	79	-----	3	33,298	-----	362
Aircraft.....	36	6,689	36	-----	-----	6,689	-----	-----
Aluminum manufactures.....	16	2,609	16	-----	-----	2,609	-----	-----
Beet sugar.....	48	14,927	48	-----	-----	14,927	-----	-----
Beverages.....	290	9,388	287	-----	3	9,372	-----	16
Bolts, nuts, washers, and rivets.....	67	7,587	65	-----	2	7,545	-----	42
Butter.....	219	5,555	217	-----	2	5,546	-----	9
Cash registers, adding machines, and calculating machines.....	52	15,967	52	-----	-----	15,967	-----	-----
Clocks, time-recording devices, and clock movements.....	25	7,439	25	-----	-----	7,439	-----	-----
Corsets and allied garments.....	28	4,095	28	-----	-----	4,095	-----	-----
Cottonseed oil, cake and meal.....	44	2,692	44	-----	-----	2,692	-----	-----
Cotton, small wares.....	102	8,846	100	-----	2	8,829	-----	17
Cutlery (not including silver and plated cutlery) and edge tools.....	118	9,437	116	-----	2	9,408	-----	29
Forgings, iron and steel.....	45	5,051	44	-----	1	5,009	-----	42
Gas and electric fixtures, lamps, lanterns, and reflectors.....	46	5,442	46	-----	-----	5,442	-----	-----
Hats, fur-felt.....	39	5,543	39	-----	-----	5,543	-----	-----
Jewelry.....	153	11,590	151	-----	2	11,571	-----	19
Marble, granite, slate, and other stone products.....	204	6,221	203	-----	1	6,201	-----	20
Men's furnishing goods.....	73	5,479	73	-----	-----	5,479	-----	-----
Paint and varnish.....	341	15,629	339	-----	2	15,564	-----	65
Plated ware.....	37	5,475	36	-----	1	5,460	-----	15
Plumbers' supplies.....	67	4,885	67	-----	-----	4,885	-----	-----
Radio.....	38	18,352	38	-----	-----	18,352	-----	-----
Rayon.....	20	24,155	20	-----	-----	24,155	-----	-----
Rubber goods other than boots, shoes, tires, and inner tubes.....	103	19,217	102	-----	1	19,177	-----	40
Smelting and refining, copper, lead, and zinc.....	30	9,508	30	-----	-----	9,508	-----	-----
Soap.....	60	8,460	60	-----	-----	8,460	-----	-----
Tin cans and other tinware.....	52	7,251	50	-----	2	7,200	-----	51
Tools (not including edge tools, machine tools, files, or saws).....	125	8,137	125	-----	-----	8,137	-----	-----
Turpentine and rosin.....	21	1,157	18	-----	3	1,145	-----	12
Typewriters and supplies.....	16	9,253	16	-----	-----	9,253	-----	-----
Wirework.....	57	6,058	57	-----	-----	6,058	-----	-----

Wage Changes Reported by Trade-Unions Since October, 1931

A TABULATION of union and municipal wage and hour changes reported to the bureau during the past month and occurring during the past four months is presented herewith.

There were 51,744 workers for which changes were reported, 10,095 of whom were reported to have gone on the 5-day week. In addition to wage changes tabulated there were renewals or extensions of existing agreements affecting several hundred bakers, electricians, clothing workers, upholsterers, compositors, electrotypers, stereotypers, and pressmen.

RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, OCTOBER, 1931, TO JANUARY, 1932

Industry or occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Building trades:					
Bricklayers—		<i>Per hour</i>	<i>Per hour</i>		
Cedar Rapids, Iowa.....	Nov. 22	\$1.50	\$1.37½	44	44
Des Moines, Iowa.....	Oct. 1	1.50	1.25	40	40
Everett, Wash.....	Jan. 1	1.50	1.50	40	30
Carpenters—					
Great Barrington, Mass.....	...do....	1.12½	1.00	44	44
Sioux City, Iowa, and vicinity.....	Oct. 1	1.12½	1.00	44	44
Washington, Pa.....	Jan. 1	1.12½	1.00	44	40
Cement finishers—					
Birmingham, Ala.....	...do....	.75	1.00	40	40
Pueblo, Colo.....	Oct. 26	1.50	1.31¼	44	44
Electricians, Everett, Wash.....	Jan. 1	1.37½	1.37½	40	30
Engineers, hoisting, Everett, Wash.....	...do....	1.12½	1.12½	40	30
Glaziers, Dayton, Ohio.....	Dec. 7	1.37½	1.10	40	40
Laborers, Everett, Wash.....	Jan. 1	.75-1.00	.75-1.00	40	30
Painters—					
Atlantic City, N. J.....	...do....	1.45	1.00	40	40
Dayton, Ohio.....	Dec. 7	1.25	1.00	40	40
Everett, Wash.....	Jan. 1	1.12½	1.12½	40	30
Plasterers—					
Birmingham, Ala.....	...do....	.75	1.00	40	40
Everett, Wash.....	...do....	1.50	1.50	40	30
Memphis, Tenn.....	Dec. 1	1.56¼	1.25	40	40
Port Angeles, Wash., and vicinity.....	Oct. 26	1.37½	1.12½	44	44
Pueblo, Colo.....	...do....	1.50	1.31¼	44	44
Rochester, Pa., and vicinity.....	Dec. 2	1.66¼	1.25	40	40
Santa Barbara, Calif.....	Nov. 19	1.50	1.12½	40	30
Plumbers—					
Everett, Wash.....	Jan. 1	1.37½	1.37½	40	30
Milwaukee, Wis.....	Nov. 16	1.18¾	1.00	44	44
Sheet-metal workers, Everett, Wash.....	Jan. 1	1.25	1.25	40	30
Steamfitters—					
Milwaukee, Wis.....	Nov. 16	1.06¼	.93¾	44	44
Helpers.....	...do....	.62½	.56¼	44	44
Structural-iron workers, Everett, Wash.....	Jan. 1	1.12½	1.12½	40	30
Chauffeurs and teamsters:		<i>Per week</i>	<i>Per week</i>		
Laundry wagon drivers, Chicago, Ill.....	Nov. 1	\$39.50	\$40.50	(1)	(1)
Clothing:					
Overall, shirt, and men's clothing workers, United States—					
Cutters.....	Jan. 1	35.00-42.00	29.75-35.70	44	40
Pieceworkers.....	...do....	18.00-30.00	14.40-24.00	44	40
Longshoremen:					
Corpus Christi, Galveston, Houston, and Texas City, Tex.....	Oct. 21	<i>Per hour</i> \$0.80	<i>Per hour</i> \$0.70	48	48
Metal trades:		<i>Per day</i>	<i>Per day</i>		
Molders and coremakers, Troy, N. Y.....	Dec. 3	\$7.25	\$6.60	8	8

¹ Various.

² Average.

³ Per day.

RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, OCTOBER, 1931, TO JANUARY, 1932—Continued

Industry or occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Printing and publishing:					
Compositors and machine operators—		<i>Per week</i>	<i>Per week</i>		
Bismarck, N. Dak., newspaper	Jan. 1	\$46.56	\$46.56	47	46
Grand Rapids, Mich.—					
Job work	Nov. 16	35.00	4 32.00	44	40
Newspaper, day	do	46.00	4 38.35	48	40
Newspaper, night	do	48.00	4 40.00	48	40
Middletown, Ohio, newspaper	Nov. 1	34.00	35.00	48	48
Mount Vernon, N. Y.—					
Job work	Jan. 1	52.00	54.00	44	44
Newspaper, day	do	55.00	57.00	45	45
Newspaper, night	do	57.00	58.00	42	42
New York, N. Y.—					
Job work, day	do	59.00	60.00	44	44
Job work, night	do	62.00	63.00	44	44
Job work, midnight	do	65.00	66.00	44	44
Phoenix, Ariz.—					
Newspaper, day	Oct. 31	46.50	45.00	48	46½
Newspaper, night	do	49.50	48.00	48	46½
Paper handlers and sheet straighteners,					
New York, N. Y.—					
Day work	Jan. 1	40.00-44.00	41.00-45.00	44	44
Night work	do	43.00-47.00	44.00-48.00	40	40
Press assistants, New York, N. Y.—					
Job work, day	do	47.50-53.00	48.50-54.00	44	44
Job work, night	do	50.50-56.00	51.50-57.00	40	40
Pressmen, New York, N. Y.—					
Job work, day	do	50.00-70.00	51.00-71.00	44	44
Job work, night	do	53.00-73.00	54.00-74.00	40	40
Railroad workers:		<i>Per hour</i>	<i>Per hour</i>		
Chicago, Ill., levermen (towermen)	Dec. 1	2 \$0.75	2 \$0.75	56	48
Street railway workers:					
Bellefonte, Pa., and East St. Louis, Ill., motormen, conductors, bus operators, and garage men	Jan. 1	.35- .60	.32½- .54	32-75	32-75
Textile workers, New Bedford, Mass.	Dec. 7	<i>Per week</i> 2 \$17.00	<i>Per week</i> 2 \$15.30	48	48
Municipal workers:					
Baltimore, Md., department of education employees	Jan. 1	(1)	(5)	(1)	(1)
Perth Amboy, N. J.	do	(1)	(6)	48	48
Sacramento, Calif., State printing plant—					
Bookbinders	Nov. 1	50.00	45.46	44	40
Printers	do	51.00	46.37	44	40
Pressmen	do	50.00	45.46	44	40

¹ Various.² Average.⁴ Temporary.⁵ 6½ per cent reduction for temporary period.⁶ 8½ per cent reduction.

Collection of Wages in New Jersey, 1930-31

DURING the year ending June 30, 1931, the various State employment bureaus of New Jersey received 2,426 claims for wages, which aggregated \$176,554.67. This was an increase of 15.7 per cent over the number of claims received in the preceding year and an increase of approximately 43 per cent in the amount of claims, the New Jersey Department of Labor reports in its Industrial Bulletin of September, 1931.

At present this wage-collection work is handled by a supervisor, one stenographer, and the part-time service of an examiner in charge of six State employment offices. The supervisor and his assistant also do the statistical work for the administration of the employment bureau division. Since this manner of handling wage claims was

instituted, in 1929, the work presented in this connection has expanded 25 per cent throughout the State. The percentage of expansion in the Newark district, where the work is carried on in the administrative office, has been greater than for the State as a whole. While this increase is due in a substantial degree to unemployment, the publicity given to the success of the only equipped bureau is also a considerable factor. Recommendation was made that a field investigator should be added to the staff doing the wage-collection work, but this extra help was not allowed. It is stated that inability to meet the expanded volume of business with equivalent facilities will result in either lack of service for some of the wage claimants or by a lower percentage of success in many cases of collection because a minimum amount of attention must be given to each case.

The local employment bureaus located outside of Newark are so taken up with the ordinary duties as employment agencies that they are not able properly to take care of the legal side of wage collection. In order to aid them in the handling of the claims submitted locally, a monthly check-up has been inaugurated so that advice and assistance can be given without delay concerning the cases in process and with prosecutions, and finally to account for funds deposited in settlements of claims. Moreover, form letters of notification, hearing, etc., have been furnished the local offices to simplify and standardize procedure. It is suggested in the report under review that the supervisor should be accorded such aid as will allow of more personal contact with the local bureaus so that a training and development program can be initiated.

During the fiscal year 1930-31 over 50 per cent of all proper claims, or \$32,836.85, representing 27.9 per cent of the money involved, was collected. The preceding year the amount collected was \$32,029.26, or about 41 per cent of the money involved in the claims.

The amount of money involved in the average case is now greater than usual, which accounts in a great measure for the smaller success in ratio of money collected, although the reasons heretofore stated are also responsible for a slightly smaller success on the ratio of cases successfully closed. Another fact explanatory of this condition is the rise of the average amount of claim to \$72.77, over the average of \$58.75 for the previous year. It is to be noted that this average is considerably above the limitation of the jurisdiction of the small claims division of the district courts.

Claims were received from every county in New Jersey, the majority of these cases being taken up by the office in Newark, where the supervisor of the wage collection division of the State employment bureau is located. While it is the labor department's policy to collect wages without inconveniencing employers, it was necessary to start prosecutions under the statute. (Ch. 38, P. L. 1899, as amended by ch. 150, P. L. 1928 and ch. 235, P. L. 1929.)

The following are the results of 37 complaints made against 19 employers in police courts, district courts, and before justices of the peace in different parts of the State:

In 16 cases wages in the amount of \$686.82 were paid and complaint dropped or sentence suspended.

In five cases a fine of \$50 in each case was imposed and paid. This, according to the statute, was turned over to the State treasurer.

In two cases a verdict was rendered and a fine of \$50 was imposed. These matters were against corporations, and the courts have reported inability to collect the fine imposed, as assets could not be discovered sufficient to cover these amounts.

In five cases a fine was imposed, and in default of payment defendants were committed to the county jail for short periods.

In nine cases the employer disappeared before warrants could be served.

The experience of the department of labor in handling thousands of claims shows that the law is seriously in need of amendment so that it will at least penalize corporations which continue their activities although the courts are unable to discover any assets on which to levy the provided fine. Changes should also be made in the matter of court jurisdiction which, as a result of the existing confusion, has opened the way for justices of the peace in particular to receive complaints from persons other than representatives of the State department of labor. This last-mentioned situation makes it possible for employers to be forced to appear in court before proper investigation has been made, and as a consequence some decisions have no foundation in fact and law.

These prosecutions were held in several of the New Jersey counties, most of them having been handled by the Newark first criminal court through the presiding magistrate's courtesy. Every complaint officially filed by the New Jersey Department of Labor was upheld by the court.

Furthermore, through a special courtesy to the department, the small claims division of the second judicial court of Irvington administered, as civil matters, cases of doubtful character, and where complicated counterclaims were presented, set these matters for trial without the petitioner's having to pay advance costs. This court set aside one day a week for the hearing of all workmen's suits whether referred by the department of labor or presented direct to the court. At the court's request the supervisor of the division of employment attended these hearings and acted as mediator on such occasions. For three and one-half months of the year ending June 30, 1931, this service included 61 cases successfully closed which are not included among the claims collected by the employment bureaus.

The division feels that, in addition to its actual remedying of wrongs, it performs a valuable service in correcting the militant attitude of many wage claimants. Of all the claims received, 25.9 per cent do not present enough evidence legally to support a case. The petitioners in such claims all consider in the beginning that they have a grievance. A careful explanation, however, of the facts and of the employers' and workers' legal rights serves to dispel these claims. A substantial volume of legal precedents is being developed in this field of law which hitherto have not often been before the courts, and such precedents have been of value in amicably adjusting disputes involving numerous well-meaning employers who have not understood the legal side of the wage controversies which so frequently come up in business.

In the statement following are given the various causes of the wage complaints in the year under review and the kinds of business in which wage claimants were engaged.

Cause:	Number of complaints
Rate or total.....	555
Held beyond pay day.....	368
Breach of contract.....	275
No funds.....	222
Bankrupt.....	165
Employer disappeared.....	111
Premature.....	84
Counterclaim.....	77
Denial of debt.....	69
None.....	54
Paid by check.....	45
Denied employment.....	41
Time worked.....	27
Quality of work.....	10
Independent contractor.....	26
Balance represents miscellaneous.	
Kinds of business:	
Building construction.....	453
Manufacturing.....	207
Painting.....	186
Restaurant.....	149
Casual.....	147
Wholesale and retail.....	145
Domestic service.....	117
Needle trades.....	67
Real estate.....	63
Trucking.....	62
Garage.....	51
Bakery.....	48
Amusement.....	43
Hotel.....	41
Road construction.....	39
Laundry.....	35
Public utility.....	33
Agricultural.....	32
Cleaning and dyeing.....	27
Printing.....	20
Professional.....	15
Balance represents miscellaneous.	

Earnings of Office Workers in New York State Factories, October, 1931

THE annual survey of office workers' earnings in New York State factories, made by the New York Department of Labor, is published in the November, 1931, Industrial Bulletin of that department. The data show that in October, 1931, the earnings of office workers averaged \$35.49, as compared with \$37.48 in October, 1930, a drop of over 5 per cent. The figure for October, 1930, however, represented the peak in the earnings of these workers; and the decline in 1931, according to the report, is "the first real setback in the upward trend evident since 1914," every other year having shown a gain over the previous year except 1915 and 1922.

This study of office workers' earnings covers only those who work in the factory offices and does not include office help in the general business offices of the firms away from the manufacturing plants, nor does it include high-salaried executives and officials. Among the types of positions represented are those of office and stock clerks, stenographers, bookkeepers, accountants, cashiers, office managers, superintendents, etc.

Table 1 shows the average earnings of these workers in representative New York State factories in October of each year from 1922 to 1931. The New York Department of Labor cautions the reader against comparing wage levels in one industry with those in another, and states that "the uneven distribution of the higher-salaried supervisory and technical staff and the lower-paid clerical force causes differences in the average earnings of office workers which do not reflect differences in the rates of pay for the same type of work." The establishments represented in this tabulation are those comprising the fixed list of manufacturing plants in the State which submit regular monthly reports for the labor market analysis of the New York Department of Labor.

TABLE 1.—AVERAGE WEEKLY EARNINGS OF OFFICE EMPLOYEES IN REPRESENTATIVE NEW YORK STATE FACTORIES IN OCTOBER OF EACH YEAR, 1922 TO 1931

Industry group	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
Stone, clay, and glass.....	\$29.95	\$30.35	\$32.65	\$32.78	\$34.06	\$34.40	\$35.10	\$34.70	\$35.52	\$34.35
Metals and machinery.....	32.08	33.36	34.63	35.75	36.31	36.88	37.63	37.72	38.29	35.06
Wood manufactures.....	33.62	34.29	35.06	36.94	39.19	39.52	37.22	37.56	36.74	38.07
Furs, leather, and rubber goods.....	28.22	28.92	29.41	28.75	29.64	29.62	29.82	29.34	30.58	28.75
Chemicals, oils, paints, etc.....	26.43	27.83	28.80	29.45	31.10	32.64	33.38	34.07	34.74	32.87
Pulp and paper.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Printing and paper goods.....	34.24	36.41	37.48	38.90	39.91	40.49	41.37	42.68	43.94	41.85
Textiles.....	26.87	28.08	28.83	29.36	29.95	29.85	30.81	30.87	33.47	33.46
Clothing and millinery.....	28.62	29.68	30.29	30.92	31.41	31.45	31.82	33.30	32.60	31.27
Food and tobacco.....	32.19	33.98	34.31	34.86	35.86	35.86	35.03	36.04	36.49	35.10
Water, light, and power.....	(1)	30.38	31.97	32.78	32.53	31.79	31.60	30.77	33.01	30.64
Total.....	31.20	32.56	33.58	34.49	35.38	35.88	36.37	36.94	37.48	35.49

¹ Separate earnings not computed because of small number of employees.

In Table 2 a comparison is given of the earnings of men and women in factory offices in New York State in October, 1931. The figures in this table are not based on a fixed list of reporting firms, as is the case with those in Table 1, as it is not possible to secure separate data for men and women from all the firms nor from identical firms.

TABLE 2.—AVERAGE WEEKLY EARNINGS OF MEN AND WOMEN IN FACTORY OFFICES IN NEW YORK STATE, OCTOBER, 1931

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.....	\$42.32	\$41.70	\$42.44	\$21.09	\$24.58	\$20.22
Wood manufactures.....	49.89	44.02	52.66	24.16	25.38	23.68
Furs, leather, and rubber goods.....	39.40	42.02	37.24	22.14	25.76	20.44
Chemicals, oils, paints, etc.....	48.84	45.33	50.57	21.06	23.56	20.09
Pulp and paper.....	(1)	(1)	(1)	(1)	(1)	(1)
Printing and paper goods.....	57.63	61.68	47.67	25.27	26.34	23.05
Textiles.....	43.47	44.41	43.28	22.89	23.07	22.84
Clothing and millinery.....	46.48	47.55	43.92	25.96	28.76	18.82
Food and tobacco.....	44.40	47.03	40.35	25.09	26.47	23.74
Water, light, and power.....	(1)	(1)	(1)	(1)	(1)	(1)
Total.....	46.22	50.90	43.46	23.25	26.31	21.18

¹ Separate earnings not computed because of small number of employees.

In view of current interest in how the depression was affecting the white-collar class in comparison with other groups of workers, the FRASER

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the New York department compiled a table showing the changes in employment and pay rolls from October, 1930, to October, 1931. This tabulation is reproduced in Table 3.

TABLE 3.—EMPLOYMENT AND PAY ROLLS IN FACTORY OFFICES IN NEW YORK STATE, OCTOBER, 1931, COMPARED WITH OCTOBER, 1930

Industry group	Employment		Pay roll	
	Number of employees, October, 1931	Per cent of change, October, 1930, to October, 1931	Amount, October, 1931	Per cent of change, October, 1930, to October, 1931
Stone, clay, and glass.....	701	-8.0	\$24,082	-11.0
Metals and machinery.....	13,895	-17.2	487,163	-24.2
Wood manufactures.....	1,471	-14.1	56,002	-11.0
Furs, leather, and rubber goods.....	2,501	-12.4	71,916	-17.6
Chemicals, oils, paints, etc.....	3,822	-12.1	125,618	-16.8
Pulp and paper.....	329	-9.9	13,845	-6.7
Printing and paper goods.....	8,798	-5.3	368,181	-9.8
Textiles.....	2,267	-15.7	75,848	-15.7
Clothing and millinery.....	3,862	-12.4	120,750	-16.0
Food and tobacco.....	2,902	-7.9	101,852	-11.4
Water, light, and power.....	1,244	-7.5	38,117	-14.2
Total.....	41,792	-12.3	1,483,374	-17.0

The comments of the New York Department of Labor on the data obtained in its surveys of office workers' earnings are reproduced below:

The rate of increase in office earnings has shown considerable variation in the period since 1914. During the war period, the rate of gain became increasingly greater until the years of 1918-1920 recorded gains of 13 and 14 per cent. The depression of 1921 was apparent in the abrupt halt to this advance when earnings made only a slight gain in 1921 and then could not quite hold this level in 1922. The upward trend began again in 1923 at a more moderate rate of 4 per cent. In the following years further increases occurred but at a slower pace. From 1927 to 1930, earnings made an annual gain of around 1½ per cent. As a result of these gains, office earnings at their peak of \$37.48 in October, 1930, had almost doubled the June, 1914, average of \$19.18.

Most of the main industry groups shared in the decline from October, 1930 to 1931. Office earnings increased only in wood manufactures and remained about constant in textiles. Losses in the other groups ranged, as far as dollars and cents are concerned, from \$1.17 in stone, clay, and glass to \$3.23 in metals and machinery. The lower wage level is evident from the fact that average earnings in the various industry groups ranged from \$28.75 to \$41.85 this October as compared with \$30.58 to \$43.94 last October.

Office men were still earning in 1931 roughly twice as much money as office women. In 1923 and 1924 and again in 1930, men's earnings averaged a little more than double women's earnings, but in the other years of 1925-1929 and of 1931, they were slightly less than double. This difference is due partly to the fact that more of the higher paid positions requiring executive ability or technical skill are held by men. Firms may prefer to have men in these positions. Also, women may feel less permanent in business and consequently accept lower pay more willingly and make less preparation for advancement. Office pay for men averaged generally between \$40 and \$50 and for women between \$20 and \$30.

As a whole, New York City office workers earned more than those up-State. Earnings averaged over \$5 more for women in New York City than up-State and almost \$7.50 more for men. Every industry showed higher earnings for women in the city but three of the industries reported greater earnings for men up-State. This may be due to a greater proportion of supervisory and technical men in these industries up-State.

Office workers have been reduced since October, 1930, not only in pay but also in number. The table of employment and pay rolls in factory offices in October, 1931, indicates that the number of office workers declined 12 per cent and that

pay rolls dropped 17 per cent from a year ago. Every industry participated in this downward movement, with pay rolls generally losing more rapidly than employment. The greatest loss in both forces and total earnings occurred in metals and machinery and the smallest in pulp and paper.

However, the decrease in the past 12 months has not been as severe for office workers in factories as for shop workers either in employment, pay rolls or average earnings. This is evident from the following figures, which compare the percentage of loss from October, 1930, to October, 1931, for office workers with the combined total of office and shop workers in factories.

	Office	Total (office and shop combined)
Employment.....	-12.3	-14.3
Pay rolls.....	-17.0	-22.5
Average weekly earnings.....	-5.3	-9.6

The average office worker received considerably more pay per week than the shop worker in every main industry group except the public utility group. In addition, office workers enjoyed more regular employment and generally shorter hours than the shop workers.

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General Survey of Wages in Czechoslovakia¹

THE law of December 19, 1918, established the 8-hour working-day and the 48-hour working-week in Czechoslovakian industries. Overtime rates are not fixed by law, but wage agreements secured by the labor unions usually guarantee the worker a 25 per cent increase over the hourly rate for all overtime work. Such agreements generally provide for a specified number of holidays with pay, varying in different industries from 2 to 14. A law adopted in 1925 provides that workers shall receive an annual paid vacation of 6 to 8 days. In certain industries this period has been extended by the terms of collective agreements. In cases of illness workers receive the regular payments from the sickness insurance fund. If the illness continues for a period of more than three weeks, the employer is obliged to pay the worker 10 per cent of his wages. If he is still ill at the end of five weeks, he receives 20 per cent of his wages in addition to the regular benefits from the sickness insurance fund. In some industries allowances are granted to cover food, lodging, light and heat. Thus, in the brewery industry workers receive sugar and beer in addition to their money wages. Due to the general housing shortage, some factories have erected dwellings for their workers and, in such cases, workers are usually permitted to occupy the company houses without charge. Deductions from workers' wages to cover income taxes and social insurance dues are authorized by law. The cost of social insurance, including sickness, old-age, and invalidity insurance, is divided equally between employer and employee. The amount of the contribution for social insurance varies with the workers' income, usually amounting to about 18 per cent of the total money wage. All dues for accident insurance are paid by the employer. In the higher-paid groups of employees, deductions are also made to provide for old-age and invalidity benefits.

Coal and Other Mining

THE wage agreement of December 1, 1929, concluded between the mine workers and their employers, provides that average wages for miners shall normally amount to 44 crowns (\$1.30)² per 8-hour shift. It is estimated that 90 per cent of the underground workers (who form 65 per cent of the workers in the lignite fields and 75 per cent of those in the coal fields) work on a piecework basis. The scale of wages is so adjusted that the earnings of the best-paid miners on piecework are between 44 and 50 crowns (\$1.30 to \$1.48) per shift. The following table shows the daily wages of the various classes of workers:

¹ This report was prepared by Francis B. Stevens, United States vice consul, Prague.

² Conversions into United States currency on basis of crown=2.96 cents.

TABLE 1.—AVERAGE DAILY WAGES IN COAL MINING IN CZECHOSLOVAKIA, IN 1930
[Conversions into United States currency on basis of crown=2.96 cents]

Class of worker, and age	Average daily wage		Class of worker, and age	Average daily wage	
	Czechoslovak currency	United States currency		Czechoslovak currency	United States currency
Artisans—	<i>Crowns</i>		Surface workers—	<i>Crowns</i>	
Up to 18 years.....	21. 80-24. 90	\$0. 65-\$0. 74	Up to 16 years.....	16. 90-18. 90	\$0. 50-\$0. 56
18 to 20 years.....	25. 70-29. 60	. 76- . 88	16 to 18 years.....	19. 90-21. 80	. 59- . 65
20 to 25 years.....	30. 70-36. 10	. 91- 1. 07	18 to 20 years.....	22. 80-25. 70	. 67- . 76
Over 25 years.....	36. 40-40. 40	1. 08- 1. 20	20 to 25 years.....	26. 70-30. 20	. 79- . 89
Underground workers—			Over 25 years.....	30. 50-34. 40	. 90- 1. 02
Up to 18 years.....	20. 90-22. 90	. 62- . 68	Female workers—		
18 to 20 years.....	23. 70-26. 70	. 70- . 79	Under 18 years.....	14. 90-17. 00	. 44- . 50
20 to 25 years.....	27. 70-31. 10	. 82- . 92	18 to 20 years.....	17. 80-19. 80	. 53- . 59
Over 25 years.....	31. 50-35. 40	. 93- 1. 05	Over 20 years.....	20. 80-22. 80	. 62- . 67

In addition to money wages, various allowances are granted to miners. According to the report of the Czechoslovak Statistical Office on miners' wages in 1930, each married miner, male or female, receives a family allowance of 0.90 crown (2.7 cents) per shift, and an additional 1.35 crowns (4.0 cents) per shift is allotted for every child under 14 years of age dependent upon him for support. Each married miner receives 8.2 tons of coal annually for household use, while each single miner receives 4.1 tons. Other nonmonetary payments take the form of wood for fuel, free lodging and light, and rent allowances. In practically all districts for which statistics are available, however, the payments in coal constitute more than 90 per cent in value of the total compensation paid in this form. Overtime work in the mining industry beyond the regular 46 or 48 hour working week is paid for at the rate of time and a quarter and work on Sundays and holidays at the rate of time and a half. Deductions are made from the wages of mine workers to cover sickness insurance, provisional insurance against emergencies, and a fee for the use of company lands for hunting or gardening.

The daily rate of money income and total income of workers of different classes in various sections of the country, as well as the annual amount of deductions for the purposes enumerated above, are given the following table:

TABLE 2.—WAGES IN MINING IN CZECHOSLOVAKIA IN 1930

Black coal

[Conversions into United States currency on basis of crown=2.96 cents]

Class of worker and basin or district	Cash wage per shift		Total earnings per shift		Total deductions from wages per year	
	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency
Class of workers:	<i>Crowns</i>		<i>Crowns</i>		<i>Crowns</i>	
Pick miners.....	51.76	\$1.53	56.68	\$1.68	849	\$25.13
Wagoners.....	39.66	1.17	42.14	1.25	824	24.39
Other adult underground workers.....	44.80	1.33	48.38	1.43	780	23.08
Young underground workers.....	23.80	.70	24.26	.72	694	20.54
All underground workers.....	45.33	1.34	48.97	1.45	827	24.48
Expert workers.....	41.32	1.22	44.64	1.32	836	24.75
Other surface workers.....	32.57	.96	35.36	1.05	720	21.31
Young surface workers.....	14.01	.41	14.38	.43	554	15.81
Females.....	18.68	.55	20.45	.61	600	17.76
All surface workers.....	35.32	1.05	38.25	1.13	758	22.44
Basins:						
Kladno-Rakovnik.....	38.16	1.13	40.55	1.20	639	18.91
Pilsen-Radnice.....	37.28	1.10	39.39	1.17	709	20.99
Zaclar-Svatonovice.....	34.89	1.03	36.93	1.09	736	21.79
Ostrava-Karvin.....	46.52	1.38	50.70	1.50	874	25.87
Rosice-Oslavany.....	32.06	.95	34.25	1.01	734	21.73
Other basins.....	29.27	.87	31.20	.92	642	19.00
Total.....	42.91	1.27	46.38	1.37	812	24.04

Lignite

Class of worker and basin or district	Cash wage per shift		Total earnings per shift		Total deductions from wages per year	
	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency
Class of workers:						
Pick miners.....	52.71	\$1.56	57.19	\$1.69	883	\$26.14
Other adult underground workers.....	38.72	1.15	41.40	1.23	773	22.88
Young underground workers.....	16.39	.49	16.92	.50	562	16.64
All underground workers.....	45.07	1.33	48.56	1.44	827	24.48
Expert workers.....	42.05	1.24	44.66	1.32	880	26.05
Other adult surface workers.....	35.00	1.04	37.35	1.11	757	22.41
Young surface workers.....	14.16	.42	14.24	.42	628	18.59
Females.....	22.38	.66	23.76	.70	639	18.91
All surface workers.....	36.29	1.07	38.64	1.14	785	23.24
Basins:						
North Bohemian brown (lignite).....	43.54	1.29	46.90	1.39	828	24.51
Falknov-Loket.....	40.41	1.20	43.33	1.28	799	23.65
South Moravian.....	21.74	.64	23.23	.69	619	18.32
Other lignite mines in Bohemia, Moravia, and Silesia.....	32.11	.95	33.39	.99	683	20.22
Slovakia.....	32.79	.97	33.75	1.00	734	21.73
Total.....	41.81	1.24	44.87	1.33	813	24.06

TABLE 2.—WAGES IN MINING IN CZECHOSLOVAKIA IN 1930—Continued

Iron ore

Class of worker and basin or district	Cash wage per shift		Total earnings per shift		Total deductions from wages per year	
	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency
Class of workers:	<i>Crowns</i>		<i>Crowns</i>		<i>Crowns</i>	
Pick miners.....	34.24	\$1.01	35.29	\$1.04	709	\$20.99
Wagoners.....	24.74	.73	25.28	.75	599	17.73
Other adult underground workers.....	31.30	.93	32.51	.96	640	18.94
Young underground workers.....	15.16	.45	15.36	.45	563	16.66
All underground workers.....	31.78	.94	32.74	.97	676	20.01
Expert workers.....	28.81	.85	29.85	.88	708	20.96
Other adult surface workers.....	27.19	.80	28.17	.83	635	18.80
Young surface workers.....	13.08	.39	13.27	.39	498	14.74
Females.....	13.48	.40	13.76	.41	496	14.68
All surface workers.....	24.78	.73	25.63	.76	623	18.44
District:						
Bohemia, Moravia, and Silesia.....	36.40	1.08	37.62	1.11	616	18.23
Slovakia and Ruthenia.....	25.97	.77	26.77	.79	667	19.74
Total.....	28.75	.85	29.66	.88	654	19.36

Other ores

Class of workers:						
Pick miners.....	35.72	\$1.06	36.84	\$1.09	719	\$21.28
Wagoners.....	26.97	.80	27.69	.82	630	18.65
Other adult underground workers.....	31.40	.93	32.32	.96	706	20.90
Young underground workers.....	15.93	.47	16.11	.48	560	16.58
All underground workers.....	32.87	.97	33.86	1.00	699	20.69
Expert workers.....	30.34	.90	31.15	.92	707	20.93
Other adult surface workers.....	27.24	.81	28.06	.83	654	19.36
Young surface workers.....	11.60	.34	11.73	.35	478	14.15
Females.....	14.16	.42	14.48	.43	499	14.77
All surface workers.....	27.33	.81	28.11	.83	660	19.54
District:						
Bohemia, Moravia, and Silesia.....	33.56	.99	34.68	1.03	692	20.48
Slovakia and Ruthenia.....	27.91	.83	28.62	.85	675	19.98
Total.....	30.55	.90	31.45	.93	683	20.22

Other minerals

Class of workers:						
Pick miners.....	53.43	\$1.58	54.83	\$1.62	757	\$22.41
Wagoners.....	40.37	1.19	41.21	1.22	753	22.29
Other adult underground workers.....	47.34	1.40	48.69	1.44	898	26.58
All underground workers.....	48.10	1.42	49.34	1.46	796	23.56
Expert workers.....	36.47	1.08	38.05	1.13	724	21.43
Other adult surface workers.....	28.12	.83	28.92	.86	640	18.94
Young surface workers.....	15.00	.44	15.00	.44	627	18.56
Females.....	27.03	.80	27.64	.82	627	18.56
All surface workers.....	30.10	.89	31.08	.92	660	19.54
District:						
Moravia and Silesia.....	23.39	.69	24.01	.71	592	17.52
Slovakia and Ruthenia.....	43.09	1.28	44.38	1.31	768	22.73
Total.....	36.37	1.08	37.44	1.11	710	21.02

Metal Trades

THE normal working period in the metal trades, according to the trade agreement concluded on June 4, 1928, which regulates wages in the metal industry, is the 8-hour day and the 48-hour week, workers being entitled to 8 days' vacation annually with pay. Workers are usually paid by the day rate, but piecework may be adopted under special conditions. The overtime rates for the first three hours beyond the regular working period on week days and for a similar period of work on Sundays or holidays vary for the different classes of workers. Additional overtime beyond this period is paid for at twice the usual overtime rate. Workers on night shifts from 10 p. m. to 5 a. m. receive 0.70 crown (2.1 cents) per hour above the regular day rate. Apprentices are given a certain amount of free time each week to permit them to complete a course in a continuation school. Certain deductions are made from wages to cover social-insurance contributions.

Metal factories are classified into three groups paying different wage rates. Apparently, the classification of a factory is determined by the cost of production and the cost of living in the particular region where the enterprise is located. Table 3 shows the time and piece rates for various classes of metal workers, including the so-called "security" allowance (which is added to the piece rate when the worker is earning no more than the basic minimum wage, but is paid to all workers on a day rate). The figures shown, therefore, represent the actual minimum wage, according to the wage agreement. A representative of the Association of the Metal Industry states, however, that these rates must be increased by from 45 to 50 per cent to reflect accurately present wage levels for metal workers.

TABLE 3.—AVERAGE HOURLY WAGES IN THE METAL TRADES OF CZECHOSLOVAKIA IN 1930

Establishments of first class

[Conversions into United States currency on basis of crown=2.96 cents]

Group of workers	Basic wages (including "security" addition)			
	Piece rate		Time rate	
	Czecho-slovak currency	United States currency	Czecho-slovak currency	United States currency
	<i>Crowns</i>	<i>Cents</i>	<i>Crowns</i>	<i>Cents</i>
Expert workers (artisans), on production work:				
First year.....	2.40	7.1	2.55	7.5
After 7th year ¹	3.85	11.4	4.00	11.8
Independent, specially qualified workers.....	4.00	11.8	4.15	12.3
Older workers.....	4.15	12.3	4.30	12.7
Foremen.....	4.30	12.7	4.50	13.3
Workers not on production work:				
17 years of age.....	2.25	6.7	2.35	7.0
24 years of age and over ²	3.60	10.7	3.75	11.1
Independent, specially qualified workers.....	3.75	11.1	3.90	11.5
Older workers.....	3.90	11.5	4.05	12.0
Foremen.....	4.05	12.0	4.25	12.6
Trained workers:				
17 years of age.....	2.25	6.7	2.30	6.8
24 years of age and over ²	3.35	9.9	3.40	10.1
Independent, specially qualified workers.....	3.55	10.5	3.60	10.7
Older workers.....	3.70	11.0	3.80	11.2
Foremen.....	3.85	11.4	4.00	11.8

¹ These workers receive an increase each year up to the seventh, after which the rate is as given.

² These workers receive an increase each year up to the twenty-fourth year of age, after which the rate is as given.

TABLE 3.—AVERAGE HOURLY WAGES IN THE METAL TRADES OF CZECHOSLOVAKIA
IN 1930—Continued*Establishments of first class—Continued*

Group of workers	Basic wages (including "security" addition)			
	Piece rate		Time rate	
	Czecho- slovak currency	United States currency	Czecho- slovak currency	United States currency
	<i>Crowns</i>	<i>Cents</i>	<i>Crowns</i>	<i>Cents</i>
Helpers:				
17 years of age.....	2.15	0.063	2.20	0.064
24 years of age and over ¹	3.25	.095	3.30	.097
Independent, specially qualified workers.....	3.45	10.2	3.50	10.4
Older workers.....	3.60	10.7	3.70	11.0
Foremen.....	3.70	11.0	3.80	11.2
Trained female workers:				
17 years of age.....	1.65	4.9	1.70	5.0
24 years of age and over ²	2.15	6.4	2.20	6.5
Independent, specially qualified workers.....	2.20	6.5	2.25	6.7
Older workers.....	2.25	6.7	2.30	6.8
Forewomen.....	2.25	6.7	2.35	7.0
Female helpers:				
17 years of age.....	1.60	4.7	1.65	4.9
24 years of age and over ²	2.10	6.2	2.15	6.4
Independent, specially qualified helpers.....	2.15	6.4	2.20	6.5
Older helpers.....	2.15	6.4	2.25	6.7
Forewomen.....	2.15	6.4	2.30	6.8

Establishments of second class

Expert workers (artisans), on production work:				
First year.....	2.35	7.0	2.50	7.4
After seventh year ¹	3.80	11.2	3.95	11.7
Independent, specially qualified workers.....	3.95	11.7	4.10	12.1
Older workers.....	4.10	12.1	4.25	12.6
Foremen.....	4.20	12.4	4.40	13.0
Workers not on production work:				
17 years of age.....	2.20	6.5	2.30	6.8
24 years of age and over ²	3.55	10.5	3.70	11.0
Independent, specially qualified workers.....	3.70	11.0	3.85	11.4
Older workers.....	3.85	11.4	4.00	11.8
Foremen.....	4.00	11.8	4.20	12.4
Trained workers:				
17 years of age.....	2.20	6.5	2.25	6.7
24 years of age and over ²	3.30	9.8	3.35	9.9
Independent, specially qualified workers.....	3.50	10.4	3.55	10.5
Older workers.....	3.65	10.8	3.75	11.1
Foremen.....	3.80	11.2	3.95	11.7
Helpers:				
17 years of age.....	2.10	6.2	2.15	6.4
24 years of age and over ²	3.20	9.5	3.25	9.6
Independent, specially qualified workers.....	3.40	10.1	3.45	10.2
Older workers.....	3.55	10.5	3.65	10.8
Foremen.....	3.65	10.8	3.75	11.1
Trained female workers:				
17 years of age.....	1.60	4.7	1.65	4.9
24 years of age and over ²	2.10	6.2	2.15	6.4
Independent, specially qualified workers.....	2.15	6.4	2.20	6.5
Older workers.....	2.20	6.5	2.25	6.7
Forewomen.....	2.20	6.5	2.30	6.8
Female helpers:				
17 years of age.....	1.55	4.6	1.60	4.7
24 years of age and over ²	2.05	6.1	2.10	6.2
Independent, specially qualified helpers.....	2.10	6.2	2.15	6.4
Older helpers.....	2.10	6.2	2.20	6.5
Forewomen.....	2.10	6.2	2.25	6.7

¹ These workers receive an increase each year up to the seventh, after which the rate is as given.² These workers receive an increase each year up to the twenty-fourth year of age, after which the rate is as given.

TABLE 3.—AVERAGE HOURLY WAGES IN THE METAL TRADES OF CZECHOSLOVAKIA
IN 1930—Continued*Establishments of third class*

Group of workers	Basic wages (including "security" addition)			
	Piece rate		Time rate	
	Czecho- slovak currency	United States currency	Czecho- slovak currency	United States currency
Expert workers (artisans), on production work:	<i>Crowns</i>	<i>Cents</i>	<i>Crowns</i>	<i>Cents</i>
First year.....	2.25	6.7	2.40	7.1
After 7th year ¹	3.70	11.0	3.85	11.4
Independent, specially qualified workers.....	3.85	11.4	4.00	11.8
Older workers.....	4.00	11.8	4.15	12.3
Foremen.....	4.10	12.1	4.30	12.7
Workers not on production work:				
17 years of age.....	2.10	6.2	2.20	6.5
24 years of age and over ²	3.45	10.2	3.60	10.7
Independent, specially qualified workers.....	3.60	10.7	3.75	11.1
Older workers.....	3.75	11.1	3.90	11.5
Foremen.....	3.90	11.5	4.10	12.1
Trained workers:				
17 years of age.....	2.10	6.2	2.15	6.4
24 years of age and over ²	3.20	9.5	3.25	9.6
Independent, specially qualified workers.....	3.40	10.1	3.45	10.2
Older workers.....	3.55	10.5	3.65	10.8
Foremen.....	3.70	11.0	3.85	11.4
Helpers:				
17 years of age.....	2.00	5.9	2.05	6.1
24 years of age and over ²	3.10	9.2	3.15	9.3
Independent, specially qualified helpers.....	3.30	9.8	3.35	9.9
Older helpers.....	3.45	10.2	3.55	10.5
Foremen.....	3.55	10.5	3.65	10.8
Trained female workers:				
17 years of age.....	1.50	4.4	1.55	4.6
24 years of age and over ²	2.00	5.9	2.05	6.1
Independent, specially qualified workers.....	2.05	6.1	2.10	6.2
Older workers.....	2.10	6.2	2.15	6.4
Forewomen.....	2.10	6.4	2.20	6.5
Female helpers:				
17 years of age.....	1.45	4.3	1.50	4.4
24 years of age and over ²	1.95	5.8	2.00	5.9
Independent, specially qualified helpers.....	2.00	5.9	2.05	6.1
Older helpers.....	2.00	5.9	2.10	6.2
Forewomen.....	2.00	5.9	2.15	6.4

¹ These workers receive an increase each year up to the seventh, after which the rate is as given.² These workers receive an increase each year up to the twenty-fourth year of age, after which the rate is as given.

The rates of apprentices are shown in Table 4:

TABLE 4.—BASIC HOURLY RATES OF APPRENTICES IN THE METAL TRADES IN
CZECHOSLOVAKIA IN 1930

[Conversions into United States currency on basis of crown=2.96 cents]

Period	Basic hourly rate in establishments of—			
	First class		Second and third classes	
	Czecho- slovak currency	United States currency	Czecho- slovak currency	United States currency
	<i>Crowns</i>	<i>Cents</i>	<i>Crowns</i>	<i>Cents</i>
First year (after first 6 weeks).....	0.50	1.5	0.40	1.2
Second year.....	.70	2.1	.60	1.8
Third year.....	.90	2.7	.80	2.4

Sugar Industry

WAGES in the sugar industry are fixed by the collective agreement for workers in raw sugar factories, refineries, and mixed factories in the Czechoslovak Republic, dated June 25, 1929. By the terms of this agreement, sugar factories are divided into four groups, in each of which a different wage scale is maintained. Group I includes dry refineries and combined crushing mills and refineries in or near large industrial centers; Group II combines mills and refineries outside industrial centers and raw sugar factories in or near large cities; Group III, other raw sugar factories; and Group IV, other refineries.

Employees in sugar enterprises are divided into two groups—the so-called permanent employees who are engaged in the factories throughout the year, and the so-called helpers, or seasonal workers, constituting approximately 80 per cent of the total working force, who are engaged in the company fields during the growing season and join the factory force when the harvest is completed.

In addition to the basic weekly wage, workers receive allotments determined by the cost of living in the district where they are employed and an annual bonus (payable on December 15) equal to one month's wages, plus a 4 per cent increase for every year of their employment in the enterprise since 1900. Special clothing allotments are made for seasonal workers and permanent employees on a day wage on the following basis, payments being made in two semiannual installments, on June 15 and December 15:

Unmarried employees under 18 years, 200 crowns (\$5.92).

Unmarried employees over 18 years, 400 crowns (\$11.84).

Widowers and widows, childless or with grown children, 400 crowns (\$11.84).

Widowers and widows with minor children will receive in addition for every child up to 15 years (maximum of 4 children), 150 crowns (\$4.44).

Married employees, 800 crowns (\$23.68).

For each minor child up to 15 years (maximum of 4 children), 150 crowns (\$4.44).

Additional allotments are made as follows:

Married messengers and those supporting aged parents, minor brothers or sisters, 600 crowns (\$17.76).

Single messengers, married workers receiving daily wage, and those supporting aged parents or minor brothers or sisters, 450 crowns (\$13.32).

Single workers receiving daily wage, 250 crowns (\$7.40).

A special allowance, payable in three installments, and amounting to 4 per cent of the actual wage earned, is paid to both permanent and seasonal workers. Furthermore, workers entitled to the special clothing allotment receive an additional seasonal allowance amounting to 5 per cent of the seasonal earnings. Helpers are guaranteed, as a minimum seasonal wage, an amount equal to the remuneration for a similar number of hours of work at the minimum day rate, plus the 5 per cent allowance. A so-called cost-of-living allowance, amounting to 5 per cent of the wage earned, is paid to seasonal workers for each minor child dependent upon them for support. Seasonal workers who remain with an enterprise throughout the season receive, at its close, an additional bonus amounting to one day's wage per week for the number of weeks in the season. Workers in sugar enterprises in the Province of Bohemia must be provided with approved hygienic dwellings, including bed and bedding, fuel and light. Furthermore, the company is obliged to feed the workers, half the cost of this serv-

ice being deducted from the workers' wages. Overtime work on working-days is paid for at the rate of time and a quarter and that on Sundays and holidays (Christmas, Easter, Whitsuntide, New Year's Day, May 1, July 6, and October 28), and between 10 p. m. and 5 a. m. at the rate of time and a half. According to the collective agreement, piece rates must be sufficiently high to guarantee even to average workers earnings better than the basic daily wage.

Seasonal workers receive paid vacations of 8 days during the first 5 years of their employment, 14 days during the next 10 years, and thereafter 21 days. Permanent day workers are entitled to 3 days' paid vacation annually during their first three years, 6 days during the next two years, and thereafter 8 days.

In addition to the contributions for social insurance, workers in the sugar industry must pay pension contributions. In the case of workers receiving the clothing allowance and the annual bonus, the company deducts from the wage one-sixth of the contribution, and in the case of other workers, one-third of the contribution required.

Tables 5 and 6 show the wages and allowances of helpers, or seasonal workers, in the various groups of enterprises:

TABLE 5.—BASIC WEEKLY AND MONTHLY WAGES OF HELPERS (INCLUDING ALLOWANCES) IN THE CZECHOSLOVAK SUGAR INDUSTRY IN 1931

[Conversions into United States currency on basis of crown=2.96 cents]

Class of helper	Basic wages (including allowances) of helpers in establishments in—							
	Group I				Group II			
	Per week		Per month		Per week		Per month	
	Czecho-slovak currency	United States currency	Czecho-slovak currency	United States currency	Czecho-slovak currency	United States currency	Czecho-slovak currency	United States currency
	<i>Crowns</i>		<i>Crowns</i>		<i>Crowns</i>		<i>Crowns</i>	
Class 1.....	138	\$4.08	600	\$17.76	127	\$3.76	550	\$16.28
Class 2.....	127	3.76	550	16.28	115	3.40	500	14.80
Class 3.....	115	3.40	500	14.80	104	3.08	450	13.32
Class 4.....	104	3.08	450	13.32	92	2.72	400	11.84
Class of helper	Group III				Group IV			
	Per week		Per month		Per week		Per month	
	Czecho-slovak currency	United States currency	Czecho-slovak currency	United States currency	Czecho-slovak currency	United States currency	Czecho-slovak currency	United States currency
	<i>Crowns</i>		<i>Crowns</i>		<i>Crowns</i>		<i>Crowns</i>	
Class 1.....	115	\$3.40	500	\$14.80	104	\$3.08	450	\$13.32
Class 2.....	104	3.08	450	13.32	92	2.72	400	11.84
Class 3.....	92	2.72	400	11.84	80	2.37	350	10.36
Class 4.....	80	2.37	350	10.36	70	2.07	300	8.88

Helpers receiving monthly wages of 300, 350, and 400 crowns (\$8.88, \$10.36, and \$11.84) are entitled to a cost-of-living allowance amounting to 50 per cent; those receiving monthly wages of 450 and 500 crowns (\$13.32 and \$14.80) 45 per cent; and those receiving monthly wages of 550 and 600 crowns (\$16.28 and \$17.76) 40 per cent.

Married helpers are entitled to two rooms, a woodshed, and a sty, or a housing allowance of 400 crowns (\$11.84) to be paid by enterprises in Groups I and II, and 300 crowns (\$8.88) to be paid by enterprises in Groups III and IV.

All classes of helpers receive 2 cubic meters of wood for fuel, and lighting to the value of 180 crowns (\$5.33). In addition, helpers of

class 1 receive 60 kilograms of sugar, 4.8 tons of brown coal or 3.2 tons of black coal, and 8 quintals of potatoes or 800 square meters of ground for planting potatoes; helpers of class 2 receive 50 kilograms of sugar, 4.2 tons of brown or 2.8 tons of black coal, and 6 quintals of potatoes or 600 square meters for planting them; and helpers in classes 3 and 4 receive 40 kilograms of sugar, 3.6 tons of brown or 2.4 tons of black coal, and 4 quintals of potatoes or 400 square meters of ground.

TABLE 6.—DAILY WAGES AND ALLOWANCES OF PERMANENT EMPLOYEES IN THE CZECHOSLOVAK SUGAR INDUSTRY IN 1931

[Conversions into United States currency on basis of crown=2.96 cents]

Class and age of workers	Daily wages of workers in establishments in—								Annual allowance for 1—		
	Group I		Group II		Group III		Group IV		Clothing		Sugar (kilograms) ²
	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency	
Expert workers (artisans):	<i>Crs.</i>	<i>Cents</i>	<i>Crs.</i>	<i>Cents</i>	<i>Crs.</i>	<i>Cents</i>	<i>Crs.</i>	<i>Cents</i>	<i>Crs.</i>		
Over 22 years of age.....	31.00	91.8	29.00	85.8	27.00	79.9	25.00	74.0	200	\$5.92	30
Under 22 years of age.....	28.00	82.9	26.00	77.0	24.00	71.0	22.00	65.1	150	4.44	15
Helpers, male, over 18 years of age:											
Qualified foremen.....	28.00	82.9	26.00	77.0	24.00	71.0	22.00	65.1	150	4.44	15
Other experienced, trained helpers.....	26.00	77.0	24.00	71.0	22.00	65.1	20.00	59.2	120	3.55	15
Less experienced helpers.....	24.00	71.0	22.00	65.1	20.00	59.2	18.00	53.3	120	3.55	15
Boys under 18 years and females.....	14.50	42.9	12.50	37.0	11.50	34.0	10.15	30.0	100	2.96	10
Boys and girls under 16.....	12.50	37.0	10.15	30.0	8.50	25.2	7.50	22.2	50	1.48	5

¹ In addition to the allowances shown below, artisans over 22 years receive 15 quintals (3,307 pounds) of lignite or 10 quintals (2,205 pounds) of black coal. Married men or heads of families in the other classes receive 12 quintals (2,646 pounds) of lignite or 8 quintals (1,764 pounds) of black coal.

² Kilogram=2.2046 pounds.

Textile Industry

ACCORDING to the trade agreement of April 15, 1930, a 48-hour working week is established for textile workers, the daily working period being determined by the special problems of the individual enterprise. Overtime beyond the specified period commands a 30 per cent increase over the normal rate on working days, a 60 per cent increase on Sundays, and a 100 per cent increase for night work between 10 p. m. and 5 a. m., or work on holidays. (Two days at Christmas, New Year's Day, Easter, Whitsuntide, May 1, and October 28.)

The basic wage scales are indicated in Table 7.

TABLE 7.—BASIC HOURLY RATES IN THE TEXTILE INDUSTRY OF PRAGUE DISTRICT, CZECHOSLOVAKIA, 1931

[Conversions into United States currency on basis of crown=2.96 cents]

Branch of industry, and occupation	Basic hourly rates		Branch of industry, and occupation	Basic hourly rates	
	Czecho-slovak cur-rency	U. S. cur-rency		Czecho-slovak cur-rency	U. S. cur-rency
<i>Cotton spinning</i>			<i>Flax spinning—Continued</i>		
Spinners:	<i>Cr.</i>	<i>Cts.</i>	Tenders between first and second lap machines.....	<i>Cr.</i>	<i>Cts.</i>
2 automatic machines.....	2.75	8.1	Loaders.....	1.65	4.9
1 automatic machine.....	2.37	7.0	Speeder tenders.....	1.70	5.0
Machine tenders, first hand.....	2.20	6.5	Conveyer tenders.....	1.75	5.2
Other machine tenders over 18 years of age.....	1.90	5.6	Oilers.....	1.90	5.6
Doffers:			to to	2.00	5.9
14 to 16 years.....	1.25	3.7	Bander tenders.....	2.00	5.9
16 to 18 years.....	1.50	4.4	Winder tenders.....	1.70	5.0
18 to 20 years.....	1.70	5.0	Twister tenders.....	1.70	5.0
Over 20 years of age.....	1.90	5.6	Dryers.....	1.90	5.6
Spinners, ring frames:			to to	2.00	5.9
Second hands.....	2.35	7.0	Balers.....	2.00	5.9
Section hands.....	2.20	6.5	Helpers.....	1.50	4.4
2 frames.....	1.75	5.2	to to	1.65	4.9
1 frame, for filling.....	1.45	4.3	Haulers.....	2.00	5.9
1 frame, for warp.....	1.40	4.1			
Piecers.....	2.10	6.2	<i>Jute and hemp</i>		
Spinners, fly frames:			Softeners.....	2.10	6.2
Fine frame.....	1.75	5.2	Rubbing-machine tenders.....	1.90	5.6
Jack frame.....	1.83	5.4	Weighers.....	2.00	5.9
Drawing-frame tenders:			Truckers.....	1.90	5.6
Men tending up to 12 heads.....	1.90	5.6	Combing:		
Women tending up to 12 heads.....	1.70	5.0	Feeders.....	2.00	5.9
Card tenders:			Fine-card tenders.....	1.80	5.3
Men tending up to 14 machines.....	1.90	5.6	Breaker-card tenders.....	1.80	5.3
Women tending up to 10 machines.....	1.70	5.0	Tenders between first and second lap machines, female.....	1.60	4.7
Women tending up to 14 machines.....	1.76	5.2	Spinners.....	1.90	5.6
Comber tenders.....	2.10	6.2	Spinners, female.....	1.85	5.5
Card strippers.....	2.50	7.4	Helpers.....	1.60	4.7
Card grinders.....	2.37	7.0	Haulers.....	2.00	5.9
Cleaners.....	2.00	5.9	Trackers.....	1.90	5.6
Silver lap machine tenders, men.....	2.00	5.9	to to	1.90	5.6
Silver lap machine tenders, women.....	1.85	5.5	Oilers.....	2.00	5.9
Opener tenders:			Paper-cutting machines:		
Men.....	2.00	5.9	Paper cutters.....	2.00	5.9
Women.....	1.80	5.3	Female workers classifying and soaking paper.....	1.80	5.3
Roving haulers.....	1.85	5.5	Twisting:		
Ticketers.....	1.65	4.9	Twisters, first year.....	1.50	4.4
Knotters:			Twisters, after first year.....	1.65	4.9
First year.....	1.50	4.4	Twister tenders.....	1.65	4.9
After first year.....	1.65	4.9	Binders.....	1.90	5.6
Spooler tenders.....	1.70	5.0	Sweepers.....	1.50	4.4
Winder tenders.....	1.70	5.0	Winder tenders.....	1.70	5.0
Oilers and lamp lighters—					
First class.....	2.00	5.9	<i>Spinning of waste</i>		
Second class.....	1.90	5.6	Waste foreman.....	3.00	8.9
Skilled cleaners of carding and combing machines.....	2.37	7.0	Waste men.....	2.50	7.4
Sweepers.....	1.50	4.4	Rag men.....	2.50	7.4
Section hands.....	1.80	5.3	Comber tenders.....	2.10	6.2
Helpers, day, male:			Grinders.....	2.37	7.0
14 to 16 years.....	1.15	3.4	Spinners:		
16 to 18 years.....	1.50	4.4	1 automatic machine.....	2.37	7.0
18 to 20 years.....	1.70	5.0	2 automatic machines.....	2.75	8.1
Over 20 years.....	1.90	5.6	Binders.....	2.10	6.2
Helpers, day, female:			Workers over 18 years of age:		
14 to 16 years.....	1.10	3.3	skilled.....	2.00	5.9
16 to 18 years.....	1.30	3.8	Tenders of waste machines, semiskilled.....	1.90	5.6
18 to 20 years.....	1.45	4.3	Women, skilled.....	1.85	5.5
Over 20 years.....	1.60	4.7	Women, semiskilled.....	1.75	5.2
<i>Flax spinning</i>			Young workers:		
Comber tenders.....	2.10	6.2	14 to 16 years.....	1.25	3.7
Picker tenders.....	2.00	5.9	16 to 18 years.....	1.50	4.4
Trackers and waste pickers.....	1.90	5.6			
Card tenders.....	1.90	5.6			
Weighers.....	2.00	5.9			
Lap-machine tenders.....	1.60	4.7			

TABLE 7.—BASIC HOURLY RATES IN THE TEXTILE INDUSTRY OF PRAGUE DISTRICT, CZECHOSLOVAKIA, 1931—Continued

Branch of industry, and occupation	Basic hourly rates		Branch of industry, and occupation	Basic hourly rates	
	Czecho-slovak currency	U. S. currency		Czecho-slovak currency	U. S. currency
<i>Jute waste spinning</i>			<i>Finishing—Continued</i>		
Doffers, men.....	Cr. 2.10	Cts. 6.2	Sewers.....	Cr. 1.83	Cts. 5.4
Doffers, women.....	1.85	5.5	Coal and ash haulers.....	2.00	5.9
Card tenders, skilled.....	2.10	6.2			
Card tenders, semiskilled.....	2.00	5.9	<i>Jute weaving and finishing</i>		
Cleaners.....	2.10	6.2	Weavers of material:		
Spinners, female.....	1.90	5.6	Up to 52 inches.....	1.75	5.2
Binders, female.....	1.75	5.2	Over 52 to 80 inches.....	1.83	5.4
Helpers:			Over 80 inches.....	1.90	5.6
Up to 16 years.....	1.20	3.6	Size makers, skilled.....	2.27½	6.7
16 to 18 years.....	1.40	4.1	Size makers, semiskilled.....	2.10	6.2
18 to 20 years.....	1.55	4.6	Cutters.....	2.27½	6.7
Over 20 years.....	1.70	5.0	Mangle tenders.....	2.27½	6.7
Twisters:			Calender tenders.....	2.15	6.4
First year.....	1.50	4.4	Sprinklers.....	2.00	5.9
After first year.....	1.65	4.9	Sewing-machine tenders.....	1.83	5.4
Ball binders.....	1.85	5.5	Oilers.....	2.00	5.9
First hands in rope factory.....	2.50	7.4	Bag makers.....	2.00	5.9
Helpers in rope factory as well as printing plant:			Pressmen.....	2.00	5.9
14 to 16 years.....	1.25	3.7	Measurers.....	2.00	5.9
16 to 18 years.....	1.60	4.7	Cutters, bag.....	2.00	5.9
18 to 20 years.....	1.80	5.3			
Over 20 years.....	2.00	5.9			
<i>Cotton and flax weaving</i>			<i>Bleaching, dyeing, printing, and finishing</i>		
Weavers of goods—			Starch-room workers, contract:		
Up to 100 centimeters wide.....	1.75	5.2	Male—		
Up to 120 centimeters wide.....	1.80	5.3	14 to 16 years.....	1.25	3.7
120 to 140 centimeters wide.....	1.85	5.5	16 to 18 years.....	1.60	4.7
140 to 160 centimeters wide.....	1.95	5.8	18 to 20 years.....	1.80	5.3
160 to 200 centimeters wide.....	2.05	6.1	Over 20 years.....	2.00	5.9
200 to 240 centimeters wide.....	2.20	6.5	Helpers, female—		
Over 240 centimeters wide.....	2.40	7.1	14 to 16 years.....	1.20	3.6
Design weavers.....	2.27½	6.7	16 to 18 years.....	1.40	4.1
Spooler tenders, first year.....	1.50	4.4	18 to 20 years.....	1.55	4.6
Spooler tenders, after first year.....	1.65	4.9	Over 20 years.....	1.80	5.3
Warpers.....	1.75	5.2	Skilled workers—		
Warpers, sectional.....	1.83	5.4	Men, over 20 years.....	2.25	6.7
Warpers, complicated.....	2.27½	6.7	Women, over 20 years.....	1.90	5.6
Creelers.....	1.83	5.4	Highly skilled.....	2.50	7.4
Warpers and creelers, first year.....	1.50	4.4	Press feeders—		
Women, embroidery machines.....	1.65	4.9	1-3 machines.....	2.00	6.2
Loom cleaners.....	1.60	4.7	3-5 machines.....	2.15	6.4
Oilers over 18 years of age.....	1.90	5.6	More than 5 machines.....	2.20	6.5
Stock keepers.....	2.27½	6.7	Stock men, adjusters, over 3 years.....	2.10 to 2.27½	6.2 to 6.7
Size makers.....	2.27½	6.7	Stock women, over 3 years.....	1.90	5.6
Beamer tender helpers.....	2.00	5.9	Boiler tenders (plus 10 helpers (\$0.002 for wet work)).....	2.00	5.9
Section hands.....	2.50	7.4	Boiler tenders, highly skilled.....	2.25	6.7
Expert workers, inspectors of goods.....	2.27½	6.7	Tender feeders.....	2.15	6.4
Measurers.....	2.00	5.9			
Twisters-in and winders.....	1.65	4.9	<i>Wool</i>		
Twisters-in and winders, first year.....	1.50	4.4	Fuller tenders, male:		
<i>Finishing</i>			Over 20 years.....	2.10	6.2
Pasters.....	1.90	5.6	18 to 20 years.....	1.90	5.6
Stock men.....	1.90	5.6	At centrifugal machines.....	2.10	6.2
Loaders, men, over 3 years.....	2.27½	6.7	Females at tenter frame.....	1.90	5.6
Loaders, women, over 3 years.....	1.90	5.6	Tenter tenders.....	2.20	6.5
Stock men, up to 3 years, day workers:			Wringing or pressing at vat, men over 20 years of age.....	2.00	5.9
14 to 16 years.....	1.15	3.4	Wringing or pressing at vat, women over 20 years of age.....	1.80	5.3
16 to 18 years.....	1.50	4.4	Brushing and cutting machine tenders, men over 20 years of age.....	2.00	5.9
18 to 20 years.....	1.70	5.0	Brushing and cutting machine tenders, women over 20 years of age.....	1.80	5.3
Over 20 years.....	1.90	5.6	Shearers, male:		
Stock women, up to 3 years, day workers:			Over 20 years.....	2.10	6.2
14 to 16 years.....	1.10	3.3	18 to 20 years.....	1.90	5.6
16 to 18 years.....	1.30	3.8			
18 to 20 years.....	1.45	4.3			
Over 20 years.....	1.60	4.7			

Skilled apprentices receive 1 crown (3 cents) per hour up to four weeks, and in subsequent weeks, 1 crown per hour, plus a cost-of-living bonus.

The workers receive a cost-of-living bonus of 35 per cent of the basic hourly wage rates.

Piecework rates are high enough to insure average workers a wage 15 per cent above their earnings at the regular hourly rate to compensate for the cost-of-living bonus made to day workers. Apprentices and inferior workers who are unable to earn the average wage plus the 15 per cent cost-of-living increase receive proportionately lower wages. In addition to money wages, the textile workers in dyeing, bleaching, and printing plants are provided with aprons and wooden shoes, while those working with acids are completely equipped. All married workers in cotton mills are entitled to 10 meters of cotton cloth annually for their own use at the current factory price, and unmarried workers may purchase up to 6 meters of cloth, according to their needs. In mills producing unprinted woolen textiles, workers are entitled to purchase half of the above-named amounts, and in mills producing both cotton and woolen textiles the workers may purchase the latter only at the discretion of the factory management.

Death benefits amounting to 50 crowns (\$1.48) in the case of workers employed less than three months, and 100 crowns (\$2.96) for workers who have been with the enterprise for longer periods are paid by the employer to the heirs of deceased workers.

Deductions from the wages of textile workers are made to cover one-half of contributions for sickness, old-age, and pension insurance, the balance being borne by the employer.

Except for the tables applying specifically to the manufacture of woolen textiles, the wage tables given above apply to workers in the cotton, jute, and hemp industries only. The basic rate for workers engaged in the production of silk textiles is 10 per cent higher.

Lumber Industry

THE regular 8-hour working-day is observed in the lumber industry, according to the wage agreement for the lumber industry for 1930. Overtime work on working-days entitles the worker to a 25 per cent hourly increase in southern Bohemia and a 50 per cent increase in central Bohemia. Work on Sundays and holidays (two days at Christmas, New Year's Day, Easter Monday, and Whitsuntide Monday), or from 8 p. m. in southern Bohemia and 10 p. m. in central Bohemia to 5 a. m., commands a 50 per cent increase in southern Bohemia and a 100 per cent increase in central Bohemia.

The statement following shows the piece rates paid in central Bohemia in 1930 to regular workers, that is, grown men at least 18 years of age who work 180 days per year, or produce 300 cubic meters of wood per season. These rates are subject to revision during the course of the year at the request of either the workers or the employers, in case living costs change substantially.

	Per cubic meter	
Long wood.....	10.00 crowns	(29.6 cents).
Logs.....	12.00 crowns	(35.5 cents).
Fuel and shingle wood.....	9.50-10.50 crowns	(28.1-31.1 cents).
Pulp wood.....	14.00-16.00 crowns	(41.4-47.4 cents).
Poles, fence wood.....	11.00 crowns	(32.6 cents).
Bark.....	9.00 crowns	(26.6 cents).

In southern Bohemia, lumber workers are divided into classes on the basis of age and period of employment. Workers who have been employed over a 2-year period, working 120 days a year, or producing 250 cubic meters of wood annually, are considered permanent. Temporary workers are those who work at least 60 days annually at the height of the season. The third group includes short-term workers who are employed for less than 60 days annually. Day workers in Class I, including men and young men over 18, receive 2.35 crowns (7.0 cents) per hour, those of Class II, including boys from 16 to 18, women and girls over 16, 1.35 crowns (4.0 cents) per hour, and those of Class III, composed of boys and girls under 16 years, 0.80 crown (2.4 cents) per hour. Most workers, however, are on a piecework basis, according to the following scales:

TABLE 8.—PIECE RATES PAID TO WORKERS IN THE LUMBER INDUSTRY OF SOUTHERN BOHEMIA IN 1931

[Conversions into United States currency on basis of crown=2.96 cents]

Type of wood, or process	Unit	Piece rates of workers in—					
		Class I ¹		Class II ²		Class III ³	
		Czecho-slovak currency	United States currency	Czecho-slovak currency	United States currency	Czecho-slovak currency	United States currency
		<i>Crowns</i>	<i>Cents</i>	<i>Crowns</i>	<i>Cents</i>	<i>Crowns</i>	<i>Cents</i>
Hard beech and other wood, unpeeled	Cu. m.	10.00	29.6	11.50	34.0	13.00	38.5
Soft wood, peeled	do.	9.50	28.1	11.00	32.6	12.00	35.5
Dressing wood for ties and matches	do.	8.30	24.6	9.50	28.1	10.50	31.1
Soft fuel wood	Cord m.	10.00	29.6	11.30	33.4	13.00	38.5
Hard fuel wood	do.	11.00	32.6	12.00	35.5	13.50	40.0
Pine bark	do.	8.00	23.7	9.30	27.5	11.00	32.6
Pulpwood, including peeling:							
7 centimeters thick	do.	13.00	38.5	14.30	42.3	17.00	50.3
From 4 to 6 centimeters thick	do.	35.00	103.6				
Shingle wood:							
Not split	do.	11.50	34.0	13.50	40.0		
Split	do.	13.00	38.5	15.00	44.4		
Wheelwright wood	do.	15.20	45.0				
Stump wood, split:							
When working on swampy ground, under less difficult conditions.	do.	18.00-22.00	53.3-65.1				
When working under more difficult conditions.	do.	22.00-26.00	65.1-77.0				

¹ Includes males over 18 years.

² Includes boys 16 to 18 years, women and girls over 16 years.

³ Includes boys and girls under 16 years.

In addition to the regular money wages, lumber workers are entitled to dwellings and a family allowance of 112 crowns (\$3.32) per year. Permanent and temporary workers receive waste wood, or fuel, according to their needs. Permanent workers are entitled to purchase 2 cords of second-class wood for fuel at one-half the prevailing price, and temporary workers may purchase smaller amounts, dependent upon the number of days worked. Lumber workers engaged in forest administration work receive 8 cords of fuel wood annually at half cost. All allowance of wood for fuel, however, must be used entirely by the worker in his home. Permanent workers also may purchase 3 cubic meters of construction timber at a 35 per cent reduction from the current price, to permit alterations or additions

to their dwellings. Workers supplying their own tools receive a bonus of 4 per cent above the normal wage for day or piece work. A deposit of 40 crowns (\$1.18) is required from workers not owning their tools. This deposit is returned to permanent workers at the end of the year, providing the tools are returned in good condition.

Deductions are made from the wages of lumber workers to cover one-half the cost of contributions for sickness, old-age and pension insurance, the balance being paid by the employer.

Agriculture

WAGES of agricultural workers in Czechoslovakia vary according to wage agreements made in various sections of the country. In all sections permanent workers receive monthly wages, whereas seasonal workers are on an hourly basis. The regular working-day is established by a law of December 19, 1918, at 11 hours. In Bohemia, the length of the working-day varies at different seasons of the year, but averages 9 hours for permanent workers and 10 hours for seasonal workers on a daily wage. In Slovakia, the normal working-day is 11 hours. Overtime on working-days in Bohemia is paid for at the regular hourly rate for permanent workers, while seasonal workers receive an increase of 50 per cent. In Slovakia permanent workers in Class I receive 1 crown (3.0 cents) for the first hour of overtime on regular working-days and 1.70 crowns (5.0 cents) for each additional hour, while seasonal workers receive 1.60 crowns (4.7 cents) for each hour of overtime; permanent workers in Class II receive 0.70 crown (2.1 cents) for the first hour and 1.30 crowns (3.8 cents) for each additional hour, and seasonal workers receive 1.20 crowns (3.6 cents) per hour; permanent workers in Class III receive 0.50 crown (1.5 cents) for the first hour and 0.90 crown (2.7 cents) thereafter, and seasonal workers receive 0.80 crown (2.4 cents) per hour.³

Agricultural workers are ordinarily free on Sundays and the following holidays: Two days at Christmas, New Year's Day, Easter Monday, Whitsuntide Monday, May 1, and October 28. Work done on these days is paid at the rate of time and a half in Bohemia, and double time in Slovakia. Permanent stable workers in Slovakia receive an allowance of 3.20 crowns (9.5 cents) for work on holidays and seasonal stable workers an allowance of 3 crowns (8.9 cents).

Basic monthly wages were paid to regular agricultural workers in Bohemia in 1931 on the following scale:

³ Class I includes adult workers, mowers, and stable attendants; Class II, boys over 18 years of age, women, and strong girls; and Class III, other girls and boys under 18.

TABLE 9.—BASIC WAGES OF AGRICULTURAL WORKERS IN BOHEMIA IN 1931
[Conversions into United States currency on basis of crown=2.96 cents]

Districts raising—	Basic monthly wages of permanent workers						Basic hourly wages of seasonal workers in—					
	Feeders, herders, and shepherds		Horse feeders		Ox feeders, maids		Class I ¹		Class II ²		Class III ³	
	Czechoslovak currency	U. S. currency	Czechoslovak currency	U. S. currency	Czechoslovak currency	U. S. currency	Czechoslovak currency	U. S. currency	Czechoslovak currency	U. S. currency	Czechoslovak currency	U. S. currency
Sugar beets predominantly.....	Cr. 155	\$4.59	Cr. 145	\$4.29	Cr. 130	\$3.85	Cr. 1.50	Cts. 4.4	Cr. 1.15	Cts. 3.4	Cr. 1.00	Cts. 3.0
Sugar beets and other crops.....	150	4.44	140	4.14	125	3.70	1.45	4.3	1.10	3.3	.95	2.8
Grain I.....	135	4.00	125	3.70	115	3.40	1.25	3.7	1.00	3.0	.90	2.7
Grain II.....	120	3.55	110	3.26	100	2.96	1.10	3.3	.95	2.8	.80	2.4
Potatoes.....	105	3.11	95	2.81	90	2.66	1.05	3.1	.85	2.5	.75	2.2
Fodder.....	95	2.81	85	2.52	80	2.37	1.05	3.1	.80	2.4	.70	2.1

¹ Includes adult workers, mowers, and stable attendants.

² Includes boys over 18 years of age, women, and strong girls.

³ Includes other girls and boys under 18.

Regular workers in Bohemia receive a special bonus of 19 crowns (56.2 cents) per month in the high-grade vegetable and sugar-beet sections. Workers who complete the year are given an allowance amounting to an extra month's wage. Work during the harvest season is usually paid on a piecework basis, securing to the average worker a wage from 10 to 15 per cent higher than his normal earnings.

Deductions of 4 crowns (11.8 cents) per day in Bohemia and 6 crowns (17.8 cents) per day in Slovakia are made to cover the cost of housing, fuel, light, and maintenance which are furnished by the employers. Workers of Classes I and II engaged in digging potatoes receive an added hourly increment of 15 heller (0.44 cent), while those of Class III are paid an added 12 heller (0.36 cent). This increased earning, however, is not considered as a basic wage in computing overtime pay.

Agricultural workers in Slovakia are paid on the following basic wage scale:

TABLE 10.—BASIC DAILY WAGES OF AGRICULTURAL WORKERS IN SLOVAKIA IN 1931
[Conversions into United States currency on basis of crown=2.96 cents]

Class	Basic daily wages of—							
	Permanent workers				Seasonal workers			
	Ordinary labor		Harvest season ¹		Ordinary labor		Harvest season ²	
	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency	Czechoslovak currency	United States currency
Class I.....	Crowns 6.30	Cents 18.6	Crowns 7.25	Cents 21.5	Crowns 6.90	Cents 20.4	Crowns 7.75	Cents 22.9
Class II.....	4.50	13.3	5.20	15.4	4.75	14.1	5.20	15.4
Class III.....	3.20	9.5	4.05	12.0	3.45	10.2	4.30	12.7

¹ Payable for a period of 2 months from the beginning of the harvest.

² Payable for a period of 6 weeks from the beginning of the harvest.

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Workers employed in caring for horses receive an additional 2.50 crowns (7.4 cents) per day over the basic wages indicated above, while those caring for oxen receive an extra 2 crowns (5.9 cents) daily.

Sugar beet workers receive wages on a piecework scale as follows:

	Per katastraljoch ⁴
First hoeing.....	24.30 crowns (\$0.72)
Weeding and separating.....	49.50 crowns (\$1.47)
Second hoeing.....	49.50 crowns (\$1.47)
Harvesting by hand.....	130.00 crowns (\$3.85)
Harvesting, when plowed out.....	90.00 crowns (\$2.66)

The mowing of hay and clover is also paid on a piece basis at 24.15 crowns (71.5 cents) per katastraljoch (57,600 square feet).

Regular workers engaged in the grain harvest receive a special allowance of grain in addition to their money earnings. All workers reaping and threshing by hand receive one-tenth of the grain produced, those operating a mowing machine, binding, and threshing are entitled a thirteenth part of the output, while operators of a reaper and binder receive a fifteenth share. Reaping and binding with threshing entitles the worker to one-twelfth of the production and other workers engaged in threshing receive 3½ per cent of the amount of grain they handle. By agreement between the employer and the workers, these allowances may be made in money instead of grain, but in such cases the workers are privileged to buy enough grain to meet their needs from the employer at the price prevailing on the nearest grain exchange. Seasonal workers operating threshing machines receive a bonus of 1.50 crowns (4.4 cents) per day.

In addition to money wages, allowances of various kinds are paid to agricultural workers by the terms of the collective agreements. In Bohemia, married workers receive a hygienic dwelling with at least one room and a woodshed. If the worker occupies his own dwelling, he is entitled to a rent allowance, determined by the current rents paid in that section. Workers in this group may be granted a piece of ground for raising potatoes, with seed potatoes and fertilizer furnished by the employer. They are further permitted to keep six chickens, two nests of rabbits, and possibly a pig. In Slovakia, workers of both groups must be provided with lodgings, including a heated common room, hygienic sleeping quarters, and toilet facilities. Beds and bedding must also be provided by the employer. The necessary agricultural implements and tools are furnished by the employer, but workers are responsible for any damage done to them beyond ordinary depreciation through use. A cook, paid at the regular scale of wages, must be provided for every 20 workers.

The trade agreements further provide that married agricultural workers shall receive allowances of food and fuel, as noted below.

⁴ 57,600 square feet.

TABLE 11.—FOOD ALLOWANCES OF AGRICULTURAL WORKERS IN BOHEMIA IN 1931

[Quintal=220.46 pounds; kilogram=2.2046 pounds; liter=1.0567 quarts]

Item	Allowances to—	
	Permanent workers	Seasonal workers (per 100 days)
Rye, barley or wheat:		<i>Kilos</i>
Grain.....	85 kilograms per month.....	10. ¹
Flour.....	60 kilograms per month.....	
Butter or lard ²	1 kilogram per month.....	
Potatoes ³	80 kilograms per month.....	300. ⁴
Milk ⁵	1 liter per day.....	
Illuminating oil ⁶	2 liters per month.....	
Coal:		
Black.....	16 quintals per year.....	
Lignite.....	24 quintals per year.....	
Wood for fuel.....	4 cubic meters per year.....	

¹ A bonus of 5 kilograms is added if the worker is employed for 150 days.² Granted only in case worker is not permitted to raise a pig.³ Granted only in case worker is not allotted land for raising potatoes.⁴ An additional 100 kilograms is allotted for every 25-day period beyond the 100-day season.⁵ Families of more than 4 members may purchase one-fourth of a liter daily for each additional member, at half the prevailing price.⁶ Granted only from Oct. 1 to Mar. 31.

Allowances for 6-week periods to pairs of agricultural workers in Slovakia are as follows:

TABLE 12.—FOOD ALLOWANCES, FOR 6-WEEK PERIODS, TO AGRICULTURAL LABORERS WORKING IN PAIRS, IN SLOVAKIA IN 1931

[Kilogram=2.2046 pounds; liter=1.0567 quarts]

Item	Food allowances ¹ to—	
	Permanent workers	Seasonal workers
Corn.....	70 kilograms.....	60 kilograms.
Wheat.....	50 kilograms.....	40 kilograms.
Legumes (peas, beans, barley, or rice) ²	14 kilograms.....	10 kilograms.
Potatoes.....	35 kilograms.....	40 kilograms.
Meat, chiefly beef.....	3 kilograms.....	3 kilograms.
Bacon.....	1.5 kilograms ³	3 kilograms.
Animal fat.....	2 kilograms.....	
Salt.....	3 kilograms.....	3 kilograms.
Whole milk.....	42 liters.....	42 liters.
Allowance for preparing food.....	25 crowns (\$0.73).....	35 crowns (\$1.02).

¹ To be furnished in the articles prescribed or their equivalents.² 3 of the 4 varieties to be supplied as selected by the employer.³ 1 kilogram to be used in the common kitchen.

Seasonal workers in Slovakia receive, whenever they sever their contracts with the employer and regardless of the reason therefor, 20 kilograms of grain for each six weeks of employment during the season. If they complete the season as contracted, they are entitled to a premium sufficient to enable them to purchase 50 kilograms of corn and 25 kilograms of wheat at the current grain exchange prices for September.

Deductions are made from the wages of all agricultural workers in Czechoslovakia to cover half the cost of the insurance against sickness and old age, the remaining half being borne by the employer. In Slovakia 60 crowns (\$1.78) are deducted from the first two wage payments of the season as a forfeit which falls to the employer in case the

worker does not complete the season according to the terms of the contract. Seasonal workers in Slovakia employed at piece rates have a deduction of 6 crowns (17.8 cents) per day made to cover the cost of their maintenance.

General Survey of Wages in Hungary ¹

ACCORDING to the latest census, taken at the end of 1930, the total number of industrial workers in Hungary, excluding those engaged in agriculture, is 1,169,797. Of this number approximately 157,000 are members of labor unions.

Average Annual Earnings in Manufacturing Industries

THE publication *Statisztikai Havi Közlemények* in its April-June, 1931, issue, gives detailed data regarding average annual earnings during 1930, in the various branches of the manufacturing industries. The following tables are taken from that report:

TABLE 1.—AVERAGE ANNUAL EARNINGS IN SPECIFIED INDUSTRY GROUPS IN HUNGARY, 1930

[Conversions into United States currency on basis of pengő=17.5 cents]

Industry group	Average annual earnings per worker		Industry group	Average annual earnings per worker	
	Hungarian currency	United States currency		Hungarian currency	United States currency
	<i>Pengős</i>			<i>Pengős</i>	
Iron and metal.....	1,605	\$280.88	Clothing.....	1,418	\$248.15
Machine.....	1,643	287.53	Paper.....	1,434	250.95
Public utility electric power.....	2,397	419.48	Provision and convertible industries.....	1,439	251.83
Earthenware, stone and glass.....	1,208	211.40	Chemicals.....	1,612	282.10
Wood and bone.....	1,308	228.90	Reproductive and decorative.....	2,886	505.05
Leather, bristle, and feather.....	1,412	247.10			
Spinning and weaving.....	1,188	207.90			

For all industries covered in Table 1, earnings amounted to 1,497 pengős (\$261.98)² in 1930, as against 1,580 pengős (\$276.50) in 1929. The cost of living declined by 5.3 per cent.

The average annual earnings of industrial workers employed in the various branches of the industries given in Table 1 are shown in Table 2.

¹ This report was prepared by Stephen Hattala of the American Consulate at Budapest, Hungary.

² Conversions into United States currency on basis of pengő=17.5 cents.

TABLE 2.—AVERAGE ANNUAL EARNINGS IN SPECIFIED BRANCHES OF INDUSTRY IN HUNGARY IN 1930

[Conversions into United States currency on basis of pengő=17.5 cents]

Industry	Average annual earnings per worker		Industry	Average annual earnings per worker	
	Hun-garian cur-rency	United States cur-rency		Hun-garian cur-rency	United States cur-rency
Iron and metal industries:	Pengős		Spinning and weaving industries:	Pengős	
Iron and steel manufacturing	1,647	\$288.23	Cotton	1,233	\$215.78
Iron and steel molding	1,473	257.78	Linen	913	159.78
Wrought-iron goods	1,666	291.55	Flax	994	173.95
Cables, wire, etc.	1,729	302.58	Jute	1,202	210.35
Enameled goods	1,270	222.25	Wool	1,255	219.63
Building and locksmith hard-ware	1,345	235.38	Silk	1,075	188.13
Iron and brass furniture	1,330	232.75	Ribbon	1,192	208.60
Semifinished metal products	1,931	337.93	Knitted and woven goods	1,076	188.30
Gold and silver goods	1,952	341.60	Braiding	1,317	230.48
Coppersmith goods	1,622	283.85	Embroidery and laces	497	86.98
Metal foundries	1,950	341.25	Preparing plants	1,702	297.85
Chandeliers and lamp prod-ucts	1,562	273.35	Clothing industry:		
Plumbing and fittings	1,866	326.55	Tailors	1,677	293.48
Finished metal goods	1,185	207.38	Furriers	1,735	303.63
Machine industries:			Linen goods	1,147	200.73
Boilers, machines, arms, boats, etc.	1,733	303.28	Style goods, umbrellas	1,196	209.30
Scales	1,498	262.15	Gloves, trusses	1,145	200.38
Electrotechnical goods	1,505	263.38	Hats	1,145	252.88
Musical instruments	1,911	334.43	Artificial flowers, decorative feathers	938	164.15
Precision apparatus, watches, etc.	1,433	250.78	Leather shoes	1,346	235.55
Earthenware, stone, and glass industries:			Paper industry:		
Lime burning	1,533	268.28	Paper	1,687	295.23
Cement, fireproof, and insu-lating material	1,572	275.10	Paper goods	1,359	237.83
Asbestos shingles	1,621	283.68	Provision and convertible indus-tries:		
Artificial stone and cement goods	1,297	226.98	Flour mills	1,483	259.53
Stone quarries	1,215	212.63	Spice grinding	1,012	177.10
Stone-working plants	1,614	282.45	Bakeries, potato mashing	1,707	298.73
Brick factories	1,027	179.73	Sugar factories	1,190	208.25
Stove factories	2,427	424.73	Candy factories	1,039	181.83
Pottery and other earthen-ware	1,188	207.90	Chickory and vegetable pack-ing	1,127	197.23
Glass melting	1,379	241.33	Seed assorting	389	68.08
Glass cutting	2,070	362.25	Salami and canned-meat fac-tories	1,804	315.70
Wood and bone industries:			Milk products	1,534	268.45
Sawmills	1,006	176.05	Tobacco products	1,252	219.10
Barrels and woodenware	1,497	261.98	Beer and malt	1,684	294.70
Hardwood flooring and ve-neers	1,271	222.43	Alcohol	1,506	263.55
Other woodenware	1,431	250.43	Vinegar	1,173	205.28
Shades, carpenter goods	1,480	259.00	Brandy, liquor, rum	1,251	218.93
Lathes	1,241	217.18	Champagne	1,400	245.00
Canes	707	123.73	Mineral and soda water	1,400	245.00
Picture-frame making and gilding	1,198	209.65	Water supply (public utility)	3,014	527.45
Wooden tools	1,221	213.68	Ice	1,780	311.50
Bone and mother-of-pearl	1,271	222.43	Chemical industries:		
Children's toys	1,226	214.55	Oil refining	1,649	288.58
Broomcorn sweepers	856	149.80	Gas (public utility)	2,416	422.80
Reed and straw goods, basket-ware	925	161.88	Briquette	1,425	249.38
Carriage and staves	1,652	289.10	Cornstarch	1,330	232.75
Leather, bristle, and feather in-dustries:			Matches	814	142.45
Leather	1,618	283.15	Glue and albumin	1,399	244.83
Leather goods, bags, saddlery	1,264	221.20	Vegetable oil	1,499	262.33
Oilcloth	1,237	216.48	Candle, soap, perfumery	1,195	209.13
Bristle, animal hair, feather	1,087	190.23	Greases	1,421	248.68
Rubber goods	1,271	222.43	Paints, lacquers, ink, pencils	1,668	291.90
			Fertilizers	1,651	288.93
			Asphalt and pitch	1,775	310.63
			Chemical products	1,455	254.63
			Chemical sundries	1,500	262.50
			Reproductive and decorative in-dustries	2,886	505.05

The daily working time in these industries is eight hours.

The wages are subject to a deduction of 2 per cent for income tax and 4.64 per cent for social insurance contributions.

Hourly Wages in Certain Occupations

THE Hungarian Manufacturers' Association maintains an organization, designated as the Central Bureau of Hungarian Employers, that fixes and registers hourly wages actually paid. This bureau classifies labor into the following classes: Skilled laborers, machine workers, day laborers, female workers, boys and girls, and apprentices. The average hourly wages paid to these classes of labor on June 30, 1931, were as follows:

Skilled laborers.....	0. 90 pengő (15. 7 cents)
Machine workers.....	0. 73 pengő (12. 7 cents)
Day laborers.....	0. 50 pengő (8. 7 cents)
Female help.....	0. 44 pengő (7. 7 cents)
Boys and girls.....	0. 30 pengő (5. 3 cents)
Apprentices.....	0. 16 pengő (2. 8 cents)

As all collective agreements have been canceled, except in the bakery trade, the wage scales are nominal and the wages obtained in new employment are subject to bargaining. Hourly wages have followed a declining trend, as shown in the following comparison listing hourly wages paid in certain occupations at the end of June, 1931, and the average paid during 1930:

TABLE 3.—AVERAGE HOURLY RATES IN SPECIFIED OCCUPATIONS IN HUNGARY IN 1930 AND JUNE 30, 1931

[Conversions into United States currency on basis of pengő=17.5 cents]

Occupation	Average hourly rate			
	1930		June, 1931	
	Hungarian currency	United States currency	Hungarian currency	United States currency
	<i>Pengős</i>		<i>Pengős</i>	
Plumbers.....	0.72	\$0.13	0.68	\$0.12
Joiners.....	.61	.11	.54	.09
Tailors.....	.54	.09	.44	.08
Bricklayers.....	.80	.14	.80	.14
Day laborers.....	.45	.08	.44	.08
Female factory hands.....	.25	.04	.26	.05
Female day laborers.....	.38	.07	.34	.06

New men are hired at present between the limitations of the following minimum and maximum wages per hour:

Skilled laborers.....	0. 58-1. 55 pengő (\$0. 10-\$0. 27)
Machine operators.....	0. 50-0. 88 pengő (\$0. 09-\$0. 15)
Day laborers.....	0. 32-0. 51 pengő (\$0. 06-\$0. 09)
Female help.....	0. 23-0. 73 pengő (\$0. 04-\$0. 13)
Boys.....	0. 19-0. 33 pengő (\$0. 03-\$0. 06)
Engravers.....	0. 94-1. 12 pengő (\$0. 16-\$0. 20)
Apprentices.....	0. 15-0. 24 pengő (\$0. 03-\$0. 04)

Weekly Wages in Certain Occupations, Budapest

THE Statistical Yearbook of the city of Budapest, 1930, gives detailed data regarding wages paid by 16,256 small industrial firms employing 20 workers or fewer each and by 1,854 larger industrial

firms employing more than 20 men each. The data collected are based on actual wages paid to 176,534 employees, of whom 136,893 were men and 39,641 women. These data relate solely to the city of Budapest, and show average weekly wages in specified industries and occupations in 1929.

TABLE 4.—AVERAGE WEEKLY WAGES IN SPECIFIED INDUSTRIES AND OCCUPATIONS IN BUDAPEST, 1929

[Conversions into United States currency on basis of pengő=17.5 cents]

Industry and occupation	Average weekly wages		Industry and occupation	Average weekly wages	
	Hungarian currency	United States currency		Hungarian currency	United States currency
Metal industries:	<i>Pengős</i>		Leather, brushes, hair, feather, oilcloth, and rubber industries:	<i>Pengős</i>	
Steel foundries.....	57.60	\$10.08	Tanners, skilled.....	35.46	\$6.21
Iron foundries.....	58.56	10.25	Tanners' helpers, male.....	26.16	4.58
Metal foundries.....	56.64	9.91	Tanners' helpers, female.....	17.75	3.11
Machine molders.....	37.44	6.55	Purse and fancy-goods workers.....	28.52	4.99
Casting cleaners.....	30.72	5.38	Leather workers.....	35.21	6.16
Locksmith, foremen.....	53.76	9.41	Brush makers, male.....	41.28	7.22
Locksmiths' helpers.....	39.84	6.97	Brush makers, female.....	30.72	5.38
Machine setters.....	45.12	7.90	Furriers, male.....	49.79	8.71
Mold makers.....	55.20	9.66	Furriers, female.....	38.63	6.76
Tool repairers.....	44.64	7.81	Glove makers.....	52.00	9.10
Iron lathe turners.....	49.44	8.65	Truss makers.....	43.50	7.61
Metal lathe turners.....	42.24	7.39	Automobile upholsterers.....	45.92	8.04
Tool lathe turners.....	49.92	8.74	Textile industry:		
Boilersmith, firemen.....	43.20	7.56	Jute weavers, male.....	25.00	4.38
Boilersmiths' helpers.....	39.36	6.89	Jute weavers, female.....	23.00	4.03
Toolsmiths, firemen.....	46.56	8.15	Cotton weavers, male.....	20.00	3.50
Toolsmiths' helpers.....	36.48	6.38	Cotton weavers, female.....	20.00	3.50
Shipsmiths.....	31.68	5.54	Rope makers.....	36.00	6.30
Riveters, foremen.....	34.56	6.05	Knitters, male.....	45.00	7.88
Riveters.....	30.72	5.38	Knitters, female.....	25.00	4.38
Tinsmiths.....	45.12	7.90	Braiding makers, male.....	50.00	8.75
Bronze workers.....	54.72	9.58	Braiding makers, female.....	28.00	4.90
Metal-press men.....	58.08	10.16	Dyers, male.....	58.00	10.15
Polishers.....	37.92	6.64	Dyers, female.....	34.00	5.95
Galvanizers, female.....	24.96	4.37	Tapestry makers.....	51.00	8.93
Factory workers, female.....	12.48	2.18	Clothing industry:		
Workers, female.....	15.36	2.69	Men's tailoring—		
Electricians.....	39.84	6.97	Beginners.....	23.04	4.03
Electricians' helpers.....	27.84	4.87	Semiskilled workers.....	31.68	5.54
Coppersmiths.....	56.64	9.91	Skilled workers.....	40.32	7.06
Machinists.....	41.28	7.22	Pieceworkers.....	46.08	8.06
Firemen.....	33.60	5.88	Men's ready-made clothing—		
Planers.....	44.64	7.81	First-class pressers, and machine and hand workers.....	65.28	11.42
Borers.....	44.16	7.73	Contract pressers, and machine and hand workers—		
Cold-press men.....	32.64	5.71	First class.....	61.44	10.75
Machine workers, turret lathe.....	36.48	6.38	Second class.....	51.84	9.07
Coal passers.....	26.88	4.70	Pressers and machine workers, helpers—		
Oilers.....	26.40	4.62	First class.....	48.00	8.40
Boiler cleaners.....	27.84	4.87	Second class.....	42.24	7.39
Crane operators.....	30.24	5.29	Women's tailoring, hand workers—		
Machine workers, female.....	20.64	3.61	First 6 months.....	12.00	2.10
Mechanics' helpers, female.....	19.20	3.36	Second 6 months.....	14.88	2.60
Electrical industry and manufacture of machines and precision and musical instruments:			After 1 year.....	19.68	3.44
Machine workers, first class.....	36.00	6.30	Women's ready-made clothing—		
Machine workers, second class.....	24.48	4.28	Beginners.....	15.84	2.77
Factory helpers.....	22.08	3.86	Semiskilled workers.....	25.44	4.45
Modelers.....	48.00	8.40	Skilled workers.....	33.12	5.80
Machine workers, female.....	20.64	3.61	Contractors, female.....	44.16	7.73
Watch makers.....	30.00	5.25	Hat makers, male.....	30.00	5.25
Instrument makers, male.....	44.64	7.81	Hat makers, female.....	15.40	2.70
Instrument makers, female.....	19.20	3.36	Cap makers, male.....	51.16	8.95
Stone and glass industries:			Cap makers, female.....	30.60	5.25
Stonecutters.....	64.32	11.26	Shoemakers.....	22.17	3.88
Brick manufacture—			Shoemakers, uppers, male.....	23.44	4.10
Males.....	13.92	2.44	Shoemakers, uppers, female.....	20.30	3.55
Females.....	9.12	1.60	Laundry workers, male.....	38.00	6.65
Potters.....	70.56	12.35	Laundry workers, female.....	27.00	4.73
Wood industry:					
Lumbermen.....	49.92	8.74			
Coopers.....	43.20	7.56			
Joiners, building.....	34.56	6.05			
Joiners, average-size plants.....	43.20	7.56			
Joiners, small plants.....	33.60	5.88			
	43.20	7.56			

TABLE 4.—AVERAGE WEEKLY WAGES IN SPECIFIED INDUSTRIES AND OCCUPATIONS IN BUDAPEST, 1929—Continued

Industry and occupation	Average weekly wages		Industry and occupation	Average weekly wages	
	Hun-garian cur-rency	United States cur-rency		Hun-garian cur-rency	United States cur-rency
Paper industry:			Building trades—Continued.	Pengős	
Bookbinding and envelopes, skilled workers—	Pengős		Day laborers, female.....	14.40	\$2.52
First year.....	42.50	\$7.44	Carpenters.....	38.40	6.72
Second year.....	48.50	8.49	Glaziers.....	45.00	7.88
Third year.....	54.50	9.54	Painters, beginners.....	32.64	5.71
After 3 years.....	58.50	10.24	Painters, semiskilled.....	52.80	9.24
Food industry:			Painters, skilled.....	57.00	9.98
Mill workers.....	25.92	4.54	Paper hangers.....	63.36	11.09
Millers.....	28.62	5.01	Varnishers.....	52.80	9.24
Mill workers, female.....	16.20	2.84	Cement workers.....	38.40	6.72
Bakers, kneaders.....	58.17	10.18	Plasterers.....	68.16	11.93
Butchers.....	48.00	8.40	Printing trades:		
Sausage mixers.....	51.00	8.93	Lithographers, skilled.....	75.00	13.13
Chemical industry:			Press feeders, female.....	32.00	5.60
Factory workers, male.....	26.00	4.55	Printers, skilled.....	62.00	10.85
Factory workers, female.....	16.00	2.80	Printers' helpers, male.....	39.50	6.91
Building trades:			Printers' helpers, female.....	34.00	5.95
Scaffold workers.....	36.00	6.30			
Day laborers, male.....	19.20	3.36			

Weekly Wages Paid to Members of Labor Unions, 1928 to 1931

THE Board of Trade Unions compiled the following comparative schedule of weekly wages paid to the members of the labor unions employed in the various industries at the end of the years 1928, 1929, and 1930, and on October 31, 1931:

TABLE 5.—WEEKLY WAGES OF MEMBERS OF TRADE-UNIONS IN HUNGARY, 1928 TO 1931

[Conversions into United States currency on basis of pengő=17.5 cents]

Industry	Average weekly wages on—							
	Dec. 31, 1928		Dec. 31, 1929		Dec. 31, 1930		Oct. 31, 1931	
	Hun-garian cur-rency	United States cur-rency	Hun-garian cur-rency	United States cur-rency	Hun-garian cur-rency	United States cur-rency	Hun-garian cur-rency	United States cur-rency
Leather.....	Pengős		Pengős		Pengős		Pengős	
Provisions and convertibles.....	36.37	\$6.36	36.12	\$6.32	33.00	\$5.78	29.46	\$5.16
Building trades.....	38.30	6.70	36.94	6.46	36.40	6.37	33.04	5.78
Wood and furniture.....	52.32	9.16	53.46	9.36	48.88	8.55	40.26	7.05
Printing trades.....	51.86	9.08	53.35	9.34	46.32	8.11	44.00	7.70
Precious metals.....	51.76	9.06	53.01	9.28	49.33	8.63	48.33	8.46
Clothing.....	34.66	6.07	33.00	5.78	59.73	10.45	43.86	7.68
Forwarding, shipping.....	52.88	9.25	52.80	9.24	45.70	8.00	45.70	8.00
Textiles.....	42.00	7.35	42.00	7.35	36.66	6.42	36.66	6.42
Iron and metal.....	35.00	6.13	35.00	6.13	33.10	5.79	31.60	5.53
Chemical.....	40.44	7.08	40.98	7.17	43.64	7.62	43.33	7.58
Sculpture and carving.....	41.75	7.31	35.22	6.16	38.75	6.78	36.00	6.30
Miscellaneous.....	80.32	14.06	80.32	14.06	62.66	10.97	49.60	8.68
Day labor, female.....	31.68	5.54	31.68	5.54	28.26	4.95	24.66	4.32
	26.67	4.67	26.23	4.59	24.24	4.24	23.12	4.05
Average.....	44.00	7.70	43.58	7.63	41.89	7.33	37.83	6.62

Coal Mining

THE coal industry employs 34,917 miners. The normal working time is 8 hours. Miners receive lodging for a nominal rent and a heating allowance of 3.75 metric tons of coal per annum. Electric light is given free of charge. Of the wages, 2 per cent is deducted for income tax and 4.64 per cent for social insurance. The Royal Hungarian Bureau of Statistics gives the average annual wages paid during 1930 as follows:

Management.....	5, 644. 00 pengös (\$987. 70)
Officials, clerks.....	3, 510. 00 pengös (\$614. 25)
Subordinate helpers.....	2, 634. 00 pengös (\$460. 95)
Pick miners.....	1, 892. 00 pengös (\$331. 10)
Other underground laborers:	
Men.....	1, 245. 00 pengös (\$217. 88)
Boys.....	618. 00 pengös (\$108. 15)
Surface laborers:	
Men.....	1, 409. 00 pengös (\$246. 58)
Women.....	715. 00 pengös (\$125. 13)
Children.....	673. 00 pengös (\$117. 78)

Agriculture

THE latest census taken December 31, 1930, gives the farm population of Hungary as follows:

TABLE 6.—FARM POPULATION OF HUNGARY, 1930

Class	Number of wage earners	Number of dependents
Owners of large estates.....	798	1, 461
Owners of middle-size estates.....	11, 484	17, 359
Owners of small farms.....	407, 947	419, 882
Agricultural servants.....	225, 129	379, 975
Agricultural laborers.....	749, 169	779, 420
Total.....	1, 394, 527	1, 598, 097

Agricultural labor in Hungary is entirely unorganized. The great majority of workers are employed or hired by owners of large and middle-size estates. Small farmers hire scarcely any paid labor and help each other. Shortage in capital, together with scarcity and high cost of agricultural credit, is a characteristic of Hungarian agrarian production that affects the development of the wages paid in the industry. As a result, wages are low and there is a trend toward minimal monetary compensation and maximal payment in kind for work done. Of the total number of agricultural workers only 12 per cent receive wages paid wholly in cash.

Statistical data are based on the size and estimated value of the farms according to the three regions of the country and according to counties, rental paid for the farm in cash and in kind, seasonal wages paid to male and female workers inclusive and exclusive of food, seasonal wage scale for vineyard workers, seasonal contract labor, and agricultural servants.

Average Daily Wage Scale

The annual report of the National Agricultural Chamber for 1930 gives the following figures showing the average wages paid per day during 1930.

TABLE 7.—AVERAGE DAILY WAGES OF AGRICULTURAL WORKERS IN HUNGARY, 1930

[Conversions into United States currency on basis of pengő=17.5 cents]

Season	Average daily wages of—					
	Men		Women		Children	
	Hungarian currency	United States currency	Hungarian currency	United States currency	Hungarian currency	United States currency
	<i>Pengős</i>		<i>Pengős</i>		<i>Pengős</i>	
Spring.....	2.50	\$0.44	1.80	\$0.32	1.30	\$0.23
Summer.....	3.60	.63	2.60	.46	1.90	.33
Autumn.....	2.60	.46	1.90	.33	1.40	.25
Winter.....	2.00	.35	1.30	.23	1.00	.18
Yearly average.....	2.68	.47	1.90	.33	1.40	.25
If food is furnished, above scale is reduced by.....	.60	.11	.40	.07	.30	.05

The average working time during 1930 was 150 days per annum.

Monthly Wage Scale for Seasonal Labor

Seasonal labor in general is of two kinds—excluding harvesting and threshing, and including harvesting and threshing. Contracts are made in each case for the season, stipulating cash payment by the month, varying from 5 pengős (88 cents) to 45 pengős (\$7.88), and the following additional compensation in kind: Wheat, from 220 to 660 pounds; rye, from 220 to 1,100 pounds; barley, from 220 to 1,100 pounds; bread flour, 44 pounds; cooking flour, from 5.6 to 22 pounds; vegetables, from 6.6 to 11 pounds; bacon, 8.8 pounds; lard, 2 pounds; meat, 2 to 8.8 pounds; salt, 1 to 8 pounds; potatoes, from 16 to 44 pounds; and vinegar, 2 liters.

Certain farm workers engaged in groups exclusively for the harvesting and threshing, are usually paid with a share of the crop. The share of each worker varies from 1,300 to 1,400 pounds of cereal, in addition to board.

Annual Wage Scale of Agricultural Servants

Agricultural servants including drivers, cowmen, cattle, sheep and swine herders, etc., are hired for the crop year beginning April 1. Employment is permanent throughout the year. Servants receive free lodging, \$7.00 to \$24.48 wages per annum, 1,200 to 1,600 pounds of wheat, 1,400 to 1,600 pounds of rye, 200 to 800 pounds of barley, 400 to 880 pounds of corn, the use of 100 to 1,600 square meters of garden space, 400 to 6,400 square meters of corn land, free pasture, hay, and straw, and the keeping of 1 cow, 1 calf, 1 to 2 hogs and 6 to 12 pigs. Of course, conditions of employment change according to occupation, region, size of the farm, and various other local factors.

Daily Wage Scale in Vineyards

Seasonal day laborers in vineyards working 112 to 140 days per annum were paid during 1930 according to the following wage scale:

Opening-----	2.30 pengös (\$0.40)
Pruning-----	2.90 pengös (\$0.51)
Hoeing-----	2.80 pengös (\$0.49)
Spraying-----	3.70 pengös (\$0.65)
Binding-----	2.30 pengös (\$0.40)
Picking-----	1.90 pengös (\$0.33)
Carrying-----	2.50 pengös (\$0.44)
Pressing-----	2.80 pengös (\$0.49)
Covering-----	2.20 pengös (\$0.39)

During the year there was a strong tendency to enforce crop-share contracts instead of cash payment.

General Survey of Wages in Poland ¹

ON EXAMINING the wage tables following, much difference will be found even within a single industry, while to some extent districts of the country also determine their own standard. As a general thing wages are highest in Warsaw and the Warsaw district, followed by the Silesia district and by Cracow. Where mining and smelting are concerned, Silesia leads. Thus in the zinc smelters of Silesia a wage of 14.18 zlotys (\$1.59) ² per day of 8 hours is paid to certain skilled workers. This is the highest daily wage reached in either smelting or mining. On the other hand young surface workers in coal mines receive as little as 1.95 zlotys (21.9 cents) per day, and the average is far below \$1 per day. The zinc, coal, lead and iron industries pay the highest daily wage for high-class workers.

A short list of the highest wages paid in these industries follows:

	Daily wages
Zinc smelters: first-class ore smelters in Silesia-----	14.18 zlotys (\$1.59)
Coal mines: miners in Silesia-----	14.00 zlotys (\$1.57)
Lead smelters: first-class lead casters-----	13.41 zlotys (\$1.50)
Iron ore mines: miners in Cracow-----	11.78 zlotys (\$1.32)
Salt mines: mechanics in Wieliczka-----	11.50 zlotys (\$1.29)

Metal workers are paid much less than workers in mines, while the textile industry, centering largely in Lodz, and very important to Poland, pays very low wages.

The highest daily wages are paid to hand compositors in printing, to baker specialists, and to masons, as follows:

Hand compositors (printing): Warsaw-----	22.00 zlotys (\$2.24)
Cracow-----	17.54 zlotys (\$1.97)
Masons: Warsaw-----	17.84 zlotys (\$2.00)
Cracow-----	14.00 zlotys (\$1.57)
Bakers: Warsaw-----	17.48 zlotys (\$1.96)
Lodz-----	13.91 zlotys (\$1.56)

Technical department chiefs among iron workers receive as much as 1,946 zlotys (\$218.34), per month, which is regarded as very high, indeed. Laboratory chemists of the highest class receive about 863 zlotys (\$96.83) per month, heading their profession in metallurgy.

Agriculture is an important industry both because of its prevalence in the Polish economy and its own particular features of remuneration.

¹ This report was prepared by Stewart E. McMillen, American consul, Warsaw, and T. W. Chylinski and Sophie Swiecicka, of the American consulate in Warsaw.

² Conversions into United States currency on basis of zloty=11.22 cents.

Wages in Mining and Smelting Industries

THE average daily wages per working-day shown in the following tables include the actual wages, the value of payments in kind (the coal allowance in coal mines), and vacation wages. These figures actually constitute, therefore, the total earnings of a workman for work done, although from this wage deductions are made for social insurance, income tax, and penalties.

In the column entitled "Deductions," the average deduction from the total wage of one workman per working-day for social insurance (sick funds, benefit fraternities, etc.) is given.

The average daily wages paid in iron mines and in zinc and lead mines in June, 1931, and the deductions per day are shown in the following table:

TABLE 1.—AVERAGE DAILY EARNINGS IN IRON MINES AND IN ZINC AND LEAD MINES IN POLAND IN JUNE, 1931

[Conversions into United States currency on basis of zloty = 11.22 cents]

Occupation	Iron mines				Zinc and lead mines			
	Average earnings per day		Average deductions per day		Average earnings per day		Average deductions per day	
	Polish currency	United States currency	Polish currency	United States currency	Polish currency	United States currency	Polish currency	United States currency
	Zlotys	Cents	Zlotys	Cents	Zlotys	Cents	Zlotys	Cents
Miners.....	7.28	81.7	0.82	9.2	12.13	\$1.36	2.29	25.7
Underground workers.....	4.73	53.1	.21	2.4	10.13	1.14	1.73	19.4
Surface workers.....	4.85	54.4	.20	2.2	8.86	.99	1.12	12.6
Female workers.....	3.11	34.9	.19	2.1	3.19	.36	.43	4.8
Average, males.....	5.51	61.8	.37	4.2	9.81	1.10	1.50	16.8
Average, all workers.....	5.44	61.0	.37	4.2	8.73	.98	1.33	14.9

In the following statement the average daily wages of workers engaged in the extraction of petroleum in the Boryslaw district are given for August, 1931:

Drillers, first class.....	10.59 zlotys (\$1.19)
Skilled helpers.....	7.05 zlotys (\$0.79)
Laborers and women.....	5.10 zlotys (\$0.57)
Young workers.....	2.81 zlotys (\$0.32)

The following table shows the average daily earnings, with and without the special allowances, in Polish coal mines in June, 1931, and the deductions from wages on account of different forms of social insurance. There are wide variations in the rate of pay in the different coal regions, the highest rates being paid in Upper Silesia and the lowest in the Basin of Cracow. The deductions are also considerably higher in Upper Silesia, since that section has old-age insurance which the other districts do not have.

TABLE 2.—AVERAGE DAILY EARNINGS IN COAL MINES IN POLAND IN JUNE, 1931
[Conversions into United States currency on basis of zloty=11.22 cents]

Occupation	Average daily earnings		Average daily earnings including overtime pay and family allowances		Average daily earnings including overtime and vacation pay, family allowances and value of coal allowance		Average daily deductions	
	Polish currency	United States currency	Polish currency	United States currency	Polish currency	United States currency	Polish currency	United States currency
	<i>Zlotys</i>		<i>Zlotys</i>		<i>Zlotys</i>		<i>Zlotys</i>	<i>Cents</i>
Underground workers.....	9.10	\$1.02	9.88	\$1.11	10.38	\$1.16	1.06	11.9
Miners.....	11.55	1.30	12.55	1.41	13.12	1.47	1.27	14.2
Surface workers.....	7.87	.88	8.86	.99	9.29	1.04	.85	9.5
Female workers.....	3.59	.40	3.85	.43	4.08	.56	.43	4.8
Young workers, underground.....	3.94	.44	4.19	.47	4.19	.47	.24	2.7
Young workers, surface.....	2.40	.27	2.53	.28	2.57	.29	.21	2.4
Average, males.....	8.71	.98	9.56	1.07	10.03	1.13	.99	11.1
Average, all workers.....	8.53	.96	9.35	1.05	9.82	1.10	.97	10.9

The daily earnings of workers in zinc and lead smelting and refining plants in June, 1931, are shown in the following table. The table shows the earnings with and without the special allowances.

TABLE 3.—AVERAGE DAILY EARNINGS IN ZINC AND LEAD SMELTING AND REFINING IN POLAND IN JUNE, 1931
[Conversions into United States currency on basis of zloty=11.22 cents]

Occupation	Average daily earnings		Average daily earnings including overtime pay and family allowances	
	Polish currency	United States currency	Polish currency	United States currency
	<i>Zlotys</i>		<i>Zlotys</i>	
Zinc smelters:				
Men.....	8.80	\$0.99	9.76	\$1.10
Mechanics.....	9.82	1.10	10.36	1.16
Laborers.....	6.19	.69	6.72	.75
Laborers, female.....	4.14	.46	4.29	.48
Young workers.....	2.82	.32	2.92	.33
Muffle and brick departments—				
Men.....	9.17	1.03	9.50	1.07
Women.....	4.22	.47	4.33	.49
Preparation, crushing, and grinding ore—				
Men.....	9.34	1.05	10.69	1.20
Ore burners.....	11.21	1.26	12.87	1.44
Women.....	3.63	.41	3.73	.42
Young workers.....	2.41	.27	2.57	.29
Sulphating and other chemical operations—				
Men.....	8.38	.94	9.20	1.03
Women.....	3.76	.42	4.01	.45
Young workers.....	2.54	.28	2.64	.30
Smelting and refining—				
Men.....	9.14	1.03	10.45	1.17
Smelters.....	9.82	1.10	11.28	1.27
Young persons.....	5.35	.60	6.03	.68
Electrolytic refining—Men.....	10.55	1.18	11.75	1.32
Mechanical working of zinc—				
Men.....	11.03	1.24	11.35	1.27
Rollers.....	13.70	1.54	14.05	1.58
Women.....	4.31	.48	4.36	.49
Other technical departments—All workers (average).....	8.10	.91	8.65	.97
Other nontechnical departments—All workers (average).....	6.03	.68	6.53	.73
Average, all workers.....	8.08	.91	8.99	1.01

TABLE 3.—AVERAGE DAILY EARNINGS IN ZINC AND LEAD SMELTING AND REFINING IN POLAND IN JUNE, 1931—Continued

Occupation	Average daily earnings		Average daily earnings including overtime pay and family allowances	
	Polish currency	United States currency	Polish currency	United States currency
Lead smelters:	<i>Zlotys</i>		<i>Zlotys</i>	
Men.....	7.88	\$0.88	8.89	\$1.00
Skilled workers.....	8.58	.96	9.58	1.07
Laborers.....	7.22	.81	8.03	.90
Women.....	3.93	.44	4.20	.47
Young persons.....	2.11	.24	2.14	.24
Preparation, smelting, and sulphating ore—				
Men.....	7.73	.87	8.80	.99
Smelters.....	7.91	.89	9.03	1.01
Lead smelting and manufacture—				
Men.....	7.95	.89	8.99	1.01
Smelters.....	10.63	1.19	11.89	1.33
Women.....	3.87	.43	4.05	.45
Other technical departments—All workers (average).....	8.11	.91	9.12	1.02
Other nontechnical departments—All workers (average).....	6.87	.77	7.68	.86
Average, all workers.....	7.47	.84	8.44	.95

Wages in the Metal Industry

FOLLOWING are given the hourly wages paid in the metal industry February 28, 1931. These figures include the value of all additional payments in money or kind without deductions. No figures were available giving the value of additional payments or deductions.

Artisans and skilled workers.....	1.44 zlotys (16.2 cents)
Mechanics.....	1.39 zlotys (15.6 cents)
Lathe operators.....	1.49 zlotys (16.7 cents)
Carpenters.....	1.45 zlotys (16.3 cents)
Founders.....	1.28 zlotys (14.4 cents)
Skilled helpers.....	0.92 zloty (10.3 cents)
Unskilled workers.....	0.76 zloty (8.5 cents)
Apprentices.....	0.32 zloty (3.6 cents)
Women.....	0.54 zloty (6.1 cents)
Young persons, male.....	0.33 zloty (3.7 cents)
Young persons, female.....	0.32 zloty (3.6 cents)
Average, all occupations.....	1.17 zlotys (13.1 cents)

Wages in Manufacturing Industries

THE manufacture of matches in Poland is a State monopoly. There are nine factories, and the hourly earnings shown below are an average of the wages paid to workers in all of these factories.

Skilled workers, male.....	1.15 zlotys (12.9 cents)
Skilled workers, female.....	0.63 zloty (7.1 cents)
Skilled helpers, male.....	0.93 zloty (10.4 cents)
Skilled helpers, female.....	0.57 zloty (6.4 cents)
Unskilled workers, male.....	0.77 zloty (8.6 cents)
Unskilled workers, female.....	0.51 zloty (5.7 cents)
Young workers, male.....	0.48 zloty (5.4 cents)
Young workers, female.....	0.46 zloty (5.2 cents)
Average, males.....	0.92 zloty (10.3 cents)
Average, females.....	0.54 zloty (6.1 cents)

The basic wages in force in August, 1931, in certain specified industries are shown in the following table for different localities:

TABLE 4.—AVERAGE DAILY WAGES IN VARIOUS MANUFACTURING INDUSTRIES IN POLAND, AUGUST, 1931

Industry, locality, and occupation	Average rates per day		Industry, locality, and occupation	Average rates per day	
	Polish currency	U. S. currency		Polish currency	U. S. currency
Petroleum extraction and refining—Boryslaw district:	Zlotys		Glassware plants—Other localities—Continued.	Zlotys	
Drillers, borers	10.59	\$1.19	Women—		
Helpers, skilled	7.05	.79	Minimum	2.47	\$0.28
Laborers, female	5.10	.57	Maximum	2.87	.32
Young workers	2.81	.32	Mechanics' apprentices, first class—		
Distillers and refiners	9.28	1.04	Minimum		
Rectifiers of oil, kerosene, and paraffin	7.05	.79	Maximum	2.15	.24
Helpers and laborers	5.10	.57	Mechanics' apprentices, second class—		
Women and young workers	2.81	.32	Minimum		
Bakeries and flour mills—Warsaw:			Maximum	3.66	.41
Bakers, skilled	17.48	1.96	Glass-bottle works—City and district of Warsaw:		
Bakers' helpers	10.30	1.16	Skilled smelters—		
Millers	13.26	1.49	Minimum	8.86	.99
Ordinary workers	11.50	1.29	Maximum	12.04	1.35
Sugar refining—Warsaw:			Unskilled workers—		
Sugar boilers, skilled	7.35	.82	Minimum	2.90	.33
Boiler tenders and firemen	5.41	.61	Maximum	4.50	.50
Laborers	3.91	.44	Women—		
Women	2.94	.33	Minimum		
Building trades:			Maximum	3.21	.36
Masons and carpenters	11.20 to 13.20	1.26 to 1.48	Mechanics' apprentices, first year—Minimum	1.93	.22
Unskilled workers	6.72 to 7.84	.75 to .88	Mechanics' apprentices, second year—Maximum	3.85	.43
Printing trades—Cracow:			Glass-bottle works—Other localities:		
Hand compositors	17.54	1.97	Skilled smelters—		
Press feeders, female	8.77	.98	Minimum	6.60	.74
Fly-boys, female	4.38	.49	Maximum	8.34	.94
Chemical works—Upper Silesia:			Unskilled workers—		
Skilled workers	8.15	.91	Minimum	2.90	.33
Skilled helpers	7.30	.82	Maximum	3.34	.37
Unskilled workers	6.70	.75	Women—		
Women	4.50	.50	Minimum	1.93	.22
Young workers, apprentices	2.05	.23	Maximum	2.57	.29
Leather industry (tanneries)—Warsaw district:			Mechanics' apprentices, first year—		
Tanners	9.35	1.05	Minimum	1.93	.22
Skilled workers	7.00	.79	Maximum	3.27	.37
Women	5.15	.58	Cement plants—Southern Provinces:		
Young workers	4.30	.48	Artisans, first class	9.73	1.09
Furniture manufacturing—Posen:			Grinders, first class	6.92	.78
Joiners	8.48	.95	Unskilled workers	5.02	.56
Unskilled workers	6.40	.72	Women and young workers—		
Young workers	3.36	.38	Minimum	2.79	.31
Glassware plants—City and district of Warsaw:			Maximum	3.35	.38
Skilled smelters—			Manufacture of bricks by machine—Upper Silesia:		
Minimum	9.60	1.08	Machinists and skilled workers	9.04	1.01
Maximum	12.76	1.43	Firemen and machinists' helpers	7.92	.89
Unskilled workers—			Unskilled workers	6.90	.77
Minimum	3.23	.36	Women	3.44	.39
Maximum	5.02	.56	Young and unskilled workers—		
Women	3.66	.41	Minimum	3.60	.40
Mechanics' apprentices, first class—			Maximum	5.36	.60
Minimum	2.15	.24	Flour mills—Posen:		
Maximum	2.87	.32	Skilled workers	9.36	1.05
Mechanics' apprentices, second class—			Helpers (over 21 years of age)	6.92	.78
Minimum	3.66	.41	Breweries—Posen:		
Maximum	4.31	.48	Skilled workers	9.36	1.05
Glassware plants—Other localities:			Laborers	6.88	.77
Skilled smelters—			Clothing industry—Warsaw:		
Minimum	7.90	.89	Tailors, first class	22.24	2.50
Maximum	12.05	1.35	Tailors, second class	19.84	2.23
Unskilled workers—					
Minimum	3.13	.35			
Maximum	3.72	.42			

Textile industry.—The average wage given in the following tables includes the total cash wage plus extras for output (piecework) and bonuses; no deductions being made for sick funds, unemployment insurance, etc.

In compiling these tables only the returns from textile plants employing at least 20 workers were considered. Questionnaires were sent out to 446 plants, but owing to the fact that a certain number of these were inactive at that time, only 382 plants employing a total of 83,788 workers were included in the final compilations.

The total number of plants and workers covered by this report are divided among the various Provinces and districts, as follows:

Warsaw Province.....	5 establishments	(2,340 workers)
Lodz Province.....	303 establishments	(66,709 workers)
Kielce Province.....	6 establishments	(7,676 workers)
Bialystok Province.....	11 establishments	(782 workers)
Bielsk Biala district.....	57 establishments	(6,281 workers)
Total.....	382 establishments	(83,788 workers)

TABLE 5.—AVERAGE HOURLY AND WEEKLY EARNINGS IN THE POLISH TEXTILE INDUSTRY, FEBRUARY, 1931

[Conversions into United States currency on basis of zloty=11.22 cents]

Industry and occupation	Average earnings—			
	Per hour		Per week	
	Polish currency	United States currency	Polish currency	United States currency
Cotton, vicuna, and cotton waste spinning:	<i>Zlotys</i>	<i>Cents</i>	<i>Zlotys</i>	
Spinners, male.....	0.96	10.8	37.69	\$4.23
Ring spinners, female.....	.72	8.1	27.94	3.13
Other workers, male.....	.78	8.8	30.72	3.45
Other workers, female.....	.63	7.1	24.47	2.75
Young persons.....	.48	5.4	19.61	2.20
Cotton, half wool, and light wool weaving:				
Weavers, male.....	.83	9.3	30.29	3.40
Weavers, female.....	.75	8.4	26.19	2.94
Other workers, male.....	1.12	12.6	45.17	5.07
Other workers, female.....	.67	7.5	25.06	2.81
Young persons.....	.47	5.3	19.50	2.19
Cotton dyeing and finishing:				
Printers and engravers.....	2.41	27.0	96.25	10.80
Other workers, male.....	.81	9.1	31.92	3.58
Women.....	.68	7.6	25.61	2.87
Young persons.....	.49	5.5	18.90	2.12
Wool and worsted spinning:				
Spinners, male.....	1.16	13.0	49.94	5.60
Ring spinners, female.....	.62	7.0	25.08	2.81
Other workers, male.....	.84	9.4	36.58	4.10
Other workers, female.....	.62	7.0	27.19	3.05
Young persons.....	.45	5.0	20.02	2.25
Wool weaving:				
Weavers, male.....	1.13	12.7	47.50	5.33
Weavers, female.....	.89	10.0	38.74	4.35
Other workers, male.....	1.15	12.9	50.54	5.67
Other workers, female.....	.73	8.2	30.71	3.45
Young persons.....	.49	5.5	20.83	2.34
Dyeing and finishing:				
Fullers.....	.84	9.4	33.54	3.76
Other workers, male.....	.85	9.5	35.61	4.00
Other workers, female.....	.66	7.4	27.92	3.13
Young persons.....	.49	5.5	20.12	2.26

Tobacco industry.—The average hourly earnings of tobacco workers in February, 1931, are shown in the following statement:

Skilled workers.....	1.93 zlotys (21.7 cents)
Skilled helpers.....	1.33 zlotys (14.9 cents)
Unskilled workers.....	1.17 zlotys (13.1 cents)
Women.....	1.02 zlotys (11.4 cents)
Average, males.....	1.35 zlotys (15.1 cents)

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Chocolate and bonbon factories.—The average hourly and weekly earnings of workers in chocolate and bonbon factories in December, 1929, are given in the following table:

TABLE 6.—AVERAGE EARNINGS OF WORKERS IN CANDY FACTORIES, DECEMBER 1929

[Conversions into United States currency on basis of zloty=11.22 cents]

Occupation	Warsaw				Cracow			
	Average hourly earnings		Average weekly earnings		Average hourly earnings		Average weekly earnings	
	Polish currency	United States currency	Polish currency	United States currency	Polish currency	United States currency	Polish currency	United States currency
	Zlotys	Cents	Zlotys	\$	Zlotys	Cents	Zlotys	\$
Artisans and skilled workers.....	1.72	19.3	76.68	\$8.60	2.27	25.5	106.11	\$11.91
Helpers, skilled.....	.96	10.8	43.92	4.93	1.85	20.8	85.22	9.56
Unskilled workers.....	.87	9.8	43.57	4.89	.72	8.1	30.86	3.46
Women.....	.62	7.0	28.35	3.18	.61	6.8	27.03	3.03
Young persons.....	.43	4.8	17.13	1.92	.31	3.5	14.31	1.61

Agriculture

Method of Computing Wages

COMPUTATIONS of the Polish Central Statistical Office with reference to wages paid to farm laborers divide these workers into five separate classes as follows: (1) Permanent farm laborers, including teamsters and hostlers, farm help, keepers, shepherds, and general-utility men; (2) agricultural artisans, including blacksmiths, wheelwrights, carpenters, mechanics, chauffeurs, gardeners, hop growers, fish breeders; (3) agricultural overseers, including field overseers and the other grades of overseers and bosses in the various branches of agriculture and breeding; (4) contract laborers; and (5) woman contract laborers.

The border line for remuneration of workers in the above five groups is relatively wide and is difficult to define strictly. For example, the pay of a teamster is always greater than that of a shepherd, but both are in the first class. In the same manner, remuneration of the various overseers differs. Considering this great variety of remuneration (especially in cash) it was decided to compute average wages in the five groups over a series of counties and Provinces. These compilations, however, include only wages of workers conducting their own domiciles (married or supporting families) and able-bodied workers. Able-bodied workers mean those who are of age and capable of undertaking all kinds of work on the farm (especially harvesting with the scythe), or else skilled and experienced artisans capable of doing the work for which engaged.

Remuneration of these workers, as regards wages and payments in kind, usually differs from wages paid to the other workers (to minors, single persons, invalids, and women), but, again, payment differs among individuals in the several counties of a single Province and even in the same county. Hence, the average remuneration for each Province has been computed to include these differences as an arithmetical average.

Average values of the wages received by agricultural workers were relatively easy to ascertain, but the average remuneration in kind was somewhat more complicated. Of necessity the prices of comestibles paid in the various Provinces during the periods of agreements had to be taken as a basis.

Wages of Farm Laborers

Up to the fiscal year 1928-29 wages as specified in farm laborer agreements were expressed in rye equivalents (except in the southern Provinces and Upper Silesia). Collective agreements, on the other hand, specified that these wages must be paid in cash. Quarterly wage payments were therefore made difficult to compute, as it was necessary to figure out each time the index of rye prices as reported by the commission to the Ministry of Labor and Public Welfare, based on market quotations, and local market prices as paid on the date when wages were paid.

For the purpose of simplifying these computations, wage agreements drawn up for the fiscal year 1929-30 in the southern Provinces and in the Provinces of Posen and Pomerania were based on wages paid in zlotys. In the eastern Provinces the method of expressing wages in terms of rye was retained, and owing to the drop in rye prices in general, wages in these districts dropped from 60 to 70 per cent accordingly, as compared with wages in the remaining Provinces.

Remuneration in Kind

Remuneration in kind is fundamentally composed of the following: Wheat, rye, barley (excepting in the Provinces of Wilno and Nowogrodek, where all the remuneration in kind is in the form of rye). Amounts of these products issued vary considerably.

In addition, in the Provinces of Posen and Pomerania, remuneration in kind also includes 1 metric quintal of peas. In the central and southern Provinces peas or buckwheat may be issued in small quantities, as defined in agreements, providing the estate raises these products.

Lodgings.—Computation of the value of lodgings was much more difficult to arrive at than values of grain issued as part payment in kind. These values for the fiscal year 1930-31 are determined on the basis of the annual amortization installment plus insurance and interest on capital invested in the building as for the fiscal year 1927-28, with subsequent corrections and changes depending on current rates of amortization and general building costs. The average value (for the whole of Poland) of a 1-room lodging, such as is supplied to farm laborers, is estimated at 74.4 Polish zlotys (\$8.35) yearly. Aside from this, agreements in Upper Silesia specify the value of a farm estate lodging in that district as 70 Polish zlotys (\$7.85); also the order of the Minister of Labor and Public Welfare dated March 21, 1931, fixes the rate of lodging charge to released farm laborers at 5 zlotys (56.1 cents) per month.

Fuel.—Laborers using lodgings provided by an estate receive an annual allowance of fuel consisting of coal, wood, or peat ranging in different districts from 8.2 to 2.0 cubic meters. An additional cubic meter of lumber is issued to families baking their own bread. The coal equivalent for 1 cubic meter of firewood is taken as 2.5 metric quintals.

Livestock maintenance allowance.—Farm workers are allowed to keep cows in the barns of the estate. The cost of maintaining one

or two cows, together with calves up to two months, is based on the cost of the stall, the value of summer and winter feed, and the milk allowance during the period when the cows are dry.

In the Provinces of Polesie and Volhynia the agreements do not provide that milk is to be issued in exchange for nonmaintenance of cows, whereas in the Province of Silesia workers receive only milk and are not allowed to keep cows. In this district, however, the workers are allowed to keep pigs, but in case of voluntary surrender of this privilege the workers are paid an indemnity amounting to 100 zlotys (\$11.22) per annum. In cases where the employer refuses permission to keep cows in general the workers are paid a milk equivalent amounting to 1,460 liters in the central Provinces, also in Wilno and Nowogrodek, and 912.5 liters in the districts of Lemberg, Stanislaw, and Tarnopol.

Land allowed for planting potatoes and gardens.—In addition to the 17 to 58 ares³ of potato land and 2.5 to 4 ares of garden land usually allowed to farm workers, there is also allowed sometimes a small patch of land for flax growing, and an allowance in potatoes.

Other forms of remuneration in kind.—Agricultural workers are also entitled to a certain usage of horse-drawn vehicles belonging to the estate for purposes of transporting grain to the mill, transportation of farm products from the fields, also when sending for the priest for weddings, christenings, funerals, etc., or the doctor. The use of one horse-drawn vehicle is fixed at approximately 3.72 zlotys (41.7 cents). Other remunerations offered by estates (but the value of which has not been included in these computations) are: Installation of electric lighting systems in the workmen's houses, i. e., where the estates possess a lighting system, installation of baths, issuance of straw for bedding, etc.

Contributions to Social Insurance

Contributions toward social insurance and welfare funds in behalf of the farm worker are paid by the employer. These constitute a separate form of remuneration which is given in a separate column in Table 7.

These contributions include: (a) Social insurance imposed by law, i. e., insurance against invalidity caused by dangerous accidents (effective for the whole of Poland), sickness (effective in the western and southern Provinces), and old age (effective only in the western Provinces); (b) compulsory medical aid by the employer (this is especially provided for in agreements in the central and eastern Provinces); (c) funeral allowances (in the central and eastern Provinces); and (d) benefits to members of a deceased farm worker's family (effective in the central, eastern, and southern Provinces).

In Table 7 are given the wages paid to permanent farm laborers, the value of remuneration in kind and of social insurance contributions paid by the employer in behalf of the employee, as figured by the Polish Statistical Office, for the fiscal year 1930-31:

³ 1 are=100 square meters; 1 hectare=100 ares.

TABLE 7.—ANNUAL REMUNERATION OF PERMANENT FARM LABORERS IN POLAND, 1930-31

[Conversions into United States currency on basis of zloty=11.22 cents]

Province	Cash wage		Value of—							
	Polish currency	U. S. currency	Remuneration in kind		Lodgings		Fuel		Maintenance of livestock	
			Polish currency	U. S. currency	Polish currency	U. S. currency	Polish currency	U. S. currency	Polish currency	U. S. currency
Central Provinces:	Zlotys		Zlotys		Zlotys		Zlotys		Zlotys	
Warsaw.....	137.4	\$15.42	282.8	\$31.73	68.8	\$7.72	156.6	\$17.57	124.8	\$14.00
Lodz.....	153.0	17.17	306.0	34.33	70.7	7.93	156.6	17.57	133.0	14.92
Kielce.....	135.3	15.18	287.8	32.29	75.0	8.42	152.7	17.13	141.6	15.89
Lublin.....	137.9	15.47	265.3	29.77	69.3	7.78	145.8	16.36	121.7	13.65
Bialystok.....	129.2	14.50	236.5	26.54	63.8	7.16	137.1	15.38	124.6	13.98
Eastern Provinces:										
Vilna.....	44.2	4.96	194.5	21.82	61.9	6.95	210.0	23.56	142.9	16.03
Nowogrod.....	42.4	4.76	186.8	20.96	59.4	6.66	228.5	25.64	138.7	15.56
Polesie.....	45.9	5.15	189.8	21.30	62.7	7.03	149.7	16.80	145.3	16.30
Volhynia.....	52.4	5.88	212.8	23.88	60.1	6.74	152.1	17.07	103.5	11.61
Western Provinces:										
Posen.....	160.0	17.95	307.9	34.55	106.5	11.95	184.4	20.69	185.4	20.80
Pomerania.....	168.0	18.85	314.8	35.32	108.5	12.17	183.3	20.57	158.3	17.76
Silesia.....	355.9	39.93	313.4	35.16	102.0	11.44	210.0	23.56	240.2	26.95
Southern Provinces:										
Cracow.....	148.6	16.67	283.4	31.80	67.8	7.61	144.0	16.16	156.3	17.54
Lemberg.....	133.3	14.96	254.3	28.53	66.2	7.43	106.8	11.98	139.4	15.64
Stanislaw.....	120.0	13.46	237.5	26.65	84.0	9.42	100.2	11.24	140.6	15.78
Tarnopol.....	120.0	13.46	214.7	24.09	63.3	7.10	100.2	11.24	123.7	13.88

Province	Value of—				Total annual remuneration		Employer's contributions for social insurance	
	Land and potatoes		Vehicles		Polish currency	U. S. currency	Polish currency	U. S. currency
	Polish currency	U. S. currency	Polish currency	U. S. currency				
Central Provinces:	Zlotys		Zlotys		Zlotys		Zlotys	
Warsaw.....	208.0	\$23.34	12.8	\$1.44	961.2	\$111.21	67.4	\$7.56
Lodz.....	197.0	22.10	13.5	1.51	1,029.8	115.54	70.0	7.85
Kielce.....	246.5	27.66	13.3	1.49	1,052.1	118.05	71.5	8.02
Lublin.....	214.0	24.01	12.3	1.38	966.3	108.42	65.7	7.37
Bialystok.....	210.0	23.56	12.2	1.37	913.4	102.48	62.1	6.97
Eastern Provinces:								
Vilna.....	174.4	19.57	11.8	1.32	839.7	94.21	57.0	6.40
Nowogrod.....	195.3	21.91	11.3	1.27	862.4	96.76	58.6	6.57
Polesie.....	209.5	23.51	12.2	1.37	815.1	91.45	55.4	6.22
Volhynia.....	212.3	23.82	11.2	1.26	804.4	90.25	54.7	6.14
Western Provinces:								
Posen.....	265.7	29.81	13.7	1.54	1,223.6	137.29	89.3	10.02
Pomerania.....	309.7	34.75	14.2	1.59	1,256.8	141.01	91.7	10.29
Silesia.....	309.0	34.67	17.0	1.91	1,647.5	173.63	116.1	13.03
Southern Provinces:								
Cracow.....	166.4	18.67	15.1	1.69	981.6	110.14	59.9	6.72
Lemberg.....	157.0	17.62	13.9	1.56	870.9	97.71	53.1	5.96
Stanislaw.....	185.3	20.79	14.6	1.64	882.2	98.98	53.8	6.04
Tarnopol.....	143.2	16.07	12.1	1.36	777.2	87.20	47.4	5.32

Wages of Other Farm Workers

As regards remuneration for other classes of workers (i. e. artisans, overseers, and contracted labor) it should be noted that not all districts in Poland have collective agreements embracing these classes.

In the central Provinces, woman contract workers draw cash wages amounting to only 30 per cent of the cash wages drawn by men.

In the following table are given the annual wages of agricultural artisans, overseers, and contract laborers for the various districts as computed by the central statistical office:

TABLE 8.—ANNUAL REMUNERATION OF AGRICULTURAL ARTISANS, OVERSEERS, CONTRACT WORKERS, AND WOMAN WORKERS IN POLAND, FIRST PART OF 1931

[Conversions into United States currency on basis of zloty=11.22 cents]

Province	Agricultural artisans				Agricultural overseers			
	Value of annual remuneration ¹		Social insurance contributions		Value of annual remuneration ¹		Social insurance contributions	
	Polish currency	U. S. currency	Polish currency	U. S. currency	Polish currency	U. S. currency	Polish currency	U. S. currency
	Zlotys		Zlotys		Zlotys		Zlotys	
Warsaw	-----	-----	-----	-----	1,007.2	\$113.01	68.4	\$7.67
Lodz	-----	-----	-----	-----	1,046.6	117.43	71.2	7.99
Kielce	-----	-----	-----	-----	1,068.8	119.92	72.7	8.16
Lublin	-----	-----	-----	-----	981.7	110.15	66.7	7.48
Bialystok	-----	-----	-----	-----	928.6	104.19	63.1	7.08
Vilna	² 923.7	² \$103.64	62.8	\$7.05	854.4	95.86	58.1	6.52
Nowogrod	921.6	103.40	62.7	7.03	876.6	98.35	59.6	6.69
Polesie	932.2	104.59	63.4	7.11	830.4	93.17	56.5	6.34
Volhynia	1,003.6	112.60	68.2	7.65	818.4	91.82	55.6	6.24
Posen	1,426.4	160.04	104.1	11.68	³ 1,303.0	³ 146.20	95.1	10.67
Pomerania	1,448.8	162.56	105.8	11.87	⁴ 1,307.7	⁴ 146.72	95.5	10.72
Upper Silesia	⁵ 2,010.8	⁵ 225.01	150.8	16.92	1,926.8	216.19	144.5	16.21
Cracow	2,263.5	254.76	77.1	8.65	1,055.9	118.47	64.4	7.23
Lemberg	1,107.6	124.27	67.6	7.58	935.0	104.91	57.0	6.40
Stanislau	1,109.9	124.53	67.7	7.60	960.5	107.77	58.6	6.57
Tarnopol	991.4	111.24	60.5	6.79	852.3	95.63	52.0	5.83
	Contract laborers				Woman workers			
Warsaw	⁶ 780.5	⁶ \$87.57	51.2	\$5.74	⁶ 463.9	⁶ \$52.05	31.5	\$3.53
Lodz	⁶ 797.2	⁶ 89.45	54.2	6.08	⁶ 489.3	⁶ 54.90	33.3	3.74
Kielce	⁶ 796.0	⁶ 89.31	54.1	6.07	⁶ 479.8	⁶ 53.83	32.6	3.66
Lublin	⁶ 747.5	⁶ 83.87	50.8	5.70	⁶ 447.1	⁶ 50.16	30.4	3.41
Bialystok	⁶ 705.6	⁶ 79.17	48.0	5.39	⁶ 419.4	⁶ 47.06	28.5	3.20
Vilna	-----	-----	-----	-----	-----	-----	-----	-----
Nowogrod	-----	-----	-----	-----	-----	-----	-----	-----
Polesie	-----	-----	-----	-----	-----	-----	-----	-----
Volhynia	-----	-----	-----	-----	-----	-----	-----	-----
Posen	⁷ 1,226.0	⁷ 137.56	89.5	10.04	-----	-----	-----	-----
Pomerania	⁷ 1,187.8	⁷ 133.27	86.7	9.73	-----	-----	-----	-----
Upper Silesia	⁷ 1,322.8	⁷ 148.42	99.2	11.13	832.8	93.44	62.5	7.01
Cracow	-----	-----	-----	-----	-----	-----	-----	-----
Lemberg	-----	-----	-----	-----	-----	-----	-----	-----
Stanislau	-----	-----	-----	-----	-----	-----	-----	-----
Tarnopol	-----	-----	-----	-----	-----	-----	-----	-----

¹ Not including social insurance contributions.

² Not including reimbursement for use of artisans' own implements and tools; such reimbursements are not customary in the Province of Vilna.

³ Trained shepherds also receive in addition a bonus of 0.75 zloty (8.4 cents) per sheep sold; 0.50 zloty (5.6 cents) per lamb reared; 2 zlotys (22.4 cents) per stud ram sold and one-half kilogram of wool per 50 head of sheep sold.

⁴ Trained shepherds and married assistants receive an annual bonus of not less than 1 per cent of the selling price of sheep, also a small amount for rearing lambs.

⁵ Not including Teschen Silesia.

⁶ For year of 270 working-days.

⁷ For year of 300 working-days.

In summing up this review of farm labor wages, it should be remembered that it pertains only to full-value workers maintaining families and domiciles. The wages mentioned are basic as guaranteed to workers by collective wage agreements and, since there are numerous factors tending to increase or decrease wage values, the average as given in the review may be taken as being fairly close to actual values and conditions.

Social Insurance in Agriculture

As far as overdue contributions to institutions of social insurance are concerned, agriculture probably will be unable to pay them. The situation of agriculture is not now expected to improve over last year because of unfavorable crops. Especially do conditions in counties to the right of the Vistula River make it seem so, as only 4 quintals of rye have been threshed from one morg. Theoretically the price should be 30 zlotys (\$3.37) in Poland but actually it amounts to only 25-28 zlotys (\$2.81-\$3.14) for good grain. The cost of wheat production is higher and it amounts to 35-40 zlotys (\$3.93-\$4.49). It is impossible to plan the paying of overdue shares under these circumstances. At the same time it might be added that dairy production does not pay, prices of lumber and livestock have fallen, and the area of beet plantings has decreased. Only those farms which have no debts will be able to close their balance favorably, without, however, putting aside any savings. There are very few such farms as these. The greatest effort will be made in order to pay overdue interest from overdue contributions and of course only interest will be paid to social insurance institutions.

The only way is the granting of long-term credit with very low interest. In the course of the present year, which is marked by a strong deficit, the paying of capital can not be thought of, and the present moment is very unfavorable for the introduction of any kind of social insurance. So far the old system, which has existed in the former Russian part of Poland, and which obliges the agricultural employer to care for the health of his employees, has not caused any misunderstandings or claims. The employees are satisfied with the conditions and are rather afraid of the introduction of sick fund institutions (*Kasa Chorych*). Furthermore, the counties are often located very far one from another, communication is difficult between them and no guaranty could be given that the sick would be treated promptly and properly. In the case of joining municipal and rural sick funds, the rural funds would in reality pay for the city also and that is why municipal and rural sick funds must not be joined.

Social insurance against old age is very useful but it would involve large expenses in connection with establishing this new institution and agriculture can not afford any new fees for the next few years. The only thing that could be done would be the effecting of obligatory savings in the form of purchase of special stamps and pasting these in a booklet of the employee; after a certain time (old age or inability to work) the employee would then get this money back.

As far as wages in agriculture are concerned, it is obvious that the present wages, especially in former German Poland, are higher than the pre-war wages, while the dividends of farms decreased considerably because of lower prices of agricultural products and because of new taxes and social dues.

General Survey of Wages in Rumania¹

IN 1925 the Rumanian Government ratified the decision of the International Labor Conference of Washington and accordingly introduced legislation fixing the hours of labor in Rumania at eight per day.

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The 8-hour day is now general in most Rumanian industries of all classes. However, as a result of the present general economic depression, the hours of work in most local industries have been temporarily reduced to seven hours or less and in some cases to as low as three per day. In some industries the working-day has been materially reduced and rotation of labor has been introduced in an effort to avoid dismissal of employees.

Payment for Overtime

PRACTICALLY all Rumanian industries at the present time pay for overtime on working-days the normal rate plus 25 per cent and work on Sundays and holidays about 50 per cent over the normal rate. During the prosperous period following the war overtime was sometimes paid as high as 50 to 100 per cent above the normal rate.

Legislation is now in force in Rumania providing for 25 per cent over the normal rate as the minimum payment for overtime; this is in conformity with the decisions of the International Labor Conference at Washington.

Wages of Women and Minors

WOMEN and minors are always paid lower wages than men engaged in the same occupations. There is no fixed relation between the wages of men, women, and minors, but the difference generally does not exceed 30 per cent.

Payments Supplementary to Wages

SUPPLEMENTARY payments in addition to wages are not usual in Rumanian industries, excepting for overtime. About 15 of the largest companies engaged in mining, oil companies, and steel companies provide housing for certain employees. Employees who have served as long as those given housing, but for whom quarters are not provided, are usually allowed a rent allowance of about 10 per cent of the monthly wage. These rent allowances are available only to long-service employees who have families. The shelters provided in the oil fields are in the nature of barracks and are available for younger employees without families.

Many companies allow reduced prices to employees who purchase articles manufactured by the company.

Deductions from Wages

DEDUCTIONS from wages are made for social insurance and income tax; one-half of 1 per cent of the wage is deducted for a fund intended for the establishment of chambers of labor.

Social insurance deductions differ in amount and method of collection in the various parts of greater Rumania. The deductions are made in accordance with the law in effect in each section (Old Kingdom, Transylvania, Bessarabia, etc.), and are generally for old-age and accident insurance and pensions, although the use of the amounts deducted also varies in the different districts. It has been found impracticable to indicate the amounts of such deductions, due to these variations.

Income taxes in Rumania are assessed as follows: Incomes below 750 lei per month (\$4.50)² are exempt; incomes above that amount are

² Conversions into United States currency on basis of lei=0.6 cent.

taxed at the rate of 4.4 per cent on the first 4,000 lei (\$24) and of 8.8 per cent on the remainder.

From the above it appears that there is a regular deduction, not including social-insurance deductions, from the wages earned, as follows:

	Per cent
Wages below 750 lei (\$4.50) per month.....	0.5
Wages between 750 lei (\$4.50) and 4,000 lei (\$24).....	4.9
Wages above 4,000 lei (\$24) per month.....	9.3

Wages in Leading Industries

THE FIGURES contained in Table 1 represent the average wage for each class of labor during October, 1931, as compiled from figures from 46 cities of Rumania. Since, in most cases, the figures are not complete for all districts, the number of districts averaged is indicated in each case. There are at present no other figures available concerning 1931.

TABLE 1.—AVERAGE MONTHLY WAGES IN SPECIFIED INDUSTRIES AND OCCUPATIONS IN RUMANIA, OCTOBER, 1931

[Conversions into United States currency on basis of leu=0.6 cent]

Wood and furniture industry

Industry and occupation	Number of cities	Average monthly wages		Industry and occupation	Number of cities	Average monthly wages	
		Rumanian currency	U. S. currency			Rumanian currency	U. S. currency
		Lei				Lei	
Wood gilders.....	12	3,117.50	\$18.71	Saw tenders.....	29	2,590.21	\$15.54
Picture-frame makers.....	27	2,525.55	15.15	Basket workers.....	20	1,950.00	11.70
Pattern makers.....	16	2,550.00	15.30	Hardwood-floor layers.....	27	3,128.96	18.77
Sieve makers.....	17	1,980.00	11.88	Wheelwrights.....	43	2,223.95	13.34
Billiard-table makers.....	9	3,333.33	20.00	Makers of wooden household articles.....	12	1,883.33	11.30
Coffin makers.....	36	2,325.00	13.95	Wood carvers.....	39	2,574.67	15.45
Cart makers.....	34	2,351.76	14.11	Wood turners.....	39	2,786.08	16.72
Trunk and box makers.....	34	2,293.83	13.76	Cabinetmakers.....	43	2,643.35	15.86
Coopers.....	40	2,448.50	14.69				
Carpenters.....	43	2,731.16	16.39				

Food industry

Brewers.....	17	3,890.59	\$23.34	Dough makers.....	13	3,138.46	\$18.83
Sweets makers.....	34	2,710.59	16.26	Casings makers.....	33	2,386.67	14.32
Bakers.....	45	2,640.07	15.84	Meat-preserves makers.....	38	2,500.26	15.00
Cooks.....	40	2,376.50	14.26	Millers.....	44	2,798.64	16.79
Pastry makers.....	42	2,538.34	15.23	Bread-rolls makers.....	23	2,257.39	13.54

Metallurgical and mechanical industry

Copper-plate workers.....	24	3,090.25	\$18.54	Fitters.....	45	3,085.24	\$18.51
Firearms makers.....	26	3,009.62	18.06	Drivers.....	40	3,571.50	21.43
Sharpeners.....	34	2,244.41	13.47	Mounters.....	35	3,922.57	23.54
Boiler makers.....	27	3,151.52	18.91	Shoemiths.....	44	1,818.55	10.91
Coppersmiths.....	35	2,679.83	16.08	Machinery and bicycle repairers.....	38	2,947.37	17.68
Cutlers.....	30	2,191.33	13.15	Turners.....	41	3,158.24	18.95
Blacksmiths.....	45	2,165.24	12.99	Tinsmiths.....	43	2,591.49	15.55
Firemen.....	38	2,162.63	12.98	Foundrymen.....	33	3,296.09	19.78
Platers.....	19	3,240.00	19.44	Toolmakers.....	17	3,417.06	20.50
Locksmiths.....	44	2,561.39	15.37				

TABLE 1.—AVERAGE MONTHLY WAGES IN SPECIFIED INDUSTRIES AND OCCUPATIONS IN RUMANIA, OCTOBER, 1931—Continued

Extractive industries

Industry and occupation	Number of cities	Average monthly wages		Industry and occupation	Number of cities	Average monthly wages	
		Rumanian currency	U. S. currency			Rumanian currency	U. S. currency
Miners.....	11	<i>Lei</i> 2,998.18	\$17.99	Drillers.....	4	<i>Lei</i> 2,425.00	\$14.55

Hide and fur industries

Furriers.....	38	2,750.79	\$16.50	Combers.....	22	1,902.73	\$11.42
Footwear makers.....	45	2,342.00	14.05	Saddle makers.....	16	2,228.13	13.37
Fur-vest makers.....	42	1,983.57	11.90	Tanners.....	43	2,186.51	13.12
Strap makers.....	43	2,240.00	13.44				

Textile industry

Felt-cloth makers.....	21	2,430.95	\$14.59	Chuilt makers.....	36	2,178.33	\$13.07
Dyers.....	36	2,710.28	16.26	Upholsterers.....	35	2,564.29	15.39
Rope makers.....	36	2,018.89	12.11	Knitters.....	29	2,070.79	12.42
Brush makers.....	31	2,204.26	13.23	Weavers.....	30	2,914.73	17.49

Wages in Leading Industrial Cities

TABLE 2 shows the wages paid in the leading industrial city of various sections of Rumania such as the Old Kingdom, Transylvania, Bessarabia, Bukowina, and the Banat. These figures are monthly wages for the month of October, 1931.

TABLE 2.—AVERAGE MONTHLY WAGES IN SPECIFIED INDUSTRIES IN FIVE LEADING INDUSTRIAL CITIES OF RUMANIA, OCTOBER, 1931

[Conversions into United States currency on basis of leu=0.6 cent]

Industry and occupation	Average monthly wages in—									
	Bucharest (Old Kingdom)		Cluj (Transylvania)		Kishineff (Bessarabia)		Cernauti (Bukowina)		Temesvar (Banat)	
	Rumanian currency	U. S. currency	Rumanian currency	U. S. currency	Rumanian currency	U. S. currency	Rumanian currency	U. S. currency	Rumanian currency	U. S. currency
Wood and furniture industry:	<i>Lei</i>		<i>Lei</i>		<i>Lei</i>		<i>Lei</i>		<i>Lei</i>	
Wood gilders.....	4,500	\$27.00	4,000	\$24.00	2,400	\$14.40	-----	-----	3,000	\$18.00
Picture-frame makers.....	4,500	27.00	3,200	19.20	2,000	12.00	-----	-----	3,500	21.00
Pattern makers.....	5,000	30.00	3,200	19.20	2,200	13.20	-----	-----	3,000	18.00
Sieve makers.....	3,500	21.00	-----	-----	1,600	9.60	-----	-----	-----	-----
Billiard-table makers.....	6,000	36.00	-----	-----	-----	-----	-----	-----	4,000	24.00
Coffin makers.....	4,500	27.00	4,000	24.00	2,300	13.80	3,100	\$18.60	2,700	16.20
Cart makers.....	5,400	32.40	2,400	14.40	2,500	15.00	-----	-----	2,700	16.20
Trunk and box makers.....	4,500	27.00	3,200	19.20	2,000	12.00	2,100	12.60	2,600	15.60
Coopers.....	4,000	24.00	2,800	16.80	3,600	21.60	2,100	12.60	2,800	16.80
Carpenters.....	6,000	36.00	5,500	33.00	3,200	19.20	2,100	12.60	2,600	15.60
Saw tenders.....	5,200	31.20	2,800	16.80	1,500	9.00	2,100	12.60	-----	-----
Basket workers.....	4,000	24.00	2,000	12.00	1,500	9.00	-----	-----	-----	-----
Hardwood-floor layers.....	5,200	31.20	4,250	25.50	2,000	12.00	2,100	12.60	4,000	24.00
Wheelwrights.....	5,000	30.00	2,400	14.40	2,200	13.20	2,100	12.60	2,800	16.80
Makers of wooden household articles.....	3,000	18.00	-----	-----	-----	-----	2,100	12.60	2,600	15.60
Wood carvers.....	6,500	39.00	4,600	27.60	3,000	18.00	2,100	12.60	4,000	24.00
Wood turners.....	6,500	39.00	3,840	23.04	3,000	18.00	2,100	12.60	3,600	21.60
Cabinet makers.....	5,000	30.00	4,200	25.20	3,400	20.40	2,100	12.60	3,000	18.00

TABLE 2.—AVERAGE MONTHLY WAGES IN SPECIFIED INDUSTRIES IN FIVE LEADING INDUSTRIAL CITIES OF RUMANIA, OCTOBER, 1931—Continued

Industry and occupation	Average monthly wages in—									
	Bucharest (Old Kingdom)		Cluj (Transylvania)		Kishineff (Bessarabia)		Cernauti (Bukovina)		Temesvar (Banat)	
	Rumanian currency	U. S. currency	Rumanian currency	U. S. currency	Rumanian currency	U. S. currency	Rumanian currency	U. S. currency	Rumanian currency	U. S. currency
Food industry:	<i>Lei</i>		<i>Lei</i>		<i>Lei</i>		<i>Lei</i>		<i>Lei</i>	
Brewers.....	5,000	\$30.00	4,500	\$27.00	5,000	\$30.00	3,000	\$18.00	5,000	\$30.00
Sweets makers.....	4,000	24.00	5,600	33.60	2,500	15.00	2,100	12.60	4,000	24.00
Bakers.....	4,500	27.00	6,000	36.00	3,300	19.80	2,100	12.60	3,500	21.00
Cooks.....	3,500	21.00	4,500	27.00	2,500	15.00	1,200	7.20	4,500	27.00
Pastry makers.....	4,000	24.00	4,000	24.00	2,500	15.00	2,100	12.60	4,500	27.00
Dough makers.....	4,500	27.00	4,500	27.00	2,300	13.80	2,400	14.40	5,000	30.00
Casings makers.....	3,000	18.00	2,800	16.80	1,800	10.80	1,800	10.80	3,000	18.00
Meat preserves makers.....	3,000	18.00	3,800	22.80	2,000	12.00	1,800	10.80	3,500	21.00
Millers.....	5,000	30.00	3,500	21.00	6,500	39.00	2,100	12.60	2,500	15.00
Bread rolls makers.....	4,500	27.00	-----	-----	2,000	12.00	-----	-----	-----	-----
Metallurgical and mechanical industries:										
Copper-plate workers.....	4,000	24.00	5,300	31.80	1,800	10.80	-----	-----	4,500	27.00
Firearm makers.....	4,000	24.00	3,200	19.20	1,600	9.60	-----	-----	4,000	24.00
Sharpeners.....	3,200	19.20	4,200	25.20	1,600	9.60	-----	-----	3,500	21.00
Boiler makers.....	3,600	21.60	5,500	33.00	2,100	12.60	-----	-----	4,200	25.20
Coppersmiths.....	4,000	24.00	5,500	33.00	1,800	10.80	2,100	12.60	3,800	22.80
Cutlers.....	3,200	19.20	3,200	19.20	1,800	10.80	-----	-----	2,800	16.80
Blacksmiths.....	3,000	18.00	3,300	19.80	2,000	12.00	2,100	12.60	2,800	16.80
Firemen.....	3,000	18.00	3,700	22.20	1,800	10.80	2,100	12.60	2,600	15.60
Platers.....	4,500	27.00	3,600	21.60	2,200	13.20	2,100	12.60	3,000	18.00
Locksmiths.....	3,500	21.00	3,800	22.80	2,600	15.60	2,100	12.60	3,000	18.00
Fitters.....	5,000	30.00	4,200	25.20	3,300	19.80	2,400	14.40	4,000	24.00
Drivers.....	5,000	30.00	6,500	39.00	3,600	21.60	-----	-----	4,000	24.00
Mounters.....	5,500	33.00	5,800	34.80	4,000	24.00	2,400	14.40	4,200	25.20
Shoemsmiths.....	3,000	18.00	2,000	12.00	1,800	10.80	2,100	12.60	2,800	16.80
Machinery and bicycle repairers.....	5,000	30.00	3,800	22.80	3,200	19.20	-----	-----	3,000	18.00
Turners.....	6,000	36.00	4,800	28.80	3,000	18.00	3,000	18.00	2,100	12.60
Tinsmiths.....	6,000	36.00	4,220	25.32	1,800	10.80	2,100	12.60	2,800	16.80
Foundry makers.....	5,500	33.00	4,800	28.80	2,800	16.80	2,100	12.60	4,000	24.00
Tool makers.....	5,000	30.00	5,200	31.20	-----	-----	2,100	12.60	3,000	18.00
Extractive industries, miners.....	-----	-----	2,880	17.28	-----	-----	-----	-----	-----	-----
Hide and fur industry:										
Furriers.....	5,000	30.00	5,000	30.00	2,400	14.40	1,800	10.80	3,500	21.00
Footwear makers.....	3,000	18.00	2,400	14.40	2,000	12.00	1,800	10.80	3,500	21.00
Fur-vest makers.....	4,500	27.00	3,000	18.00	2,200	13.20	1,800	10.80	2,000	12.00
Strap makers.....	3,000	18.00	4,220	25.32	2,000	12.00	1,800	10.80	2,500	15.00
Combers.....	2,500	15.00	2,400	14.40	1,700	10.20	-----	-----	2,000	12.00
Saddle makers.....	3,000	18.00	-----	-----	2,000	12.00	-----	-----	2,500	15.00
Tanners.....	3,500	21.00	4,500	27.00	1,800	10.80	1,800	10.80	2,800	16.80
Textile industry:										
Felt-cloth makers.....	3,000	18.00	-----	-----	-----	-----	-----	-----	-----	-----
Dyers.....	4,000	24.00	4,800	28.80	2,200	13.20	2,100	12.60	4,000	24.00
Rope makers.....	4,000	24.00	2,520	15.12	1,600	9.60	1,800	10.80	2,000	12.00
Brush makers.....	3,000	18.00	3,380	20.28	1,500	9.00	-----	-----	2,000	12.00
Chuilt makers.....	3,000	18.00	2,680	16.80	2,000	12.00	-----	-----	2,200	13.20
Upholsterers.....	4,000	24.00	4,500	27.00	2,300	13.80	2,100	12.60	3,000	18.00
Knitters.....	3,000	18.00	2,340	14.04	1,800	10.80	1,200	7.20	2,000	12.00
Weavers.....	4,000	24.00	2,480	14.88	2,000	12.00	1,800	10.80	2,500	15.00

Wages in the Oil Industry

TABLE 3 contains data showing the wages paid to employees of oil companies in Rumania. These figures were furnished by a representative of an oil company operating near Ploesti, Rumania and are said to be applicable to the large oil companies operating in Rumania. It is understood that the smaller companies which are completely controlled by domestic capital pay wages as low as 60 per cent of those paid by the larger companies.

TABLE 3.—AVERAGE MONTHLY WAGES IN THE OIL INDUSTRY IN RUMANIA
 [Conversions into United States currency on basis of leu =0.6 cent]

Occupation	Average monthly wages	
	Rumanian currency	United States currency
	<i>Lei</i>	
Rumanian field engineers.....	20,000-25,000	\$120.00-\$150.00
Production men (in charge of a lease).....	15,000-20,000	90.00-120.00
Production men (in charge of a group of wells).....	10,000	60.00
Helpers to above.....	2,350	14.10
Drilling foremen.....	15,000-20,000	90.00-120.00
Drillers.....	13,000-14,000	78.00-84.00
Drillers' helpers.....	3,000	18.00
Oil field mechanics.....	5,000-6,000	30.00-36.00

TREND OF EMPLOYMENT

Summary for December, 1931

EMPLOYMENT increased 0.7 per cent in December, 1931, as compared with November, 1931, and pay-roll totals increased 0.3 per cent.

The industrial groups surveyed, the number of establishments reporting in each group, the number of employees covered, and the total pay rolls for one week, for both November and December, together with the per cents of change in December, are shown in the following summary:

SUMMARY OF EMPLOYMENT AND PAY-ROLL TOTALS, NOVEMBER AND DECEMBER, 1931

Industrial group	Estab-lish-ments	Employment		Percent of change	Pay roll in 1 week		Percent of change
		Novem-ber, 1931	Decem-ber, 1931		Novem-ber, 1931	Decem-ber, 1931	
1. Manufacturing	16,560	2,795,244	2,797,386	+0.2	\$58,166,184	\$58,125,551	-0.2
2. Coal mining	1,434	312,183	307,395	-1.5	6,611,283	6,422,377	-2.9
Anthracite	160	113,909	108,857	-4.4	3,146,911	3,101,869	-1.4
Bituminous	1,274	198,274	198,538	+0.1	3,464,372	3,320,508	-4.2
3. Metalliferous mining	246	32,546	31,565	-3.0	675,326	660,154	-2.2
4. Quarrying and nonmetallie mining	787	26,403	23,998	-9.1	519,326	442,672	-14.8
5. Crude petroleum produc-ing	274	15,766	15,926	+1.0	476,941	503,501	+5.6
6. Public utilities	11,933	665,218	658,515	-1.0	20,308,019	20,319,603	+0.1
Telephone and telegraph	8,066	294,208	292,772	-0.5	8,534,998	8,817,525	+3.3
Power, light and water	3,371	233,453	230,884	-1.1	7,459,048	7,292,200	-2.2
Electric railroad operation and maintenance, exclusive of car shops	496	137,557	134,859	-2.0	4,313,973	4,209,878	-2.4
7. Trade	14,157	439,335	500,004	+13.8	10,513,974	11,295,705	+7.4
Wholesale	2,709	75,847	75,433	-0.5	2,284,814	2,229,337	-2.4
Retail	11,448	363,488	424,571	+16.8	8,229,160	9,066,368	+10.2
8. Hotels	2,338	147,939	144,820	-2.1	2,310,061	2,259,421	-2.2
9. Canning and preserving	889	37,507	25,145	-33.0	525,044	402,870	-23.3
10. Laundries	861	57,188	56,593	-1.0	1,015,544	996,147	-1.9
11. Dyeing and cleaning	362	11,934	11,241	-5.8	249,844	227,163	-9.1
Total	49,841	4,541,263	4,572,588	+0.7	101,371,846	101,655,164	+0.3

RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION ³							
New England	8,105	514,515	512,713	-0.4	\$11,123,251	\$11,220,170	+0.9
Middle Atlantic	8,604	1,384,509	1,381,090	-0.2	33,041,336	32,924,811	-0.4
East North Central	10,309	1,155,860	1,199,940	+3.8	26,889,575	27,552,681	+2.5
West North Central	5,252	290,874	293,300	+0.8	6,655,150	6,724,112	+1.0
South Atlantic	5,160	497,296	493,170	-0.8	8,750,966	8,583,762	-1.9
East South Central	2,578	193,738	190,823	-1.5	3,007,974	2,930,038	-2.6
West South Central	3,092	152,223	152,833	+0.4	3,261,144	3,265,093	+0.1
Mountain	1,977	96,229	92,743	-3.6	2,304,512	2,221,129	-3.6
Pacific	4,764	256,019	255,976	-(⁴)	6,337,938	6,233,368	-1.6
All divisions	49,841	4,541,263	4,572,588	+0.7	101,371,846	101,655,164	+0.3

¹ Weighted per cent of change for the combined 54 manufacturing industries, repeated from Table 1, manufacturing industries; the remaining per cents of change, including total, are unweighted.

² The amount of pay roll given represents cash payments only; the additional value of board, room, and tips can not be computed.

³ New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont. Middle Atlantic: New Jersey, New York, Pennsylvania. East North Central: Illinois, Indiana, Michigan, Ohio, Wisconsin. West North Central: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota. South Atlantic: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia. East South Central: Alabama, Kentucky, Mississippi, Tennessee. West South Central: Arkansas, Louisiana, Oklahoma, Texas. Mountain: Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming. Pacific: California, Oregon, Washington.

⁴ Less than one-tenth of 1 per cent.

Three of the 15 industrial groups included in the summary table on the preceding page reported increased employment, the retail-trade group reporting an increase of 16.8 per cent, reflecting the Christmas trade, while the crude petroleum and the bituminous-coal mining groups reported increases of 1 per cent and 0.1 per cent, respectively. Increased pay-roll totals were also reported in three groups, retail trade showing a gain of 10.2 per cent over the month interval, crude petroleum reporting an increase of 5.6 per cent in earnings, and the telephone and telegraph group reporting a gain of 3.3 per cent in pay-roll totals, coupled with a decrease of 0.5 per cent in employment.

The remaining 11 groups reported losses in both employment and earnings over the month interval. Decreases of 1 per cent or less were reported in manufacturing, wholesale trade, and laundries, and declines ranging from 1.1 per cent to 3 per cent were shown in power, light, and water, electric-railroad operation, hotels, and metalliferous mining. Anthracite mining reported 4.4 per cent fewer employees in December than in November, and the dyeing and cleaning group reported a decrease of 5.8 per cent in number of workers over the month interval. Seasonal decreases in employment and pay roll of 9.1 per cent and 14.8 per cent, respectively, were reported in quarrying and nonmetallic mining, while the canning and preserving industry reported the usual large seasonal declines in number of workers and earnings in December.

The East and West North Central and the West South Central geographic divisions reported increases in both employment and pay-roll totals from November to December, and the New England division reported increased earnings coupled with a small decline in employment. The remaining five divisions reported a falling off in each item over the month interval.

PER CAPITA WEEKLY EARNINGS IN DECEMBER, 1931, AND COMPARISON WITH NOVEMBER, 1931, AND DECEMBER, 1930

Industrial group	Per capita weekly earnings in December, 1931	Per cent of change December, 1931, compared with—	
		November, 1931	December, 1930
1. Manufacturing (54 industries).....	\$20.74	—(1)	—13.1
2. Coal mining:			
Anthracite.....	28.49	+3.3	—2.6
Bituminous.....	16.72	—4.3	—23.3
3. Metalliferous mining.....	20.91	+0.8	—21.5
4. Quarrying and nonmetallic mining.....	18.45	—6.2	—19.7
5. Crude petroleum producing.....	31.62	+4.4	—5.4
6. Public utilities:			
Telephone and telegraph.....	30.12	+3.9	+0.9
Power, light, and water.....	31.58	—1.2	—1.9
Electric railroads.....	31.22	—0.4	—2.4
7. Trade:			
Wholesale.....	29.55	—1.9	—6.3
Retail.....	21.35	—5.6	—5.3
8. Hotels (cash payments only) ²	15.60	—0.1	—8.4
9. Canning and preserving.....	16.02	+14.7	—2.7
10. Laundries.....	17.60	—1.0	—6.7
11. Dyeing and cleaning.....	20.21	—3.5	—8.3
Total.....	22.23	—0.4	—9.9

¹ Less than one-tenth of 1 per cent.

² The additional value of board, room, and tips can not be computed.

Per capita earnings for December, 1931, given in the preceding table must not be confused with full-time weekly rates of wages; they are actual per capita weekly earnings computed by dividing the total number of employees reported into the total amount of pay roll in the week reported, and the "number of employees" includes all persons who worked any part of the period reported—that is, part-time workers as well as full-time workers. Comparisons are made with per capita earnings in November, 1931, and with December, 1930.

For convenient reference the latest data available relating to all employees, excluding executives and officials, on Class I railroads, drawn from Interstate Commerce Commission reports, are shown in the following statement. These reports are for the months of October and November instead of for November and December, 1931; consequently, the figures can not be combined with those presented in the summary table.

EMPLOYMENT AND PAY-ROLL TOTALS, CLASS I RAILROADS

Industry	Number on pay roll		Per cent of change	Amount of pay roll in entire month		Per cent of change
	Oct. 15, 1931	Nov. 15, 1931		October, 1931	November, 1931	
Class I railroads.....	1, 210, 426	1, 154, 540	-4.6	\$164, 636, 799	\$148, 646, 952	-9.7

The total number of employees included in this summary is 5,727,128 and their combined earnings in one week amount to approximately \$136,000,000.

Employment in Selected Manufacturing Industries in December, 1931

Comparison of Employment and Pay-Roll Totals in Manufacturing Industries in December, 1931, with November, 1931, and December, 1930

EMPLOYMENT and earnings in manufacturing industries decreased 0.2 per cent in December, 1931, as compared with November, 1931. Measured by changes in the indexes of employment and pay-roll totals over the year interval, there was a decrease of 13 per cent in employment from December, 1930, to December, 1931, while pay-roll totals showed a falling off of 24.5 per cent over the 12-month period.

The per cents of change in employment and pay-roll totals in December, 1931, as compared with November, are based upon returns made by 13,916 establishments in 54 of the principal manufacturing industries in the United States, having in December 2,521,161 employees, whose combined earnings in one week were \$52,296,003.

The index of employment in December, 1931, is 65.3, as compared with 65.4 in November, 1931, 67.3 in October, 1931, and 75.1 in December, 1930; the index of pay-roll totals for December, 1931, is 50.9, as compared with 51.0 for November, 1931, 53.7 for October, 1931, and 67.4 for December, 1930. The monthly average for 1926 equals 100.

The leather and the vehicles groups, of the 12 groups of industries upon which the bureau's indexes of employment and pay-roll totals are based, reported both increased employment and earnings from November to December, while three additional groups reported increases in pay-roll totals coupled with slight losses in employment over the month interval. The remaining 7 groups reported decreases in both items, the greatest declines occurring in the tobacco products, lumber, and stone-clay-glass groups.

Employment and earnings in each of these 12 groups in December, 1931, was below the level of December, 1930, the decreases in earnings in each instance being more pronounced than the decline in employment. The leather group reported the smallest loss in employment over the 12-month period, 1.9 per cent, while the greatest decrease in number of employees, 23.2 per cent, was shown in the lumber products group.

Increased employment in December, as compared with November, was reported in 15 of the 54 manufacturing industries on which the bureau's indexes of employment and earnings are based, and increased pay-roll totals were shown in 17 industries. The most pronounced gains over the month interval were shown in the automobile industry, which reported an increase of 20.6 per cent in employment coupled with an increase of 13.3 per cent in pay-roll totals. Substantial gains in employment were also reported in the agricultural implement, boot and shoe, fertilizer, and slaughtering industries.

The cigar and cigarette industry reported the greatest decline in employment from November to December (10.9 per cent), labor disturbances in one section of the country causing a pronounced decrease in number of workers in this industry during the December pay period reported. Decreases in employment ranging from 10.8 per cent to 5.9 per cent were shown in the stove, brick, sawmill, shirt and collar, cement, steam fitting, and carriage and wagon industries. The losses in employment over the month interval in rubber boots and shoes, pianos, men's clothing, furniture, pottery, carpets, and chemicals ranged from 4.2 per cent to 3.1 per cent; the remaining 24 industries showed declines of less than 3 per cent.

Increased employment in December, 1931, as compared with December, 1930, was shown in three industries—chewing and smoking tobacco, hosiery and knit goods, and cane sugar refining. Pay-roll totals however, in these three industries in December, 1931, were below the level of December, 1930. In the remaining 51 manufacturing industries, decreases in both employment and pay-roll totals were shown over the year interval. The agricultural implement industry reported the greatest losses in both items from December, 1930, to December, 1931, 49.5 per cent in employment and 54.7 per cent in pay-roll totals. Decreases in employment over the 12-month period ranging from 30.7 per cent to 36.3 per cent were shown in the brick, fertilizer, machine tool, and piano industries. Decreases in employment of over 20 per cent were reported in the sawmill, structural-iron work, foundry, steam fittings, cement, steam-railroad car building and repairing, and carriage and wagon industries. The iron and steel industry reported 16.7 per cent fewer employees in December, 1931, than in December, 1930, and employment in the automobile industry was 12.7 per cent below the level of the corresponding month of the previous year. The cotton goods and the boot and shoe industries

reported but slight losses in employment in December, 1931, as compared with December, 1930, cotton goods showing a falling-off of only 1.2 per cent in employment over the year interval, and boots and shoes reporting a decrease of only one-tenth of 1 per cent.

In Table 1 are shown the number of identical establishments reporting in both November and December, 1931, in the 54 manufacturing industries on which the bureau's indexes of employment and pay-roll totals are based, together with the total number of employees on the pay rolls of these establishments during the pay period ending nearest December 15, and the amount of their weekly earnings in December, the per cents of change over the month and the year intervals, and the index numbers of employment and pay-roll totals in December, 1931.

The monthly per cents of change in employment and earnings for each of the 54 separate industries are computed by direct comparison of the total number of employees and the amount of weekly earnings in identical establishments for the two months considered. The per cents of change over the month interval in the several groups and in the total of the 54 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 per cents of change over the year interval in the separate industries, the group indexes, and the general indexes are computed from the index numbers of employment and pay-roll totals.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL MANUFACTURING ESTABLISHMENTS IN NOVEMBER AND DECEMBER, 1931, PER CENT OF CHANGE OVER A YEAR INTERVAL, AND INDEX NUMBERS OF EMPLOYMENT AND PAY-ROLL TOTALS, DECEMBER, 1931

Industry	Es- tab- lish- ments repor- ting in both No- vem- ber and De- cem- ber, 1931	Employment			Pay-roll totals			Index num- bers Decem- ber, 1931 (average 1926=100)	
		Number on pay roll, Decem- ber, 1931	Per cent of change		Amount of pay roll (1 week) Decem- ber, 1931	Per cent of change		Em- ploy- ment	Pay- roll totals
			No- vem- ber to De- cem- ber, 1931	De- cem- ber, 1930, to De- cem- ber, 1931		No- vem- ber to De- cem- ber, 1931	De- cem- ber, 1930, to De- cem- ber, 1931		
Food and kindred products.	2, 082	221, 529	-0.1	-4.8	\$5, 156, 062	-0.7	-12.9	87.7	80.5
Slaughtering and meat packing.....	207	88, 112	+3.2	-2.9	2, 120, 100	+5.1	-11.7	93.3	87.1
Confectionery.....	320	38, 368	-1.3	-1.5	645, 249	-0.2	-12.5	89.2	79.0
Ice cream.....	315	10, 146	-2.1	-8.8	311, 985	-3.4	-14.0	68.7	63.8
Flour.....	424	16, 208	-2.5	-6.9	373, 168	-9.6	-17.7	85.7	75.3
Baking.....	802	60, 760	-1.4	-7.0	1, 498, 666	-2.8	-13.0	86.8	80.4
Sugar refining, cane.....	14	7, 935	-2.7	+0.3	206, 894	-4.9	-10.9	80.0	70.6
Textiles and their products.	2, 430	523, 934	-1.2	-5.6	8, 062, 887	-0.9	-18.1	72.8	55.8
Cotton goods.....	516	184, 799	+0.5	-1.2	2, 219, 647	+1.2	-17.8	73.8	56.8
Hosiery and knit goods.....	351	86, 698	-1.5	+1.1	1, 337, 839	-2.1	-10.4	84.5	68.8
Silk goods.....	251	49, 464	+0.2	-14.1	829, 510	+1.3	-25.6	70.9	57.9
Woolen and worsted goods.....	184	45, 069	-2.1	-5.3	832, 481	-1.4	-14.0	66.0	55.2
Carpets and rugs.....	27	14, 513	-3.1	-3.1	275, 802	-6.5	-14.6	63.1	44.9
Dyeing and finishing tex- tiles.....	130	35, 031	+0.6	-10.8	768, 681	+1.5	-18.8	83.0	71.5
Clothing, men's.....	339	54, 441	-4.2	-3.0	845, 410	-0.5	-14.2	66.8	42.8
Shirts and collars.....	106	15, 478	-9.0	-9.3	177, 933	-14.7	-27.3	65.3	42.9
Clothing, women's.....	385	25, 825	-(1)	-17.2	543, 728	-2.2	-25.5	73.5	55.4
Millinery and lace goods.....	141	12, 616	-0.9	-8.8	231, 856	-3.8	-18.3	67.5	49.9
Iron and steel and their products.	1, 984	456, 061	-0.3	-20.5	8, 807, 372	+1.1	-38.1	58.8	38.0
Iron and steel.....	190	191, 222	+0.9	-16.7	3, 416, 568	+2.2	-40.0	63.0	37.1
Cast-iron pipe.....	38	7, 761	-1.2	-11.4	134, 975	+2.1	-27.2	49.1	37.0
Structural-iron work.....	174	20, 828	-2.3	-25.6	458, 382	-3.4	-41.1	62.2	44.5

¹ Less than one-tenth of 1 per cent.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL MANUFACTURING ESTABLISHMENTS IN NOVEMBER AND DECEMBER, 1931, PER CENT OF CHANGE OVER A YEAR INTERVAL, AND INDEX NUMBERS OF EMPLOYMENT AND PAY-ROLL TOTALS, DECEMBER, 1931—Continued

Industry	Es- tab- lish- ments report- ing in both Nov- em- ber and De- cem- ber, 1931	Employment			Pay-roll totals			Index numbers Decem- ber, 1931 (average 1926=100)	
		Number on pay roll, Decem- ber, 1931	Per cent of change		Amount of pay roll (1 week) Decem- ber, 1931	Per cent of change		Em- ploy- ment	Pay- roll totals
			No- vem- ber to De- cem- ber, 1931	De- cem- ber, 1930, to De- cem- ber, 1931		No- vem- ber to De- cem- ber, 1931	De- cem- ber, 1930, to De- cem- ber, 1931		
Iron and steel and their products—Continued.									
Foundry and machine-shop products.....	1,095	159,297	+0.6	-23.3	\$3,298,223	+3.4	-37.5	57.4	38.9
Hardware.....	100	24,118	-1.2	-15.9	427,695	-1.9	-31.3	60.4	40.1
Machine tools.....	145	16,086	-0.3	-36.0	367,078	+1.5	-40.3	50.1	37.2
Steam fittings and steam and hot-water heating apparatus.....	106	21,543	-6.6	-22.2	418,059	-8.1	-40.2	48.0	31.5
Stoves.....	136	15,206	-10.8	-13.6	286,392	-17.6	-29.0	53.5	33.8
Lumber and its products.....	1,450	138,315	-7.1	-23.2	2,133,523	-9.2	-38.3	44.7	30.6
Lumber, sawmills.....	664	67,280	-9.3	-28.2	917,914	-15.1	-46.4	39.7	25.4
Lumber, millwork.....	350	21,594	-2.5	-18.7	381,047	-1.1	-31.9	46.5	34.3
Furniture.....	436	49,441	-4.2	-14.0	834,562	-5.5	-28.0	56.9	38.6
Leather and its products.....	423	111,448	+5.1	-1.9	1,792,964	+6.6	-13.7	72.4	48.6
Leather.....	140	22,163	-2.4	-8.5	460,597	-3.6	-19.2	69.9	57.9
Boots and shoes.....	283	89,285	+7.0	-0.1	1,332,367	+11.3	-11.4	73.0	46.0
Paper and printing.....	1,755	227,428	-0.2	-7.6	6,631,385	+0.2	-13.8	88.4	84.4
Paper and pulp.....	390	76,312	-1.1	-8.6	1,607,802	-3.3	-22.4	77.6	61.5
Paper boxes.....	301	23,628	-2.9	-7.1	475,355	-4.8	-14.6	81.5	74.6
Printing, book and job.....	622	52,869	+1.2	-11.5	1,662,826	+3.1	-16.6	86.7	83.2
Printing, newspapers.....	442	74,619	+0.2	-3.0	2,885,402	+0.7	-6.5	105.1	105.1
Chemicals and allied products.....	471	83,144	-1.4	-17.3	2,354,590	-1.5	-21.7	71.0	66.7
Chemicals.....	165	33,244	-3.1	-12.5	844,572	-3.4	-17.3	80.7	74.2
Fertilizers.....	205	6,960	+3.8	-35.2	107,722	+7.8	-41.3	48.5	41.2
Petroleum refining.....	101	42,940	-0.1	-18.4	1,302,296	-0.1	-23.3	67.3	64.1
Stone, clay, and glass products.....	1,094	89,173	-5.1	-19.6	1,682,521	-8.4	-33.3	51.7	36.9
Cement.....	111	14,697	-6.9	-21.7	304,844	-14.5	-35.4	49.1	34.9
Brick, tile, and terra cotta.....	688	21,733	-10.1	-30.7	326,538	-15.3	-49.1	37.3	21.8
Pottery.....	110	14,945	-4.7	-14.3	278,079	-6.6	-27.9	69.0	50.7
Glass.....	185	37,798	+0.1	-9.3	773,060	-2.0	-20.7	65.4	52.6
Metal products, other than iron or steel.....	256	44,148	-0.6	-12.2	860,994	-1.5	-27.2	63.6	46.8
Stamped and enameled ware.....	91	16,295	-1.1	-8.1	305,626	-2.1	-22.9	66.2	49.8
Brass, bronze, and copper products.....	165	27,853	-0.4	-14.2	555,368	-1.1	-29.0	62.3	45.6
Tobacco products.....	224	54,445	-9.5	-15.2	785,561	-8.6	-24.0	73.7	62.5
Chewing and smoking tobacco and snuff.....	26	8,854	+1.6	+1.3	130,223	+6.1	-3.8	88.8	79.2
Cigars and cigarettes.....	198	45,591	-10.9	-17.3	655,338	-10.5	-26.4	71.8	60.5
Vehicles for land transportation.....	1,251	328,766	+8.8	-16.9	8,366,684	+4.3	-22.3	55.5	45.7
Automobiles.....	220	222,774	+20.6	-12.7	5,561,838	+13.3	-13.5	61.6	46.7
Carriages and wagons.....	47	607	-5.9	-21.0	11,069	-9.4	-30.9	31.2	27.7
Car building and repairing, electric-railroad.....	480	25,704	-0.9	-11.7	760,632	-0.6	-14.5	71.1	68.2
Car building and repairing, steam-railroad.....	504	79,681	-1.2	-21.7	2,033,145	-3.1	-30.8	49.0	43.2
Miscellaneous industries.....	496	242,770	-0.4	-16.9	5,761,460	+0.5	-26.3	69.0	56.0
Agriculture implements.....	82	10,057	+7.7	-49.5	196,680	+7.7	-54.7	36.8	26.7
Electric machinery, apparatus, and supplies.....	229	137,269	-0.8	-18.5	3,396,101	-2.1	-27.6	72.7	60.5
Pianos and organs.....	54	3,572	-3.5	-36.3	83,008	-0.2	-45.1	29.8	21.7
Rubber boots and shoes.....	9	13,020	-3.6	-8.2	229,950	-3.5	-18.7	69.8	53.0
Automobile tires and inner tubes.....	38	44,920	-0.2	-3.3	971,018	+6.1	-16.5	64.9	46.1
Shipbuilding.....	84	33,932	+0.7	-10.6	884,703	+4.2	-20.9	93.9	83.3
Total—54 industries used in computing index numbers of employment and pay roll.....	13,916	2,521,161	-0.2	-13.0	52,296,003	-0.2	-24.5	65.3	50.9

The trend of employment and pay-roll totals in 31 additional manufacturing industries, surveyed but not yet included in the bureau's weighted indexes of employment and earnings, is shown in Table 2 following. The combined total of these 31 industries shows a falling off in employment of 3.8 per cent in December as compared with November, while pay-roll totals decreased 4.7 per cent over the month interval. These industries have been added to the bureau's trend of employment survey since February, 1929, but have not been combined with the 54 manufacturing industries upon which the bureau's indexes of employment and earnings are based due to lack of information concerning the bureau's index base year, 1926.

Three of these 31 industries reported gains in both employment and earnings from November to December, while three industries reported gains in employment only, and three additional industries reported increased pay-roll totals combined with losses in number of employees. The tin-can industry reported an increase of 2.7 per cent in employment from November to December, and the aircraft industry reported 2.4 per cent more employees over the month interval. The typewriter and typewriter-supplies industry reported a gain of 1.9 per cent in employment in December as compared with November, and the remaining three industries in which increased employment was shown reported gains of less than 1 per cent. The greatest falling off in employment over the month interval was reported in the radio industry, in which a drop of 22.2 per cent was shown. Beet sugar reported a season loss of 11.3 per cent in employment from November to December, and decreases ranging from 7.5 per cent to 3 per cent were reported in the marble-granite-slate, jewelry, cottonseed oil-cake-meal, butter, plumbers' supplies, forgings, turpentine, cotton small wares, and clock industries. The decreases in the remaining 14 industries were less than 3 per cent. A comparison of employment and earnings over the year interval is available for 9 of these 31 industries. With the exception of the rayon industry, in which no change in employment over the 12-month interval was reported, the remaining industries reported decreases in both employment and earnings. The radio manufacturing industry reported a decline in employment between December, 1930, and December, 1931, of 40.7 per cent. The level of employment in the aircraft industry in December, 1931, was 24.5 per cent below the level of December, 1930, and the jewelry industry reported a decrease of 20.7 per cent in number of workers over the 12-month period. Employment in the beet-sugar industry in December, 1931, was 16.1 per cent below the level of December, 1930, and the cash-register industry reported 12 per cent fewer employees in December, 1931, as compared with the corresponding month of 1930.

TABLE 2.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN DECEMBER, 1931, WITH NOVEMBER, 1931, AND DECEMBER, 1930, IN SPECIFIED MANUFACTURING INDUSTRIES, FOR WHICH DATA FOR THE INDEX BASE YEAR (1926) ARE NOT AVAILABLE

Industry	Estab- lish- ments report- ing in both Nov- ember and De- cember, 1931	Employment			Pay-roll totals		
		Per cent of change			Per cent of change		
		Number on pay roll, De- cember, 1931	No- vember to De- cember, 1931	De- cember, 1930, to De- cember, 1931	Amount of pay roll (1 week) Dece- mber, 1931	No- vember to De- cember, 1931	De- cember, 1930, to De- cember, 1931
Aircraft.....	36	6,689	+2.4	-24.5	\$217,218	-2.5	-24.0
Aluminum manufactures.....	20	3,135	-0.5	(1)	66,357	+6.6	(1)
Beet sugar.....	48	14,927	-11.3	-16.1	294,396	-23.7	-29.5
Beverages.....	310	10,540	-2.2	-6.8	281,457	-4.6	-15.8
Bolts, nuts, washers, and rivets.....	68	7,591	-0.1	(1)	143,540	+1.0	(1)
Butter.....	219	5,555	-5.3	(1)	134,485	-5.1	(1)
Cash registers, adding machines, and calculat- ing machines.....	52	15,967	+0.2	-12.0	418,494	+2.2	-25.4
Clocks, time-recording devices, and clock movements.....	25	7,439	-3.0	(1)	122,096	-15.3	(1)
Corsets and allied garments.....	28	4,095	-2.8	(1)	65,230	-6.3	(1)
Cottonseed oil, cake, and meal.....	44	2,692	-5.4	(1)	37,816	-3.7	(1)
Cotton, small wares.....	102	8,846	-3.2	(1)	149,118	-1.4	(1)
Cutlery (not including silver and plated cut- lery) and edge tools.....	118	9,437	-1.0	(1)	183,080	-3.5	(1)
Forgings, iron and steel.....	46	5,146	-3.7	(1)	94,886	-4.6	(1)
Gas and electric fixtures, lamps, lanterns, and reflectors.....	46	5,442	-2.9	(1)	133,595	-0.4	(1)
Hats, fur-felt.....	39	5,543	-0.3	(1)	96,400	-1.3	(1)
Jewelry.....	153	11,590	-6.5	-20.7	257,357	-0.9	-24.5
Marble, granite, slate, and other stone prod- ucts.....	220	6,433	-7.5	(1)	164,502	-9.1	(1)
Men's furnishing goods.....	80	5,946	+0.5	(1)	87,999	-10.2	(1)
Paint and varnish.....	350	16,082	-0.8	-8.8	397,914	-1.1	-18.2
Plated ware.....	38	5,490	-0.7	(1)	129,718	+5.8	(1)
Plumbers' supplies.....	67	4,885	-4.2	(1)	87,753	-4.3	(1)
Radio.....	39	18,869	-22.2	-40.7	421,265	-15.3	-36.0
Rayon.....	20	24,155	-1.1	(1)	426,879	-(2)	-8.3
Rubber goods, other than boots, shoes, tires, and inner tubes.....	103	19,217	-0.8	-6.2	397,475	-1.0	-16.9
Smelting and refining copper, lead, and zinc.....	30	9,508	-2.0	(1)	188,460	-8.9	(1)
Soap.....	65	8,770	-1.3	(1)	208,951	-1.7	(1)
Tools (not including edge tools, machine tools, files, or saws).....	125	8,137	+0.9	(1)	152,189	+0.5	(1)
Tin cans, and other tinware.....	52	7,251	+2.7	(1)	155,905	+0.9	(1)
Turpentine and rosin.....	21	1,157	-3.4	(1)	16,182	-6.3	(1)
Typewriters and supplies.....	16	9,253	+1.9	(1)	166,977	-4.8	(1)
Wirework.....	64	6,438	-1.0	(1)	131,854	-0.7	(1)
Total.....	2,644	276,225	-3.8	(1)	5,829,548	-4.7	(1)

¹ Data not available.

² Less than one-tenth of 1 per cent.

³ No change.

The total number of employees and the amount of earnings in these 31 industries shown in the foregoing table have been combined with totals of the 54 manufacturing industries shown in Table 1, in presenting the total of all manufacturing industries in the summary table, and in the following table which presents a recapitulation of manufacturing industries by geographic divisions.

This recapitulation of the combined 85 manufacturing industries by geographic divisions shows increased employment and earnings in December, as compared with November, in the East and West North Central divisions, while increased pay-roll totals coupled with decreased employment was reported in the New England States.

Decreased employment and earnings were shown in the six remaining divisions, the greatest falling-off over the month interval being reported in the Mountain division, due largely to the seasonal decline in the beet-sugar industry in that section. The level of employment and earnings in December, 1931, in each of these nine divisions was considerably below the level of December, 1930, the South Atlantic division reporting the least change over the year interval and the Mountain division reporting the greatest decrease in each item.

TABLE 3.—TREND OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING ESTABLISHMENTS BY GEOGRAPHIC DIVISIONS, NUMBER OF ESTABLISHMENTS REPORTING FOR BOTH NOVEMBER AND DECEMBER, 1931, NUMBER OF EMPLOYEES ON PAY ROLL AND AMOUNT OF WEEKLY EARNINGS IN DECEMBER, 1931, AND PER CENTS OF CHANGE OVER THE MONTH AND YEAR INTERVALS

Geographic division	Number of establishments reporting in both November and December, 1931	Number on pay roll December, 1931	Per cent of change		Amount of pay roll (1 week) December, 1931	Per cent of change	
			November, 1931, to December, 1931	December, 1930, to December, 1931		November, 1931, to December, 1931	December, 1930, to December, 1931
New England.....	2,058	344,486	-1.7	-11.7	\$6,776,832	+0.3	-21.7
Middle Atlantic.....	3,992	827,597	-1.3	-13.4	18,288,862	-1.8	-25.1
East North Central.....	3,961	844,374	+4.5	-15.1	18,761,302	+3.5	-24.3
West North Central.....	1,737	154,284	+1.2	-12.5	3,396,939	+2.1	-20.2
South Atlantic.....	1,932	326,097	-2.0	-6.0	5,186,280	-2.1	-18.7
East South Central.....	709	104,618	-2.0	-8.7	1,536,750	-1.2	-23.2
West South Central.....	778	69,719	-1.7	-17.4	1,371,400	-2.1	-27.2
Mountain.....	443	31,836	-10.2	-28.1	710,604	-13.9	-30.3
Pacific.....	950	94,375	-5.3	-17.5	2,096,582	-6.8	-29.8
All divisions.....	16,560	2,797,386	-1-0.2	-13.0	58,125,551	-1-0.2	-24.5

¹ Weighted per cent of change for the combined 54 manufacturing industries, repeated from Table 1, manufacturing industries.

Per Capita Earnings in Manufacturing Industries

ACTUAL per capita weekly earnings in December, 1931, for each of the 85 manufacturing industries surveyed by the Bureau of Labor Statistics, together with per cents of change in December, 1931, as compared with November, 1931, and December, 1930, are shown in Table 4.

Per capita earnings in December, 1931, for the combined 54 manufacturing industries upon which the bureau's indexes of employment and pay rolls are based, were less than one-tenth of 1 per cent lower than for November, 1931, and 13.1 per cent lower than for December, 1930.

The actual average per capita weekly earnings in December, 1931, for the 54 manufacturing industries were \$20.74; the average per capita earnings for all of the 85 manufacturing industries surveyed were \$20.78.

Per capita earnings given in Table 4 must not be confused with full-time weekly rates of wages. They are actual per capita weekly earnings, computed by dividing the total number of employees reported into the total amount of pay roll in the week reported, and the "number of employees" includes all persons who worked any part of the period reported—that is, part-time workers as well as full-time workers.

TABLE 4.—PER CAPITA WEEKLY EARNINGS IN MANUFACTURING INDUSTRIES IN DECEMBER, 1931, AND COMPARISON WITH NOVEMBER, 1931, AND DECEMBER, 1930

Industry	Per capita weekly earnings in December, 1931	Per cent of change compared with—	
		November, 1931	December, 1930
Food and kindred products:			
Slaughtering and meat packing.....	\$24.06	+1.8	-9.1
Confectionery.....	16.82	+1.1	-11.0
Ice cream.....	30.75	-1.3	-5.7
Flour.....	23.02	-7.3	-11.8
Baking.....	24.67	-1.3	-6.5
Sugar refining, cane.....	26.07	-2.2	-10.7
Textiles and their products:			
Cotton goods.....	12.01	+0.7	-16.9
Hosiery and knit goods.....	15.43	-0.6	-11.1
Silk goods.....	16.77	+1.0	-13.5
Woolen and worsted goods.....	18.47	+0.7	-9.6
Carpets and rugs.....	19.00	-3.6	-11.8
Dyeing and finishing textiles.....	21.94	+0.9	-9.4
Clothing, men's.....	15.53	+3.9	-11.7
Shirts and collars.....	11.50	-6.2	-19.6
Clothing, women's.....	21.05	-2.2	-10.4
Millinery and lace goods.....	18.38	-2.9	-10.3
Iron and steel and their products:			
Iron and steel.....	17.87	+1.3	-27.9
Cast-iron pipe.....	17.39	+3.4	-17.9
Structural-iron work.....	22.01	-1.1	-20.9
Foundry and machine-shop products.....	20.70	+2.7	-18.7
Hardware.....	17.73	-0.7	-18.8
Machine tools.....	22.82	+1.8	-6.6
Steam fittings and steam and hot-water heating apparatus.....	19.41	-1.6	-23.1
Stoves.....	18.83	-7.7	-17.9
Lumber and its products:			
Lumber, sawmills.....	13.64	-6.4	-25.4
Lumber, millwork.....	17.65	+1.4	-16.7
Furniture.....	16.88	-1.3	-16.3
Leather and its products:			
Leather.....	20.78	-1.3	-11.8
Boots and shoes.....	14.92	+4.0	-11.3
Paper and printing:			
Paper and pulp.....	21.07	-2.1	-15.1
Paper boxes.....	20.12	-1.9	-7.7
Printing, book and job.....	31.45	+1.8	-5.8
Printing, newspapers and periodicals.....	38.67	+0.5	-3.4
Chemicals and allied products:			
Chemicals.....	25.41	-0.3	-5.6
Fertilizers.....	15.48	+3.9	-9.6
Petroleum refining.....	30.33	-0.1	-6.1
Stone, clay, and glass products:			
Cement.....	20.74	-8.1	-17.4
Brick, tile, and terra cotta.....	15.02	-5.9	-26.7
Pottery.....	18.61	-1.9	-15.7
Glass.....	20.45	-2.1	-12.5
Metal products, other than iron and steel:			
Stamped and enameled ware.....	18.76	-0.9	-16.0
Brass, bronze, and copper products.....	19.94	-0.8	-17.6
Tobacco products:			
Chewing and smoking tobacco and snuff.....	14.71	+4.5	-4.8
Cigars and cigarettes.....	14.37	+0.4	-11.1
Vehicles for land transportation:			
Automobiles.....	24.97	-6.0	-1.2
Carriages and wagons.....	18.24	-3.7	-12.7
Car building and repairing, electric-railroad.....	29.59	+0.3	-3.4
Car building and repairing, steam-railroad.....	25.52	-1.8	-11.4
Miscellaneous industries:			
Agricultural implements.....	19.56	(1)	-10.3
Electrical machinery, apparatus, and supplies.....	24.74	-1.3	-11.3
Pianos and organs.....	23.24	+3.4	-14.2
Rubber boots and shoes.....	17.66	+0.1	-11.5
Automobile tires and inner tubes.....	21.62	+6.4	-13.7
Shipbuilding.....	26.07	+3.4	-11.5
Industries added since February, 1929, for which data for the index base year (1926) are not available:			
Aircraft.....	32.47	-4.8	+0.8
Aluminum manufactures.....	21.17	+7.2	(2)
Beet sugar.....	19.72	-14.1	-16.2
Beverages.....	26.70	-2.4	-9.8
Bolts, nuts, washers, and rivets.....	18.91	+1.1	(2)
Butter.....	24.21	+0.2	(2)
Cash registers, adding machines, and calculating machines.....	26.21	+2.1	-15.3

1 No change.

2 Data not available.

TABLE 4.—PER CAPITA WEEKLY EARNINGS IN **MANUFACTURING** INDUSTRIES IN DECEMBER, 1931, AND COMPARISON WITH NOVEMBER, 1931, AND DECEMBER, 1930—Continued

Industry	Per capita weekly earnings in December, 1931	Per cent of change compared with—	
		November, 1931	December 1930
Industries added since February, 1929—Continued.			
Clocks, time-recording devices, and clock movements.....	\$16.41	-12.6	(2)
Corsets and allied garments.....	15.93	-3.5	(2)
Cottonseed oil, cake, and meal.....	14.05	+1.8	(2)
Cotton small wares.....	16.86	+1.8	(2)
Cutlery (not including silver and plated cutlery) and edge tools.....	19.40	-2.5	(2)
Forgings, iron and steel.....	18.44	-0.9	(2)
Gas and electric fixtures, lamps, lanterns, and reflectors.....	24.55	+2.5	(2)
Hats, fur-felt.....	17.39	-1.0	(2)
Jewelry.....	22.21	+6.0	-4.6
Marble, granite, slate, and other stone products.....	25.57	-1.7	(2)
Men's furnishing goods.....	14.80	-10.6	(2)
Paint and varnish.....	24.74	-0.4	-10.1
Plated ware.....	23.63	+6.5	(2)
Plumbers' supplies.....	17.96	-0.1	(2)
Radio.....	22.33	+8.8	+7.6
Rayon.....	17.67	+1.1	-8.2
Rubber goods, other than boots, shoes, tires, and inner tubes.....	20.68	-0.2	-11.3
Smelting and refining, copper, lead, and zinc.....	19.82	-7.0	(2)
Soap.....	23.83	-0.5	(2)
Tools (not including edge tools, machine tools, files, or saws) ..	18.70	-0.4	(2)
Tin cans and other tinware.....	21.50	-1.7	(2)
Turpentine and rosin.....	13.99	-3.0	(2)
Typewriters and supplies.....	18.05	-6.5	(2)
Wirework.....	20.48	+0.3	(2)

² Data not available.

Index Numbers of Employment and Pay-Roll Totals in Manufacturing Industries

TABLE 5 shows the general indexes of employment and pay-roll totals in manufacturing industries by months from January, 1923, to December, 1931, together with the average indexes for each of the years 1923 to 1931, inclusive.

TABLE 5.—GENERAL INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN **MANUFACTURING** INDUSTRIES, JANUARY, 1923, TO DECEMBER, 1931

[Monthly average, 1926=100]

Month	Employment										Pay-roll totals									
	1923	1924	1925	1926	1927	1928	1929	1930	1931	1923	1924	1925	1926	1927	1928	1929	1930	1931		
Jan....	106.6	103.8	97.9	100.4	97.3	91.6	95.2	90.2	73.1	95.8	98.6	93.9	98.0	94.9	89.6	95.5	87.6	62.3		
Feb....	108.4	105.1	99.7	101.5	99.0	93.0	97.4	90.3	74.1	99.4	103.8	99.3	102.2	100.6	93.9	101.8	90.7	67.0		
Mar....	110.8	104.9	100.4	102.0	99.5	93.7	98.6	89.8	74.8	104.7	103.3	100.8	103.4	102.0	95.2	103.9	90.8	68.5		
Apr....	110.8	102.8	100.2	101.0	98.6	93.3	99.1	89.1	74.5	105.7	101.1	98.3	101.5	100.8	93.8	104.6	89.8	67.4		
May....	110.8	98.8	98.9	99.8	97.6	93.0	99.2	87.7	74.1	109.4	96.5	98.5	99.8	99.8	94.1	104.8	87.6	66.6		
June....	110.9	95.6	98.0	99.3	97.0	93.1	98.8	85.5	72.2	109.3	90.8	95.7	99.7	97.4	94.2	102.8	84.1	62.5		
July....	109.2	92.3	97.2	97.7	95.0	92.2	98.2	81.6	70.4	104.3	84.3	93.5	95.2	93.0	91.2	98.2	75.9	59.1		
Aug....	108.5	92.5	97.8	98.7	95.1	93.6	98.6	79.9	70.0	103.7	87.2	95.4	98.7	95.0	94.2	102.1	73.9	58.5		
Sept....	108.6	94.3	98.9	100.3	95.8	95.0	99.3	79.7	69.6	104.4	89.8	94.4	99.3	94.1	95.4	102.6	74.2	55.4		
Oct....	108.1	95.6	100.4	100.7	95.3	95.9	98.3	78.6	67.3	106.8	92.4	100.4	102.9	95.2	99.0	102.3	72.7	53.7		
Nov....	107.4	95.5	100.7	99.5	93.5	95.4	94.8	76.5	65.4	105.4	91.4	100.4	99.6	91.6	96.1	95.1	68.3	51.0		
Dec....	105.4	97.3	100.8	98.9	92.6	95.5	91.9	75.1	65.3	103.2	95.7	101.6	99.8	93.2	97.7	92.0	67.4	50.9		
Av....	108.8	98.2	99.2	100.0	96.4	93.8	97.5	83.7	70.9	104.3	94.6	97.7	100.0	96.5	94.5	100.4	80.3	60.2		

Index numbers of employment and pay-roll totals for each of the 54 separate industries included in the bureau's general indexes and for each of the 12 groups of industries are shown in Table 6 for each month of 1931, together with average indexes for each of the years 1923 to 1931, inclusive.

The average general index of employment for the 12 months of 1931 was 15.3 per cent below the average index for 1930, and the average index of pay-roll totals was 25.0 per cent below the average for 1930.

In computing these general indexes and group indexes the index numbers of the separate industries are weighted according to the relative importance of the industries.

Following Table 6 are two charts made from index numbers showing the trend in employment and earnings for each month of the years 1926 to 1931, inclusive.

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN **MANUFACTURING** INDUSTRIES, JANUARY TO DECEMBER, 1931, AND YEARLY AVERAGES, 1923 TO 1931

[Monthly average, 1926=100]

Year and month	General index		Food and kindred products							
			Group index		Slaughtering and meat packing		Confectionery		Ice cream	
	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals
1923 average.....	108.8	104.3	111.1	106.3	122.9	118.4	116.3	107.0	103.9	95.8
1924 average.....	98.2	94.6	106.4	104.4	115.1	111.8	103.2	99.9	100.3	93.1
1925 average.....	95.2	97.7	101.2	99.9	104.4	102.6	98.1	96.4	101.3	98.3
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927 average.....	96.4	96.5	99.4	100.0	99.5	99.9	96.5	97.9	94.0	93.4
1928 average.....	93.8	94.5	98.4	99.8	99.5	101.0	93.0	93.3	92.4	93.1
1929 average.....	97.5	100.4	99.4	101.7	101.0	103.2	92.3	94.1	91.9	93.0
1930 average.....	83.7	80.3	94.5	97.0	97.1	100.2	85.9	86.2	87.6	87.5
1931 average.....	70.9	60.2	88.3	85.7	90.8	89.8	82.4	75.6	80.6	78.2
1931										
January.....	73.1	62.3	89.9	90.9	96.6	101.7	83.1	81.1	74.3	73.9
February.....	74.1	67.0	89.2	89.3	94.0	96.3	83.9	79.1	74.7	76.2
March.....	74.8	68.5	87.9	86.9	90.2	90.2	82.3	77.2	76.2	76.9
April.....	74.5	67.4	87.0	85.9	89.4	90.0	78.1	73.2	78.5	79.4
May.....	74.1	66.6	88.0	87.3	90.6	91.6	78.6	73.3	83.7	82.6
June.....	72.2	62.5	88.1	87.2	90.2	91.0	77.3	72.5	90.3	87.3
July.....	70.4	59.1	87.6	85.9	89.1	89.5	69.2	59.8	94.5	90.7
August.....	70.0	58.5	87.6	84.5	88.2	86.5	74.0	67.1	93.2	87.6
September.....	69.6	55.4	89.4	85.1	88.3	85.3	89.5	82.6	86.8	82.4
October.....	67.3	53.7	89.0	83.6	89.0	84.9	93.0	83.4	76.7	71.8
November.....	65.4	51.0	87.8	81.1	90.4	82.9	90.3	79.1	70.1	66.1
December.....	65.3	50.9	87.7	80.5	93.3	87.1	89.2	79.0	68.7	63.8

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JANUARY TO DECEMBER, 1931, AND YEARLY AVERAGES, 1923 TO 1931—Continued

Year and month	Food and kindred products—Continued						Textiles and their products			
	Flour		Baking		Sugar refining, cane		Group index		Cotton goods	
	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals
1923 average.....	114.2	110.9	99.2	94.8	106.8	104.6	116.1	116.4	120.3	123.5
1924 average.....	108.1	108.2	100.5	98.4	104.6	105.4	102.4	101.0	99.9	99.6
1925 average.....	103.1	102.5	98.7	97.1	104.5	104.6	103.7	104.2	101.1	101.1
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927 average.....	99.3	99.4	101.4	102.2	98.8	98.8	101.3	103.0	105.0	108.5
1928 average.....	100.0	102.1	100.9	101.6	91.1	94.9	96.3	95.6	95.2	91.7
1929 average.....	102.1	105.3	102.1	103.5	94.0	98.5	97.0	97.2	95.5	94.3
1930 average.....	97.0	99.9	96.8	98.5	91.6	94.4	83.7	77.0	80.6	73.3
1931 average.....	88.2	84.2	90.5	87.1	81.7	80.0	77.3	65.7	75.4	64.9
1931										
January.....	90.4	87.7	90.5	89.6	81.4	79.3	75.5	64.8	73.2	65.3
February.....	89.0	87.9	90.6	89.5	79.9	82.3	78.6	72.3	73.3	65.8
March.....	87.7	85.2	90.6	88.9	82.2	84.5	81.0	75.4	76.8	69.8
April.....	87.9	84.4	90.1	87.5	83.5	83.5	80.1	71.4	77.3	71.4
May.....	86.3	84.1	91.7	89.7	79.1	79.5	79.8	68.9	79.1	72.6
June.....	85.3	81.5	91.9	89.7	80.7	81.6	77.5	65.5	77.0	68.1
July.....	90.5	86.7	92.5	88.8	84.2	86.8	76.1	64.2	76.2	65.8
August.....	90.0	86.4	91.6	86.7	84.3	82.1	77.6	66.9	75.0	64.3
September.....	88.9	83.3	91.2	86.7	82.8	79.7	78.3	65.0	75.4	62.4
October.....	88.5	84.0	90.1	85.1	79.8	75.4	76.0	61.7	74.1	60.1
November.....	87.9	83.3	88.0	82.7	82.2	74.3	73.7	56.3	73.5	56.1
December.....	85.7	75.3	86.8	80.4	80.0	70.6	72.8	55.8	73.8	56.8

Year and month	Textiles and their products—Continued									
	Hosiery and knit goods		Silk goods		Woolen and worsted goods		Carpets and rugs		Dyeing and finishing textiles	
	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals
1923 average.....	102.1	91.3	99.8	93.9	124.5	126.7	106.5	110.1	102.1	99.9
1924 average.....	92.6	82.9	94.1	88.6	113.3	114.1	98.1	95.2	94.0	91.8
1925 average.....	100.2	96.4	103.1	102.7	110.7	110.6	100.7	101.2	101.7	102.3
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927 average.....	99.0	102.2	98.4	99.2	99.7	100.6	102.5	104.1	100.9	102.8
1928 average.....	94.7	97.3	96.9	100.2	95.0	94.4	101.0	95.9	99.5	101.0
1929 average.....	98.1	104.3	98.0	100.9	96.0	96.3	106.8	101.4	101.8	102.2
1930 average.....	87.5	84.6	86.5	81.7	77.7	72.7	81.9	66.0	93.0	87.9
1931 average.....	81.3	69.9	73.9	64.5	75.4	68.1	72.2	57.2	88.0	80.7
1931										
January.....	75.0	64.4	81.6	70.8	68.8	61.9	67.0	50.2	92.9	85.9
February.....	79.3	72.0	84.3	78.6	74.8	71.9	71.7	62.8	95.5	96.2
March.....	80.1	73.4	83.2	76.2	76.4	73.0	76.1	64.6	95.4	94.5
April.....	80.6	72.9	80.7	71.9	71.7	65.4	77.2	64.6	93.5	90.6
May.....	81.4	74.7	76.9	66.9	77.4	72.4	78.2	65.4	91.2	84.7
June.....	81.9	72.4	67.4	58.1	80.9	74.5	77.1	63.0	86.0	76.2
July.....	79.9	64.4	63.6	55.6	84.8	78.6	75.2	60.4	82.7	73.7
August.....	81.3	67.2	65.3	58.9	86.6	81.4	76.6	59.0	84.1	77.4
September.....	81.6	67.4	69.5	59.2	81.4	68.3	69.7	52.6	86.0	76.6
October.....	84.5	70.6	73.0	62.4	68.6	58.1	69.5	50.9	82.9	70.9
November.....	85.8	70.3	70.7	57.2	67.4	55.9	65.1	48.1	82.5	70.4
December.....	84.5	68.8	70.9	57.9	66.0	55.2	63.1	44.9	83.0	71.5

TABLE 6.—INDEXES TO EMPLOYMENT AND PAY-ROLL TOTALS IN **MANUFACTURING INDUSTRIES**, JANUARY TO DECEMBER, 1931, AND YEARLY AVERAGES, 1923 TO 1931—Continued

Year and month	Textiles and their products—Continued								Iron and steel and their products	
	Clothing, men's		Shirts and collars		Clothing, women's		Millinery and lace goods		Group index	
	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals
1923 average.....	118.6	128.4	118.9	117.1	126.3	124.4	138.1	133.1	108.5	102.7
1924 average.....	106.9	111.0	100.6	97.5	111.9	108.6	120.3	117.1	93.8	89.1
1925 average.....	103.1	105.8	103.3	103.2	105.6	109.3	117.1	115.8	95.0	93.3
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927 average.....	97.8	97.3	95.0	96.3	105.4	107.4	95.6	96.8	93.2	91.9
1928 average.....	92.2	89.0	92.2	89.9	105.4	105.2	93.5	92.7	91.5	92.8
1929 average.....	91.9	88.2	92.7	90.8	105.4	105.1	93.1	91.1	98.9	102.6
1930 average.....	80.4	67.9	81.1	70.9	94.2	87.2	85.1	78.4	84.8	79.2
1931 average.....	74.6	56.2	72.3	57.1	85.3	70.3	76.4	63.8	66.2	49.9
1931										
January.....	71.2	53.9	67.2	52.9	87.8	72.1	76.8	63.3	71.6	56.8
February.....	75.6	62.9	71.5	59.1	93.6	85.3	82.4	73.0	72.0	60.4
March.....	77.5	66.2	74.2	62.4	98.6	93.8	88.3	86.1	72.6	62.0
April.....	76.1	58.2	75.1	62.8	98.3	83.7	84.4	77.7	71.9	60.7
May.....	72.8	50.7	74.9	62.7	93.2	72.4	76.5	60.9	70.3	57.8
June.....	73.3	55.6	72.7	57.8	84.9	62.4	72.4	56.6	67.4	52.0
July.....	76.3	62.1	71.4	59.4	74.1	57.2	67.9	51.4	65.1	47.3
August.....	78.7	65.0	72.4	59.1	80.1	63.5	77.4	66.6	63.3	45.0
September.....	79.8	59.3	74.6	59.0	85.4	73.6	79.6	68.3	62.1	41.1
October.....	77.0	54.8	75.9	57.0	80.2	67.4	75.2	60.0	60.3	40.0
November.....	69.7	43.0	71.8	50.3	73.5	56.6	68.1	51.9	59.0	37.6
December.....	66.8	42.8	65.3	42.9	73.5	55.4	67.5	49.9	58.8	38.0

Year and month	Iron and steel and their products—Continued									
	Iron and steel		Cast-iron pipe		Structural-iron work		Foundry and machine-shop products		Hardware	
	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals
1923 average.....	102.1	97.3	94.3	92.8	100.8	93.9	115.3	110.7	113.4	102.0
1924 average.....	95.4	91.3	98.2	97.8	91.7	86.3	93.0	87.2	104.2	95.7
1925 average.....	97.9	96.4	95.6	96.2	92.5	91.5	93.1	90.6	103.6	98.4
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927 average.....	92.9	91.4	89.8	88.1	94.9	95.0	93.8	92.4	92.2	90.9
1928 average.....	90.9	92.7	80.1	75.9	95.0	97.9	92.3	92.8	88.9	88.4
1929 average.....	94.7	99.3	76.1	75.5	102.1	104.4	104.3	108.1	91.9	93.7
1930 average.....	84.5	79.8	67.4	65.6	92.2	89.0	87.8	81.5	78.8	68.5
1931 average.....	70.0	51.8	55.6	46.3	71.1	57.4	65.0	49.1	65.3	47.4
1931										
January.....	74.8	58.8	53.8	46.8	78.9	67.4	71.9	56.9	69.7	53.5
February.....	75.1	64.9	56.8	50.6	75.8	64.6	72.3	59.1	69.2	54.1
March.....	76.2	67.8	58.5	54.6	75.4	63.9	72.3	59.9	69.3	55.2
April.....	76.2	67.3	60.6	58.2	74.1	60.7	70.9	58.2	68.8	53.6
May.....	74.2	62.1	61.0	55.8	72.5	60.8	69.5	56.4	68.0	53.2
June.....	70.7	54.1	59.2	48.6	71.2	58.7	66.6	51.6	66.7	48.8
July.....	69.7	48.3	58.0	48.6	71.9	61.0	63.3	46.5	64.4	44.3
August.....	68.2	46.2	56.5	44.2	72.1	57.8	60.9	43.5	62.0	44.2
September.....	65.6	40.4	53.3	37.7	69.3	54.1	60.1	40.7	61.5	39.3
October.....	63.5	38.3	51.1	36.7	65.6	49.0	58.1	39.9	61.8	42.2
November.....	62.5	36.3	49.7	36.2	63.7	46.1	57.1	37.7	61.2	40.8
December.....	63.0	37.1	49.1	37.0	62.2	44.5	57.4	38.9	60.4	40.1

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN **MANUFACTURING INDUSTRIES**, JANUARY TO DECEMBER, 1931, AND YEARLY AVERAGES, 1923 TO 1931—Continued

Year and month	Iron and steel and their products—Cont'd.						Lumber and its products			
	Machine tools		Steam fittings and steam and hot-water heating apparatus		Stoves		Group index		Lumber, sawmills	
	Em- plov- ment	Pay- roll totals	Em- plov- ment	Pay- roll totals	Em- plov- ment	Pay- roll totals	Em- plov- ment	Pay- roll totals	Em- plov- ment	Pay- roll totals
1923 average.....	98.1	88.5	103.3	98.0	116.3	113.9	110.0	102.4	115.1	106.5
1924 average.....	82.0	74.9	98.6	95.4	100.3	101.0	104.4	99.6	108.0	102.8
1925 average.....	85.8	83.4	100.1	97.4	97.8	97.8	102.5	100.4	103.6	101.7
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927 average.....	92.8	92.2	92.5	91.9	91.2	90.4	91.9	93.1	91.0	92.4
1928 average.....	100.8	107.5	82.2	81.9	87.6	84.7	87.8	88.8	86.7	88.0
1929 average.....	129.8	139.8	78.5	78.8	90.8	87.3	87.9	88.9	85.9	86.9
1930 average.....	98.7	90.2	65.2	58.7	74.3	64.1	68.9	64.7	67.7	65.0
1931 average.....	62.6	48.4	54.8	40.7	60.6	44.7	51.9	40.8	48.3	37.1
1931										
January.....	74.4	56.6	60.9	49.8	52.7	38.5	54.1	43.1	50.9	40.0
February.....	73.0	57.6	60.0	49.9	60.0	47.1	54.3	44.7	50.6	40.3
March.....	72.9	58.3	60.1	47.4	64.7	50.3	54.1	45.4	50.3	41.2
April.....	70.8	56.1	57.7	44.7	65.4	50.0	54.3	44.1	51.1	40.1
May.....	68.7	54.5	55.8	41.9	64.8	50.3	54.6	45.0	51.6	41.8
June.....	65.3	50.6	54.6	40.0	62.6	46.0	54.1	43.9	51.6	41.9
July.....	61.1	49.1	53.2	38.5	54.8	39.4	52.0	41.1	49.3	38.7
August.....	54.3	44.1	51.4	37.4	60.0	43.4	51.8	40.5	48.3	37.1
September.....	55.8	39.8	51.0	34.3	63.8	48.0	50.7	39.5	47.0	36.1
October.....	54.4	40.2	53.4	38.3	64.3	48.7	49.8	37.4	45.7	33.2
November.....	50.2	36.6	51.4	34.3	60.0	41.0	48.1	33.7	43.8	29.9
December.....	50.1	37.2	48.0	31.5	53.5	33.8	44.7	30.6	39.7	25.4

Year and month	Lumber and its products—Continued				Leather and its products					
	Lumber, mill-work		Furniture		Group index		Leather		Boots and shoes	
	Em- plov- ment	Pay- roll totals	Em- plov- ment	Pay- roll totals	Em- plov- ment	Pay- roll totals	Em- plov- ment	Pay- roll totals	Em- plov- ment	Pay- roll totals
1923 average.....	101.5	95.5	100.4	94.2	110.7	113.9	109.6	107.0	111.1	117.0
1924 average.....	101.2	98.0	95.2	90.7	100.3	100.6	96.9	95.7	101.6	102.8
1925 average.....	103.0	101.8	99.1	95.6	101.9	101.8	98.7	97.5	102.9	103.6
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927 average.....	89.2	89.2	96.1	98.2	97.9	97.4	98.4	97.2	97.7	97.6
1928 average.....	85.5	85.6	92.5	93.2	92.8	89.7	95.4	93.7	91.9	88.0
1929 average.....	83.1	82.8	95.9	97.0	92.8	89.9	92.2	93.2	92.9	89.0
1930 average.....	63.9	61.0	75.2	66.6	85.0	72.9	85.2	83.0	85.0	70.1
1931 average.....	52.2	43.0	61.0	46.6	79.2	62.7	76.6	70.0	79.9	60.6
1931										
January.....	53.6	44.9	62.7	48.4	76.7	58.6	77.6	69.9	76.5	55.4
February.....	54.8	47.1	63.7	52.2	79.4	66.5	77.6	72.0	79.9	64.9
March.....	55.0	47.6	63.4	52.4	82.3	70.9	78.4	73.8	83.3	70.1
April.....	55.2	47.7	62.2	49.7	81.5	68.2	77.6	73.3	82.5	66.8
May.....	56.0	49.1	61.5	48.7	79.9	66.5	77.3	73.8	80.6	64.4
June.....	54.3	47.3	60.4	45.8	78.8	64.5	77.3	73.1	79.2	62.1
July.....	53.1	44.6	58.5	43.6	83.6	70.2	79.2	74.2	84.7	69.0
August.....	52.6	43.5	60.5	45.6	85.7	72.9	80.1	75.7	87.1	72.1
September.....	49.3	38.7	61.4	46.9	83.3	65.4	77.5	70.6	79.2	63.9
October.....	48.0	36.6	61.5	46.3	78.3	54.6	74.6	65.6	79.2	51.5
November.....	47.7	34.7	59.4	40.8	68.9	45.6	71.6	60.1	68.2	41.4
December.....	46.5	34.3	56.9	38.6	72.4	48.6	69.9	57.9	73.0	46.0

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JANUARY TO DECEMBER 1931, AND YEARLY AVERAGES, 1923 TO 1931—Continued

Year and Month	Paper and printing									
	Group index		Paper and pulp		Paper boxes		Printing, book and job		Printing, newspapers	
	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals
1923 average.....	96.5	89.7	104.6	97.6	98.9	91.3	96.1	87.8	89.5	84.5
1924 average.....	96.7	91.7	98.6	94.4	98.2	93.3	97.9	90.8	93.1	89.7
1925 average.....	97.3	94.3	98.7	96.8	98.6	95.6	97.5	93.1	95.4	93.0
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927 average.....	100.1	101.2	97.5	96.6	96.8	90.0	100.3	102.1	103.4	104.6
1928 average.....	99.2	101.5	94.4	94.9	94.0	90.4	99.2	101.6	105.2	107.4
1929 average.....	101.3	106.0	95.5	98.2	96.0	103.3	102.6	105.8	112.8	112.8
1930 average.....	98.3	101.9	91.3	89.8	89.7	92.9	99.5	102.6	108.5	112.3
1931 average.....	90.5	89.0	80.8	70.3	82.1	79.6	89.7	87.6	105.6	106.6
1931										
January.....	93.6	93.9	82.5	74.9	82.8	79.8	96.8	97.3	107.1	108.1
February.....	92.5	93.2	82.4	77.9	81.7	80.6	94.8	94.0	105.8	107.2
March.....	92.4	94.5	82.0	77.1	81.9	83.0	93.0	94.4	107.9	110.4
April.....	92.0	93.4	82.0	75.5	82.0	82.1	91.9	92.6	107.6	110.2
May.....	92.0	92.7	82.6	75.2	81.4	81.7	91.5	90.9	107.7	110.3
June.....	90.2	89.6	81.0	71.2	80.9	79.8	88.7	87.5	106.2	107.9
July.....	89.5	86.8	81.1	68.1	80.1	76.9	88.1	85.2	104.5	104.8
August.....	89.2	86.3	81.2	69.5	81.1	78.0	88.4	85.0	102.6	102.2
September.....	88.4	83.9	79.5	64.2	83.1	77.7	86.0	80.8	103.0	103.2
October.....	89.0	84.9	79.6	65.4	84.7	82.8	85.3	79.8	105.1	105.0
November.....	88.6	84.2	78.4	63.6	83.9	78.4	85.7	80.6	104.9	104.4
December.....	88.4	84.4	77.6	61.5	81.5	74.6	86.7	83.2	105.1	105.1
Chemicals and allied products										
Year and month	Chemicals and allied products								Stone, clay, and glass products	
	Group index		Chemicals		Fertilizers		Petroleum refining		Group Index	
1923 average.....	101.8	98.2	104.9	96.6	96.2	91.8	99.7	102.1	100.2	93.5
1924 average.....	93.1	91.0	96.2	92.5	86.9	83.6	91.8	91.7	97.0	95.2
1925 average.....	95.8	94.2	97.3	94.3	95.1	90.6	94.9	95.2	97.9	97.3
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927 average.....	96.6	99.1	100.0	103.7	91.2	94.0	94.6	95.6	94.5	94.2
1928 average.....	93.4	95.9	99.3	103.3	95.4	97.1	84.8	87.2	89.7	89.6
1929 average.....	99.4	102.3	103.2	107.1	95.2	94.7	96.5	99.1	86.6	85.3
1930 average.....	92.9	94.5	94.3	94.1	89.5	87.5	92.6	95.9	73.1	67.3
1931 average.....	77.7	75.7	85.6	81.7	62.9	56.2	73.5	73.4	59.7	47.9
1931										
January.....	84.5	81.7	90.8	84.3	73.5	66.6	81.0	81.8	57.5	45.9
February.....	83.9	83.7	90.5	87.5	74.2	66.5	79.7	83.1	58.8	50.7
March.....	82.2	80.6	88.8	87.2	93.7	78.3	71.5	74.8	61.1	53.1
April.....	86.8	83.7	86.6	84.1	116.4	105.4	77.9	79.7	63.6	54.7
May.....	80.6	79.8	85.0	82.9	72.9	66.5	78.1	79.2	65.1	55.7
June.....	75.3	75.2	83.8	81.0	44.5	44.2	75.4	75.1	64.9	53.6
July.....	74.5	74.1	84.5	80.5	41.3	40.7	73.7	73.8	61.2	47.8
August.....	73.1	71.7	82.6	78.6	44.2	40.8	71.6	70.5	60.7	47.3
September.....	74.3	71.8	85.2	80.5	50.1	44.0	69.9	68.4	59.8	45.4
October.....	73.9	71.5	85.5	82.2	49.0	41.3	68.8	66.6	57.1	43.1
November.....	72.0	67.7	83.3	76.8	46.8	38.3	67.4	64.2	54.5	40.3
December.....	71.0	66.7	80.7	74.2	48.5	41.2	67.3	64.1	51.7	36.9

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN **MANUFACTURING INDUSTRIES**, JANUARY TO DECEMBER, 1931, AND YEARLY AVERAGES, 1923 TO 1931—Continued

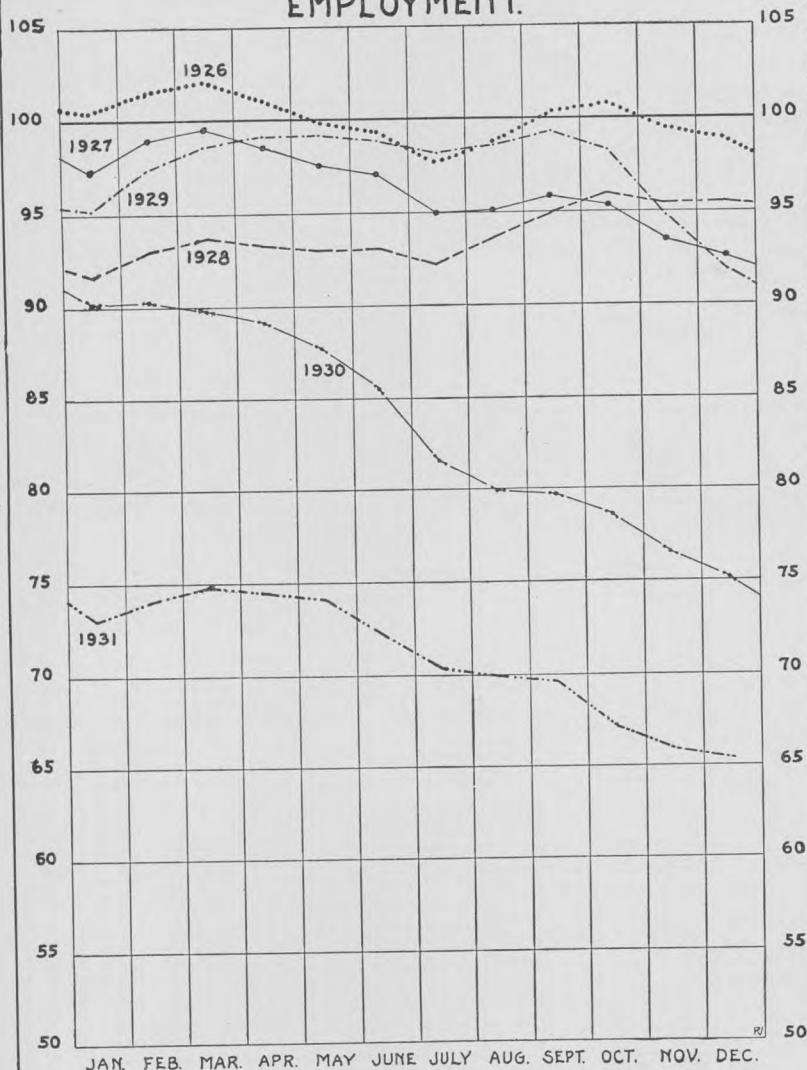
Year and month	Stone, clay, and glass products—Continued								Metal products, other than iron and steel	
	Cement		Brick, tile, and terra cotta		Pottery		Glass		Group index	
	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals
1923 average.....	109.0	104.2	99.3	95.1	93.7	85.8	101.1	92.6	102.6	101.5
1924 average.....	108.9	107.9	97.4	98.5	100.6	95.1	91.4	88.2	95.1	93.0
1925 average.....	105.3	104.9	98.9	99.1	98.3	96.3	94.4	93.4	99.2	99.4
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927 average.....	95.8	96.5	94.3	94.1	94.5	94.2	94.2	93.4	92.9	91.6
1928 average.....	87.7	88.3	84.9	82.8	95.3	93.4	92.9	94.3	92.8	96.1
1929 average.....	81.1	81.0	80.5	76.9	94.2	91.0	94.6	97.3	97.6	102.8
1930 average.....	74.1	71.5	63.1	55.3	84.7	74.7	81.3	78.3	79.1	74.1
1931 average.....	59.2	50.4	46.8	32.6	76.0	58.8	70.4	62.6	68.0	55.5
1931										
January.....	56.1	44.4	43.9	32.0	78.5	60.1	67.3	59.3	69.7	58.6
February.....	56.9	50.3	44.5	34.0	79.5	65.4	70.1	67.3	70.7	62.4
March.....	60.0	53.2	47.7	36.8	79.1	67.4	72.2	69.1	71.3	64.0
April.....	63.9	57.6	51.1	38.5	80.6	70.6	72.9	68.1	71.0	63.1
May.....	66.1	61.1	52.7	39.4	82.1	69.0	74.0	69.0	70.4	61.6
June.....	64.2	60.4	52.9	37.9	77.9	58.5	76.1	69.5	69.3	57.9
July.....	64.5	56.3	50.9	34.6	71.7	48.9	69.1	61.3	67.8	53.2
August.....	61.3	52.8	48.8	32.5	73.9	53.7	70.9	61.9	66.1	51.9
September.....	58.2	48.2	46.9	30.8	73.8	51.7	72.3	61.4	66.4	50.1
October.....	56.9	45.3	43.2	27.6	73.5	55.2	69.3	58.0	65.2	49.1
November.....	52.7	40.8	41.5	25.7	72.4	54.2	65.3	53.7	64.0	47.5
December.....	49.1	34.9	37.3	21.8	69.0	50.7	65.4	52.6	63.6	46.8

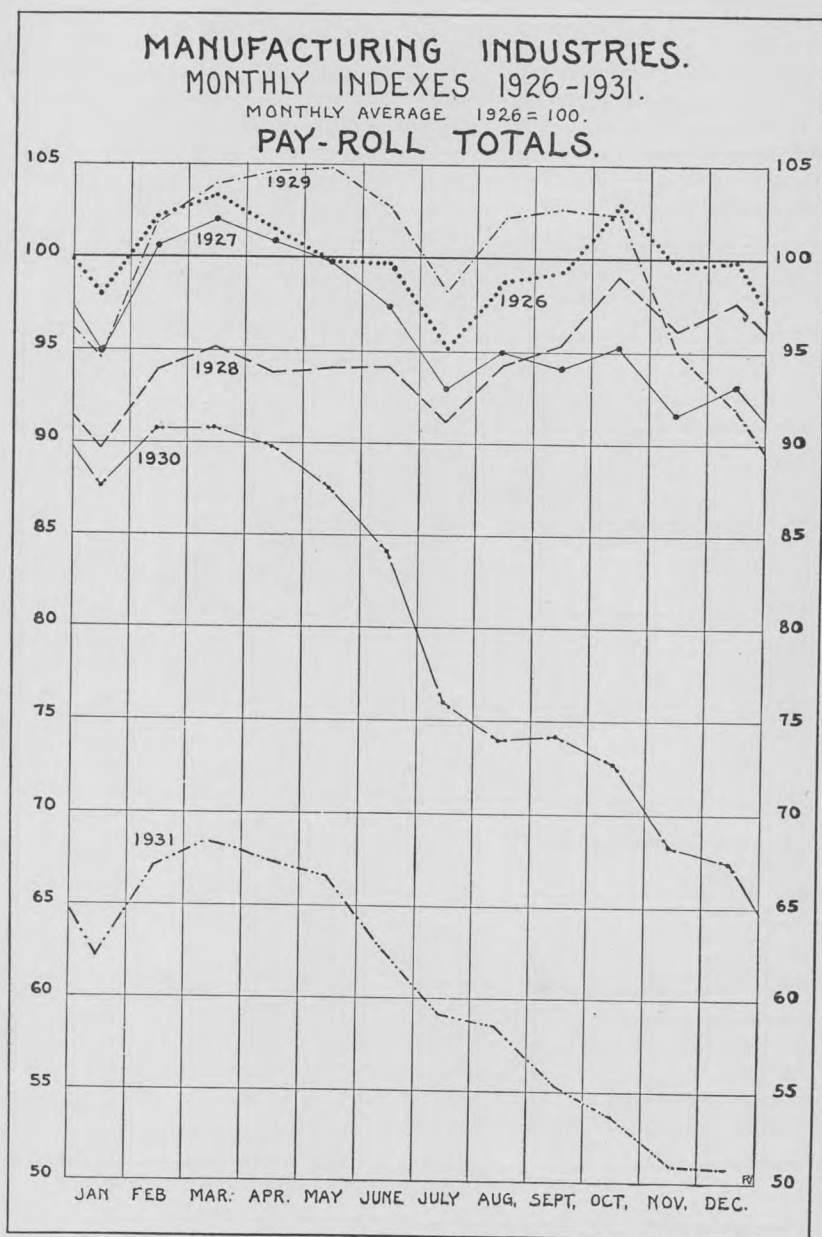
Year and month	Metal products, other than iron and steel—Continued				Tobacco products					
	Stamped and enameled ware		Brass, bronze, and copper products		Group index		Chewing and smoking tobacco and snuff		Cigars and cigarettes	
	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals
1923 average.....	105.2	109.3	101.3	98.9	116.9	114.0	105.4	100.1	118.3	115.9
1924 average.....	94.7	93.2	95.2	92.9	109.8	108.9	105.2	101.2	110.4	109.9
1925 average.....	99.0	100.2	99.2	99.1	107.5	105.7	97.0	98.3	109.0	106.7
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927 average.....	88.9	90.6	94.5	92.0	98.1	97.1	97.7	97.7	98.1	97.0
1928 average.....	88.8	90.4	94.4	98.0	96.0	93.5	95.2	94.1	96.0	93.4
1929 average.....	90.4	91.1	101.1	107.4	93.6	92.8	89.3	89.6	94.2	93.2
1930 average.....	77.9	71.8	79.7	74.9	89.5	84.1	89.5	87.7	89.5	83.7
1931 average.....	70.6	58.8	66.7	54.2	81.3	69.3	86.1	79.3	80.7	68.1
1931										
January.....	68.6	54.8	70.2	60.1	77.7	68.2	93.7	87.2	75.6	65.9
February.....	72.7	67.0	69.8	60.6	85.6	69.3	93.8	88.1	84.6	67.0
March.....	72.7	67.3	70.7	62.7	85.0	72.4	92.2	84.3	84.1	71.0
April.....	73.8	67.3	69.7	61.5	82.1	69.5	79.8	73.9	82.4	69.0
May.....	72.3	63.9	69.5	60.7	82.7	72.3	84.6	78.7	82.4	71.5
June.....	72.6	62.0	67.7	56.3	81.7	72.6	81.8	77.1	81.7	72.0
July.....	70.8	55.6	66.3	52.2	81.3	71.4	80.7	76.8	81.4	70.8
August.....	70.2	56.7	64.2	50.0	81.0	70.2	83.3	78.5	80.7	69.2
September.....	70.7	56.3	64.4	47.7	81.4	66.4	82.4	75.1	81.3	65.4
October.....	69.2	54.5	63.3	47.0	81.8	68.5	84.9	78.0	81.4	67.3
November.....	66.9	50.9	62.6	46.1	81.4	68.4	87.4	74.6	80.6	67.6
December.....	66.2	49.8	62.3	45.6	73.7	62.5	88.8	79.2	71.8	60.5

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN **MANUFACTURING INDUSTRIES**, JANUARY TO DECEMBER, 1931, AND YEARLY AVERAGES, 1923 TO 1931—Continued

Year and month	Vehicles for land transportation													
	Group index		Automobiles		Carriages and wagons		Car building and repairing, electric-railroad		Car building and repairing, steam-railroad					
	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals				
1923 average.....	109.6	107.7	93.0	92.0	108.8	108.3	112.7	110.1	123.8	120.9				
1924 average.....	97.2	94.3	87.0	83.8	90.8	95.0	100.0	97.8	105.8	102.8				
1925 average.....	99.8	100.7	99.0	102.4	100.2	100.4	99.6	100.5	100.6	99.4				
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				
1927 average.....	90.8	91.6	91.2	90.3	78.7	83.6	100.9	101.1	90.3	92.3				
1928 average.....	95.8	98.3	111.3	114.4	76.7	82.1	94.9	96.2	83.5	85.4				
1929 average.....	99.8	105.2	116.9	118.7	78.6	84.1	91.9	93.9	85.1	92.3				
1930 average.....	78.3	75.1	83.7	74.6	56.7	61.8	86.9	87.6	72.9	74.8				
1931 average.....	61.9	53.4	67.7	53.0	36.5	36.9	75.5	72.7	56.0	52.5				
1931														
January.....	66.7	49.4	69.9	38.9	34.5	35.2	79.7	77.1	63.1	58.2				
February.....	66.9	61.0	71.5	59.4	36.4	38.4	79.7	78.3	62.1	61.5				
March.....	67.8	63.5	75.2	65.9	37.9	40.9	79.4	79.5	60.6	59.9				
April.....	68.2	64.7	76.8	68.8	40.8	40.9	78.9	77.9	59.9	59.6				
May.....	68.3	65.6	79.1	73.5	41.5	42.6	77.7	76.2	58.2	56.9				
June.....	65.3	58.0	74.3	60.4	37.1	40.0	76.5	74.4	56.7	54.4				
July.....	61.8	51.6	68.8	51.8	38.1	38.8	74.2	70.8	54.7	50.1				
August.....	60.4	49.8	67.0	49.0	37.1	37.5	72.5	67.9	53.8	49.3				
September.....	59.2	44.3	65.4	40.4	36.4	36.6	72.4	66.4	52.9	46.6				
October.....	52.2	43.7	51.7	40.3	33.6	33.2	72.0	67.5	51.4	45.5				
November.....	51.0	43.8	51.1	41.2	33.1	30.6	71.7	68.6	49.6	44.6				
December.....	55.5	45.7	61.6	46.7	31.2	27.7	71.1	68.2	49.0	43.2				
Miscellaneous industries														
Year and month	Group index		Agricultural implements		Electrical machinery, apparatus, and supplies		Pianos and organs		Rubber boots and shoes		Automobile tires and inner tubes		Shipbuilding	
	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals
1923 average.....	103.3	98.1	101.3	89.8	101.3	97.0	105.3	94.9	116.7	107.2	91.1	88.2	108.6	103.0
1924 average.....	90.7	89.0	81.2	75.2	95.1	94.7	99.9	96.6	82.7	76.6	88.6	88.1	90.2	88.8
1925 average.....	94.6	92.8	93.6	90.8	92.1	92.2	98.9	97.8	97.1	97.7	102.2	100.4	92.6	90.3
1926 average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927 average.....	99.5	100.9	91.9	92.2	95.1	95.7	90.4	87.4	103.3	107.7	97.3	98.2	104.8	105.8
1928 average.....	91.6	91.9	106.8	111.8	93.9	95.9	77.1	74.3	101.1	101.0	103.3	105.7	82.8	83.0
1929 average.....	110.7	112.3	121.1	125.3	118.3	121.5	66.6	63.8	97.6	99.3	104.1	101.8	105.3	108.1
1930 average.....	94.1	92.7	92.3	85.6	101.6	102.0	47.4	41.1	80.2	74.2	77.6	73.4	114.9	116.4
1931 average.....	75.1	65.3	47.8	37.4	80.9	71.4	35.7	26.1	66.3	50.0	68.6	57.6	95.8	88.0
1931														
January.....	82.2	73.1	77.6	66.8	87.9	78.8	43.3	33.1	69.7	54.7	68.9	59.0	103.7	98.3
February.....	81.3	73.6	75.8	66.6	87.7	80.5	42.1	30.6	68.1	47.4	68.1	60.9	100.3	96.2
March.....	79.4	72.4	66.4	53.7	87.0	80.5	42.4	32.5	55.8	34.9	68.3	63.3	97.6	92.3
April.....	79.3	71.9	59.9	43.6	86.2	78.9	41.5	31.6	61.7	43.9	69.0	65.1	100.3	94.9
May.....	78.0	72.0	49.7	36.3	84.3	78.1	39.1	27.4	63.5	45.6	72.5	69.4	98.2	96.6
June.....	76.5	68.3	43.9	32.0	82.4	73.0	31.8	22.9	66.2	48.1	73.3	70.5	98.0	89.8
July.....	73.6	63.1	35.2	27.6	79.7	68.9	29.1	19.3	67.0	51.1	71.1	60.2	94.8	84.0
August.....	71.0	62.5	31.3	24.0	77.1	69.0	34.5	23.5	62.4	51.8	69.4	58.0	88.9	81.4
September.....	71.2	57.8	31.0	23.2	77.3	64.3	32.2	24.7	69.5	57.1	67.3	48.1	90.5	77.4
October.....	69.9	57.3	32.0	23.5	75.6	62.7	31.4	23.6	69.5	57.0	65.5	47.1	89.8	82.0
November.....	69.3	55.7	34.2	24.8	73.3	61.7	30.9	21.7	72.4	54.9	65.1	43.5	93.3	80.0
December.....	69.0	56.0	36.8	26.7	72.7	60.5	29.8	21.7	69.8	53.0	64.9	46.1	93.9	83.3

MANUFACTURING INDUSTRIES.
MONTHLY INDEXES 1926-1931.
MONTHLY AVERAGE 1926=100.
EMPLOYMENT.





Time Worked in Manufacturing Industries in December, 1931

REPORTS as to working time in December were received from 12,401 establishments in 64 manufacturing industries. Two per cent of these establishments were idle, while 49 per cent were operating on a full-time basis, and 49 per cent were operating part time.

An average of 87 per cent of full-time operation in December was shown by reports received from operating establishments included in this tabulation. In the establishments reporting part-time operation, the average percentage of full-time operation was 73 per cent. These percentage figures show no change in operating time from the percentages shown in the previous month's compilation.

TABLE 7.—PROPORTION OF FULL TIME WORKED IN MANUFACTURING INDUSTRIES BY ESTABLISHMENTS REPORTING IN DECEMBER, 1931

Industry	Establishments reporting		Per cent of establishments in which employees worked		Average per cent of full time reported by—	
	Total number	Per cent idle	Full time	Part time	All operating establishments	Establishments operating part time
Food and kindred products	1,710	1	75	24	95	79
Slaughtering and meat packing.....	167	-----	77	23	98	90
Confectionery.....	266	1	65	35	93	9
Ice Cream.....	233	(1)	65	34	94	83
Flour.....	388	3	66	32	91	71
Baking.....	644	(1)	89	11	98	80
Sugar refining, cane.....	12	-----	50	50	90	81
Textiles and their products	1,997	3	58	39	91	76
Cotton goods.....	476	1	54	45	88	73
Hosiery and knit goods.....	308	1	59	39	92	80
Silk goods.....	236	1	72	27	95	81
Woolen and worsted goods.....	173	4	53	43	89	75
Carpets and rugs.....	23	-----	39	61	83	72
Dyeing and finishing textiles.....	123	-----	45	55	87	77
Clothing, men's.....	246	8	53	39	90	77
Shirts and collars.....	75	7	56	37	92	81
Clothing, women's.....	239	8	69	23	93	72
Millinery and lace goods.....	98	2	58	40	91	78
Iron and steel and their products	1,671	2	22	77	73	66
Iron and steel.....	139	5	24	71	77	69
Cast-iron pipe.....	32	9	9	81	62	57
Structural-iron work.....	154	1	27	71	82	75
Foundry and machine-shop products.....	942	1	24	75	73	65
Hardware.....	64	-----	17	83	70	64
Machine tools.....	122	2	16	82	73	68
Steam fittings and steam and hot-water heating apparatus.....	98	1	11	88	67	62
Stoves.....	120	2	15	83	72	67
Lumber and its products	1,122	2	29	69	78	69
Lumber, sawmills.....	466	3	24	73	75	67
Lumber, millwork.....	303	1	25	74	79	71
Furniture.....	353	1	39	60	82	71
Leather and its products	370	1	36	62	82	72
Leather.....	121	-----	46	54	87	75
Boots and shoes.....	249	2	31	67	80	71
Paper and printing	1,545	1	58	42	91	79
Paper and pulp.....	313	3	34	64	82	73
Paper boxes.....	264	-----	44	56	88	79
Printing, book and job.....	573	-----	56	44	92	82
Printing, newspapers.....	395	-----	89	11	99	90
Chemicals and allied products	349	2	66	32	93	78
Chemicals.....	131	1	62	37	92	79
Fertilizers.....	151	3	60	37	91	77
Petroleum refining.....	67	-----	91	9	99	86

¹ Less than one-half of 1 per cent.

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TABLE 7.—PROPORTION OF FULL TIME WORKED IN **MANUFACTURING** INDUSTRIES BY ESTABLISHMENTS REPORTING IN DECEMBER, 1931—Continued

Industry	Establishments reporting		Per cent of establishments in which employees worked		Average per cent of full time reported by—	
	Total number	Per cent idle	Full time	Part time	All operating establishments	Establishments operating part time
Stone, clay, and glass products	695	16	44	40	85	68
Cement.....	83	23	69	8	97	72
Brick, tile, and terra cotta.....	371	20	35	45	80	65
Pottery.....	100	7	22	71	78	72
Glass.....	141	6	71	23	95	79
Metal products, other than iron and steel	207	(¹)	29	71	80	72
Stamped and enameled ware.....	73	1	27	71	81	74
Brass, bronze, and copper products.....	134	-----	30	70	80	71
Tobacco products	207	4	40	56	87	77
Chewing and smoking tobacco and snuff.....	24	-----	42	58	88	79
Cigars and cigarettes.....	183	4	40	56	87	77
Vehicles for land transportation	1,073	(¹)	48	52	88	77
Automobiles.....	168	1	38	62	84	74
Carriages and wagons.....	40	5	35	60	84	74
Car building and repairing, electric-railroad.....	391	-----	70	30	95	82
Car building and repairing, steam railroad.....	474	(¹)	34	66	85	77
Miscellaneous industries	407	2	31	67	84	77
Agricultural implements.....	75	5	31	64	82	74
Electrical machinery, apparatus, and supplies.....	169	1	18	81	82	78
Pianos and organs.....	41	-----	27	73	83	76
Rubber boots and shoes.....	7	-----	43	57	90	82
Automobile tires and inner tubes.....	34	-----	12	88	77	74
Shipbuilding.....	81	4	69	27	95	82
Industries added in 1929 and 1930	1,048	(¹)	60	40	89	73
Radio.....	33	-----	70	30	95	84
Rayon.....	10	-----	40	60	90	83
Aircraft.....	33	3	76	21	95	76
Jewelry.....	137	1	45	55	85	73
Paint and varnish.....	334	-----	58	42	90	75
Rubber goods, other than boots, shoes, tires, and inner tubes.....	100	1	46	53	87	77
Beet sugar.....	45	2	93	4	98	65
Beverages.....	292	(¹)	67	33	90	68
Cash registers.....	50	-----	56	44	88	73
Typewriters.....	14	-----	57	43	82	54
Total	12,401	2	49	49	87	73

¹ Less than one-half of 1 per cent.

Employment in Nonmanufacturing Industries in December, 1931

IN THE following table are presented data for 14 groups of nonmanufacturing industries, the totals of which also appear in the summary table of employment and pay-roll totals.

The retail trade group reported large gains in both employment and earnings, from November to December, reflecting the Christmas trade, and the crude petroleum groups also reported gains in both items. The bituminous coal mining industry reported a slight increase in number of workers, coupled with a decrease of 4.2 per cent in employee's earnings, while the telephone and telegraph group reported a decrease of 0.5 per cent in employment combined with an increase in pay-roll totals of 3.3 per cent. The remaining 10 groups reported losses in both employment and earnings over the month interval, the decreases in employment ranging from 0.5 per cent in the wholesale trade group to 33 per cent in the canning and preserving group.

The level of employment and pay-roll totals in each of these 14 groups in December, 1931, was considerably below the level of the corresponding month of 1930. Laundries reported the least change in employment over the year interval, 4.9 per cent, while the greatest decline was shown in the canning and preserving industry which registered a drop of 33.9 per cent in number of workers over the 12-month period. Decreases in employment over the year interval, ranging from 19.2 per cent to 27 per cent, were reported in anthracite mining, quarrying and nonmetallic mining, crude petroleum producing, and metalliferous mining. The decreases in pay-roll totals in these 14 groups over the 12-month period were, with one exception (telephone and telegraph), more pronounced than the declines in employment.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL NONMANUFACTURING ESTABLISHMENTS IN NOVEMBER AND DECEMBER, 1931, PER CENT OF CHANGE OVER A YEAR INTERVAL, AND INDEX NUMBERS OF EMPLOYMENT AND PAY-ROLL TOTALS, DECEMBER, 1931

Industrial group	Estab-lish-ments reporting in both Novem-ber and Decem-ber, 1931	Employment			Pay-roll totals			Index num-bers, Decem-ber, 1931 (average 1929=100)	
		Number on pay roll, Decem-ber, 1931	Per cent of change		Amount of pay roll (1 week) Decem-ber, 1931	Per cent of change		Em-ploy-ment	Pay-roll totals
			Nov. to Dec., 1931	Dec., 1930, to Dec., 1931		Nov. to Dec., 1931	Dec., 1930, to Dec., 1931		
Anthracite.....	160	108,857	-4.4	-19.2	\$3,101,869	-1.4	-21.2	80.6	75.4
Bituminous.....	1,274	198,538	+0.1	-12.2	3,320,508	-4.2	-32.7	83.2	57.5
Metalliferous mining.....	246	31,565	-3.0	-27.0	660,154	-2.2	-42.7	59.1	44.8
Quarrying and nonmetallic mining.....	787	23,998	-9.1	-23.2	442,672	-14.8	-38.4	67.4	53.4
Crude petroleum producing.....	274	15,926	+1.0	-24.8	503,501	+5.6	-28.9	65.7	61.7
Telephone and telegraph.....	8,066	292,772	-0.5	-9.3	8,817,525	+3.3	-8.5	86.6	93.7
Power, light, and water.....	3,371	230,884	-1.1	-12.5	7,292,200	-2.2	-14.2	95.6	96.7
Electric railroad operation and maintenance, exclusive of car shops.....	496	134,859	-2.0	-10.0	4,203,878	-2.4	-12.2	84.7	83.4
Wholesale.....	2,709	75,433	-0.5	-9.0	2,229,337	-2.4	-14.8	86.6	83.6
Retail.....	11,448	424,571	+16.8	-7.7	9,066,368	+10.2	-12.6	89.4	86.6
Hotels.....	2,338	144,820	-2.1	-10.1	2,259,421	-2.2	-17.6	92.0	85.4
Canning and preserving.....	889	25,145	-33.0	-33.9	402,870	-23.3	-35.7	80.9	65.6
Laundries.....	861	56,593	-1.0	-4.9	996,147	-1.9	-11.4	(1)	(1)
Dyeing and cleaning.....	362	11,241	-5.8	-7.2	227,163	-9.1	-14.9	(1)	(1)

¹ Data not available.

Indexes of Employment and Pay-Roll Totals for Nonmanufacturing Industries

INDEX numbers of employment and pay-roll totals, by months, for the period from January, 1930, to December, 1931, for 12 of the 14 nonmanufacturing industries appearing in the preceding table, are shown in Table 2. Index numbers for the laundering and the dyeing and cleaning groups are not presented, as data for the index base year (1929) are not available.

TABLE 2.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS FOR NONMANUFACTURING INDUSTRIES, JANUARY, 1930, TO DECEMBER, 1931

[Monthly average, 1929=100]

Year and month	Anthracite mining		Bituminous coal mining		Metalliferous mining		Quarrying and non-metallic mining		Crude petroleum producing		Telephone and telegraph		Power, light, and water		Operation and maintenance of electric railroads ¹		Wholesale trade		Retail trade		Hotels		Canning and preserving	
	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals	Em- ploy- ment	Pay- roll totals
1930																								
January.....	102.1	105.8	102.5	101.4	95.7	92.7	79.6	71.9	92.7	94.0	101.6	105.1	99.6	99.7	97.1	97.8	100.0	100.0	98.9	99.7	100.4	100.3	46.1	50.3
February.....	106.9	121.5	102.4	102.1	92.3	92.5	79.8	73.5	90.8	88.6	100.2	101.9	98.8	100.4	95.1	95.7	98.5	98.3	94.4	96.0	102.4	103.8	45.7	51.5
March.....	82.6	78.5	98.6	86.4	90.9	90.8	83.0	80.0	89.3	91.3	99.4	105.8	99.7	102.1	94.4	95.4	97.7	99.7	93.9	95.5	102.4	104.4	49.7	50.8
April.....	84.1	75.0	94.4	81.7	89.3	88.3	87.4	85.4	86.8	86.6	98.9	103.4	100.7	102.6	95.2	97.1	97.3	97.9	97.3	97.5	100.1	100.3	74.8	72.6
May.....	93.8	98.8	90.4	77.5	87.5	85.6	90.8	90.2	89.8	85.4	99.7	103.2	103.4	104.5	95.2	96.0	96.8	97.4	96.7	97.3	98.0	98.4	65.7	66.9
June.....	90.8	94.3	88.4	75.6	84.6	81.6	90.3	90.9	90.2	87.1	99.8	103.4	104.6	107.8	94.8	97.0	96.5	98.6	93.9	96.8	98.0	98.1	83.0	81.5
July.....	91.6	84.0	88.0	68.9	80.5	71.9	89.9	85.5	89.9	88.5	100.0	106.6	105.9	106.7	95.3	95.6	96.0	96.0	89.0	91.7	101.3	99.8	126.3	112.7
August.....	80.2	78.8	89.2	71.1	79.0	71.0	89.3	85.8	87.7	86.0	98.8	102.5	106.4	106.6	92.9	92.1	95.0	93.6	85.6	87.6	101.5	98.6	185.7	172.0
September.....	93.8	91.6	90.5	74.9	78.1	69.9	87.7	82.5	85.0	84.0	96.8	102.2	105.2	106.1	91.8	90.5	94.8	93.6	92.0	92.4	100.1	97.1	246.6	214.8
October.....	99.0	117.2	91.8	79.4	77.2	68.6	84.7	79.3	85.2	82.6	94.5	100.9	104.8	105.6	91.0	88.9	94.2	92.9	95.5	95.1	97.5	95.5	164.7	140.0
November.....	97.2	98.0	92.5	79.1	72.8	63.4	78.3	66.8	83.6	80.0	93.0	97.9	103.4	103.7	89.3	87.7	92.6	91.0	98.4	96.8	95.2	93.6	96.7	82.9
December.....	99.1	100.0	92.5	77.7	70.1	59.9	70.2	59.9	77.4	77.2	91.6	101.3	103.2	106.3	88.8	88.6	92.0	91.3	115.1	107.7	93.5	91.5	61.6	57.4
Average.....	93.4	95.3	93.4	81.3	83.2	78.0	84.3	79.3	87.4	85.9	97.9	102.9	103.0	104.3	93.4	93.5	96.0	95.9	95.9	96.2	99.2	98.5	103.9	96.1
1931																								
January.....	90.6	89.3	93.9	73.3	68.3	55.0	64.4	50.4	74.8	71.5	90.5	96.3	99.2	98.6	86.9	85.6	89.5	87.5	90.0	89.4	95.0	91.0	48.9	46.1
February.....	89.5	101.9	91.5	68.3	65.3	54.6	66.6	54.4	73.2	70.0	89.2	94.8	97.8	99.7	86.6	87.1	88.2	88.4	87.1	86.7	96.8	93.7	48.3	48.6
March.....	82.0	71.3	88.8	65.2	63.5	52.8	70.0	58.2	72.2	73.2	88.6	97.9	96.7	102.4	86.4	88.1	87.4	89.1	87.8	87.5	96.8	93.4	53.0	50.3
April.....	85.2	75.2	85.9	58.6	63.9	51.4	76.1	62.6	69.8	66.3	88.1	95.0	97.1	97.6	86.8	86.6	87.4	85.2	90.1	88.3	95.9	89.9	59.6	57.1
May.....	80.3	76.1	82.4	54.4	62.4	49.3	75.0	62.3	67.8	64.7	87.4	94.1	97.6	98.7	85.9	85.1	87.1	84.7	89.9	88.0	92.5	87.7	56.0	56.0
June.....	76.1	66.7	78.4	52.4	60.0	46.1	72.3	60.1	65.0	62.7	86.9	95.0	97.2	98.3	85.3	84.8	87.1	84.1	89.1	87.6	91.6	85.4	70.6	58.6
July.....	65.1	53.7	76.4	50.4	56.2	41.3	71.0	57.3	65.3	59.2	86.6	93.3	96.7	97.4	85.6	83.3	86.8	83.3	83.9	83.3	93.3	85.2	102.2	74.2
August.....	67.3	56.4	77.0	50.6	55.8	40.2	68.9	55.1	62.4	56.3	85.9	92.3	95.9	96.2	84.8	81.9	86.5	82.1	81.8	80.3	92.8	83.8	142.9	104.7
September.....	80.0	64.9	80.4	53.6	55.5	40.0	66.6	51.2	61.2	55.2	85.0	92.1	94.7	94.3	84.0	81.2	86.1	81.4	86.6	83.5	90.6	81.9	180.1	129.4
October.....	86.8	91.1	81.3	56.2	53.8	37.4	64.5	48.7	60.4	54.4	84.1	91.6	92.7	93.2	82.7	79.0	85.2	79.9	89.8	84.6	88.5	79.7	108.1	77.6
November.....	² 83.5	² 79.5	81.1	54.6	52.8	35.1	59.3	43.3	57.6	52.0	83.5	89.7	91.3	93.3	81.5	79.7	84.1	79.7	90.9	85.4	85.9	77.1	60.8	48.1
December.....	² 79.8	² 78.4	81.2	52.3	51.2	34.3	53.9	36.9	58.2	54.9	83.1	92.7	90.3	91.2	79.9	77.8	83.7	77.8	106.2	94.1	84.1	75.4	40.7	36.9
Average.....	²80.5	75.4	83.2	57.5	59.1	44.8	67.4	53.4	65.7	61.7	86.6	93.7	95.6	96.7	84.7	83.4	86.6	83.6	89.4	86.6	92.0	85.4	80.9	65.6

gitized for FRASER including electric-railroad car building and repairing see vehicles group, manufacturing industries, Table 1, et seq.

² Revised.

Trend of Employment in December, 1931, by States

IN THE following table are shown the fluctuations in employment and earnings in December, 1931, as compared with November, in certain industrial groups, by State totals. These tabulations have been prepared from information secured directly from reporting establishments and from data supplied by cooperating State agencies. The fluctuations in employment and earnings over the month interval in the combined total of the 15 industrial groups included in this monthly survey are presented, together with the changes in the manufacturing, public utility, hotel, wholesale trade, retail trade, bituminous coal mining, crude petroleum producing, quarrying and nonmetallic mining, metalliferous mining, laundries, and dyeing and cleaning groups. In presenting data concerning the public utility group, the totals of the telephone and telegraph, water-light-power, and electric-railroad operation groups have been combined and are presented as one group in this State compilation. 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 earnings in November and December, as reported by identical establishments in this industry, are included, however, in the tabulation of "all groups" by States.

As the anthracite mining industry is confined entirely to the State of Pennsylvania, the changes reported in this industry in the summary table are the fluctuations in this industry by State total.

Where 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 have been included in the State totals for "all groups." Data are not presented for any industrial group where the bureau's representation covers less than three establishments.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS IN NOVEMBER AND DECEMBER, 1931, BY STATE TOTALS, FOR 11 INDUSTRIAL GROUPS AND TOTAL OF ALL GROUPS COMBINED

[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 December, 1931	Per cent of change	Amount of pay roll (1 week) December, 1931	Per cent of change	Number of establishments	Number on pay roll December, 1931	Per cent of change	Amount of pay roll (1 week) December, 1931	Per cent of change
Alabama.....	466	51,863	-0.5	\$695,422	+0.6	193	33,247	-0.9	\$445,219	+1.5
Arkansas.....	<i>439</i>	<i>14,743</i>	<i>-1.1</i>	<i>241,940</i>	<i>-0.4</i>	<i>175</i>	<i>9,397</i>	<i>-2.9</i>	<i>130,986</i>	<i>-2.3</i>
Arizona.....	375	11,664	-1.8	282,466	-2.6	71	2,543	-7.3	62,218	-9.6
California.....	<i>1,317</i>	<i>207,070</i>	<i>-0.3</i>	<i>5,413,811</i>	<i>-2.3</i>	<i>1,080</i>	<i>117,551</i>	<i>-5.6</i>	<i>3,011,744</i>	<i>-5.9</i>
Colorado.....	542	35,162	-2.3	810,675	-3.1	129	13,939	-9.1	311,904	-11.2
Connecticut.....	986	130,155	-0.9	2,686,187	-2.1	588	109,348	-1.8	2,112,458	-2.8
Delaware.....	130	8,596	-1.8	180,089	-2.1	49	5,680	+3.7	119,655	+1.2
Florida.....	514	21,716	-12.2	452,572	-8.4	146	12,384	-24.5	223,276	-23.1
Georgia.....	603	61,984	-1.7	915,498	-0.8	277	47,747	-0.7	585,601	-2.2
Idaho.....	156	8,805	-12.3	183,909	-13.0	41	4,780	-21.0	91,284	-23.9
Illinois.....	<i>1,385</i>	<i>303,044</i>	<i>+0.9</i>	<i>7,333,557</i>	<i>+1.2</i>	<i>1,065</i>	<i>188,817</i>	<i>+2.1</i>	<i>4,084,548</i>	<i>+4.4</i>
Indiana.....	1,404	131,128	+0.5	2,880,545	+1.7	607	96,122	+1.2	2,089,452	+2.6
Iowa.....	1,203	49,103	+1.0	1,085,996	+1.9	488	26,547	+0.3	565,677	-0.9
Kansas.....	656	30,371	+1.1	686,675	+0.1	185	17,125	+0.5	401,904	-0.3
Kentucky.....	946	60,908	-3.6	1,025,692	-7.3	163	18,927	-5.8	320,836	-4.2
Louisiana.....	473	31,636	-0.7	518,496	-1.8	181	18,515	-4.4	271,744	-5.7
Maine.....	525	35,797	-2.9	711,864	+7.3	165	28,863	+0.9	543,298	+12.4
Maryland.....	<i>689</i>	<i>82,184</i>	<i>(1)</i>	<i>1,696,130</i>	<i>-2.0</i>	<i>329</i>	<i>55,309</i>	<i>-1.8</i>	<i>1,073,847</i>	<i>-0.9</i>
Massachusetts.....	<i>7,512</i>	<i>346,305</i>	<i>-0.6</i>	<i>8,234,604</i>	<i>-1.4</i>	<i>1,067</i>	<i>151,916</i>	<i>-1.7</i>	<i>3,021,108</i>	<i>-1.9</i>
Michigan.....	1,441	288,867	+11.9	7,044,426	+5.7	<i>459</i>	<i>186,385</i>	<i>+10.5</i>	<i>4,793,118</i>	<i>+6.5</i>
Minnesota.....	1,095	66,950	-3.9	1,566,048	-3.7	286	32,728	-4.2	752,224	-3.7
Mississippi.....	397	11,251	-3.6	155,997	+0.9	78	6,755	-1.5	78,530	+0.5
Missouri.....	1,137	111,230	+3.3	2,528,221	+3.8	528	60,444	+4.4	1,270,897	+7.9
Montana.....	285	8,653	-3.3	242,031	+0.7	64	3,069	-7.8	69,193	-6.7
Nebraska.....	660	26,629	+2.9	625,501	+1.8	131	13,899	+4.3	323,357	+2.6
New Hampshire.....	391	27,279	-2.2	483,068	+3.6	146	23,197	-2.2	379,383	+5.3
New Jersey.....	1,460	211,319	-1.1	5,206,343	-2.3	<i>2,759</i>	<i>188,753</i>	<i>-4.0</i>	<i>4,515,145</i>	<i>-4.6</i>
New Mexico.....	138	4,857	-2.4	99,691	+0.6	23	516	-2.3	8,596	-7.7
Nevada.....	82	1,160	-4.6	35,208	-7.1	14	197	-9.6	7,418	-9.2
New York.....	3,234	533,659	+0.9	13,921,795	+0.3	<i>2,719</i>	<i>355,731</i>	<i>-1.6</i>	<i>8,799,256</i>	<i>-2.7</i>
North Carolina.....	1,036	82,387	-0.5	1,101,448	-0.8	438	75,373	-0.5	978,661	-0.8
North Dakota.....	292	3,592	-1.9	88,740	-3.0	63	1,211	-2.5	33,896	-3.3
Ohio.....	3,257	362,485	+2.3	7,748,678	+1.8	1,479	257,794	+1.0	5,457,008	+2.1
Oklahoma.....	595	26,958	+1.5	658,358	+1.5	101	8,380	-0.7	200,257	-3.5
Oregon.....	575	28,478	-3.5	642,040	-3.5	182	16,470	-5.6	326,244	-6.1
Pennsylvania.....	3,912	635,994	-0.9	13,788,402	-0.2	1,883	355,620	-1.0	6,909,823	+ (1)
Rhode Island.....	549	55,378	-0.6	1,172,617	+3.2	269	42,154	-2.1	846,907	+3.7
South Carolina.....	405	49,286	+0.7	549,758	-1.1	180	44,543	+0.5	471,550	-0.9
South Dakota.....	226	6,118	+1.2	153,546	+4.1	47	2,293	(3)	49,770	+11.9
Tennessee.....	774	66,784	-(1)	1,051,376	-0.3	279	45,669	-1.3	690,597	-1.6
Texas.....	<i>594</i>	<i>67,895</i>	<i>-0.6</i>	<i>1,730,643</i>	<i>-1.1</i>	<i>295</i>	<i>38,447</i>	<i>-1.7</i>	<i>1,003,011</i>	<i>-3.2</i>
Utah.....	256	15,647	-4.1	362,767	+1.7	75	5,029	-8.5	111,883	-6.3
Vermont.....	340	10,132	-1.1	216,861	+1.3	121	5,710	+1.3	120,214	+0.2
Virginia.....	849	65,127	-0.8	1,158,599	-2.4	222	44,195	-1.9	774,609	-3.7
Washington.....	875	53,737	-6.8	1,230,607	-5.5	270	26,062	-7.7	525,778	-11.2
West Virginia.....	728	87,194	-1.6	1,656,760	-6.1	192	33,222	-1.0	712,076	+2.0
Wisconsin.....	<i>1,201</i>	<i>143,908</i>	<i>-0.1</i>	<i>2,784,122</i>	<i>-1.7</i>	<i>852</i>	<i>109,520</i>	<i>-0.2</i>	<i>2,021,668</i>	<i>+0.6</i>
Wyoming.....	150	7,258	-0.4	213,788	-3.3	26	1,913	-1.2	53,902	-10.8

¹ Less than one-tenth of 1 per cent.

² Includes laundries.

³ No change.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS IN NOVEMBER AND DECEMBER, 1931, BY STATE TOTALS, FOR 11 INDUSTRIAL GROUPS AND TOTAL OF ALL GROUPS COMBINED—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 December, 1931	Per cent of change	Amount of pay roll (1 week) December, 1931	Per cent of change	Number of establishments	Number on pay roll December, 1931	Per cent of change	Amount of pay roll (1 week) December, 1931	Per cent of change
Alabama	18	649	+0.5	\$19,200	+1.7	37	3,159	+12.5	\$51,168	+7.4
Arkansas						1 153	2,082	+0.4	44,452	-0.9
Arizona	22	203	(³)	5,804	-7.4	182	1,704	+13.6	29,098	+4.4
California	52	5,944	-1.2	129,137	-0.5	82	33,992	+25.7	711,423	+17.2
Colorado	23	708	-0.4	23,464	-10.1	47	4,797	+26.5	93,457	+18.2
Connecticut	60	1,033	+0.6	35,417	-1.3	123	6,007	+19.4	119,746	+7.1
Delaware	9	93	-1.1	1,882	-4.8	14	235	+12.4	3,785	+6.3
Florida	53	766	-0.9	21,797	-0.9	51	1,297	+11.7	31,783	+13.8
Georgia	32	394	-1.5	11,705	-3.4	39	2,917	+17.8	46,991	+7.9
Idaho	9	130	-6.5	4,125	-4.2	21	543	+7.5	10,446	+3.8
Illinois	21	1,504	-0.3	42,584	+3.1	57	16,988	+2.7	442,703	+0.2
Indiana	59	1,191	-1.3	35,770	-2.9	302	8,101	+18.5	152,902	+15.9
Iowa	40	1,272	-1.8	39,049	-4.5	127	4,297	+16.4	96,943	+35.2
Kansas	27	741	+0.5	20,495	-4.8	44	1,720	+16.9	29,929	-(²)
Kentucky	25	615	-3.8	14,580	+2.1	198	1,834	+3.5	37,101	-0.4
Louisiana	32	744	-1.2	17,349	-4.4	59	4,177	+12.3	65,323	+8.1
Maine	14	387	-4.0	10,328	-0.9	68	1,309	+10.8	26,065	+5.6
Maryland	13	517	-0.2	11,818	-1.0	25	6,505	+24.7	112,327	+9.7
Massachusetts	682	15,134	-1.1	457,855	-1.1	4,104	68,845	+8.3	1,547,934	+5.7
Michigan	62	1,542	-0.2	52,747	-5.1	157	16,154	+24.3	364,824	+15.2
Minnesota	66	4,166	+0.6	125,278	-1.6	351	9,639	-5.7	178,688	+1.6
Mississippi	5	133	+0.8	2,919	+0.3	72	595	+14.4	7,394	+5.6
Missouri	57	5,391	-0.1	143,751	-4.3	144	8,657	+19.0	175,097	+7.8
Montana	12	228	-3.4	8,256	+1.4	22	496	+12.7	11,983	+2.4
Nebraska	40	1,084	+0.6	31,437	-1.3	90	1,872	+10.3	37,753	+5.7
New Hampshire	15	185	-4.1	5,332	-8.0	50	740	+17.1	13,300	+7.1
New Jersey	34	810	+0.6	25,011	+0.2	410	11,617	+30.6	259,778	+18.8
New Mexico	6	50	(³)	1,776	-6.4	10	130	+21.5	2,371	+8.3
Nevada										
New York	206	6,087	-0.9	210,290	+0.4	227	64,128	+21.6	1,561,843	+12.2
North Carolina	22	488	(³)	13,143	-3.7	445	2,118	+2.2	36,018	-0.6
North Dakota	16	235	-2.5	7,452	-8.4	11	276	+5.7	5,387	-0.5
Ohio	166	4,381	-0.1	127,239	-1.2	680	35,838	+20.2	722,572	+13.4
Oklahoma	46	950	-0.9	28,112	-3.5	44	1,915	+12.4	45,330	+1.8
Oregon	57	1,525	+1.5	46,420	-3.4	66	2,018	+9.4	47,649	+1.5
Pennsylvania	149	4,082	-1.3	114,725	-3.2	336	34,185	+15.5	720,056	+12.2
Rhode Island	52	1,446	-8.7	34,749	+4.3	146	5,740	+11.2	126,859	+5.6
South Carolina	20	259	(³)	6,709	-0.8	92	1,051	+16.8	12,403	+6.3
South Dakota	7	125	-0.8	4,210	-4.7	18	301	+15.8	5,417	+4.0
Tennessee	50	1,093	+0.3	24,407	-0.8	70	4,996	+18.6	86,231	+15.9
Texas	60	2,720	+0.9	78,662	-1.9	56	8,189	+12.5	162,848	+6.9
Utah	16	447	-2.6	13,123	-5.3	10	1,084	+36.5	15,263	+18.4
Vermont	5	112	(³)	3,062	-0.3	27	412	+7.3	7,358	+0.5
Virginia	41	1,485	+1.8	30,101	-0.8	367	3,465	+25.3	61,947	+14.0
Washington	94	2,512	-0.7	76,453	-4.9	143	8,151	+25.9	151,332	+16.1
West Virginia	42	694	-5.1	22,064	-8.1	54	1,249	+20.2	22,649	+4.9
Wisconsin	47	1,531	-2.0	48,759	-2.1	60	11,252	+30.5	184,717	+21.2
Wyoming	9	46	-2.1	1,750	-3.4	10	144	+4.3	4,116	-2.5

¹ Includes wholesale trade.² Less than one-tenth of 1 per cent.³ No change.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS IN NOVEMBER AND DECEMBER, 1931, BY STATE TOTALS, FOR 11 INDUSTRIAL GROUPS AND TOTAL OF ALL GROUPS COMBINED—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 December, 1931	Per cent of change	Amount of pay roll (1 week) December, 1931	Per cent of change	Number of establishments	Number on pay roll December, 1931	Per cent of change	Amount of pay roll (1 week) December, 1931	Per cent of change
Alabama.....	121	2,210	-0.4	\$50,252	+2.3	25	1,245	-2.4	\$13,037	-1.3
Arkansas.....	50	1,507	+10.9	41,667	+10.8	18	773	+1.9	10,047	+1.9
Arizona.....	65	1,618	-0.8	45,433	+2.8	14	436	+6.9	7,461	+14.7
California.....	39	46,115	-1.2	1,446,962	-2.7	257	11,754	+0.3	215,630	-1.3
Colorado.....	208	6,151	-1.0	176,501	-1.1	34	1,267	-5.2	20,297	-5.0
Connecticut.....	136	10,767	-0.9	359,942	-0.2	20	1,043	-2.1	15,864	-5.4
Delaware.....	31	1,163	-0.3	33,313	+1.9	6	272	+0.7	3,770	-3.7
Florida.....	185	4,541	(¹)	139,684	+7.1	44	1,276	+47.2	19,648	+76.1
Georgia.....	182	7,608	-0.5	233,792	+3.7	26	1,437	-0.5	15,160	+0.2
Idaho.....	57	754	-0.5	18,628	+7.9	14	239	-7.4	3,808	-11.1
Illinois.....	59	74,451	-1.7	2,324,258	-3.4	² 61	10,933	-2.2	200,865	-3.4
Indiana.....	131	11,340	-1.9	307,128	-4.1	69	3,054	-2.7	39,847	-6.3
Iowa.....	433	10,843	-2.8	277,677	-2.7	58	2,598	+1.8	29,891	-2.8
Kansas.....	286	6,486	-1.2	156,061	+0.1	34	958	-3.1	10,531	-4.6
Kentucky.....	299	7,650	-3.4	192,948	-2.0	32	1,812	-0.7	21,869	-3.9
Louisiana.....	155	4,851	-1.5	122,125	-0.4	20	2,117	+3.2	26,061	+0.1
Maine.....	173	3,346	-2.4	98,586	+1.1	7	520	-38.1	8,082	-22.9
Maryland.....	82	12,506	+0.2	366,074	-6.3	17	1,374	+0.3	19,319	-2.6
Massachusetts.....	136	49,677	-2.4	1,595,270	-1.8	91	5,545	-2.3	88,415	-3.4
Michigan.....	424	26,120	+0.4	819,328	+1.5	75	4,741	-4.4	75,564	-7.9
Minnesota.....	243	13,922	-1.5	399,358	-5.0	63	3,278	-2.5	47,519	-5.4
Mississippi.....	198	2,425	-3.8	55,415	+3.3	23	670	+1.4	6,271	-1.7
Missouri.....	214	24,529	-0.7	741,458	-0.5	85	4,970	-2.4	68,176	-1.1
Montana.....	116	2,852	-2.5	96,032	+5.9	19	302	-3.8	5,206	-3.6
Nebraska.....	301	6,826	+3.4	190,411	+2.4	39	1,861	-5.1	24,382	-3.2
New Hampshire.....	145	2,469	-6.1	73,211	-1.8	7	191	-9.5	2,515	-14.1
New Jersey.....	269	24,555	-0.9	833,804	+1.8	57	3,825	-8.7	60,637	-6.3
New Mexico.....	58	626	-12.6	14,753	-4.6	14	342	-0.6	4,392	+1.9
Nevada.....	40	384	-2.8	12,237	-2.9	10	130	-6.5	2,561	-11.3
New York.....	17	6,042	+0.2	216,786	+2.9	223	31,027	-2.6	554,611	-0.9
North Carolina.....	78	2,134	-0.8	46,778	-0.1	25	1,150	-4.3	13,642	-2.2
North Dakota.....	171	1,272	-1.4	33,651	-1.2	21	410	-6.2	5,049	-7.5
Ohio.....	470	33,398	-0.1	940,519	-2.1	164	9,630	-2.6	143,933	-2.5
Oklahoma.....	237	6,976	-2.0	181,037	+1.4	43	942	-1.4	10,463	-2.4
Oregon.....	188	6,187	-1.1	182,916	+0.8	43	1,211	-3.4	20,208	-3.1
Pennsylvania.....	675	56,252	-1.4	1,751,040	-0.5	147	9,843	-3.0	147,051	-3.7
Rhode Island.....	36	4,017	-1.9	126,387	-1.0	15	391	+7.4	6,053	+1.7
South Carolina.....	70	1,795	-5.1	44,169	-4.4	17	592	+0.7	5,918	+0.7
South Dakota.....	127	1,295	+3.3	35,244	+2.7	16	336	-2.6	4,554	-2.6
Tennessee.....	250	5,445	-1.3	136,397	+3.5	42	2,556	-2.7	26,958	-2.5
Texas.....	18	8,908	-3.5	260,989	-3.3	52	2,867	-0.7	39,184	-3.5
Utah.....	66	1,927	-4.6	47,305	-2.4	18	625	-0.6	9,486	-1.5
Vermont.....	122	1,088	-4.7	28,571	-3.7	18	397	-4.1	5,220	-3.4
Virginia.....	106	6,585	(³)	173,931	+0.6	31	2,195	-8.6	28,050	-9.1
Washington.....	207	10,531	-0.9	341,856	+2.0	69	2,436	-4.0	37,117	-3.6
West Virginia.....	113	6,607	-2.8	191,762	-3.3	18	704	-3.0	8,964	-3.8
Wisconsin.....	42	12,015	(³)	384,644	-2.9	² 48	1,460	-5.1	(⁴)	-----
Wyoming.....	47	469	-4.7	12,931	-0.6	12	184	-3.7	3,137	-0.5

¹ No change.² Includes restaurants.³ Less than one-tenth of 1 per cent.⁴ Amount of pay roll not reported.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS IN NOVEMBER AND DECEMBER, 1931, BY STATE TOTALS, FOR 11 INDUSTRIAL GROUPS AND TOTAL OF ALL GROUPS COMBINED—Continued

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State	Bituminous coal mining					Crude petroleum producing				
	Number of establishments	Number on pay roll December, 1931	Per cent of change	Amount of pay roll (1 week) December, 1931	Per cent of change	Number of establishments	Number on pay roll December, 1931	Per cent of change	Amount of pay roll (1 week) December, 1931	Per cent of change
Alabama.....	42	8,794	-1.5	\$85,674	-4.7					
Arkansas.....	4	312	-11.3	4,737	-15.8					
Arizona.....						33	4,425	-0.4	\$154,753	-4.2
California.....										
Colorado.....	44	6,090	+6.4	134,126	+11.1					
Connecticut.....										
Delaware.....										
Florida.....										
Georgia.....										
Idaho.....										
Illinois.....	32	7,524	-0.1	155,262	+2.3					
Indiana.....	52	6,861	+3.1	177,766	+7.3	4	27	+3.8	485	+10.5
Iowa.....	23	2,699	+5.1	63,436	+23.8					
Kansas.....	12	1,363	+0.4	24,153	+7.4	33	1,010	+2.7	25,157	+3.0
Kentucky.....	155	27,663	-2.2	406,038	-12.6	8	202	-1.0	4,222	+4.9
Louisiana.....						10	176	+0.6	5,401	+6.2
Maine.....										
Maryland.....	13	1,279	-4.0	20,304	+18.6					
Massachusetts.....										
Michigan.....										
Minnesota.....										
Mississippi.....										
Missouri.....	17	1,186	+4.9	26,975	+2.1					
Montana.....	11	1,082	+1.8	37,735	+6.9	5	42	-12.5	1,281	+3.2
Nebraska.....										
New Hampshire.....										
New Jersey.....										
New Mexico.....	13	2,030	+2.6	42,666	+3.3	4	56	+9.8	2,107	+5.8
Nevada.....										
New York.....						4	94	-3.1	2,930	-2.1
North Carolina.....										
North Dakota.....										
Ohio.....	66	12,402	+4.1	189,357	-7.2	6	72	-12.2	1,310	-3.0
Oklahoma.....	19	1,224	+15.9	20,235	+12.1	67	5,114	+4.2	146,929	+9.5
Oregon.....										
Pennsylvania.....	387	56,486	+0.4	868,173	-3.4	20	348	-2.0	9,675	+4.3
Rhode Island.....										
South Carolina.....										
South Dakota.....										
Tennessee.....	21	3,794	+0.3	42,595	-6.1					
Texas.....						47	3,333	-1.3	100,823	-3.4
Utah.....	14	2,604	+9.8	77,749	+31.7					
Vermont.....										
Virginia.....	30	4,879	+0.7	60,366	-2.9					
Washington.....	11	1,583	-0.8	48,153	+14.9					
West Virginia.....	268	42,956	-2.3	669,517	-14.3	9	421	-0.7	10,383	-1.1
Wisconsin.....										
Wyoming.....	33	4,213	+0.6	130,184	+0.3	6	183	-2.1	5,654	-12.8

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS IN NOVEMBER AND DECEMBER, 1931, BY STATE TOTALS, FOR 11 INDUSTRIAL GROUPS AND TOTAL OF ALL GROUPS COMBINED—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 December, 1931	Per cent of change	Amount of pay roll (1 week) December, 1931	Per cent of change	Number of establishments	Number on pay roll December, 1931	Per cent of change	Amount of pay roll (1 week) December, 1931	Per cent of change
Alabama	10	593	-11.8	\$9,549	-14.6	5	1,035	-3.5	\$10,050	-7.9
Arkansas										
Arizona						12	4,715	-4.8	124,451	-2.8
California	34	888	-7.5	20,259	-19.7	17	1,936	+0.3	54,583	+0.5
Colorado	3	8	-52.9	222	-36.8	17	813	-18.0	23,798	-14.5
Connecticut	13	250	-5.3	6,058	-15.8					
Delaware	3	526	+1.3	12,584	-4.8					
Florida	10	447	+2.8	5,888	+4.8					
Georgia	19	1,055	-3.5	13,615	-10.9					
Idaho						10	2,209	+1.3	54,033	+0.5
Illinois										
Indiana	90	1,620	-3.0	33,079	-11.9					
Iowa	13	207	+1.0	3,870	-13.6					
Kansas	18	462	-1.3	10,226	-4.6	7	234	+67.1	3,936	+67.8
Kentucky	28	707	-21.5	6,834	-31.1					
Louisiana	3	310	(¹)	4,176	-1.9					
Maine	10	284	-34.4	8,028	-33.8					
Maryland	18	454	-13.7	7,663	-19.9					
Massachusetts										
Michigan	19	458	-22.5	7,721	-39.5	43	9,162	-1.9	132,612	-3.3
Minnesota	8	113	+24.2	2,086	-11.5	33	1,572	-20.6	34,070	-17.1
Mississippi	3	21	-57.1	223	-50.8					
Missouri	17	585	-7.6	12,244	-4.9	11	1,866	-2.8	29,214	+5.4
Montana	4	37	-17.8	649	-21.1	15	150	(¹)	3,296	-24.4
Nebraska	40	91	-38.9	1,003	-67.9					
New Hampshire	10	169	-9.6	3,819	-18.8					
New Jersey	3	60	-11.8	1,914	-10.2	3	117	+1.7	2,808	+2.9
New Mexico						3	814	-8.9	17,978	+3.0
Nevada						11	346	-3.6	10,357	-9.4
New York	65	1,942	-20.8	52,703	-18.8					
North Carolina	11	268	+6.3	3,233	-11.3					
North Dakota										
Ohio	68	1,808	-14.2	38,971	-20.7					
Oklahoma						27	869	+7.0	17,044	+4.2
Oregon						7	125	+11.6	3,959	+33.0
Pennsylvania	54	2,785	-9.5	34,323	-18.7					
Rhode Island										
South Carolina	6	167	-1.8	743	-50.7					
South Dakota	3	24	-11.1	454	-32.9	2	1,618	+0.1	51,727	+0.3
Tennessee	20	1,294	-1.2	18,048	-13.9	4	305	+6.6	5,081	-0.5
Texas	7	688	-31.3	17,208	-32.2					
Utah						11	2,806	-0.4	66,702	+2.6
Vermont	42	2,334	+0.4	51,229	+8.2					
Virginia	17	1,067	+0.8	13,796	+6.3					
Washington	8	117	-14.0	2,541	-25.9					
West Virginia	5	450	+0.2	4,969	-14.1					
Wisconsin	² 14	133	-30.4	2,504	-28.2	(³)	712	+0.8	12,023	-1.5
Wyoming										

¹ No change.

² Includes stone crushing.

³ Data not given.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS IN NOVEMBER AND DECEMBER, 1931, BY STATE TOTALS, FOR 11 INDUSTRIAL GROUPS AND TOTAL OF ALL GROUPS COMBINED—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 December, 1931	Per cent of change	Amount of pay roll (1 week) December, 1931	Per cent of change	Number of establishments	Number on pay roll December, 1931	Per cent of change	Amount of pay roll (1 week) December, 1931	Per cent of change
Alabama.....	6	602	-3.1	\$7,080	-2.4	5	202	-3.6	\$2,633	+1.4
Arkansas.....	18	474	-1.4	5,528	-0.1					
Arizona.....	5	394	-1.8	6,885	-0.7					
California.....	¹ 64	5,428	-2.2	114,545	-4.0					
Colorado.....	11	923	+0.5	14,872	-1.1	10	139	-8.6	2,913	-12.4
Connecticut.....	31	1,378	-2.1	28,470	-3.2	14	317	-7.0	7,985	-9.4
Delaware.....	2	94	+6.8	1,318	+1.1	3	43	-4.4	824	-7.2
Florida.....	7	357	+5.3	4,344	+7.0	5	52	-1.9	861	+2.7
Georgia.....	10	543	-1.1	5,751	-3.7	4	140	-3.4	1,969	-1.5
Idaho.....										
Illinois.....	¹ 21	1,394	-1.4	24,941	-4.6					
Indiana.....	20	1,677	-1.0	26,890	-0.8	6	57	-9.5	1,078	-10.0
Iowa.....	4	245	+0.8	4,162	-1.7					
Kansas.....	8	233	-0.9	3,468	-2.4					
Kentucky.....	20	928	-1.4	13,364	+0.8	5	183	-3.2	2,923	-3.1
Louisiana.....										
Maine.....	21	445	-0.9	6,842	-1.7					
Maryland.....	20	1,759	+2.8	29,503	-0.5	7	379	-16.5	6,311	-16.8
Massachusetts.....										
Michigan.....	26	1,885	-0.9	29,487	-3.8	18	524	-4.6	11,386	-6.4
Minnesota.....	13	849	-2.5	15,825	-2.5	10	330	-4.3	6,456	-7.1
Mississippi.....	6	275	-1.4	2,940	-5.2					
Missouri.....	36	2,829	-0.2	44,675	-2.2	17	480	-6.8	8,972	-9.4
Montana.....	13	350	-2.8	7,337	-2.3					
Nebraska.....	10	831	+0.2	14,429	+2.6	3	29	-3.3	593	-3.1
New Hampshire.....	16	307	-2.8	5,148	-7.1					
New Jersey.....	32	3,234	+ (?)	71,599	-0.1	7	344	-1.4	9,433	-11.3
New Mexico.....	6	288	-4.0	4,870	-2.4					
Nevada.....	4	70	-2.8	1,567	-8.6					
New York.....	63	7,045	-1.9	137,179	-1.9	26	837	-6.5	18,945	-12.1
North Carolina.....	11	769	-1.3	8,903	-1.2	5	73	(²)	1,024	-10.8
North Dakota.....	8	165	-2.4	2,854	-2.4					
Ohio.....	64	4,298	-1.2	77,866	-4.1	30	1,518	-3.1	29,230	-7.9
Oklahoma.....	3	357	-6.1	5,386	-5.9	6	200	-3.4	3,027	-8.9
Oregon.....	5	354	-1.9	6,448	-4.5	4	39	-2.5	956	-5.8
Pennsylvania.....	48	3,724	-0.2	63,873	-0.5	25	1,085	-4.6	21,664	-11.3
Rhode Island.....	20	1,184	-2.0	22,577	-1.0	10	428	-15.9	8,698	-11.4
South Carolina.....	8	357	-2.2	3,956	-1.8					
South Dakota.....	4	98	(³)	1,556	+1.2					
Tennessee.....	14	1,144	-1.7	12,590	-4.6	13	325	-10.7	6,193	-15.8
Texas.....										
Utah.....	8	609	-1.0	10,214	+2.5	6	95	-4.0	2,082	-6.9
Vermont.....										
Virginia.....	8	672	-0.3	8,632	+0.7	16	313	-2.2	4,956	-5.9
Washington.....	12	625	-2.0	14,884	-3.1	9	124	-5.3	2,752	-10.6
West Virginia.....	18	700	-1.7	11,027	-5.0	9	191	-0.5	3,349	-6.0
Wisconsin.....	¹ 28	1,042	-0.6	16,387	-9.3					
Wyoming.....	5	94	-4.1	1,846	-6.2					

¹ Includes dyeing and cleaning.² Less than one-tenth of 1 per cent.³ No change.

Employment and Pay-Roll Totals in December, 1931, in Cities of Over 500,000 Population

IN THE following table is presented the fluctuations in employment and earnings in December, 1931, as compared with November, in 13 cities of the United States having a population of 500,000 or over. These fluctuations are based on reports received from identical establishments in each month.

These city tabulations include all establishments reporting in the 15 industrial groups in these 13 cities, and also additional employment information secured from banks, insurance companies, garages, and other establishments in these 13 cities. Building construction data are not included in these totals, as information is not available for all cities at this time. The most pronounced increase in employment and earnings is shown in the city of Detroit, due largely to the improved employment condition in the automobile industry in December over November. Decreased employment is shown in only two cities, Chicago and Philadelphia. Increased earnings were reported in each of these 13 cities, with the exception of San Francisco, in which a decrease of 0.7 per cent in earnings was combined with a small increase in employment.

EMPLOYMENT IN CITIES OF 500,000 POPULATION OR OVER

City	Number of establishments reporting in both November and December, 1931	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		November, 1931	December, 1931		November, 1931	December, 1931	
New York City	820	139,530	145,657	+4.4	\$3,707,219	\$3,715,755	+0.2
Chicago, Ill.	1,725	209,456	209,374	—(1)	5,607,476	5,682,735	+1.3
Philadelphia, Pa.	558	119,404	118,664	—0.6	2,921,309	2,989,050	+2.3
Detroit, Mich.	461	151,545	176,656	+16.6	4,287,076	4,517,374	+5.4
Los Angeles, Calif.	423	51,265	54,054	+5.4	1,337,036	1,368,503	+2.4
Cleveland, Ohio	766	73,497	75,744	+3.1	1,691,969	1,710,293	+1.1
St. Louis, Mo.	457	66,048	68,377	+3.5	1,486,293	1,560,104	+5.0
Baltimore, Md.	400	49,299	50,063	+1.5	1,047,966	1,060,336	+1.2
Boston, Mass.	2,785	82,721	82,954	+0.3	2,234,301	2,262,761	+1.3
Pittsburgh, Pa.	279	51,890	53,463	+3.0	1,175,625	1,197,544	+1.9
San Francisco, Calif.	834	36,542	36,686	+0.4	989,795	983,140	—0.7
Buffalo, N. Y.	222	42,256	42,446	+0.4	1,053,881	1,069,906	+1.5
Milwaukee, Wis.	273	40,339	41,936	+4.0	912,857	915,230	+0.3

¹ Less than one-tenth of 1 per cent.

Employees in Executive Civil Service of the United States, October and November, 1931, and November, 1930

A STATEMENT is here given, for specified months, of the number of officers and employees in the executive civil service of the United States Government. The figures are complete except for temporary employees in the field service of the Post Office Department. The number of such employees varies considerably, mainly because of seasonal demands, the principal demand for them being during the Christmas mail rush. The term of service usually is very short.

As indicated by the title of this article, the figures do not include the legislative, judicial, Army, or Navy services.

The figures are compiled by the several departments and offices and sent to the United States Civil Service Commission where they are assembled. They are here published by courtesy of the commission and in compliance with the direction of Congress. Data relating to salaries paid have not been collected.

Because of the importance of Washington as a government center, the figures are given for the District of Columbia separately. These figures are included in the grand total for the entire service.

The total number of executive civil employees of the United States, not counting post office field employees at the end of November, 1931, was 614,262, of which 578,933 were permanent employees and 35,329 were temporary employees taken on for a limited period of service. In the year interval, November 30, 1930, to November 30, 1931, there was a gain of 16,622 employees or 2.78 per

cent. During the month ending November 30, 1931, there was a loss of 4,533 employees or 0.73 per cent. Analysis of the figures shows, however, a gain of 932 permanent employees during the month ending November 30, 1931, with a loss of 5,465 temporary employees. During the month of November, 1931, 16,608 employees dropped out of the service because of resignations, termination of appointment, death, and other causes, and there were 12,075 new employees brought into the service. This gives a turnover rate of 1.96 per 100 in the month, which it will be observed was twice the turnover rate in the Washington personnel. The number employed in the District of Columbia at the end of November, 1931, was 69,894.

EMPLOYEES IN EXECUTIVE CIVIL SERVICE OF THE UNITED STATES, OCTOBER AND NOVEMBER, 1931, AND NOVEMBER, 1930

Item	District of Columbia			Entire service		
	November, 1930	October, 1931	November, 1931	November, 1930	October, 1931	November, 1931
Permanent employees.....	62,714	65,316	65,356	560,233	578,001	578,933
Temporary employees (not including those in field service of Post Office Department).....	8,338	4,740	4,538	37,407	40,794	35,329
Total.....	71,052	70,056	69,894	597,640	618,795	614,262

Gain or loss	District of Columbia		Entire service	
	Number	Per cent	Number	Per cent
November, 1930, to November, 1931.....	-1,158	-1.63	+16,622	+2.78
October, 1931, to November, 1931.....	-162	-.23	-4,533	-.73

Item	District of Columbia	Entire service
Additions in November, 1931.....	685	12,075
Separations in November, 1931.....	847	16,608
Monthly turnover rate, November, 1931.....	0.98	1.96

Employment in Building Construction in December, 1931

EMPLOYMENT in building construction decreased 10.7 per cent in December, 1931, as compared with November, and pay rolls decreased 14.1 per cent during the same period. This information is based on reports received from 6,575 firms engaged in building operations in 43 cities covered by the Federal bureau and 2,162 additional firms in various localities in Pennsylvania, California, Massachusetts, Wisconsin, and the city of Baltimore, Md.

As shown by the following table, these firms reported a combined employment of 88,136 for a week ending near December 15 as compared with 98,735 for a similar period in November. The total pay roll for these employees was \$2,401,-068 for a week ending near December 15 as compared with \$2,793,869 for a similar period in November.

In the 43 cities covered by the Federal bureau, reports were received from 6,575 identical contractors and subcontractors whose total employment for a week ending near December 15 was 58,215 as compared with 65,629 for a similar period in November. This is a decrease of 11.3 per cent. Nine cities reported increased employment ranging from 0.4 per cent for Wilmington to 67.4 per cent for Tulsa. These 6,575 firms reported a combined pay roll of \$1,587,518 for a week ending near December 15 as compared with \$1,863,115 for a similar period in November. This is a decrease of 14.8 per cent. Eight cities showed increased pay rolls ranging from 0.7 per cent for Charlotte to 41.5 per cent for Tulsa.

The data for the five cities in Pennsylvania, based on returns from 1,003 identical firms, show a decrease of 11.6 per cent in employment and 14.3 per cent in pay-roll totals. Erie employment increased 5.8 per cent.

Employment and pay-roll information for California, shown for the first time in this report, covers 201 identical firms whose combined employment and pay

rolls decreased 6.4 and 10.2 per cent, respectively, when December is compared with November.

Decreased employment and pay rolls are also reported for the city of Baltimore and the States of Massachusetts and Wisconsin.

Data concerning the building construction industry appearing in the following table have not been included in the summary table shown at the beginning of this trend of employment article:

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN THE BUILDING CONSTRUCTION INDUSTRY IN IDENTICAL FIRMS, NOVEMBER AND DECEMBER, 1931

Locality	Number of firms reporting	Number on pay roll week ending near—		Percent of change	Amount of pay roll week ending near—		Percent of change
		Nov. 15	Dec. 15		Nov. 15	Dec. 15	
Akron.....	80	635	450	-29.1	\$15,856	\$9,688	-38.9
Atlanta.....	122	1,305	1,241	-4.9	23,087	20,789	-10.0
Birmingham.....	77	601	585	-2.7	11,530	10,725	-7.0
Bridgeport.....	120	838	746	-11.0	27,235	20,965	-23.0
Charlotte.....	34	323	307	-5.0	5,891	5,932	+7
Cincinnati ¹	483	3,263	3,096	-5.1	100,377	90,310	-10.0
Cleveland.....	442	4,137	2,947	-28.8	140,422	97,141	-30.8
Dallas.....	109	796	828	+4.0	17,491	18,145	+3.7
Denver.....	186	912	865	-5.2	25,450	23,858	-6.3
Des Moines.....	70	696	614	-11.8	17,451	14,590	-16.4
Detroit.....	468	5,428	4,723	-13.0	154,947	128,211	-17.3
Duluth.....	49	221	240	+8.6	3,968	5,347	+34.8
Fort Wayne.....	103	677	546	-19.4	14,911	13,664	-8.4
Grand Rapids.....	78	407	394	-3.2	9,478	9,453	-.3
Hartford.....	242	2,108	1,723	-18.3	68,767	52,546	-23.6
Houston.....	88	652	553	-15.2	14,139	11,775	-16.7
Indianapolis.....	172	1,526	1,374	-10.0	47,831	42,235	-11.7
Jacksonville.....	50	363	413	+13.8	5,575	6,811	+22.2
Kansas City ²	217	2,158	1,711	-20.7	70,223	57,510	-18.1
Louisville.....	115	974	1,019	+4.6	20,037	21,287	+6.2
Memphis.....	88	789	820	+3.9	19,109	16,067	-15.9
Miami.....	73	1,378	1,533	+11.2	29,741	33,542	+12.8
Minneapolis.....	216	2,106	1,657	-21.3	58,245	49,830	-14.4
Nashville.....	62	723	810	+12.0	12,821	14,110	+10.1
New Haven.....	181	2,599	2,204	-15.2	96,743	75,177	-22.3
New Orleans.....	124	2,122	1,757	-17.2	42,490	33,518	-21.1
Norfolk-Portsmouth.....	85	516	513	-.6	11,636	10,567	-9.2
Oklahoma City.....	95	1,300	1,268	-2.5	29,538	28,977	-1.9
Omaha.....	113	950	715	-24.7	24,413	18,290	-25.1
Portland, Me.....	75	620	522	-15.8	17,523	14,060	-19.8
Portland, Oreg.....	172	1,199	894	-25.4	31,409	23,821	-24.2
Providence.....	225	2,701	2,266	-16.1	73,662	62,666	-14.9
Richmond.....	148	1,325	1,189	-10.3	30,318	28,162	-7.1
St. Louis.....	457	3,492	3,082	-11.7	119,506	102,406	-14.4
St. Paul.....	114	1,656	1,309	-21.0	46,087	36,838	-20.1
Salt Lake City.....	82	427	372	-12.9	12,420	9,717	-21.8
Seattle.....	173	1,276	1,236	-3.1	35,307	34,861	-1.3
Spokane.....	34	141	112	-20.6	3,262	2,667	-18.2
Tulsa.....	38	325	544	+67.4	7,482	10,585	+41.5
Washington, D. C.....	500	9,579	8,792	-8.2	303,209	268,591	-11.5
Wheeling.....	53	335	239	-28.7	8,184	5,431	-33.6
Wichita.....	59	435	384	-11.7	9,717	7,877	-18.9
Wilmington.....	103	1,615	1,622	+.4	45,527	38,976	-14.4
Total, 43 cities.....	6,575	65,629	58,215	-11.3	1,863,115	1,587,518	-14.8
Philadelphia ³	607	5,247	4,674	-10.9	155,634	130,936	-15.9
Pittsburgh ³	265	2,380	2,060	-13.4	80,131	72,024	-10.1
Reading ³	60	462	415	-10.2	11,859	9,140	-22.9
Scranton ³	42	285	216	-24.2	6,792	5,345	-21.2
Erie ³	29	208	220	+5.8	5,076	4,912	-3.2
Total, 5 cities.....	1,003	8,582	7,585	-11.6	259,492	222,357	-14.3
Los Angeles ³	52	3,959	3,496	-11.7	99,527	79,540	-20.1
San Francisco-Oakland ³	75	4,418	4,102	-7.2	103,539	98,943	-4.4
California (including all localities) ³	201	11,146	10,428	-6.4	266,485	239,436	-10.2
Baltimore, Md. ³	160	2,195	2,025	-7.7	55,825	47,301	-15.3
Massachusetts ³	730	8,915	7,840	-12.1	295,100	254,767	-13.7
Wisconsin ³	68	2,268	2,043	-9.9	53,852	49,689	-7.7
Grand total, all localities.....	8,737	98,735	88,136	-10.7	2,793,869	2,401,068	-14.1

¹ Includes Covington and Newport, Ky.

² Includes both Kansas City, Kans., and Kansas City, Mo.

³ Data supplied by cooperating State bureaus.

Employment on Class I Steam Railroads in the United States

THE monthly trend of employment from January, 1923, to November, 1931, on Class I railroads—that is, all roads having operating revenues of \$1,000,000 or over—is shown by the index numbers published in Table 1. These index numbers are constructed from monthly reports of the Interstate Commerce Commission, the monthly average for 1926 being used as the base.

TABLE 1.—INDEX OF EMPLOYMENT ON CLASS I STEAM RAILROADS IN THE UNITED STATES, JANUARY, 1923, TO NOVEMBER, 1931
[Monthly average, 1926=100]

Month	1923	1924	1925	1926	1927	1928	1929	1930	1931
January	98.3	96.9	95.6	95.8	95.5	89.3	88.2	86.3	73.7
February	98.6	97.0	95.4	96.0	95.3	89.0	88.9	85.4	72.7
March	100.5	97.4	95.2	96.7	95.8	89.9	90.1	85.5	72.9
April	102.0	98.9	96.6	98.9	97.4	91.7	92.2	97.0	73.5
May	105.0	99.2	97.8	100.2	99.4	94.5	94.9	88.6	73.9
June	107.1	98.0	98.6	101.6	100.9	95.9	96.1	86.5	72.8
July	108.2	98.1	99.4	102.9	101.0	95.6	96.6	84.7	72.4
August	109.4	99.0	99.7	102.7	99.5	95.7	87.4	83.7	71.2
September	107.8	99.7	99.9	102.8	99.1	95.3	96.8	82.2	69.3
October	107.3	100.8	100.7	103.4	98.9	95.3	96.9	80.4	67.7
November	105.2	99.0	99.1	101.2	95.7	92.9	93.0	77.0	64.5
December	99.4	96.0	97.1	98.2	91.9	89.7	88.8	74.9	-----
Average	104.1	98.3	97.9	100.0	97.5	92.9	93.3	83.5	71.3

¹ Average for 11 months.

TABLE 2.—EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES, NOVEMBER, 1930, AND OCTOBER AND NOVEMBER, 1931

[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]

Occupation	Number of employees at middle of month			Total earnings		
	Nov. 15, 1930	Oct. 15, 1931	Nov. 15, 1931	November, 1930	October, 1931	November, 1931
Professional, clerical, and general	242,839	213,562	209,224	\$35,233,582	\$31,554,435	\$29,720,407
Clerks	134,521	115,455	113,086	18,262,624	16,187,748	15,023,441
Stenographers and typists	22,474	19,911	19,461	2,906,532	2,617,660	2,479,268
Maintenance of way and structures	293,534	264,289	234,886	26,543,586	23,525,799	19,495,096
Laborers, extra gang and work train	28,799	23,649	18,105	1,946,167	1,535,791	1,032,633
Laborers, track and roadway section	151,695	143,141	125,159	9,766,946	9,225,986	7,003,005
Maintenance of equipment and stores	376,973	322,984	313,116	46,758,153	39,195,506	35,620,205
Carmen	79,549	67,191	64,788	10,984,697	9,152,923	8,289,738
Machinists	48,046	43,334	42,066	6,955,261	6,042,693	5,428,597
Skilled trades helpers	82,705	70,213	68,295	8,593,256	7,083,088	6,367,696
Laborers (shops, engine houses, power plants, and stores)	31,654	26,769	26,278	2,923,088	2,459,281	2,292,091
Common laborers (shops, engine houses, power plants, and stores)	40,536	34,381	32,674	2,887,638	2,432,201	2,108,231
Transportation, other than train, engine and yard	172,791	153,712	150,136	21,302,482	19,560,726	18,218,805
Station agents	28,349	27,249	27,105	4,391,919	4,371,294	4,097,744
Telegraphers, telephoners, and towermen	20,954	18,709	18,458	3,209,579	2,960,458	2,812,695
Truckers (stations, warehouses, and platforms)	27,059	22,743	21,632	2,368,815	2,116,001	1,832,883
Crossing and bridge flagmen and gatemen	19,408	18,710	18,663	1,506,232	1,442,819	1,421,852
Transportation (yardmasters, switch tenders, and hostlers)	19,402	16,751	16,417	3,745,771	3,192,146	3,030,751
Transportation, train and engine	272,703	239,128	230,761	52,572,008	47,608,187	42,561,688
Road conductors	30,734	27,196	26,107	7,067,319	6,557,793	5,892,090
Road brakemen and flagmen	59,886	52,466	50,605	9,869,203	9,069,307	7,988,732
Yard brakemen and yard helpers	46,559	41,076	39,878	7,739,573	6,749,894	6,046,778
Road engineers and motor men	36,541	32,087	30,924	9,436,009	8,753,469	7,786,014
Road firemen and helpers	37,150	32,723	31,588	6,872,920	6,325,617	5,624,313
All employees	1,378,242	1,210,426	1,154,540	186,155,582	164,636,799	148,646,952

In Table 2 the total number of employees on the 15th day each of November, 1930, and October and November, 1931, and pay-roll totals for the entire months are shown.

In these tabulations data for the occupational group reported as "executives, officials, and staff assistants" are omitted.

Agricultural Employment Surveys in Massachusetts

THE monthly surveys of employment and earnings made by the Massachusetts Department of Labor and Industries have been expanded to cover agricultural employment. A press release of the Massachusetts department states that employers of agricultural labor are being requested to report separately for year-round employees, seasonal employees, and employed members of their families, and to give amount of cash pay roll, estimated value of board and lodging if provided, and number of employees covered by the pay roll, for the pay period including or ending nearest the 15th of the month, exclusive of owners, partners, tenants, managers, and overseers.

Only a limited number of employers are reporting as yet, but efforts are being made to extend the inquiry, in order to make it more fully representative of employment conditions in agriculture in the State. The 66 employers or employing establishments which reported for October and November, 1931, included 25 nurserymen, wholesale florists, or landscape gardeners; 20 dairy or stock farms; 13 farms or market gardens; 5 fruit growers; 2 cranberry growers; and 1 leaf-tobacco raiser. These establishments employed a total of 991 wage earners in November, as compared with 1,418 in October. The decrease is reported to have been due to the releasing of seasonal labor employed primarily in fruit and cranberry packing.

WHOLESALE AND RETAIL PRICES

Retail Prices of Food in December, 1931

IT HAS been the custom of the Bureau of Labor Statistics to publish each month the retail prices of food and coal, by cities, and index numbers of individual food articles for the United States for all years back to 1913. Rates of electricity for household use and price per 1,000 cubic feet of gas, by cities, have been published for June and December of each year.

In the interest of economy in the cost of printing, these detailed statistics are eliminated from current publications, only summaries for the United States and limited comparisons being shown. Comparable information with that shown in previous publications is on record in the files of the bureau and available to those desiring to make use of it.

Table 1 shows for the United States retail prices and index numbers of food on December 15, 1930, November 15 and December 15, 1931, and the average for the year 1931. These prices are simple averages of actual selling prices reported monthly by retail dealers in 51 cities. The index numbers are based on the average prices in 1913.

TABLE 1.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF FOOD IN THE UNITED STATES ON DECEMBER 15, 1930, NOVEMBER 15 AND DECEMBER 15, 1931, AND FOR THE YEAR 1931

Article	Unit	Average price				Index numbers (1913=100.0)			
		Dec. 15, 1930	Nov. 15, 1931	Dec. 15, 1931	Year 1931	Dec. 15, 1930	Nov. 15, 1931	Dec. 15, 1931	Year 1931
Sirloin steak	Pound	Cents 42.9	Cents 37.3	Cents 36.3	Cents 39.4	168.9	146.9	142.9	155.1
Round steak	do	37.7	32.3	31.3	34.4	169.1	144.8	140.4	154.3
Rib roast	do	31.6	27.3	26.7	28.9	159.6	137.9	134.8	146.0
Chuck roast	do	24.6	20.2	19.6	21.5	153.8	126.3	122.5	134.4
Plate beef	do	16.9	13.3	13.1	14.3	139.7	109.9	108.3	118.2
Pork chops	do	31.4	25.0	21.8	29.1	149.5	119.0	103.8	138.6
Bacon, sliced	do	41.3	32.1	30.3	36.4	153.0	118.9	112.2	134.8
Ham, sliced	do	51.5	41.8	39.7	45.9	191.4	155.4	147.6	170.6
Lamb, leg of	do	31.1	26.1	24.9	29.5	164.6	138.1	131.7	156.1
Hens	do	32.0	29.2	28.6	31.0	150.2	137.1	134.3	145.5
Salmon, red, canned	do	34.3	29.9	29.6	32.6	150.2	121.3	118.6	127.1
Milk, fresh	Quart.	13.5	12.0	11.6	12.3	151.7	134.8	130.3	138.2
Milk, evaporated	16-oz. can	9.9	8.8	8.8	9.1	151.7	134.8	130.3	138.2
Butter	Pound	42.5	37.3	36.5	35.4	111.0	97.4	95.3	92.4
Oleomargarine (all butter substitutes)	do	24.5	18.9	18.8	20.0	150.2	121.3	118.6	127.1
Cheese	do	33.2	26.8	26.2	28.1	150.2	121.3	118.6	127.1
Lard	do	16.7	12.2	11.2	13.3	105.7	77.2	70.9	84.2
Vegetable lard substitute	do	23.8	22.4	22.0	23.2	150.2	121.3	118.6	127.1
Eggs, strictly fresh	Dozen	41.6	39.7	38.5	31.7	120.6	115.1	111.6	91.9
Bread	Pound	8.5	7.3	7.2	7.6	151.8	130.4	128.6	135.7
Flour	do	4.1	3.3	3.3	3.6	124.2	100.0	100.0	109.1
Corn meal	do	5.2	4.2	4.1	4.6	173.3	140.0	136.7	153.3
Rollod oats	do	8.6	7.8	7.9	8.1	150.2	121.3	118.6	127.1
Corn flakes	8-oz. package	9.3	8.8	8.7	9.0	150.2	121.3	118.6	127.1
Wheat cereal	28-oz. package	25.3	23.1	23.0	24.1	150.2	121.3	118.6	127.1

TABLE 1.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF FOOD IN THE UNITED STATES ON DECEMBER 15, 1930, NOVEMBER 15 AND DECEMBER 15, 1931, AND FOR THE YEAR 1931—Continued

Article	Unit	Average price				Index numbers (1913=100.0)			
		Dec. 15, 1930	Nov. 15, 1931	Dec. 15, 1931	Year 1931	Dec. 15, 1930	Nov. 15, 1931	Dec. 15, 1931	Year 1931
Macaroni.....	Pound.....	Cents 18.6	Cents 16.1	Cents 16.0	Cents 16.9				
Rice.....	do.....	9.2	7.5	7.4	8.2	105.8	86.2	85.1	94.3
Beans, navy.....	do.....	9.7	6.3	6.2	7.8				
Potatoes.....	do.....	2.9	1.7	1.8	2.3	170.6	100.0	105.9	135.3
Onions.....	do.....	3.9	4.4	5.2	4.3				
Cabbage.....	do.....	3.7	3.0	3.4	3.8				
Pork and beans.....	No. 2 can.....	10.7	10.2	10.2	10.2				
Corn, canned.....	do.....	14.9	12.1	11.9	13.4				
Peas, canned.....	do.....	15.7	13.6	13.5	14.2				
Tomatoes, canned.....	do.....	11.5	9.7	9.6	10.3				
Sugar.....	Pound.....	5.9	5.6	5.5	5.7	107.3	101.8	100.0	103.6
Tea.....	do.....	76.9	75.1	75.1	75.4	141.4	138.1	138.1	138.6
Coffee.....	do.....	38.5	31.8	31.5	33.8	129.2	106.7	105.7	113.4
Prunes.....	do.....	13.1	10.7	10.5	11.8				
Raisins.....	do.....	11.4	11.4	11.5	11.3				
Bananas.....	Dozen.....	29.0	24.4	24.8	26.2				
Oranges.....	do.....	35.7	35.3	31.3	35.1				
Weighted food index.....						137.2	116.7	114.3	121.3

Table 2 shows the trend in the retail cost of three important groups of food commodities, viz, cereals, meats, and dairy products, by years and by months for 1930 and 1931. The articles within these groups are as follows:

Cereals: Bread, flour, corn meal, rice, rolled oats, corn flakes, wheat cereal, and macaroni.

Meats: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, hens, and leg of lamb.

Dairy products: Butter, cheese, fresh milk, and evaporated milk.

TABLE 2.—INDEX NUMBERS OF RETAIL COST OF CEREALS, MEATS, AND DAIRY PRODUCTS FOR THE UNITED STATES, 1913 TO DECEMBER, 1931

[Average cost in 1913=100.0]

Year and month	Cereals	Meats	Dairy products	Year and month	Cereals	Meats	Dairy products
1930: Average for year.....	158.0	175.8	136.5	1931: Average for year.....	135.9	147.0	114.6
January.....	162.9	183.6	138.9	January.....	147.1	159.5	123.6
February.....	161.6	183.1	138.5	February.....	144.6	153.4	120.2
March.....	160.9	183.0	137.6	March.....	142.4	152.5	120.5
April.....	160.3	183.3	138.9	April.....	138.9	151.4	116.5
May.....	159.8	181.5	137.0	May.....	137.7	149.3	110.3
June.....	160.1	179.9	133.7	June.....	136.3	145.7	108.3
July.....	158.6	175.2	133.9	July.....	134.3	147.8	109.6
August.....	156.9	169.9	137.4	August.....	132.0	149.1	111.9
September.....	156.4	173.3	138.8	September.....	130.2	147.7	114.3
October.....	154.4	171.1	137.8	October.....	129.8	142.7	117.0
November.....	152.4	164.0	135.3	November.....	129.1	135.4	114.4
December.....	151.6	161.6	129.8	December.....	127.8	129.3	111.4

Table 3 shows by index numbers the trend in the retail cost of food in the United States from 1890 to 1931. The number of articles included in the index number for each year has not been the same throughout the period, but a sufficient number have been used fairly

to represent food as a whole. From 1890 to 1907, 30 articles were used; from 1907 to 1913, 15 articles; from 1913 to 1920, 22 articles; and from 1921, 42 articles. The relatives for the period have been so computed as to be comparable with each other.

TABLE 3.—INDEX NUMBERS SHOWING THE TREND IN THE RETAIL COST OF FOOD IN THE UNITED STATES, BY YEARS, 1890 TO 1931

[Average for year 1913=100]

Year	Index number	Year	Index number	Year	Index number	Year	Index number
1890.....	69.6	1901.....	71.5	1912.....	97.6	1923.....	146.2
1891.....	70.6	1902.....	75.4	1913.....	100.0	1924.....	145.9
1892.....	69.3	1903.....	75.0	1914.....	102.4	1925.....	157.4
1893.....	71.0	1904.....	76.0	1915.....	101.3	1926.....	160.6
1894.....	67.8	1905.....	76.4	1916.....	113.7	1927.....	155.4
1895.....	66.5	1906.....	78.7	1917.....	146.4	1928.....	154.3
1896.....	64.9	1907.....	82.0	1918.....	168.3	1929.....	156.7
1897.....	65.4	1908.....	84.3	1919.....	185.9	1930.....	147.1
1898.....	67.1	1909.....	88.7	1920.....	203.4	1931.....	121.3
1899.....	67.7	1910.....	93.0	1921.....	153.3		
1900.....	68.7	1911.....	92.0	1922.....	141.6		

The curve shown in the chart (p. 456) pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table.

Comparison of Retail Food Costs in 51 Cities

Table 4 shows for 39 cities and the United States the percentage of increase or decrease in the retail cost of food in December, 1931, compared with the average cost in the year 1913, in December, 1930, and November, 1931. For 12 other cities comparisons are given for the 1-year and the 1-month periods; these cities have been scheduled by the bureau at different dates since 1913. The percentage changes are based on actual retail prices secured each month from retail dealers and on the average consumption of these articles in each city. The consumption figures which have been used since January, 1921, are given in the Labor Review for March, 1921 (p. 26). Those used for prior dates are given in the Labor Review for November, 1918 (pp. 94 and 95).

Effort has been made by the bureau each month to have all schedules for each city included in the average prices. For the month of December schedules were received from 99.2 per cent of the firms in the 51 cities from which retail prices of food are collected.

Out of about 1,230 food reports 12 were not received—1 each in Bridgeport, Butte, Chicago, Los Angeles, Memphis, and Norfolk, and 2 each in Boston, Cleveland, and Pittsburgh.

Out of about 350 bread reports 1 was missing in Little Rock.

A perfect record is shown for the following named cities: Atlanta, Baltimore, Birmingham, Buffalo, Charleston (S. C.), Cincinnati, Columbus, Dallas, Denver, Detroit, Fall River, Houston, Indianapolis, Jacksonville, Kansas City, Louisville, Manchester, Milwaukee, Minneapolis, Mobile, Newark, New Haven, New Orleans, New York, Omaha, Peoria, Philadelphia, Portland (Me.), Portland (Oreg.), Providence, Richmond, Rochester, St. Louis, St. Paul, Salt Lake City, San Francisco, Savannah, Scranton, Seattle, Springfield (Ill.), and Washington.

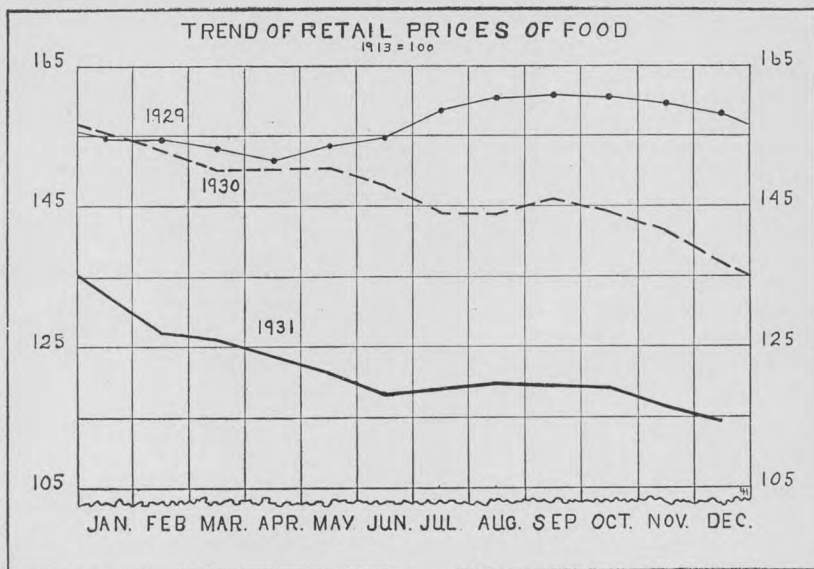


TABLE 4.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN DECEMBER, 1931, COMPARED WITH THE COST IN NOVEMBER, 1931, DECEMBER, 1930, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percent- age in- crease Decem- ber, 1931, compared with 1913	Percentage decrease December, 1931, compared with—		City	Percent- age in- crease Decem- ber, 1931, compared with 1913	Percentage decrease December, 1931, compared with—	
		Decem- ber, 1930	Novem- ber, 1931			Decem- ber, 1930	Novem- ber, 1931
United States	14.3	16.7	2.0	Mobile.....		19.0	2.2
Atlanta.....	11.9	18.6	3.0	Newark.....	14.0	15.4	3.8
Baltimore.....	18.5	16.4	1.7	New Haven.....	22.5	15.7	1.
Birmingham.....	10.1	22.4	2.7	New Orleans.....	12.2	18.0	0
Boston.....	17.9	17.5	4.8				.0
Bridgeport.....		13.4	1.4	New York.....	19.4	15.8	4.4
Buffalo.....	10.3	21.4	8.6	Norfolk.....		19.5	3.6
Butte.....		10.0	0.8	Omaha.....	5.7	19.7	2.6
Charleston, S. C.....	17.8	17.2	1.2	Peoria.....		20.1	1.0
Chicago.....	26.3	15.4	2.3	Philadelphia.....	22.3	12.9	2
Cincinnati.....	19.7	17.6	2.9				.5
Cleveland.....	6.6	19.6	2.1	Pittsburgh.....	11.7	18.2	3.6
Columbus.....		17.7	1.4	Portland, Me.....		15.3	4.0
Dallas.....	12.7	18.6	12.0	Portland, Oreg.....	7.1	10.0	0.5
Denver.....	5.7	13.3	1.7	Providence.....	18.5	15.0	4.3
				Richmond.....	18.6	16.8	1
Detroit.....	11.0	18.8	1.5				.3
Fall River.....	13.3	15.6	2.3	Rochester.....		15.4	1.4
Houston.....		17.6	11.9	St. Louis.....	13.7	17.5	2.6
Indianapolis.....	8.7	17.4	1.4	St. Paul.....		17.4	0.8
Jacksonville.....	5.3	21.0	2.8	Salt Lake City.....		13.8	1.2
Kansas City.....	13.5	15.5	0.6	San Francisco.....	15.1	16.5	3
Little Rock.....	4.0	21.4	1.4				.2
Los Angeles.....	8.0	12.6	0.8	Savannah.....		18.9	1.1
				Scranton.....	21.6	16.0	3.1
Louisville.....	7.7	17.9	0.5	Seattle.....	13.2	11.2	1.2
Manchester.....	10.8	17.5	6.3	Springfield, Ill.....		23.0	2.4
Memphis.....	4.9	18.6	1.9	Washington.....	22.1	16.7	2
Milwaukee.....	15.1	16.7	3.6				
Minneapolis.....	14.2	17.8	2.4	Hawaii:			.7
				Honolulu.....		8.8	0.2
				Other localities.....		7.6	10

¹ Increase.

Retail Prices of Coal in December, 1931

RETAIL prices of coal are secured in each of the 51 cities in 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 table shows the average prices of coal per ton of 2,000 pounds and index numbers for the United States on December 15, 1931, in comparison with the average prices on November 15, 1931, and December 15, 1930, together with the percentage change in the year and in the month.

AVERAGE RETAIL PRICE PER 2,000 POUNDS OF COAL FOR THE UNITED STATES, AND PER CENT OF CHANGE ON DECEMBER 15, 1931, COMPARED WITH DECEMBER 15, 1930, AND NOVEMBER 15, 1931

Article	Average retail price on—			Per cent of increase (+) or decrease (—), December, 1931, compared with—	
	Dec. 15, 1930	Nov. 15, 1931	Dec. 15, 1931	Dec. 15, 1930	Nov. 15, 1931
Pennsylvania anthracite:					
Stove—					
Average price per 2,000 pounds.....	\$15.13	\$15.00	\$15.00	—0.9	0.0
Index (1913=100.0).....	195.9	194.2	194.2		
Chestnut—					
Average price per 2,000 pounds.....	\$14.89	\$14.96	\$14.97	+0.5	+0.1
Index (1913=100.0).....	188.1	189.1	189.1		
Bituminous:					
Average price per 2,000 pounds.....	\$8.94	\$8.23	\$8.19	—8.4	—0.5
Index (1913=100.0).....	164.4	151.4	150.8		

Retail Prices of Gas in the United States

AVERAGE net prices in the United States per 1,000 cubic feet of manufactured gas based on a consumption of 3,000 cubic feet, and index numbers showing the trend since April, 1913, are shown in the following table. The index numbers are based on the price in April, 1913.

AVERAGE PRICE PER 1,000 CUBIC FEET OF MANUFACTURED GAS AND INDEX NUMBER IN SPECIFIED MONTHS OF EACH YEAR 1913 AND 1928 TO 1931 FOR THE UNITED STATES

Date	Average net price	Index	Date	Average net price	Index
1913: April.....	\$0.95	100.0	1930: June.....	\$1.21	127.4
1928: June.....	1.21	127.4	December.....	1.18	124.2
December.....	1.22	128.4	1931: June.....	1.18	124.2
1929: June.....	1.22	128.4	December.....	1.16	122.1
December.....	1.21	127.4			

Retail Prices of Electricity in the United States

AVERAGE retail prices per kilowatt hour of electricity for domestic consumption in the United States and index numbers based on the price in December, 1913, are shown on the following table:

AVERAGE NET PRICE PER KILOWATT-HOUR OF ELECTRICITY AND INDEX NUMBER IN SPECIFIED MONTHS OF EACH YEAR 1913 TO 1931 FOR THE UNITED STATES

[December 1913=100.0]

Date	Average price per kilowatt-hour	Index	Date	Average price per kilowatt-hour	Index	Date	Average price per kilowatt-hour	Index
	<i>Cents</i>			<i>Cents</i>			<i>Cents</i>	
1913: December.....	8.1	100.0	1922: March.....	7.7	95.1	1926: June.....	7.2	88.9
1914: December.....	7.8	96.3	June.....	7.6	93.8	December.....	7.2	88.9
1915: December.....	7.6	93.8	September.....	7.6	93.8	1927: June.....	7.1	87.7
1916: December.....	7.4	91.4	December.....	7.5	92.6	December.....	7.1	87.7
1917: December.....	7.2	88.9	1923: March.....	7.5	92.6	1928: June.....	7.0	86.4
1918: June.....	7.2	88.9	June.....	7.5	92.6	December.....	6.9	85.2
December.....	7.6	93.8	September.....	7.4	91.4	1929: June.....	6.7	82.7
1919: June.....	7.6	93.8	December.....	7.4	91.4	December.....	6.7	82.7
December.....	7.5	92.6	1924: March.....	7.4	91.4	1930: June.....	6.6	81.5
1920: June.....	7.5	92.6	June.....	7.4	91.4	December.....	6.6	81.5
December.....	7.7	95.1	September.....	7.4	91.4	1931: June.....	6.5	80.2
1921: May.....	7.7	95.1	December.....	7.4	91.4	December.....	6.5	80.2
September.....	7.7	95.1	1925: June.....	7.3	90.1			
December.....	7.7	95.1	December.....	7.3	90.1			

Index Numbers of Wholesale Prices, 1890 to 1931

THE following table shows the index numbers of wholesale prices by years from 1890 to 1931, inclusive, and by months from January, 1930, to December, 1931, inclusive, for the all-commodities group. The base used in computing these indexes is the average for the calendar year 1926. The number of commodities since 1913 included in the compilation is 550. Prior to 1913 the indexes are based on a more limited number of items, but for comparative purposes these index numbers are comparable throughout the entire period. Beginning with January, 1932, the number will be increased from 550 to 784, with the revised information extending back to and including January, 1926. Also, beginning with January, 1932, revised weights will be introduced into these compilations.

INDEX NUMBERS OF WHOLESALE PRICES, ALL COMMODITIES, BY YEARS FROM 1890-1931, INCLUSIVE, AND BY MONTHS FROM JANUARY, 1930, TO DECEMBER, 1931, INCLUSIVE

Year	Index number	Year	Index number	Year and month	Index number
1890.....	56.2	1911.....	64.9	1930-January.....	93.4
1891.....	55.8	1912.....	69.1	February.....	92.1
1892.....	52.2	1913.....	69.8	March.....	90.8
1893.....	53.4	1914.....	68.1	April.....	90.7
1894.....	47.9	1915.....	69.5	May.....	89.1
				June.....	86.8
1895.....	48.8	1916.....	85.5	July.....	84.0
1896.....	46.5	1917.....	117.5	August.....	84.0
1897.....	46.6	1918.....	131.3	September.....	84.2
1898.....	48.5	1919.....	138.6	October.....	82.6
				November.....	80.4
1899.....	52.2	1920.....	154.4	December.....	78.4
1900.....	56.1	1921.....	97.6		
1901.....	55.3	1922.....	96.7	1931-January.....	77.0
1902.....	58.9	1923.....	100.6	February.....	75.5
				March.....	74.5
1903.....	59.6	1924.....	98.1	April.....	73.3
1904.....	59.7	1925.....	103.5	May.....	71.3
1905.....	60.1	1926.....	100.0	June.....	70.0
1906.....	61.8	1927.....	95.4	July.....	70.0
				August.....	70.2
1907.....	65.2	1928.....	97.7	September.....	69.1
1908.....	62.9	1929.....	96.5	October.....	68.4
1909.....	67.6	1930.....	86.3	November.....	68.3
1910.....	70.4	1931.....	71.1	December.....	66.3

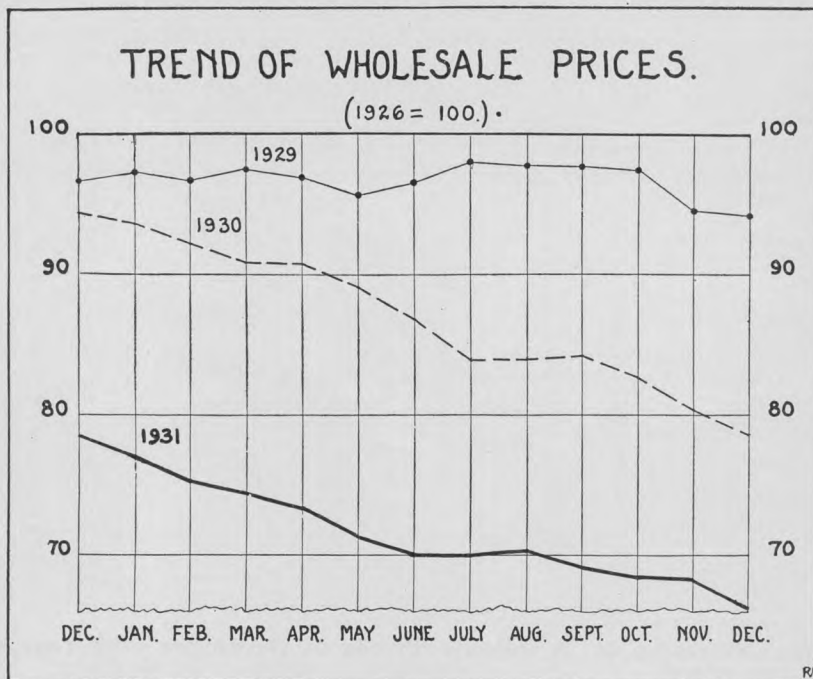
Index Numbers of Wholesale Prices in December and Year, 1931

THE index number of wholesale prices as computed by the Bureau of Labor Statistics of the United States Department of Labor shows a decrease for December. This index number, which includes 550 commodities or price series weighted according to the importance of each article and based on the average prices for 1926 as 100.0, was 66.3 for December as compared with 68.3 for November, showing a decrease of nearly 3 per cent. When compared with December, 1930, with an index number of 78.4, a decrease of about 15 per cent has been recorded.

Farm products as a group decreased 5 per cent from the November level, due to lower prices for corn, oats, rye, wheat, calves, cows, steers, hogs, lambs, poultry, dried beans, cotton, eggs, lemons, oranges, and tobacco. Barley, onions, potatoes, and hay, on the other hand, averaged higher in December.

Among foods price decreases were reported for butter, fresh and cured meats, flour, lard, raw and granulated sugar, corn meal, and evaporated milk, resulting in a net decrease of 4 per cent for the group as a whole. Coffee, oleomargarine, bananas, and rice averaged higher than in the month before.

Decreases in the average prices for most hides and skins, chrome calf leather, several types of shoes, and suit cases and bags caused the hides and leather products group to decline $2\frac{1}{2}$ per cent.



In the group of textile products cotton goods, silk and rayon, and other textile products declined sharply, while woolen and worsted goods declined slightly from November to December. The textile group as a whole declined about $2\frac{1}{2}$ per cent.

Advancing prices of anthracite and bituminous coal were offset by declining prices for gas, Pennsylvania crude petroleum, fuel oil, and gasoline, with the result that the index number for the fuel and lighting group as a whole was forced down 2 per cent.

Up and down fluctuations in the prices of the items composing the metals and metal products group produced little change on the group as a whole, but with a downward tendency. Iron and steel products, nonferrous metals, and other metal products decreased, while agricultural implements and automobiles showed no change.

Paint materials and other building materials declined in December. No change was reported for brick, cement, and structural steel, while a minor increase was reported for lumber. The group as a whole showed a decrease of less than 1 per cent.

Minor price recessions during December occurred in drugs and pharmaceuticals and mixed fertilizers, while chemicals advanced slightly and fertilizer materials showed no change. Both furniture and furnishings in the group of house-furnishing goods continued to decline in the month.

Prices of cattle feed, paper and pulp, crude rubber, automobile tires, and other miscellaneous articles showed decreases during the month. The group of miscellaneous commodities as a whole averaged 5 per cent lower than in November.

Raw materials, semimanufactured articles and finished products all averaged lower than in the month before. In the large group of non-agricultural commodities, including all articles other than farm products, and all commodities other than farm products and foods December prices showed a downward tendency.

Between November and December decreases took place in 240 instances, increases in 56 instances, while in 254 instances no change occurred.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES

[1926=100.0]

Commodity groups and subgroups	December, 1930	November, 1931	December, 1931	Year 1931	Purchasing power of the dollar, December, 1931
All commodities.....	78.4	68.3	66.3	71.1	\$1.508
Farm products.....	75.2	58.7	55.7	64.8	1.795
Grains.....	64.0	51.3	47.0	53.0	2.128
Livestock and poultry.....	76.3	55.7	51.7	63.9	1.934
Other farm products.....	78.1	63.1	61.2	69.2	1.634
Foods.....	81.8	70.9	68.1	73.8	1.468
Butter, cheese and milk.....	89.4	80.9	80.0	82.1	1.250
Meats.....	89.2	67.7	63.2	75.4	1.582
Other foods.....	74.5	68.5	66.0	69.4	1.515
Hides and leather products.....	91.2	81.3	79.4	85.9	1.259
Hides and skins.....	69.4	49.0	48.8	60.2	2.049
Leather.....	91.5	78.8	78.6	86.2	1.272
Boots and shoes.....	97.7	92.5	89.2	93.7	1.121
Other leather products.....	104.2	101.0	99.2	101.3	1.008
Textile products.....	72.4	60.7	59.2	65.3	1.689
Cotton goods.....	79.7	64.7	62.8	71.3	1.592
Silk and rayon.....	51.7	43.9	42.0	45.1	2.381
Woolen and worsted goods.....	82.3	71.9	71.5	76.1	1.399
Other textile products.....	57.8	47.4	45.0	52.6	2.222
Fuel and lighting materials.....	70.5	65.0	63.6	63.4	1.572
Anthracite coal.....	89.6	94.2	94.8	91.1	1.055
Bituminous coal.....	89.1	83.7	83.8	84.6	1.193
Coke.....	83.8	81.4	81.1	82.4	1.233
Gas.....	95.4	100.1	(1)	(1)	-----
Petroleum products.....	51.1	42.5	39.6	39.5	2.525
Metals and metal products.....	90.0	86.2	85.8	87.6	1.166
Iron and steel.....	88.0	86.0	85.2	87.0	1.174
Nonferrous metals.....	69.7	53.5	52.6	59.9	1.901
Agricultural implements.....	94.9	92.1	92.1	94.0	1.086
Automobiles.....	99.5	99.4	99.4	98.9	1.006
Other metal products.....	95.2	90.5	90.3	92.9	1.107

1 Data not yet available.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES—Continued

Commodity groups and subgroups	December, 1930	November, 1931	December, 1931	Year, 1931	Purchasing power of the dollar, December, 1931
Building materials.....	84.4	74.0	73.3	77.6	\$1.364
Lumber.....	78.1	64.2	64.3	68.6	1.555
Brick.....	81.6	79.5	79.5	80.6	1.258
Cement.....	90.6	74.6	74.6	79.4	1.340
Structural steel.....	81.7	81.7	81.7	83.1	1.224
Paint materials.....	72.4	64.6	62.8	68.3	1.592
Other building materials.....	97.1	88.1	86.3	91.3	1.159
Chemicals and drugs.....	84.8	74.7	74.7	78.0	1.339
Chemicals.....	89.1	78.8	79.0	81.2	1.266
Drugs and pharmaceuticals.....	65.5	60.7	60.4	62.4	1.656
Fertilizer materials.....	81.4	70.1	70.1	76.8	1.427
Mixed fertilizers.....	90.6	77.7	77.1	82.0	1.297
Housefurnishing goods.....	91.3	83.1	81.0	87.4	1.235
Furniture.....	95.5	84.5	82.7	91.0	1.209
Furnishings.....	87.6	81.8	79.5	84.3	1.258
Miscellaneous.....	66.9	59.7	56.9	61.3	1.757
Cattle feed.....	78.2	59.8	53.9	62.7	1.855
Paper and pulp.....	83.6	80.8	79.2	81.1	1.263
Rubber.....	18.6	9.6	9.5	12.8	10.526
Automobile tires.....	51.3	45.7	41.2	45.3	2.427
Other miscellaneous.....	86.9	77.7	75.2	81.6	1.330
Raw materials.....	74.2	62.0	60.2	65.6	1.661
Semimanufactured articles.....	74.3	64.4	62.2	68.4	1.608
Finished products.....	81.9	73.2	71.0	75.4	1.408
Nonagricultural commodities.....	79.4	71.0	69.3	73.0	1.443
All commodities less farm products and foods.....	79.0	71.8	70.4	73.3	1.420

COST OF LIVING

Changes in Cost of Living in the United States

AFTER several years of comparative stability in the cost of living, a definite downward movement was witnessed in the past two years. From December, 1929, to December, 1931, the cost of living decreased 14.9 per cent. In December, 1931, the cost of living declined 3.0 per cent from that of June, 1931. The cost of living index in December, 1931, 145.8, as based on 1913 as 100, was the lowest recorded during the past 14 years, being only 2.4 per cent higher than it was in December, 1917.

In the period of inflation, prior to the war, the prices of food, clothing, and house-furnishing goods were considerably higher than the prices of the other commodities. The high level after the war was reached in June, 1920, for most of the items with the exception of rents, which continued to advance through 1924, and miscellaneous items which were still increasing through 1930 and have since then shown only a slight drop.

The cost of living still stands well above the level of 1913—14.3 per cent above for food prices, 35.5 per cent for clothing, 36.2 per cent for rent, 68 per cent for fuel and light, 67.1 per cent for house-furnishing goods, and for miscellaneous items 105.4 per cent. For all items combined the per cent is 45.8. In some instances the current recession has tended to restore the 1913 situation. Food and clothing stand closer to the earlier level than at any time since 1916. The degree of price decline from December, 1929, to December, 1931, is considerably less than the drop of 19.5 per cent from June, 1920, to December, 1921. While there is no evidence that the bottom of the decline has been reached, the rate of recession has been somewhat retarded in the past 6 months.

Table 1 shows the index numbers which represent changes in the six groups of items entering into living costs in the United States from 1913 to December, 1931. These index numbers include prices obtained from 51 cities on food and from 32 cities on various articles of clothing, rent, fuel and light, house-furnishing goods, and miscellaneous items, weighted in accordance with their importance in the family budget, and based on 1913 as 100.

Since the food group represents the largest and most significant expenditure of the wage-earner's family—about one-third of the working-man's budget—the trend of these prices will be considered first. In December, 1931, the food prices were 16.7 per cent lower than in December, 1930, and 3.4 per cent lower than in the preceding 6-month period ending December, 1931. They have been declining steadily in the past two years and the present index is 9.3 per cent lower than the index in December, 1916. Since the peak of prices in June, 1920, the decrease in food in December, 1931, is 47.8 per cent. During the previous depression in 1921 the drop in food prices from June, 1920, to December, 1921, was 31.6 per cent and the drop from December, 1929, to December, 1931, was 27.7 per cent.

Clothing prices are 7.2 per cent less than six months ago. In the year period from December, 1930, to December, 1931, the decrease for this item averaged 11.4 per cent. Considering the peak of June, 1920, the decline averaged 52.9 per cent.

Rents in December, 1931, were 7 per cent lower than in December, 1930, and 10.3 per cent lower than in December, 1929. Since June, 1925, rents have been on the decline. Due to the enactment of rent laws during the war period, this item did not increase in the same degree or at the same time as the prices of most of the other commodities. Since the peak of rents was reached in December, 1924, the movement of this item has been continuously downward. The December, 1931, index figure is still 36.2 per cent higher than in 1913 and compares favorably with June, 1920. Changes in the housing standard and other local influences affect the rent situation in the different cities and therefore rent figures should be used only to indicate fluctuations in rents in the various cities as compared with the rent level in that city in the base period.

Fuel and light figures showed a decrease of 4.1 per cent in 1931 as compared with 1930. The increase between June, 1931, and December, 1931, averaged 1.6 per cent due to seasonal fluctuations, principally in the price of coal. The trend of this group has not been similar to that of other groups. The drop of commodity prices in 1931 had very little effect on the prices of coal, gas, and electricity.

Prices of house furnishings declined 25.5 per cent from the peak in June, 1920, to December, 1921. The decline continued until December, 1922, when an upward trend was evidenced that lasted through 1923. Since then the drop has been constant and in the period between December, 1929, and December, 1931, house-furnishing goods declined 15.5 per cent. The drop of the year period ending December, 1931, was 11.3 per cent; for the 6-month period between June and December, 1931, it was 5.6 per cent.

Miscellaneous items did not change materially as compared with the previous year. The trend of individual items comprising this group is not uniform. Street-car fares have been on the upward trend in recent years. The slight increases reported in five cities for the current period were occasioned by tobacco prices. Between 1929 and 1931 miscellaneous items decreased only 0.8 per cent, and during the year period from 1930 to 1931 the decrease was only 1.1 per cent. For the current period the drop was only 0.6 per cent.

TABLE 1.—INDEX NUMBERS SHOWING CHANGES IN COST OF GROUPS OF ITEMS ENTERING INTO COST OF LIVING IN THE UNITED STATES, 1913 TO DECEMBER, 1931

Date	Index numbers						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
Average, 1913.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
December, 1914.....	105.0	101.0	(¹)	101.0	104.0	103.0	103.0
December, 1915.....	105.0	104.7	101.5	101.0	110.6	107.4	105.1
December, 1916.....	126.0	120.0	102.3	108.4	127.8	113.3	118.3
December, 1917.....	157.0	149.1	100.1	124.1	150.6	140.5	142.4
December, 1918.....	187.0	205.3	109.2	147.9	213.6	165.8	174.4
June, 1919.....	184.0	214.5	114.2	145.6	225.1	173.2	177.3
December, 1919.....	197.0	268.7	125.3	156.8	263.5	190.2	199.3
June, 1920.....	219.0	287.5	134.9	171.9	292.7	201.4	216.5
December, 1920.....	178.0	258.5	151.1	194.9	285.4	208.2	200.4
May, 1921.....	144.7	222.6	159.0	181.6	247.7	208.8	180.4
September, 1921.....	153.1	192.1	160.1	180.9	224.7	207.8	177.3
December, 1921.....	149.9	184.4	161.4	181.1	218.0	206.8	174.3
March, 1922.....	138.7	175.5	160.9	175.8	206.2	203.3	166.9
June, 1922.....	140.7	172.3	160.9	174.2	202.9	201.5	166.4
September, 1922.....	139.7	171.3	161.1	183.6	202.9	201.1	166.3
December, 1922.....	146.6	171.5	161.9	186.4	208.2	200.5	169.5
March, 1923.....	141.9	174.4	162.4	186.2	217.6	200.3	168.8
June, 1923.....	144.3	174.9	163.4	180.6	222.2	200.3	169.7
September, 1923.....	149.3	176.5	164.4	181.3	222.4	201.1	172.1
December, 1923.....	150.3	176.3	166.5	184.0	222.4	201.7	173.2
March, 1924.....	143.7	175.8	167.0	182.2	221.3	201.1	170.4
June, 1924.....	142.4	174.2	168.0	177.3	216.0	201.1	169.1
September, 1924.....	146.8	172.3	168.0	179.1	214.9	201.1	170.6
December, 1924.....	151.5	171.3	168.2	180.5	216.0	201.7	172.5
June, 1925.....	155.0	170.6	167.4	176.5	214.3	202.7	173.5
December, 1925.....	165.5	169.4	167.1	186.9	214.3	203.5	177.9
June, 1926.....	159.7	168.2	165.4	180.7	210.4	203.3	174.8
December, 1926.....	161.8	166.7	164.2	188.3	207.7	203.9	175.6
June, 1927.....	158.5	164.9	162.1	180.8	205.2	204.5	173.4
December, 1927.....	155.9	162.9	160.2	183.2	204.6	205.1	172.0
June, 1928.....	152.6	162.6	157.6	177.2	201.1	205.5	170.0
December, 1928.....	155.8	161.9	155.9	181.3	199.7	207.1	171.3
June, 1929.....	154.8	161.3	153.7	175.2	198.5	207.3	170.2
December, 1929.....	158.0	160.5	151.9	178.7	197.7	207.9	171.4
June, 1930.....	147.9	158.9	149.6	172.8	195.7	208.5	166.6
December, 1930.....	137.2	153.0	146.5	175.0	188.3	208.1	160.7
June, 1931.....	118.3	146.0	142.0	165.4	177.0	206.6	150.3
December, 1931.....	114.3	135.5	136.2	168.0	167.1	205.4	145.8

¹ No change.

Table 2 shows the per cent of decrease in the price of electricity in 32 cities since December, 1913. Considering the year period from December, 1930, to December, 1931, this utility decreased 1.6 per cent, but no change was reported for the current 6-month period, the decline from 1913 to December, 1931, still being represented by 19.8 per cent.

TABLE 2.—PER CENT OF DECREASE IN THE PRICE OF ELECTRICITY AT SPECIFIED PERIODS AS COMPARED WITH DECEMBER, 1913

Date	Per cent of decrease from December, 1913	Date	Per cent of decrease from December, 1913	Date	Per cent of decrease from December, 1913
December, 1914	3.7	June, 1922	6.2	June, 1926	11.1
December, 1915	6.2	September, 1922	6.2	December, 1926	11.1
December, 1916	8.6	December, 1922	7.4	June, 1927	12.3
December, 1917	11.1	March, 1923	7.4	December, 1927	12.3
December, 1918	6.2	June, 1923	7.4	June, 1928	13.6
June, 1919	6.2	September, 1923	8.6	December, 1928	14.8
December, 1919	7.4	December, 1923	8.6	June, 1929	17.3
June, 1920	7.4	March, 1924	8.6	December, 1929	17.3
December, 1920	4.9	June, 1924	8.6	June, 1930	18.5
May, 1921	4.9	September, 1924	8.6	December, 1930	18.5
September, 1921	4.9	December, 1924	8.6	June, 1931	19.8
December, 1921	4.9	June, 1925	9.9	December, 1931	19.8
March, 1922	4.9	December, 1925	9.9		

The per cent of decrease in the total cost of living in each of the 32 cities and in the United States, from June, 1920, December, 1930, and June, 1931, to December, 1931, is presented in Table 3. In the period between June, 1920, and December, 1931, the decreases in the 32 cities ranged from 28.1 to 39.9 per cent and averaged 32.7 per cent for the United States. In the year from December, 1930, to December, 1931, the decreases ranged from 6.6 to 12.9 per cent and averaged 9.3 per cent for the United States.

Considering the 6-month period from June, 1931, to December, 1931, the decreases for the 32 cities ranged from 0.9 to 5.7 per cent, and for the United States averaged 3 per cent.

TABLE 3.—PER CENT OF DECREASE IN COST OF LIVING IN SPECIFIED CITIES FROM JUNE, 1920, DECEMBER, 1930, AND JUNE, 1931, TO DECEMBER, 1931

City	Per cent of decrease from—			City	Per cent of decrease from—		
	June, 1920, to December, 1931	December, 1930, to December, 1931	June, 1931, to December, 1931		June, 1920, to December, 1931	December, 1930, to December, 1931	June, 1931, to December, 1931
Atlanta	36.1	10.2	4.6	Mobile	33.3	10.6	3.5
Baltimore	29.2	8.4	2.6	New Orleans	29.3	9.0	.9
Birmingham	36.3	12.9	4.2	New York	30.7	9.3	3.2
Boston	31.6	9.5	2.0	Norfolk	33.0	9.7	3.4
Buffalo	31.5	10.4	4.1	Philadelphia	29.5	8.5	3.1
Chicago	31.9	9.9	3.7	Pittsburgh	29.9	9.3	3.6
Cincinnati	28.1	9.3	3.0	Portland, Me.	30.1	7.7	2.1
Cleveland	31.9	9.7	2.8	Portland, Oreg.	34.2	6.8	2.4
Denver	33.3	8.6	3.4	Richmond	30.3	8.2	2.1
Detroit	39.9	12.2	5.7	St. Louis	31.9	11.0	4.5
Houston	33.5	8.8	2.8	San Francisco	29.5	8.8	3.3
Indianapolis	34.0	10.5	3.7	Savannah	36.1	9.7	4.8
Jacksonville	35.1	10.5	4.7	Scranton	28.4	9.3	3.0
Kansas City	34.5	8.2	3.9	Seattle	29.7	6.6	2.8
Los Angeles	28.1	8.2	2.1	Washington	30.9	8.4	2.8
Memphis	32.0	9.9	3.8	Average, United States	32.7	9.3	3.0
Minneapolis	28.8	7.7	2.8				

A representative number of grocers, meat dealers, bakers, and dairymen in each of the 51 cities report regularly by mail their retail price on each of 43 standard articles of food. These prices are

weighted according to their importance in the family budget and then applied to the average food price in the year 1913 in order to obtain the index figure for the current period.

Retail prices on coal, wood, gas, and electricity are also reported by mail. All other cost of living data, covering prices on 32 articles of male clothing, 38 articles of female clothing, 28 house-furnishing commodities, and 14 miscellaneous items are secured by personal visits of agents of the bureau.

Rent data are secured from real-estate operators and trust companies for dwellings such as are occupied by wage earners and moderately salaried families and the same dwellings are reported as long as they continue to be representative. The number of rents secured in each city varies according to the population and ranges from 450 to 2,500.

In the practice of economy, and due to the high cost of printing, the bureau is now publishing only the initial figures for the individual cities, for the periods of high prices, and for the 6-month periods beginning with June, 1928, through December, 1931. Data on prices for all intervening periods can be obtained from the Monthly Labor Review of August, 1931.

Table 4 shows the per cent of change in the cost of living for 19 cities for each of 6 groups of items from December, 1914, to December, 1931.

TABLE 4.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO DECEMBER, 1931

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
Baltimore, Md.:							
December, 1915.....	14.1	2.7	10.2	0.5	5.6	11.4	11.4
June, 1920.....	110.9	191.3	41.6	57.6	191.8	111.4	114.3
December, 1920.....	75.6	159.5	49.5	79.0	181.9	112.9	96.8
June, 1928.....	52.9	68.1	66.7	82.0	103.2	118.7	73.7
December, 1928.....	51.9	68.3	65.7	87.3	102.0	120.9	73.9
June, 1929.....	53.8	67.5	65.2	80.7	100.4	119.8	73.8
December, 1929.....	56.7	67.2	63.4	86.1	99.4	120.2	75.1
June, 1930.....	47.2	65.9	62.4	80.9	95.6	127.0	71.6
December, 1930.....	36.9	58.1	61.3	85.6	86.0	126.5	65.8
June, 1931.....	18.7	51.6	59.8	78.7	72.1	125.6	55.8
December, 1931.....	14.4	41.9	56.3	83.9	66.8	124.5	51.8
Boston, Mass.:							
December, 1915.....	1.3	6.6	1.1	1.1	8.4	1.6	1.6
June, 1920.....	105.0	211.1	16.2	83.6	233.7	91.8	110.7
December, 1920.....	74.4	192.7	25.8	106.0	226.4	96.6	97.4
June, 1928.....	45.0	80.2	52.2	90.4	123.1	90.2	64.8
December, 1928.....	50.5	80.4	51.6	96.7	118.4	94.4	68.2
June, 1929.....	47.1	79.0	50.7	87.7	118.4	92.1	65.4
December, 1929.....	53.2	79.0	49.2	94.3	118.0	92.9	68.4
June, 1930.....	43.7	78.3	47.1	88.7	113.6	92.5	63.1
December, 1930.....	36.7	72.6	44.7	95.7	107.6	92.3	59.2
June, 1931.....	14.6	66.7	41.8	85.3	97.4	92.3	47.1
December, 1931.....	12.8	58.0	38.4	86.0	89.9	91.3	44.1
Buffalo, N. Y.:							
December, 1915.....	2.4	8.9	1.2	3.2	7.1	3.5	3.5
June, 1920.....	115.7	210.6	46.6	69.8	199.7	101.9	121.5
December, 1920.....	78.5	168.7	48.5	74.9	189.2	107.4	101.7
June, 1928.....	51.6	71.7	72.7	126.7	105.4	117.8	78.7
December, 1928.....	54.9	72.4	69.4	128.5	104.2	117.8	79.6
June, 1929.....	54.6	71.2	67.0	123.2	104.4	118.9	78.8
December, 1929.....	57.9	71.0	66.5	127.0	104.2	119.1	80.0
June, 1930.....	47.2	70.0	65.0	122.9	105.0	120.4	76.0
December, 1930.....	35.8	62.0	62.5	126.7	96.4	118.4	69.4
June, 1931.....	16.0	52.3	56.5	121.3	84.0	116.4	58.3
December, 1931.....	6.7	45.4	50.4	124.8	72.4	114.2	51.8

¹ Decrease.

TABLE 4.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO DECEMBER, 1931—Continued

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
Chicago, Ill.:							
December, 1915.....	2.7	7.5	10.1	10.9	5.9	3.0	3.0
June, 1920.....	120.0	205.3	30.1	60.4	215.9	87.5	114.6
December, 1920.....	70.5	158.6	48.9	83.5	205.8	96.5	93.3
June, 1928.....	59.4	53.3	86.8	51.2	96.0	98.5	71.5
December, 1928.....	62.4	52.1	83.6	56.5	97.2	101.7	73.1
June, 1929.....	63.0	51.5	80.3	50.7	97.4	101.7	72.3
December, 1929.....	67.3	49.2	77.2	56.7	97.0	102.9	73.7
June, 1930.....	56.9	47.7	75.1	51.5	92.1	104.7	69.1
December, 1930.....	45.6	37.2	71.1	54.8	82.7	104.5	62.2
June, 1931.....	26.7	30.3	64.4	49.5	67.7	103.3	51.8
December, 1931.....	23.1	19.5	56.5	52.5	57.8	98.6	46.2
Cleveland, Ohio:							
December, 1915.....	1.4	2.0	.1	.3	4.7	1.4	1.4
June, 1920.....	118.7	185.1	47.3	90.3	186.5	117.9	120.3
December, 1920.....	71.7	156.0	80.0	94.5	176.8	134.0	107.3
June, 1928.....	50.6	65.7	61.8	161.3	90.2	118.1	76.3
December, 1928.....	48.5	63.9	60.5	163.7	89.2	119.0	75.4
June, 1929.....	50.6	63.9	59.5	160.5	89.4	117.9	75.7
December, 1929.....	47.0	63.2	58.9	163.1	88.8	118.3	74.3
June, 1930.....	42.0	61.6	56.4	160.2	87.7	125.3	73.3
December, 1930.....	29.5	52.1	55.3	162.5	75.5	124.2	66.2
June, 1931.....	9.6	41.8	48.6	158.0	64.4	118.6	54.4
December, 1931.....	4.1	36.8	41.0	159.5	58.3	119.0	50.0
Detroit, Mich.:							
December, 1915.....	4.1	2.3	2.1	1.6	8.7	3.5	3.5
June, 1920.....	132.0	208.8	68.8	74.9	206.7	141.3	136.0
December, 1920.....	75.6	176.1	108.1	104.5	184.0	144.0	118.6
June, 1928.....	53.5	64.3	79.1	73.2	81.4	128.8	76.4
December, 1928.....	55.7	62.5	78.2	77.0	81.2	131.1	77.4
June, 1929.....	59.2	62.5	77.3	72.8	81.2	130.4	78.1
December, 1929.....	57.9	61.7	77.8	77.5	79.4	130.6	77.8
June, 1930.....	47.6	59.6	73.2	67.2	76.7	131.1	72.3
December, 1930.....	32.6	50.2	60.0	71.0	66.5	125.1	61.6
June, 1931.....	14.7	44.0	45.4	61.4	58.8	123.7	50.4
December, 1931.....	7.7	33.1	31.0	59.3	49.3	118.1	41.9
Houston, Tex.:							
December, 1915.....	11.0	2.7	12.3	1.9	6.1	1.3	1.3
June, 1920.....	107.5	211.3	25.3	55.1	213.9	90.4	112.2
December, 1920.....	83.2	187.0	35.1	74.2	208.2	103.9	104.0
June, 1928.....	45.6	85.8	30.4	29.2	132.0	89.7	64.1
December, 1928.....	51.4	86.4	30.1	33.6	131.1	89.3	66.4
June, 1929.....	51.1	84.7	27.5	29.1	129.0	92.1	66.1
December, 1929.....	55.8	84.1	27.1	31.8	129.5	92.5	68.0
June, 1930.....	43.0	82.8	25.7	25.3	127.2	92.5	62.3
December, 1930.....	32.8	65.6	23.8	24.0	113.8	92.3	54.7
June, 1931.....	11.2	63.8	20.0	18.9	110.0	92.1	45.2
December, 1931.....	9.5	52.5	12.3	16.8	99.1	92.9	41.1
Jacksonville, Fla.:							
December, 1915.....	1.3	10.5	16.9	(2)	15.1	1.3	1.3
June, 1920.....	90.1	234.0	28.9	72.6	224.2	102.8	116.5
December, 1920.....	65.6	209.3	34.1	92.6	222.3	105.6	106.2
June, 1928.....	36.4	85.0	32.3	74.4	119.2	105.1	68.3
December, 1928.....	40.0	84.6	27.4	78.9	119.6	105.1	69.1
June, 1929.....	37.4	83.9	19.8	77.1	117.8	105.1	66.9
December, 1929.....	40.8	82.4	13.2	75.0	113.9	101.0	65.8
June, 1930.....	31.9	80.4	3.2	70.6	110.5	102.4	61.0
December, 1930.....	28.4	71.9	11.5	66.3	103.3	101.0	56.9
June, 1931.....	8.4	65.4	15.9	64.0	89.9	100.2	47.4
December, 1931.....	1.4	49.7	19.7	61.0	81.7	97.6	40.5
Los Angeles, Calif.:							
December, 1915.....	14.1	2.8	12.7	.4	6.3	11.9	11.9
June, 1920.....	90.8	184.5	42.6	53.5	202.2	86.6	101.7
December, 1920.....	62.7	166.6	71.4	53.5	202.2	100.6	96.7
June, 1928.....	34.9	71.4	54.1	56.5	110.7	107.2	67.4
December, 1928.....	44.7	70.5	49.8	51.5	108.4	110.9	71.0
June, 1929.....	41.2	69.3	45.2	50.6	106.5	111.1	68.9
December, 1929.....	40.9	69.3	43.7	51.4	105.9	111.7	68.7
June, 1930.....	30.9	68.1	39.8	45.6	103.6	110.2	63.7
December, 1930.....	21.0	60.2	36.9	47.6	93.0	110.2	58.1
June, 1931.....	3.1	50.7	31.3	47.0	77.8	107.2	48.2
December, 1931.....	5.7	40.0	25.7	46.6	71.2	103.5	45.1

¹ Decrease.² No change.

TABLE 4.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO DECEMBER, 1931—Continued

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnish- ing goods	Miscel- laneous	All items
Mobile, Ala.:							
December, 1915	11.0	2.0	11.9	(²)	4.1	10.4	10.4
June, 1920	110.5	137.4	34.6	86.3	177.9	100.3	107.0
December, 1920	73.5	122.2	53.6	122.3	175.4	100.7	93.3
June, 1928	45.4	47.5	41.0	90.0	93.3	107.3	63.5
December, 1928	49.6	48.1	41.6	92.1	92.3	108.3	65.7
June, 1929	47.5	47.2	41.0	84.0	87.9	108.1	64.0
December, 1929	49.0	47.2	40.6	85.8	87.3	108.3	64.8
June, 1930	39.6	46.8	38.9	81.2	85.6	108.1	60.3
December, 1930	33.0	40.0	36.3	³ 58.6	73.5	107.5	54.4
June, 1931	12.1	34.1	32.5	49.6	57.5	105.4	43.0
December, 1931	7.4	26.2	24.6	49.7	50.6	102.3	38.0
New York, N. Y.:							
December, 1915	1.3	4.8	1.1	1.1	8.4	2.0	2.0
June, 1920	105.3	241.4	32.4	60.1	205.1	111.9	119.2
December, 1920	73.5	201.8	38.1	87.5	185.9	116.3	101.4
June, 1928	47.5	90.3	69.3	94.4	97.8	118.6	74.4
December, 1928	53.0	88.4	68.6	96.3	96.4	118.8	76.3
June, 1929	50.6	87.8	67.6	92.0	96.2	121.4	75.5
December, 1929	54.9	85.9	66.1	85.7	90.5	123.3	71.7
June, 1930	43.7	85.5	65.1	90.9	85.5	125.7	67.5
December, 1930	35.9	82.2	63.1	90.9	85.5	123.5	57.1
June, 1931	19.6	67.6	61.5	86.3	62.5	120.6	52.0
December, 1931	14.4	56.5	58.4	90.4	52.3	120.6	52.0
Norfolk, Va.:							
December, 1915	.8	.8	.1	(²)	.6	.6	.6
June, 1920	107.6	176.5	70.8	110.6	165.0	108.4	122.2
December, 1920	76.3	153.6	90.8	128.9	160.5	106.3	109.0
June, 1928	50.2	71.6	41.7	95.6	85.7	114.6	71.5
December, 1928	55.0	71.8	29.6	100.3	86.1	118.2	74.1
June, 1929	51.9	71.3	38.8	94.3	85.2	118.0	72.3
December, 1929	55.8	70.4	37.1	92.7	83.0	119.3	73.5
June, 1930	43.3	68.7	36.0	87.3	80.4	118.6	67.9
December, 1930	36.7	66.2	33.3	97.0	73.5	119.0	64.8
June, 1931	15.0	57.7	32.6	83.6	63.8	119.0	54.0
December, 1931	9.8	46.2	29.3	83.0	56.1	118.3	48.8
Philadelphia, Pa.:							
December, 1915	.3	3.6	1.3	1.8	6.9	1.2	1.2
June, 1920	101.7	219.6	28.6	66.8	187.4	102.8	113.5
December, 1920	68.1	183.5	38.0	96.0	183.4	122.3	100.7
June, 1928	51.3	76.5	67.1	81.5	85.4	121.4	75.3
December, 1928	51.7	74.0	63.8	87.3	83.9	120.3	74.5
June, 1929	50.0	72.6	59.9	85.4	84.1	121.2	73.1
December, 1929	56.1	71.2	56.5	86.3	84.7	121.2	75.0
June, 1930	42.6	69.7	54.0	86.5	83.2	121.4	69.0
December, 1930	34.4	64.9	51.2	95.8	75.3	120.7	64.5
June, 1931	20.8	57.6	45.8	80.5	63.2	118.5	55.3
December, 1931	17.0	42.0	40.3	91.7	54.1	117.6	50.5
Portland, Me.:							
December, 1915	12.0	2.1	.2	.4	6.2	1.4	1.4
June, 1920	114.5	165.9	14.5	83.9	190.3	89.4	107.6
December, 1920	78.7	147.8	20.0	113.5	191.2	94.3	93.1
June, 1928	54.2	66.5	21.5	98.4	112.5	88.8	63.8
December, 1928	57.0	64.8	20.9	102.4	112.3	97.3	66.6
June, 1929	54.3	65.8	19.8	94.1	112.3	97.3	64.8
December, 1929	55.7	65.6	19.8	101.9	112.1	97.1	65.8
June, 1930	45.9	65.4	19.9	96.9	111.9	97.1	61.5
December, 1930	38.5	60.4	19.3	99.9	105.8	95.9	57.2
June, 1931	20.5	55.7	17.9	95.3	99.2	95.9	48.2
December, 1931	17.2	47.9	17.0	97.3	91.0	95.7	45.1
Portland, Oreg.:							
December, 1915	13.8	3.0	10.9	11.0	2.9	13.1	13.1
June, 1920	107.1	158.6	33.2	46.9	183.9	79.7	100.4
December, 1920	60.9	122.1	36.9	65.9	179.9	81.1	80.3
June, 1928	36.6	50.8	20.9	51.6	80.5	76.4	50.5
December, 1928	41.8	49.4	16.4	63.0	80.1	78.0	52.4
June, 1929	41.4	48.4	11.0	51.4	79.7	77.3	50.7
December, 1929	43.7	47.8	8.2	61.8	81.0	77.7	51.6
June, 1930	34.2	44.8	5.4	49.7	78.6	86.6	49.1
December, 1930	17.8	38.4	2.4	55.5	69.7	85.1	41.5
June, 1931	8.2	32.9	1.3	36.4	65.8	83.6	35.2
December, 1931	6.0	23.3	1.6	40.1	56.8	82.9	31.9

¹ Decrease.² No change.³ The decrease is due primarily to the change in consumption and price accompanying the change from manufactured to natural gas.

TABLE 4.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO DECEMBER, 1931—Continued

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
San Francisco and Oakland, Calif.:							
December, 1915.....	14.3	2.5	10.7	10.1	6.0	11.7	11.7
June, 1920.....	93.9	191.0	9.4	47.2	180.1	79.6	96.0
December, 1920.....	64.9	175.9	15.0	66.3	175.6	84.8	85.1
June, 1928.....	41.5	82.9	35.7	45.9	102.0	79.6	58.8
December, 1928.....	48.0	83.4	33.5	47.5	99.0	83.2	61.7
June, 1929.....	45.1	82.8	31.9	43.7	97.8	83.4	60.1
December, 1929.....	48.7	81.5	30.4	40.3	87.4	82.5	60.8
June, 1930.....	40.4	77.9	28.1	38.7	100.6	80.9	55.9
December, 1930.....	32.0	72.0	26.1	32.0	91.6	82.0	51.5
June, 1931.....	15.8	66.3	24.2	28.8	79.3	79.1	42.8
December, 1931.....	10.3	57.5	20.2	30.6	66.6	78.7	38.1
Savannah, Ga.:							
December, 1915.....	1.3	.8	11.4	11.3	1.8	1.2	1.2
June, 1920.....	91.7	212.1	33.5	65.3	207.2	83.8	109.4
December, 1920.....	63.5	171.5	58.6	94.4	206.6	91.5	98.7
June, 1928.....	31.1	68.8	35.9	56.9	120.8	81.9	56.6
December, 1928.....	35.0	69.0	33.9	59.6	118.8	87.0	59.1
June, 1929.....	33.9	68.2	32.7	55.8	117.9	83.8	57.2
December, 1929.....	35.1	67.7	28.3	56.1	117.2	84.5	57.2
June, 1930.....	25.2	66.0	27.0	54.2	113.7	84.7	53.1
December, 1930.....	17.7	61.4	19.6	56.2	110.1	83.8	48.3
June, 1931.....	1.5	58.0	15.8	50.7	98.5	83.8	40.7
December, 1931.....	14.7	44.6	9.5	40.9	89.0	82.3	33.9
Seattle, Wash.:							
December, 1915.....	12.8	1.2	12.4	1.2	8.5	11.0	11.0
June, 1920.....	102.3	173.9	74.8	65.8	221.2	90.4	110.5
December, 1920.....	54.1	160.5	76.7	78.7	216.4	95.5	94.1
June, 1928.....	36.9	68.8	55.5	57.1	133.5	97.4	65.8
December, 1928.....	40.8	68.3	54.1	62.9	132.6	97.4	67.1
June, 1929.....	43.7	66.6	52.4	62.1	131.7	98.8	67.7
December, 1929.....	45.9	66.6	52.1	65.8	132.6	98.8	68.7
June, 1930.....	38.1	64.6	50.1	65.5	132.4	98.6	65.4
December, 1930.....	22.5	59.7	47.8	64.0	128.0	97.6	58.4
June, 1931.....	12.2	55.7	44.4	54.0	114.5	96.6	52.3
December, 1931.....	8.8	45.9	37.5	61.5	103.1	94.6	48.0
Washington, D. C.:							
December, 1915.....	.6	3.7	11.5	(²)	6.3	.4	1.0
June, 1920.....	108.4	184.0	15.6	53.7	196.4	68.2	101.3
December, 1920.....	79.0	151.1	24.7	68.0	194.0	73.9	87.8
June, 1928.....	55.5	67.0	32.7	38.8	102.2	73.6	59.7
December, 1928.....	58.2	65.2	31.0	41.0	99.4	73.8	60.2
June, 1929.....	58.4	64.4	30.5	38.0	100.0	74.0	60.0
December, 1929.....	57.4	62.3	30.0	39.7	100.2	74.3	59.2
June, 1930.....	49.1	60.5	29.7	36.2	100.4	73.8	55.5
December, 1930.....	41.3	55.4	28.7	36.6	93.0	76.8	51.8
June, 1931.....	22.8	49.7	28.2	32.5	86.6	75.7	43.0
December, 1931.....	17.8	39.7	27.9	34.9	79.9	75.3	39.0

¹ Decrease.² No change.³ The decrease is due primarily to the change in consumption and price accompanying the change from manufactured to natural gas.

Table 5 shows the changes in the cost of living from December, 1917, to December, 1931, for 13 cities. The table is constructed in the same manner as the preceding one and differs from it only in the base period and in the length of time covered.

TABLE 5.—CHANGES IN COST OF LIVING IN 13 CITIES, DECEMBER, 1917, TO DECEMBER, 1931

City and date	Per cent of increase over December, 1917, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
Atlanta, Ga.:							
December, 1918	19.0	29.1	14.0	17.0	24.9	14.8	19.7
June, 1920	34.0	80.5	40.4	61.0	65.0	34.6	46.7
December, 1920	12.8	56.5	73.1	66.8	58.4	39.7	38.5
June, 1928	¹ 1.0	.2	38.9	31.8	15.2	35.6	13.9
December, 1928	2.9	.4	38.2	36.3	24.9	35.3	15.6
June, 1929	.3	.3	37.5	28.4	14.6	33.0	13.6
December, 1929	.1	1.6	35.9	31.6	14.1	34.2	13.5
June, 1930	¹ 7.9	12.8	32.8	² 11.6	11.2	31.8	7.9
December, 1930	¹ 13.1	16.4	30.8	11.6	8.0	30.5	4.5
June, 1931	¹ 24.2	18.5	28.3	3.6	1.7	28.2	¹ 1.7
December, 1931	¹ 29.2	¹ 16.7	19.6	4.8	¹ 5.7	28.7	¹ 6.2
Birmingham, Ala.:							
December, 1918	17.7	23.9	8.1	22.8	19.4	13.8	17.0
June, 1920	36.4	66.4	40.3	55.3	55.6	28.7	41.9
December, 1920	11.9	45.1	68.5	74.2	48.1	30.4	33.3
June, 1928	¹ 4.7	14.3	59.4	37.1	13.9	28.2	13.7
December, 1928	¹ 2.2	14.2	54.8	43.4	12.3	27.2	14.2
June, 1929	13.9	14.3	50.8	35.5	10.6	26.1	12.3
December, 1929	12.8	15.0	40.8	38.8	10.5	27.2	11.8
June, 1930	¹ 8.9	¹ 5.9	35.9	33.2	9.3	26.4	8.2
December, 1930	¹ 14.0	19.1	23.5	38.5	2.7	25.1	3.8
June, 1931	¹ 30.6	¹ 13.1	15.1	25.3	¹ 5.4	24.2	¹ 5.6
December, 1931	¹ 33.2	¹ 20.1	1.5	24.9	¹ 11.0	24.1	¹ 9.6
Cincinnati, Ohio:							
December, 1918	15.3	33.8	.2	10.0	25.7	20.4	17.3
June, 1920	38.7	96.7	13.6	26.9	75.5	47.6	47.1
December, 1920	10.3	73.5	25.0	34.1	66.7	53.4	34.7
June, 1928	¹ .5	13.9	57.1	61.1	15.4	49.7	21.0
December, 1928	.4	15.5	57.1	61.6	14.7	49.6	21.2
June, 1929	2.5	15.8	56.9	60.8	13.6	49.7	21.8
December, 1929	4.5	16.4	56.7	70.9	13.1	51.2	23.1
June, 1930	¹ 1.2	17.1	54.5	63.6	11.6	51.5	20.1
December, 1930	18.0	18.7	52.8	69.7	8.7	49.4	16.6
June, 1931	¹ 20.4	¹ 17.5	49.3	59.2	1.4	51.5	9.1
December, 1931	¹ 24.2	¹ 22.4	43.9	64.6	¹ 5.1	50.3	5.8
Denver, Colo.:							
December, 1918	20.0	40.1	12.8	8.1	22.6	14.8	20.7
June, 1920	41.5	96.8	51.9	22.3	60.2	35.4	50.3
December, 1920	7.9	78.3	69.8	47.1	58.9	38.8	38.7
June, 1928	18.6	8.4	55.8	26.9	20.5	33.4	14.9
December, 1928	16.3	8.2	54.1	39.3	19.8	33.8	16.3
June, 1929	17.4	8.0	52.3	² 19.0	17.4	38.8	15.6
December, 1929	16.8	7.9	51.1	29.2	16.0	38.7	16.1
June, 1930	¹ 11.9	7.0	49.4	22.6	15.3	38.0	13.0
December, 1930	¹ 19.9	5.5	47.8	27.4	12.4	37.6	9.7
June, 1931	¹ 28.7	2.3	43.1	7.9	8.1	36.9	3.8
December, 1931	¹ 30.6	16.5	37.1	7.1	¹ 2	36.5	.3
Indianapolis, Ind.:							
December, 1918	17.8	32.4	1.6	19.8	18.9	21.9	19.1
June, 1920	49.0	87.9	18.9	45.6	67.5	50.4	50.2
December, 1920	11.0	72.3	32.9	60.3	63.0	47.5	37.6
June, 1928	11.8	4.3	31.3	29.2	13.7	52.3	18.2
December, 1928	1.3	3.2	30.4	32.3	12.6	52.0	18.5
June, 1929	1.8	3.0	28.4	26.1	12.7	52.3	17.7
December, 1929	2.0	2.4	27.9	31.0	11.7	52.0	18.8
June, 1930	¹ 2.7	1.2	25.9	24.8	9.0	51.8	16.1
December, 1930	¹ 14.2	¹ 1.6	23.9	30.2	5.6	50.4	10.8
June, 1931	¹ 26.5	¹ 10.4	16.8	23.8	¹ 4.7	49.5	3.0
December, 1931	¹ 29.1	¹ 19.4	11.3	23.7	¹ 12.4	49.2	1.8
Kansas City, Mo.:							
December, 1918	17.3	40.7	5.4	18.0	31.1	15.6	19.6
June, 1920	44.9	104.5	29.4	35.2	73.0	37.1	51.0
December, 1920	10.2	76.3	63.9	55.1	68.7	40.3	39.5
June, 1928	¹ 5.4	2.7	24.8	28.7	6.8	35.0	11.2
December, 1928	16.0	2.9	23.8	26.8	5.6	37.8	11.3
June, 1929	¹ 5.3	2.4	21.1	26.3	5.1	37.0	11.0
December, 1929	¹ 2.2	1.8	20.1	23.9	3.4	36.9	11.7
June, 1930	¹ 8.6	1.5	19.4	24.0	2.1	36.9	9.0
December, 1930	¹ 15.8	1.0	19.8	22.0	¹ 1.1	44.3	7.7
June, 1931	¹ 24.9	¹ 1.7	17.4	19.7	¹ 6.2	44.0	2.9
December, 1931	¹ 28.9	¹ 9.9	16.3	14.3	¹ 11.5	42.3	¹ 1.1
Memphis, Tenn.:							
December, 1918	20.3	27.7	(³)	26.8	25.4	16.1	18.3
June, 1920	38.8	77.5	35.9	49.7	67.1	38.8	46.4
December, 1920	7.0	59.0	66.2	105.4	53.9	43.2	39.3
June, 1928	¹ 8.1	1.5	46.3	60.0	16.0	36.9	16.4
December, 1928	¹ 4.9	.2	43.7	68.8	14.8	37.7	17.5

¹ Decrease.² The decrease is due primarily to the change in consumption and price accompanying the change from manufactured to natural gas.³ No change.

TABLE 5.—CHANGES IN COST OF LIVING IN 13 CITIES, DECEMBER, 1917, TO DECEMBER, 1931—Continued

City and date	Per cent of increase over December, 1917, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
Memphis, Tenn.—Continued.							
June, 1929	16.0	10.1	42.6	² 63.6	13.8	38.5	16.8
December, 1929	15.1	1.1	40.6	55.3	13.9	38.6	16.5
June, 1930	110.6	1.6	39.6	58.9	13.3	39.6	14.7
December, 1930	119.2	12.4	35.8	57.9	10.7	38.8	10.4
June, 1931	131.3	14.8	29.8	48.3	6.2	35.5	3.4
December, 1931	134.2	110.4	18.4	48.3	1.9	35.2	1.5
Minneapolis, Minn.:							
December, 1918	17.7	33.5	1.1	14.7	18.1	12.3	15.8
June, 1920	50.0	76.7	10.7	36.9	65.5	31.3	43.4
December, 1920	13.0	63.6	36.8	60.3	65.8	37.6	35.7
June, 1928	1.6	11.1	27.2	45.2	12.3	34.6	15.8
December, 1928	.7	11.5	27.5	44.6	10.5	34.5	15.2
June, 1929	1.8	11.8	25.6	41.9	10.5	36.7	15.4
December, 1929	3.9	12.8	25.2	44.3	10.9	36.6	16.2
June, 1930	11.0	13.5	23.6	46.2	10.6	36.3	14.1
December, 1930	19.4	14.4	23.5	39.9	7.8	37.0	10.6
June, 1931	121.2	18.8	21.4	41.6	3.7	35.4	5.0
December, 1931	125.5	116.2	19.8	44.3	12.7	36.1	2.1
New Orleans, La.:							
December, 1918	16.6	36.8	(³)	19.7	23.8	15.9	17.9
June, 1920	28.6	94.9	12.9	36.3	75.9	42.8	41.9
December, 1920	10.7	69.4	39.7	41.5	63.9	57.1	36.7
June, 1928	16.8	13.1	55.9	34.5	17.9	46.1	18.2
December, 1928	13.2	13.1	54.8	28.4	17.9	46.8	19.5
June, 1929	14.3	12.6	53.6	² 14.9	15.9	45.9	17.8
December, 1929	11.8	12.6	51.3	18.1	15.7	45.8	18.8
June, 1930	19.8	12.0	49.2	12.4	14.8	46.5	14.8
December, 1930	115.0	.1	45.3	14.4	10.2	46.5	10.2
June, 1931	130.3	12.7	43.0	16.5	5.9	43.1	1.2
December, 1931	130.3	19.7	38.7	4.1	1.5	45.2	.3
Pittsburgh, Pa.:							
December, 1918	18.8	35.9	7.6	9.2	26.3	16.3	19.8
June, 1920	36.5	91.3	34.9	31.7	77.4	41.2	49.1
December, 1920	14.3	75.4	35.0	64.4	78.1	46.3	39.3
June, 1928	13.8	4.2	72.8	85.6	15.9	46.9	22.3
December, 1928	2.1	3.5	71.6	86.0	16.4	46.9	24.4
June, 1929	.6	2.9	68.3	85.6	15.1	48.1	23.2
December, 1929	1.2	2.1	67.1	86.0	14.6	47.5	23.2
June, 1930	15.6	1.5	64.9	85.1	13.5	47.9	19.9
December, 1930	113.4	13.9	63.7	84.4	6.6	47.5	15.2
June, 1931	124.2	19.4	56.8	83.1	.4	46.9	8.4
December, 1931	129.2	113.3	52.3	83.8	16.4	45.6	4.5
Richmond, Va.:							
December, 1918	20.5	33.8	1.0	11.8	26.3	9.0	17.9
June, 1920	36.1	93.6	12.5	36.1	75.4	32.4	43.8
December, 1920	11.9	69.0	25.9	62.2	70.0	36.0	33.3
June, 1928	13.8	5.0	30.6	43.9	33.8	41.0	15.3
December, 1928	13.1	5.4	28.9	47.5	32.7	40.9	15.7
June, 1929	15.0	4.2	28.3	42.0	32.4	40.2	14.2
December, 1929	13.4	4.2	27.0	44.7	31.3	41.0	14.9
June, 1930	18.0	3.3	26.5	38.5	30.0	40.4	12.5
December, 1930	114.9	2.0	25.5	42.0	26.6	41.0	9.3
June, 1931	127.2	12.4	24.4	33.1	18.6	40.6	2.4
December, 1931	129.2	18.6	21.8	37.6	15.5	40.3	.3
St. Louis, Mo.:							
December, 1918	18.0	32.4	2.7	4.8	21.8	14.5	16.7
June, 1920	46.2	89.7	29.8	19.6	73.1	37.6	48.9
December, 1920	8.8	70.0	42.4	42.6	70.2	43.2	35.4
June, 1928	13.5	3.1	76.3	18.9	21.6	37.2	19.9
December, 1928	12.2	2.5	74.2	23.1	19.5	38.7	20.4
June, 1929	1.4	1.7	71.8	22.5	17.8	38.4	20.5
December, 1929	1.5	.8	69.2	33.4	16.2	44.2	21.7
June, 1930	16.7	(³)	66.0	21.8	16.9	44.6	18.3
December, 1930	114.9	11.4	59.5	29.1	15.4	42.1	13.9
June, 1931	124.9	110.7	53.0	12.4	5.9	41.5	6.2
December, 1931	129.8	119.2	44.0	20.7	1.6	39.2	1.4
Scranton, Pa.:							
December, 1918	21.3	34.4	.5	24.7	27.0	21.4	21.9
June, 1920	41.4	97.7	17.2	43.5	62.8	47.9	51.5
December, 1920	17.8	76.5	18.5	67.3	62.0	50.4	39.1
June, 1928	2.4	16.2	71.7	69.0	30.1	56.2	26.9
December, 1928	4.3	15.3	71.7	72.2	29.3	57.8	27.8
June, 1929	2.9	15.2	68.1	65.0	26.5	57.5	26.3
December, 1929	6.5	13.7	63.9	67.6	26.0	57.3	27.3
June, 1930	1.8	13.5	60.5	60.2	26.0	57.3	23.5
December, 1930	18.1	10.7	59.1	66.1	22.9	56.8	19.5
June, 1931	120.3	3.9	53.2	61.3	18.2	55.2	11.8
December, 1931	122.8	17.1	51.8	69.5	7.3	55.2	8.4

¹ Decrease.² The decrease is due primarily to the change in consumption and price accompanying the change from gas manufactured to natural gas.³ No change.

Cost of Living in the United States and in Foreign Countries

THE trend of cost of living in the United States and foreign countries for specified months of 1920, 1928, 1929, 1930, and 1931 is shown in the following table. The number of countries included varies according to the information available. Several countries publish a general index, and an index number for food only, while others omit clothing, and in some instances also rent. The table shows the trend in the cost of food, clothing, fuel and light, and rent, together with the general index for all items for the countries for which such information is published in the original sources.

Caution should be observed in the use of these figures, since not only are there differences in the base periods and in the number and kind of articles included, and the number of markets represented, but there are also radical differences in the method of construction of the indexes.

INDEX NUMBERS OF COST OF LIVING FOR SPECIFIED PERIODS IN THE UNITED STATES AND IN FOREIGN COUNTRIES

Country-----	United States	Canada	Belgium	Czechoslovakia	Denmark	Finland	France	Germany	Ireland	Italy
Commodities included-----	Food, clothing, fuel and light, rent, house furnishings, etc.	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, taxes, etc.	Food, clothing, fuel, rent, taxes, etc.	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries
Computing agency--	Bureau of Labor Statistics	Department of Labor	Ministry of Labor and Industry	Office of Statistics	Department of Statistics	Central Statistical Office	Commission for Study of Cost of Living	Federal Statistical Bureau	Department of Industry and Commerce	Municipal Administration
Base period-----	1913	1913	1921	July, 1914	July, 1914	January-June, 1914	January-June, 1914	1913-14	July, 1914	January-June, 1914
General:										
1920--Av. for year	¹ 200	¹ 190			² 262		³ 341			442
1928--June	170	155	204	734		1219	⁴ 519	151		530
December	171	158	216	725		1260	⁴ 531	153		538
1929--June	170	156	213	726		1215	⁴ 556	153		544
December	171	160	228	⁵ 105		1207	⁴ 565	153		549
1930--June	167	157	224	⁵ 105	⁶ 167	1108	⁴ 572	148	⁶ 168	531
December	161	151	223	⁵ 101	⁷ 162	1083	⁴ 597	142	⁷ 168	508
1931--June	150	138	204	⁵ 101	⁶ 157	1020	⁴ 589	138	⁸ 156	488
December	146	135		⁵ 96	⁷ 154				⁹ 165	
Food:										
1920--Av. for year	¹ 178	¹ 202					³ 344			455
1928--June	153	146	203	843		1126	⁴ 544	152		520
December	156	154	218	820		1186	⁴ 555	153		533
1929--June	155	149	208	817		1103	⁴ 590	154		541
December	158	161	227	⁵ 117		1090	⁴ 589	152		548
1930--June	148	151	201	⁵ 115	⁶ 140	937	⁴ 593	143	⁶ 156	523
December	137	138	200	⁵ 108	⁷ 132	903	⁴ 636	135	⁷ 156	499
1931--June	118	111	177	⁵ 109	⁶ 123	842	⁴ 642	131	⁸ 139	458
December	114	107			⁷ 119				⁹ 155	

See footnotes on next Page.

INDEX NUMBERS OF **COST OF LIVING** FOR SPECIFIED PERIODS IN THE UNITED STATES AND IN FOREIGN COUNTRIES—Continued

Country-----	United States	Canada	Belgium	Czechoslovakia	Denmark	Finland	France	Germany	Ireland	Italy
Commodities included-----	Food, clothing, fuel and light, rent, house furnishings, etc.	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, taxes, etc.	Food, clothing, fuel, rent, taxes, etc.	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries
Computing agency--	Bureau of Labor Statistics	Department of Labor	Ministry of Labor and Industry	Office of Statistics	Department of Statistics	Central Statistical Office	Commission for Study of Cost of Living	Federal Statistical Bureau	Department of Industry and Commerce	Municipal Administration
Base period-----	1913	1913	1921	July, 1914	July, 1914	January-June, 1914	January-June, 1914	1913-14	July, 1914	January-June, 1914
Clothing:										
1920—Av. for year.	¹ 259	¹ 232			² 355		³ 485			² 692
1928—June	163	157	242	1033		1048	⁴ 581	170		559
December	162	157	250	1023		1055	⁴ 591	173		555
1929—June	161	157	256	998		1055	⁴ 604	172		555
December	160	156	262	⁵ 147		1051	⁴ 604	170		549
1930—June	159	155	262	⁵ 145	⁶ 182	1046	⁴ 626	167		509
December	153	148	260	⁵ 137	⁷ 172	1034	⁴ 610	150		448
1931—June	146	137	251	⁵ 131	⁶ 161	1004	⁴ 552	140		421
December	136	127			⁷ 157					
Fuel and light:										
1920—Av. for year.	¹ 195	¹ 200			² 563		³ 296			² 611
1928—June	177	158	170	819		1436	⁴ 504	144		407
December	181	157	175	842		1452	⁴ 515	151		408
1929—June	175	157	194	842		1456	⁴ 539	149		425
December	179	¹ 57	213	⁵ 125		1455	⁴ 602	153		453
1930—June	173	156	205	⁵ 126	⁶ 184	1407	⁴ 607	149		473
December	175	156	198	⁵ 126	⁷ 178	1290	⁴ 633	151		457
1931—June	165	153	184	⁵ 124	⁶ 174	1067	⁴ 596	145		424
December	168	152			⁷ 168					
Rent:										
1920—Av. for year.	¹ 151	¹ 142			² 130		³ 100			² 108
1928—June	158	157	209	261		1430	⁴ 275	126		400
December	156	157	211	278		1430	⁴ 300	126		408
1929—June	154	158	224	306		1476	⁴ 300	126		408
December	152	158	227	⁵ 47		1476	⁴ 350	127		410
1930—June	150	160	406	⁵ 50	⁶ 200	1467	⁴ 350	130		410
December	146	160	405	⁵ 53	⁷ 200	1467	⁴ 350	131		422
1931—June	142	158	403	⁵ 54	⁶ 203	1373	⁴ 350	132		473
December	136	158			⁷ 203					

¹ December.² July.³ April-June.⁴ Quarter ending with month.⁵ In gold.⁶ April.⁷ October.⁸ May.⁹ November.

INDEX NUMBERS OF **COST OF LIVING** FOR SPECIFIED PERIODS IN THE UNITED STATES AND IN FOREIGN COUNTRIES—Continued

Country	Nether-lands	Nor-way	Poland	Sweden	Switzer-land	United King- dom	South Africa	India	Austra- lia	New Zealand
Commodities in- cluded	All com- modities	Food, cloth- ing, fuel, light, rent, sun- dries	Food, cloth- ing, fuel, light, rent, sun- dries	Food, cloth- ing, fuel, light, rent, sun- dries	Food, cloth- ing, fuel, light, rent, sun- dries	Food, cloth- ing, fuel, light, rent, sun- dries	Food, fuel, light, rent, sun- dries	Food, cloth- ing, fuel, light, rent	Food, gro- ceries, rent	Food, cloth- ing, fuel, light, rent, sun- dries
Computing agency	Bureau of Statistics	Central Statistical Office	Central Statistical Office	Board of Social Welfare	Federal Labor Office	Ministry of Labor	Office of Census and Statistics	Labor Office	Bureau of Census and Statistics	Census and Statistics Office
Base period	1911-1913	July, 1914	January, 1914	July, 1914	June, 1914	July, 1914	1914	July, 1914	1911	July, 1914
General:										
1920—Av. for year	¹ 222	¹⁰ 302	-----	² 270	224	² 252	179	183	175	178
1928—June	170	195	122	-----	161	165	132	146	⁴ 175	⁸ 162
December	168	184	125	-----	162	168	131	148	⁴ 173	⁸ 162
1929—June	169	181	123	-----	161	160	132	147	⁴ 180	⁸ 161
December	167	180	126	-----	162	167	129	150	⁴ 180	⁸ 161
1930—June	162	177	116	⁶ 165	158	154	129	140	¹¹ 171	⁸ 158
December	157	173	118	⁷ 163	156	155	126	121	¹² 157	⁸ 155
1931—June	154	167	106	⁶ 160	150	145	123	109	¹¹ 149	⁸ 145
December	-----	-----	-----	⁷ 158	-----	148	-----	-----	-----	-----
Food:										
1920—Av. for year	¹ 240	¹⁰ 319	-----	² 287	-----	-----	178	-----	² 164	168
1928—June	169	171	143	-----	156	156	118	142	154	147
December	164	161	147	-----	158	160	115	145	152	152
1929—June	165	156	139	-----	155	147	118	144	161	147
December	162	157	144	-----	157	159	112	148	155	147
1930—June	152	151	120	⁶ 140	151	138	112	137	149	144
December	145	147	123	⁷ 137	149	141	108	116	134	137
1931—June	141	137	107	⁶ 130	141	127	106	101	128	124
December	-----	-----	-----	⁷ 128	-----	132	-----	-----	-----	-----
Clothing:										
1920—Av. for year	-----	¹⁰ 336	-----	² 390	-----	² 430	-----	-----	⁹ 181	245
1928—June	-----	⁴ 169	169	-----	166	220	-----	156	-----	⁸ 146
December	-----	⁴ 166	169	-----	169	220	-----	160	-----	⁸ 144
1929—June	-----	⁴ 164	169	-----	167	218	-----	159	-----	⁸ 144
December	-----	⁴ 161	171	-----	165	215	-----	151	-----	⁸ 142
1930—June	-----	159	171	⁶ 181	160	213	-----	138	-----	⁸ 139
December	-----	154	171	⁷ 178	155	205	-----	125	-----	⁸ 135
1931—June	-----	148	148	⁶ 175	145	195	-----	123	-----	⁸ 128
December	-----	-----	-----	⁷ 170	-----	190	-----	-----	-----	-----
Fuel and light:										
1920—Av. for year	-----	-----	-----	² 372	-----	² 230	-----	-----	-----	178
1928—June	-----	171	124	-----	136	168	-----	158	-----	⁸ 179
December	-----	163	137	-----	136	170	-----	143	-----	⁸ 178
1929—June	-----	162	141	-----	134	170	-----	143	-----	⁸ 175
December	-----	161	151	-----	135	175	-----	143	-----	⁸ 175
1930—June	-----	159	147	⁶ 160	132	170	-----	143	-----	⁸ 175
December	-----	153	152	⁷ 156	131	175	-----	141	-----	⁸ 175
1931—June	-----	152	149	⁶ 155	127	170	-----	143	-----	⁸ 174
December	-----	-----	-----	⁷ 150	-----	175	-----	-----	-----	-----
Rent:										
1920—Av. for year	-----	¹⁰ 147	-----	² 130	-----	² 118	-----	-----	-----	114
1928—June	-----	179	56	-----	177	151	-----	172	-----	⁸ 189
December	-----	179	58	-----	177	150	-----	172	-----	⁸ 190
1929—June	-----	175	58	-----	181	153	-----	172	-----	⁸ 191
December	-----	175	58	-----	181	152	-----	172	-----	⁸ 191
1930—June	-----	174	58	⁶ 205	185	153	-----	158	-----	⁸ 189
December	-----	174	58	⁷ 205	185	154	-----	158	-----	⁸ 187
1931—June	-----	173	58	⁶ 206	187	154	-----	158	-----	⁸ 185
December	-----	-----	-----	⁷ 205	-----	154	-----	-----	-----	-----

¹ December.² July.⁴ Quarter ending with month.⁶ April.⁷ October.⁸ May.⁹ November.¹⁰ June.¹¹ Quarter ending with May.¹² Quarter ending with November.

IMMIGRATION AND EMIGRATION

Statistics of Immigration for November, 1931

By J. J. KUNNA, CHIEF STATISTICIAN UNITED STATES BUREAU OF IMMIGRATION

BOTH the inward and outward passenger movement during November show a decrease from the average for the preceding four months of the current fiscal year. In that month 12,731 aliens were admitted and 25,589 departed, while the monthly average for the period from July 1 to October 31, 1931, was 20,793 admitted and 29,234 departed. During the same month 16,823 American citizens returned and 23,224 departed, as against an average of 46,331 arrivals and 47,530 departures in the preceding four months. There was also a decline in debarments as well as in deportations. In November last 573 aliens were debarred from entering the United States and 1,524 were deported under warrant proceedings, as compared with a monthly average of 727 and 1,593, respectively, for the preceding four months.

Over four-fifths of the admissions during November came in at the seaports, mainly New York. At this port, which continues to be the principal point of landing for arrivals from overseas, 8,252, or 80 per cent, of the seaport admissions, entered the country, while only 2,061 aliens came in at the other seaports. Aliens admitted at Canadian border ports during the same months numbered 1,883 and at Mexican border ports 535.

Of the 573 aliens debarred this month, 493 were turned back at the land border stations and 80 at the seaports. Of the latter only 26 were rejected at New York, and all but 3 of these arrived without proper immigration visas. At the other seaports less than 3 per cent of the applicants in November failed to gain admission to this country but most of the debarred were seamen or stowaways coming without proper visas.

The statistics for November, 1931, show a decrease in immigration from Europe as well as from Canada and Mexico compared with the previous month, 1,760 immigrant aliens coming from Europe, 631 from Canada, and 162 from Mexico, as against 2,206, 1,030, and 184 immigrants from these respective sources during October, 1931. On the other hand, emigration to all countries increased from 10,857 in October to 11,318 in November, about 3 emigrant aliens now going to Europe for permanent residence for every immigrant admitted from that Continent.

Less than one-tenth of the 95,902 aliens of all classes admitted to the United States from July 1 to November 30, 1931, were immigrants charged to the quota, 6,709 being recorded as of this class. During the corresponding period a year ago, 40,989 quota immigrants were admitted and in the same period two years ago 59,984 were admitted. Quota aliens born in the Irish Free State show the largest decrease from 6,245 to 321, or 94.9 per cent, since last year.

Other principal classes entering the country from July to November last include 41,074 aliens who came in under the immigration act of

1924 as returning residents; 34,154 as temporary visitors for business or pleasure; 13,464 as persons passing through the country on their way elsewhere; 5,476 as natives of nonquota countries, principally Canada; and 4,430 as husbands, wives, or unmarried children under 21 years of age, of American citizens. In the five months from July to November, 1930, 9,766 aliens of the last-mentioned class entered the country, and during a like period two years ago 16,896 of this class were admitted.

Of the 95,902 aliens admitted from July to November last, 66,989 were born in Europe, 8,177 in Asia, 387 in Africa, 975 in Australia, New Zealand and other Pacific islands, and 19,374 in Canada, Mexico, and other countries in the Western Hemisphere.

INWARD AND OUTWARD PASSENGER MOVEMENT, JULY TO NOVEMBER, 1931

Period	Inward					Aliens de- barred from enter- ing ¹	Outward					Aliens de- ported after enter- ing ²
	Aliens admitted			United States citizens arrived	Total		Aliens departed			United States citizens de- parted	Total	
	Immigrant	Non-immigrant	Total				Emigrant	Non-emigrant	Total			
1931												
July.....	3, 174	12, 361	15, 535	30, 944	46, 479	761	7, 428	20, 450	27, 878	46, 961	74, 839	1, 681
August.....	4, 090	16, 580	20, 670	59, 372	80, 042	657	9, 541	23, 009	32, 550	65, 895	98, 445	1, 584
September.....	5, 017	20, 940	25, 957	62, 581	88, 538	684	8, 733	20, 393	29, 126	42, 247	71, 373	1, 446
October.....	3, 913	17, 096	21, 009	32, 427	53, 436	806	10, 857	16, 525	27, 382	35, 016	62, 398	1, 663
November.....	2, 899	9, 832	12, 731	16, 823	29, 554	573	11, 318	14, 271	25, 589	23, 224	48, 813	1, 524
Total.....	19, 093	76, 809	95, 902	202, 147	298, 049	3, 481	47, 877	94, 648	142, 525	213, 343	355, 868	7, 898

¹ These aliens are not included among arrivals, as they were not permitted to enter the United States.

² These aliens are included among aliens departed, they having entered the United States, legally or illegally, and later being deported.

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Dismissal Compensation: A List of References

Compiled by G. T. SCHWENNING, UNIVERSITY OF NORTH CAROLINA

THE payment of dismissal compensation to workers who lose their jobs through no fault of their own gives promise of becoming a significant phase of modern labor relations. The growing interest in this new practice and the numerous adoptions of dismissal-wage plans by American industries during the present depression are evidence that this labor-management policy has taken root and that it has developed sufficient momentum to forehadow a considerable movement in the future.

In the United States and England, dismissal allowances appear to have taken their place with pensions and unemployment insurance as a management device for rewarding long-service employees and for stabilizing workers' incomes. While it can not be looked upon as the solution to the problem of unemployment, discharge compensation is being used increasingly by progressive managements to mitigate the hardships of technological unemployment. Its wider use may also have the effect of inhibiting indiscriminate firing. To the worker such compensation is of value in helping him to make the economic and psychological readjustment necessitated by discharge, even if it does not compensate him fully for the loss of his job.

Abroad, such payments are in most cases compulsory. Most Latin American countries, several European countries, Japan, and China have enacted dismissal-wage laws. These laws stipulate that from 1 week to 2 years' notice of dismissal be given or in lieu thereof a sum equal to from 1 week's to 20 weeks' earnings. In the United States, where discharge allowances are paid this is done voluntarily, only three States—Maine, Massachusetts, and New Jersey—having passed a modified form of dismissal-wage law. It is now being suggested that the several States enact modern legislation on the subject.

Already a considerable body of material has been published on this new industrial relations policy. The sources are, however, widely scattered and not generally known. The following bibliography has been compiled to aid those interested in the movement.

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LITTLE, E. H.

Principles involved in the payment of dismissal wages.

(*In* Donald, W. J. Handbook of Business Administration. New York, McGraw-Hill Book Co., 1931, pp. 1117-1120.)

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METROPOLITAN LIFE INSURANCE CO. *Policyholders Service Bureau.*

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Report on advance notice of dismissal to hourly workers.

— The dismissal wage. New York, 1931.

Study of industry's use of the dismissal wage as a personnel management policy.

— The use of research in employment stabilization. A report on applying research to steady personnel, prepared for the research committee of the New England Council. New York [1929?]. 32 pp.

Commends the use of two weeks' dismissal pay as a last resort in permanent lay-off.

NATIONAL ASSOCIATION OF MANUFACTURERS.

Company plans to reduce and alleviate unemployment, by Noel Sargent. New York, October 9, 1930.

Address (in multigraphed form) by the manager of the industrial relations department of the National Association of Manufacturers in which he defines the dismissal wage as "payment of special compensation to an employee when the employer is forced to dispense with his services." Discusses four types of dismissal wage.

NATIONAL INDUSTRIAL CONFERENCE BOARD (INC.).

Lay-off and its prevention. New York, 1930. 86 pp.

Tells (pp. 36-71) how dismissal wages may be used when laying off older workers.

NATIONAL JOINT INDUSTRIAL COUNCIL FOR THE FLOUR MILLING INDUSTRY.

Eleventh annual report, 1929-30. London, 1930.

— Twelfth annual report, 1930-31. London, 1931.

These two reports give details of discharge compensation paid by the British flour-milling industry to workers laid off on account of rationalization.

— Reprint from minutes of evidence taken before the Royal Commission on Unemployment Insurance, Thirty-eighth day, Friday, July 17, 1931. London, 1931.

Report of oral evidence given by Sir Albert Humphries, chairman of Flour Milling Employers Federation of England, regarding the British flour milling industry's dismissal-wage plan where workers lose their jobs through rationalization.

NEW YORK. *Committee on Stabilization of Industry for the Prevention of Unemployment.*

Less unemployment through stabilization of operations. A report to Franklin D. Roosevelt, Governor of the State of New York. Albany, 1930. 96 pp.

Pages 88-90 give the details of various company dismissal-compensation plans and a draft of a State dismissal-wage act.

NORTHCOTT, C. H.

The degree to which an employer should take steps to deal with unemployment arising out of rationalization in his factory.

(In Twenty-ninth Lecture Conference for Works Directors, Foremen, and Forewomen, held at Balliol College, Oxford, Sept. 26-30, 1929, pp. 46-51.)

A careful statement of the principles underlying the payment of discharge compensation, and a description of the plan used by Rowntree & Co., of York, England.

ORCHARD, JOHN E.

Japan's Economic Position: The progress of industrialization. New York, McGraw-Hill Book Co., 1930. 504 pp.

Statement regarding Japan's dismissal-wage law, and the voluntary practice of paying workers a leaving gratuity, even in cases of strike activity.

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Les Délais de Préavis en Matière de Congédiement d'Employés et d'Ouvriers. Paris, La Revue des Questions Prud'hommales, 1929.

Discusses the period of notice due to employees and laborers in France before dismissal. Classifies occupations, advance notice due to each class of workers in the various Departments of France, and indemnities for unjust discharge.

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Company plans for the regularization of plant operation and employment. Princeton, 1930. 16 pp. (Mimeographed.)

Brief description of a few company dismissal-wage plans.

——— Dismissal compensation. Princeton, 1931. 46 pp. (Mimeographed.)

An analysis of various company dismissal-wage plans. Lists 49 companies that have adopted such plans. Contains a brief bibliography.

ROSS, EDWARD A.

The Social Trend. New York, Century Co., 1922. 235 pp.

Chapter III: "For a legal dismissal wage," discusses the dismissal wage in Russia under the Czar and under Kerensky. Principles underlying the payment of dismissal compensation.

SCHOMERUS, FRIEDERICH.

Die soziale Betriebspolitik der Jenaer Zeiszwerte mit besonderer Beruecksichtigung der Carl-Zeiss-Stiftung zu Jena. Goettingen, Vandenhoeck & Ruprecht, 1930.

Statement of the Carl Zeiss Co.'s dismissal-wage policy, by the company's personnel director.

——— System of employment at the Carl Zeiss Works. Jena, Carl Zeiss Co., 1910.

Statement of the company's motives in adopting a formal dismissal-wage plan.

STATUTE OF THE CARL ZEISS STIFTUNG IN JENA ESTABLISHED BY ERNST ABBE. Jena, Vopelius [n. d.]. (English translation of the 1906 revision.)

Contains the text of the dismissal-compensation plan of the Carl Zeiss Works.

TANNENBAUM, FRANK.

The Mexican Agrarian Revolution. New York, The Macmillan Co., 1929. 543 pp.

Discusses (p. 304) the compensation payable by law to Mexican workers unjustly discharged.

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Unemployment in the United States. Hearings (70th Cong., 2d sess.) on S. Res. 219, Dec. 11, 1928-Feb. 9, 1929. Washington, 1929. 517 pp.

An extensive discussion of various plans for stabilizing employment and earnings for workers, including dismissal wages.

- UNITED STATES. *Department of Labor. Bureau of Labor Statistics.*
 Labor legislation of Argentina. Washington, 1930. 124 pp. (*Its Bulletin* No. 510.)
 Gives the text of Argentina's dismissal-wage law.
- Labor legislation of Uruguay. Washington, 1930. 70 pp. (*Its Bulletin* No. 494.)
 Contains the text of several laws passed in Uruguay that provide for dismissal compensation.
- Works council movement in Germany, by Boris Stern. Washington, 1925. 114 pp. (*Its Bulletin* No. 383.)
 History of the German works council movement, and an analysis of the present law dealing with dismissals.
- *President's Emergency Committee for Employment.*
 Outline of industrial policies and practices in time of reduced operation and employment. Washington, 1931.
 Commends the use of dismissal compensation in cases of permanent lay-off.
- WALTERS, J. D.
 Applied Personnel Administration. New York, John Wiley & Sons, 1931.
 Brief discussion (pp. 111, 112) of the use of dismissal wages by industrial firms that recognize their responsibility toward their workers whom they discharge for technological considerations.
- WEBB, SIDNEY.
 The Works Manager To-day. New York, Longmans, Green & Co. [1917]. 162 pp.
 Urges, in Chapter III, a week's dismissal notice or a week's pay in lieu of notice.
- WOLF, HARRY D.
 Management and technological unemployment.
 (In Schwenning, G. T. *Management Problems*. Chapel Hill, University of North Carolina Press, 1930, pp. 73-102.)
 Shows how several companies have made use of the dismissal wage in mitigating technological unemployment.

Articles in Periodicals

- ABSORPTION OF DISCHARGED MEN'S CLOTHING CUTTERS INTO OTHER TRADES.
Monthly Labor Review, October, 1929, pp. 186-190.
 An investigation of the new jobs found by employees of Hart, Schaffner & Marx, whose jobs had been purchased by the company when they were dismissed.
- AGGER, E. E.
 The labor institute at Rutgers.
American Federationist, August, 1931, pp. 936-942.
 A conference of economists and labor leaders held at Rutgers University to consider the problem of unemployment recommended that organized labor urge the payment of dismissal compensation to steady workers who lose their jobs through no fault of their own.
- A NEW METHOD OF PLACING DISPLACED MEN.
Monthly Labor Review, October, 1929, pp. 190, 191.
 Report on the value of the company's dismissal-wage plan to employees discharged by Rowntree & Co., of York, England.
- AN INDUSTRIAL COUNCIL AND RATIONALIZATION.
 Welfare Work (Welfare Workers Institute, London), March, 1931, p. 281.
 How workers were compensated by the flour-milling industry in England when they lost their jobs on account of rationalization.
- ANOTHER COMPANY INAUGURATES A DISMISSAL-WAGE PLAN.
 Factory and Industrial Management, March, 1931, p. 442.
 Details of the dismissal-wage plan of the Hills Bros. Co., of New York.
- AUFHAEUSER, S.
 Industrial councils in Germany.
Annals of the American Academy of Political and Social Science, November, 1920, pp. 48-53.

BONUSES FOR DISCHARGED WORKERS IN THE UNITED STATES.

Industrial and Labor Information (International Labor Office, Geneva),
February 10, 1930, p. 195.

Discussion of the United States Rubber Co.'s dismissal-wage payment plan.

BOWERS, GLENN A.

Employment, wages, and industrial relations: Trends and developments.
Factory and Industrial Management, June, 1930, pp. 1379, 1380.

Brief discussion of dismissal-wage plans adopted by industries in the United States, since 1926, to mitigate the hardships of technological unemployment.

BRANCH, H. N.

The Mexican constitution of 1917 compared with the constitution of 1857.
Annals of the American Academy of Political and Social Science, May,
1917, pp. 92-102.

Contains the dismissal-wage provisions of the law of Mexico.

BROWN, J. DOUGLAS.

The manufacturers and the unemployed.
Current History, July, 1931, pp. 517-520.

Modern labor policy of enlightened management includes dismissal compensation for combating the effects of unemployment during the present depression.

BRUSSEL, F.

La concentration industrielle et l'indemnisation des travailleurs congédiés.
L'Internationale Syndicale Chrétienne (Confédération Internationale
des Syndicats Chrétiens, Utrecht, Holland), 7^{ème} Année, No. 4,
1929, pp. 50-55.

Describes the technological unemployment resulting from the concentration of the European margarine industry, and the dismissal-compensation plan of the Jurgens Co. of Oss, Holland.

CLAGUE, EWAN, AND COUPER, W. J.

The readjustment of workers displaced by plant shutdowns.
Quarterly Journal of Economics, February, 1931, pp. 309-346.

A study of the value of a dismissal wage in readjusting workers discharged by the United States Rubber Co. incident to closing its New England plants.

— When shutdown came: A dismissal wage in practice.

Survey Graphic, February 1, 1931, pp. 447-480, 513, 514.

The use of the dismissal wage in helping the United States Rubber Co.'s workers make the economic readjustment necessitated by discharge.

COMPANY COMPENSATES WORKERS LAID OFF.

Forbes, December 1, 1928.

Editorial demanding that workers be compensated for the loss of their jobs when this loss is due to management, and an account of dismissal wages paid by the Thunder Bay Paper Co. of Port Arthur, Ontario.

COMPENSATED EMPLOYEES WHO WERE DROPPED.

Forbes, September 1, 1928, p. 29.

Editorial on the A. Nash Co.'s scheme of compensating workers whose jobs were destroyed by the introduction of labor-saving machinery.

CONDITIONS IN JAPAN.

Industrial and Labor Information (International Labor Office, Geneva),
June 2, 1930, pp. 294, 295.

At a conference held in April, 1930, factory inspectors of Japan decided to apply the law concerning dismissal notice and indemnities to temporary workers.

CORBETT, HENRY D.

A more rational retirement plan.

Journal of Business of the University of Chicago, October, 1931, pp.
407-413.

Argument favoring dismissal allowances in preference to pension schemes in use in American industries.

COWDRICK, EDWARD S.

Dulling the axe of dismissal.

Nation's Business, October, 1930, pp. 47-49, 212, 213.

Discusses the dismissal wage as a new labor policy.

DAVIS, HORACE B.

The German labor courts.

Political Science Quarterly, September, 1929, pp. 397-420.

The place of the German labor courts in limiting the employer's right to discharge workers.

DEMANDS OF SALARIED EMPLOYEES IN GREECE.

Industrial and Labor Information (International Labor Office, Geneva), February 10, 1930, pp. 171, 172.

Report of the dismissal notice adopted at a meeting held in December, 1929, attended by representatives of the Federation of Salaried Employees, the General Confederation of Labor, the League of Merchants, the Companies' Association, the Association of Banks, and high Government officials.

DISMISSAL ALLOWANCES FOR GERMAN EMPLOYEES.

Industrial and Labor Information (International Labor Office, Geneva), February 10, 1930, pp. 175, 176.

Details of a request made to the Government by the German Federation of Salaried Employees for legislation increasing dismissal allowances to a maximum of a year's salary in cases where employees lose their positions because of rationalization.

DISMISSAL INDEMNITIES.

Industrial Relations, Chicago, May, 1931, p. 176.

A dispatch from Tokyo says that more than 8,000 workmen, discharged from the naval dockyards and arsenals as a consequence of restriction of activities under the London naval treaty, were granted "liberal discharge allowances."

DISMISSAL WAGE.

American Machinist (New York, N. Y.), April 16 (p. 606), June 18 (p. 939), July 2 (p. 9), July 23 (p. 166), August 20 (p. 299), September (p. 374), 1931.

Arguments for and against the payment of the dismissal wage.

DISMISSAL-WAGE PLANS.

Factory and Industrial Management, September, 1931, p. 362.

Quotation from a study made by the National Industrial Conference Board showing that 53 American firms pay dismissal allowances under formal and 30 under informal plans.

DISMISSAL WAGES FOR TEMPORARY WORKERS IN JAPAN.

Monthly Labor Review, August, 1930, p. 182.

DOUGLAS, PAUL H.

Technological unemployment.

American Federationist, August, 1930, pp. 923-950.

The dismissal wage is commended as one means of making the adjustment necessitated by technological unemployment.

DRAPER, ERNEST G.

A State dismissal-wage act.

Survey, January 15, 1931, pp. 426, 427.

Draft of a plan for a State dismissal-compensation law.

EIGHT LOOMS AGAIN.

Textile Worker, April, 1931, pp. 25-28.

Discussion of the efforts of J. Spencer (Ltd.), of Burnley, England, to end a strike of its workers caused by the introduction of the 8-loom system by paying three months' dismissal wages to the workers displaced.

EMPLOYERS IN BRAZIL MUST PAY INDEMNITIES FOR DISMISSALS.

Commerce Reports, May 18, 1931, p. 430.

Statement regarding Brazilian workers' legal claim to compensation if discharged for trade-union affiliation or participation in trade-union activities.

EMPLOYER'S PLAN FOR HELPING DISMISSED WORKERS.

Industrial and Labor Information (International Labor Office, Geneva), December 17, 1928, p. 365.

Discussion of Rowntree & Co.'s dismissal-wage plan.

EXPERIENCE OF A GROUP OF EMPLOYERS WITH THE LAY-OFF PROBLEM.

Monthly Labor Review, September, 1930, pp. 21-23.

The use of advance notice and the dismissal wage in cases of lay-off.

FACTS FOR WORKERS: UNEMPLOYMENT AND ITS REMEDIES.

International Bookbinder, October, 1930, pp. 550-552.

Suggests that discharge compensation be paid to workers who are laid off.

GERMAN WORKS COUNCIL LAW.

Monthly Labor Review, May, 1920, pp. 172-181.

Discussion of the origin and main provisions of the German works council law.

GILSON, MARY B., AND RICHES, E. J.

Employers' additional unemployment benefit schemes in Great Britain.

International Labor Review (International Labor Office, Geneva), March, 1930, pp. 348-394.

An analysis of voluntary dismissal-wage plans of a dozen or more British industries.

HARDMAN, J. B. S.

Amalgamated unionism.

The New Republic, October 28, 1931, pp. 294-297.

Achievements of the Amalgamated Clothing Workers of America in securing dismissal wages for workers discharged for technological reasons.

HAWKINS, EVERETT D.

Dismissal wages: Another step toward industrial security.

Industrial Relations, May, 1931, pp. 144-146.

Gives the discharge-compensation plans of a large number of companies.

—Letter to the editor in re the legal status of dismissal compensation.

Industrial Relations, Chicago, October, 1931, p. 316.

Discusses the legal status of voluntary dismissal-compensation payments.

—Solving the unemployment problem.

Industrial Relations, July, 1931, pp. 225-226.

How the Hills Bros. Co. uses the dismissal wage as a solution to seasonal, cyclical, and technological unemployment.

HOW ROWNTREE & CO. (LTD.) OF YORK, ENGLAND, DEALS WITH TECHNOLOGICAL UNEMPLOYMENT.

Law and Labor, April, 1930, pp. 94-96.

Statement regarding new industries started by Rowntree & Co. to afford employment for some of the employees it laid off permanently due to technological improvements in the plant.

INDEMNITY FOR UNEMPLOYED BOATMEN IN GREECE.

Industrial and Labor Information (International Labor Office, Geneva), December 10, 1928, p. 344.

Decree of the Greek Chamber, of November 18, 1928, granting indemnity to boatmen who lost their jobs on account of the mechanical loading of vessels.

INDUSTRIAL EMPLOYMENT CODE.

Bulletin of the Taylor Society, February, 1931, pp. 19-24, and October, 1931, pp. 181-185.

Holds that it is industry's responsibility to compensate the worker for the loss of his job.

INDUSTRY KEEPS 12 PER CENT MORE MEN ON PAY ROLL THAN IT NEEDS.

The Business Week, December 3, 1930, pp. 7, 8.

Gives the names of a number of companies paying a dismissal wage.

INTERNATIONAL FEDERATION OF COMMERCIAL, CLERICAL AND TECHNICAL EMPLOYEES.

Industrial and Labor Information (International Labor Office, Geneva), June 2, 1930, p. 298.

The insurance employees' section of the above federation held a conference at Vienna, in March, 1930. At the conference the program of demands drafted included "longer periods of notice and higher indemnities for dismissal."

LABOR LEGISLATION IN RUMANIA.

Industrial and Labor Information (International Labor Office, Geneva), September 9, 1929, pp. 335-340.

A discussion of the provisions of the Rumanian law dealing with discharge indemnity.

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MEEKER, ROYAL.

Industrial hazards.

Monthly Labor Review, September, 1919, pp. 1-8.

Held that "industry should be required to pay a 'dismissal wage' to employees discharged for no fault of their own."

MESSRS. ROWNTREE'S SUBSIDY SCHEME.

Industrial and Labor Information (International Labor Office, Geneva), September 8, 1929, p. 346, and September 30, 1929, p. 470.

MITIGATING DISCHARGE IN INDUSTRY.

Information Service (Federal Council of the Churches of Christ in America, New York), September 29, 1928, p. 4.

Describes the A. Nash Co.'s use of a dismissal wage when technological progress eliminated jobs in the firm.

MYERS, ROBERT J.

Occupational readjustment of displaced skilled workmen.

Journal of Political Economy, August, 1929, pp. 473-489.

A study of what happened to cutters in the Chicago clothing market who received compensation for the loss of their jobs.

OHSE, HERMAN.

The new workmen's councils legislation.

Annals of the American Academy of Political and Social Science, November, 1920, pp. 54-60.

Legal protection of German workers against discharge.

ORCHARD, DOROTHY J.

An analysis of Japan's cheap labor.

Political Science Quarterly, May, 1929, pp. 215-258.

Discussion of voluntary and compulsory payment of dismissal allowances in Japan.

PICARD, ROGER.

French legislation on the dismissal of workers.

International Labor Review (International Labor Office, Geneva), January, 1931, pp. 1-24.

Text and critical analysis of the French act of July 19, 1928, dealing with the dismissal of workers and dismissal compensation.

RATIONALIZATION IN PRACTICE: A BRITISH FLOUR-MILLING SCHEME.

Bulletin of the International Management Institute, February, 1931, pp. 31, 32.

Shows how dismissal compensation is used on a national scale in alleviating technological unemployment.

ROSS, EDWARD A.

A legal dismissal wage.

Monthly Labor Review, March, 1919, pp. 15-19.

Discusses the use of the dismissal wage in Russia under the Czar and under Kerensky, and states the principles underlying the payment of dismissal allowances.

RUKEYSER, MERRYLE STANLEY.

How progressive employers meet the challenge of unemployment.

Forbes, January 1, 1931, p. 13.

Brief description of dismissal-wage schemes of 10 companies.

SALARIED EMPLOYEES IN CZECHOSLOVAKIA.

Industrial and Labor Information (International Labor Office, Geneva), February 10, 1930, p. 174.

Report of demands submitted to Parliament by the Czechoslovak Association of Salaried Employees which included longer notice of dismissal.

SCHAEFFER, HANS.

The results of the council movement in Germany.

Annals of the American Academy of Political and Social Science, November, 1920, pp. 41-47.

Quotes and discusses the provisions of the German labor law on the formation and functions of factory councils in protecting workers from discharge.

SCHOMERUS, FRIEDERICH.

Industrial cooperation in the Carl Zeiss Works.

Industrial Psychology Monthly, February, 1928, pp. 59-63.

Gives the company's reasons for paying dismissal compensation.

SCHWENNING, G. T.

Industry's responsibility for unemployment.

Social Forces, October, 1931, pp. 112-119.

Gives the features of several American and European company dismissal-wage plans.

— The worker's legal right to his job.

American Federationist, January, 1932, pp. 26-32.

Statement regarding the extent and scope of dismissal-compensation laws; evaluation of the effectiveness of the dismissal-compensation law movement to give the worker a legal claim to his job; and the need for similar legislation in the United States.

SEISHI, IDEI.

The unemployment problem in Japan.

International Labor Review (International Labor Office, Geneva), October, 1930, pp. 503-523.

Includes a discussion of the effect of the custom of giving discharge allowances in Japanese industry on the problem of unemployment.

SINZHEIMER, HUGO.

The development of labor legislation in Germany.

Annals of the American Academy of Political and Social Science, November, 1920, pp. 35-40.

Development of German labor laws, including the works council law of February 4, 1920, which protects workers from arbitrary discharge.

SPATES, T. G.

Industrial relations in the Zeiss works.

International Labor Review (International Labor Office, Geneva), August, 1930, pp. 177-198.

A sympathetic analysis of the dismissal-compensation plan of the Carl Zeiss Co., located at Jena, Germany. The plan has been in successful operation for more than 35 years.

STARRETT, H. P.

Commercial agents subject to important Italian decision.

Commerce Reports, September 1, 1930, p. 559.

Decision of the Supreme Court of Italy holding that Italian agents of foreign firms are entitled to indemnity if their agency is restricted or withdrawn without due advance notice.

STEWART, BRYCE M.

American experiments with unemployment insurance.

Survey Graphic, April, 1929, pp. 57, 58, 75, 76.

"The solution for unemployment compensation appears to lie in the dismissal wage."

TERMINATION OF CONTRACTS IN GREECE.

Industrial and Labor Information (International Labor Office, Geneva), June 2, 1930, pp. 301, 302.

Statement regarding a notice of dismissal decree by the Greek Parliament.

THE DISMISSAL WAGE.

Factory and Industrial Management, March, 1930, pp. 536, 537.

Gives several company dismissal-wage plans in actual operation.

THE DISMISSAL WAGE.

Industry (Associated Industries of Massachusetts, Boston), August 22, 1931, p. 5.

Summary of a report on compulsory and voluntary payment of dismissal wages made by the National Industrial Conference Board.

THE DISMISSAL WAGE.

Monthly Labor Review, April, 1930, pp. 1-5.

Gives details of several dismissal-wage plans in the United States, Europe, and Japan, and lists several foreign countries which have enacted dismissal-wage laws.

THE DISMISSAL WAGE.

Service Letter on Industrial Relations (National Industrial Conference Board, New York), October 30, 1931, pp. 1-3.

Report of the National Industrial Conference Board's study of the dismissal-wage movement.

UMBREIT, PAUL.

The program of socialized industrial management.

Annals of the American Academy of Political and Social Science, November, 1920, pp. 61-65.

Postwar conditions in Germany resulting in the enactment of present labor laws, including laws dealing with dismissal compensation.

UNEMPLOYMENT AMONG SEAMEN.

Monthly Labor Review, September, 1919, pp. 169, 170.

Dismissal allowances recommended by the Central Association of German Shipowners to compensate 60,000 to 70,000 seamen for the loss of their jobs when the Allies took over the German shipping and shipbuilding industry as ordered by the peace conference.

UNEMPLOYMENT COMMITTEE PLACING RUBBER WORKERS.

Connecticut Industry (Manufacturers' Association of Connecticut, Hartford), October, 1929, p. 13.

Brief statement regarding the United States Rubber Co.'s dismissal-wage plan.

WOLMAN, LEO.

Some observations on unemployment insurance.

(In American Economic Association, Proceedings, December, 1928, pp. 23-29.)

Discusses dismissal-wage schemes as a new form of unemployment insurance.

YOUNG, A. H.

Unemployment—What about it?

Personnel (American Management Association, New York), February, 1931, pp. 116-123.

Indicates how discharge allowances may be used to assist workers who must be laid off.

Articles in Newspapers

COTTON MEN GET BONUSES.

Trans-Pacific (Tokyo), May 21, 1931, p. 8.

Account of 750,000 yen in the form of retirement allowances paid to three executives of one Japanese firm.

DOCKYARD STRIKE IN YOKOHAMA ENDS.

Trans-Pacific (Tokyo), March 28, 1929, p. 30.

An account of a 10-day strike of 4,500 workers that was terminated when the firm agreed to unusually liberal dismissal allowances beyond the legal requirements.

EMPLOYEES OF WORLD GET TWO WEEKS' PAY.

New York Times, March 5, 1931, p. 16.

Dismissal compensation paid to employees of the World and the Evening World who lost their jobs when these two papers were sold to the Scripps-Howard newspapers.

FINDING WORK FOR DISPLACED MEN: RESULTS OF ROWNTREE'S EXPERIMENT.

Manchester Guardian, August 12, 1929, p. 5.

Report on the results of Rowntree & Co.'s dismissal compensation used to assist workers dismissed for technological reasons.

40-DAY SPINNING STRIKE IS ENDED.

Trans-Pacific (Tokyo), July 23, 1927, p. 12.

In settling its strike, the firm agreed to pay generous dismissal compensation to the workers it dismissed.

HAMAMATSU STRIKE IS FINALLY SETTLED.

Japan Advertiser, August 9, 1926, p. 1.

A strike of 1,000 workers that lasted more than three months ended when the company agreed to the payment of liberal dismissal allowances.

HOSHI DRUG STRIKE BROUGHT TO FINISH.

Trans-Pacific (Tokyo), June 26, 1930, p. 10.

Account of the payment of 31,000 yen to 410 men dismissed by the firm.

JAPAN'S INDUSTRIAL DISPUTES TO CONTINUE.

Trans-Pacific (Tokyo), April 24, 1930, p. 13.

Rationalization and the depression are causing much unemployment and labor unrest in Japan. The labor movement is concentrating its efforts to secure allowances for the workers that are dismissed.

JAPANESE FIRM GIVES WORKERS \$585,000 ON DISCHARGING THEM.

New York Times, June 11, 1931, p. 1.

Report on discharge allowances paid to 3,000 workers dismissed by a Japanese firm due to lack of business.

KAWASAKI CO. LETS OUT 3,000 MEN.

Trans-Pacific (Tokyo), July 30, 1927, p. 14.

Report of large sums paid in the form of dismissal allowances by two firms that discharged many workers.

LABOR AND FARMERS' TROUBLES INCREASE.

Trans-Pacific (Tokyo), December 17, 1927, p. 17.

A statement showing that 884 labor disputes involving over 70,000 workers took place during 1927. "A total of 170 cases were stated to be the result of agitation for discharge and retirement allowances."

LABOR TROUBLES MORE THIS MONTH.

Trans-Pacific (Tokyo), September 26, 1929, p. 12.

The discharging of workers by two bus companies in Tokyo resulted in strikes bordering on sabotage. Discharge allowances were an item in the disputes.

LABOR UNREST HITS INDUSTRIAL FIRMS THROUGHOUT JAPAN.

Trans-Pacific (Tokyo), May 14, 1931, p. 13.

When the Yokohama Dockyard Co. dismissed 998 employees for lack of business, the firm distributed 254,000 yen in retirement allowances to those laid off.

MEN LAID OFF GET MICHELIN BONUSES.

New York Times, July 18, 1930, p. 5.

Nature of the \$700,000 in bonuses paid to 700 employees when the Michelin Tire Co. closed its American plant.

MICHELIN WILL END TIRE MAKING HERE.

New York Times, September 11, 1930, p. 22.

Discussion of the dismissal bonuses paid to workers when the plant was shut down permanently.

MUSLIN CO. TROUBLE IS ENDED.

Trans-Pacific (Tokyo), March 6, 1930, p. 12.

Dismissal wages constituted a part of the settlement of the strike.

NEW HILLS BROS. WAGE PLAN AIMS TO REASSURE WORKERS.

Journal of Commerce, January 31, 1931, p. 9.

Brief statement of the Hills Bros. Co.'s motives in adopting a formal dismissal-wage plan.

POLICE HERE CLASH WITH PROLETARIANS OVER MILL DISPUTE.

Trans-Pacific (Tokyo), April 17, 1930, p. 15.

Account of a strike in a spinning mill near Tokyo. Management stated that it had a special fund of about 16,000,000 yen which could be used in paying dismissal wages to discharged workers.

PULITZERS TO GIVE \$500,000 TO EMPLOYEES.

New York Times, February 28, 1931, p. 3.

Report of compensation paid to employees of the World and the Evening World at the time of the sale of these two papers.

SHIPYARD WORKERS DISCHARGED.

Trans-Pacific (Tokyo), May 14, 1931, p. 11.

A shipbuilding firm at Nanasaki paid 200,000 yen in dismissal allowances to 500 workmen it laid off.

STRIKE IN MUSLIN CO. IS SETTLED.

Japan Advertiser (Tokyo), August 11, 1926, p. 1.

The payment of compensation was a factor in bringing the dispute to an end.

THE LONGEST STRIKE.

Trans-Pacific (Tokyo), April 28, 1928, pp. 4, 13.

In ending a strike that lasted 217 days and concerned 1,000 families, the firm involved agreed (1) to pay 400 yen in dismissal allowances to each of the 700 workers discharged and (2) to pay the sum of 80,000 yen into the strike fund as a special allowance. The strike cost the company 380,000 yen in dismissal allowances.

TRUSCON STEEL CO. WORKERS WALK OUT.

Japan Advertiser (Tokyo), September 17, 1926, p. 3.

The amount of dismissal allowances was one of the principal demands formally presented to the management by the workers.

U. S. EMBASSY ASKED TO ACT IN SETTLING GREAT OSAKA STRIKE.

Trans-Pacific (Tokyo), January 23, 1930, p. 14.

A strike resulted when the Japanese plant of the General Motors Corporation discharged 800 workers and paid them only the legal 14 days' dismissal allowance. The strikers demanded more liberal compensation for those discharged.

WALDORF EMPLOYEES GET LAST DAY RECEIPTS.

New York Times, April 3, 1929, p. 15.

Statement of dismissal compensation paid its employees when they were discharged due to the closing down of the old Hotel Waldorf-Astoria.

WALDORF EMPLOYEES SHARE \$23,000 GIFT.

New York Times, May 4, 1929, p. 10.

Laws and Decrees

BOLIVIA. *Laws, statutes, etc.*

Act (November 21, 1924) respecting salaried employees in commerce and industry. (Translation by International Labor Office, Geneva, *in its* Legislative series, 1924—Bolivia 2.)

— — — Act and decree (January 8, 1925): Salaried employees. (Translation by International Labor Office, Geneva, *in its* Legislative series, 1925—Bolivia 1.)

The above two laws provide for compensation in cases of unjust discharge of salaried employees.

BRAZIL. *Laws, statutes, etc.*

Decree No. 17096 (October 28, 1925) issuing new regulations for harbor authorities. (Translation by International Labor Office, Geneva, *in its* Legislative series, 1925—Brazil 2.)

Text of law dealing with the employment and discharge of seamen, and providing for dismissal compensation.

CHILE. *Laws, statutes, etc.*

Act No. 4053 (September 8, 1924) providing that contracts of employment shall be regulated by the provisions laid down therein. (Translation by International Labor Office, Geneva, *in its* Legislative series, 1924—Chile 2.)

— — — Decree No. 857 (November 11, 1925): Salaried employees. Legislative decree No. 442 (March 20, 1925) respecting the welfare of working mothers and respecting crèches. (Translations by International Labor Office, Geneva, *in its* Legislative series, 1925—Chile 1, 3.)

— — — Decree No. 217 (April 30, 1926): Hygiene and safety. (Translation by International Labor Office, Geneva, *in its* Legislative series, 1926—Chile 2.)

— — — Decrees No. 103 (February 2, 1927), No. 636 (April 28, 1927), No. 1442 (August 26, 1927), and No. 1469 (September 1, 1927): Salaried employees. (Translations by International Labor Office, Geneva, *in its* Legislative series, 1927—Chile 1.)

The above are the texts of Chile's laws providing for the compulsory payment of dismissal wages in cases of arbitrary discharge.

ECUADOR. *Laws, statutes, etc.*

Decree No. 24 (March 4, 1927) respecting the prevention of industrial accidents. (Translation by International Labor Office, Geneva, *in its* Legislative series, 1927—Ecuador 1.)

— — — Act (October 6, 1928) respecting the individual contracts of employment. (Translation by International Labor Office, Geneva, *in its* Legislative series, 1928—Ecuador 1.)

Text of Ecuador's laws containing provision for dismissal compensation for workers.

FRANCE. *Laws, statutes, etc.*

Lois, décrets, arrêtés concernant la réglementation du travail. Documents réunis par le Ministère du Travail et de la Prévoyance sociale. Paris, Librairie Administrative Berger-Levrault, 1930.

The complete French Labor Code. Page 22 gives the text of the labor act of July 19, 1928, dealing with dismissals and dismissal compensation.

— — — Seamen's Code, December 13, 1926. (Translation by International Labor Office, Geneva, in its Legislative series, 1926—France 13.)

Provides for dismissal compensation in cases of unjust discharge.

GERMANY. *Laws, statutes, etc.*

Act of July 9, 1926: Dismissal of salaried employees. (Translation by International Labor Office, Geneva, in its Legislative series, 1926—Germany 7.)

Lays down time limits for giving notice of dismissal to salaried employees.

GREECE. *Laws, statutes, etc.*

Act No. 2112 (March 11, 1920) respecting obligatory notice of the termination of the contract of employment of private employees. (Translation by International Labor Office, Geneva, in its Legislative series, 1920—Greece 3-4.)

— — — Legislative decree (April 21, 1926) respecting arbitration and conciliation in disputes to which salaried employees are parties. (Translation by International Labor Office, Geneva, in its Legislative series, 1926—Greece 3.)

Both of the above laws of Greece make provision for the payment of compensation in cases of irregular termination of labor contracts.

GUATEMALA. *Laws, statutes, etc.*

Decree No. 1434 (April 30, 1926) promulgating the labor act. (Translation by International Labor Office, Geneva, in its Legislative series, 1926—Guatemala 1.)

Contains provision for discharge indemnity.

ITALY. *Laws, statutes, etc.*

Dismissal of employees (transport undertakings). (Translation by International Labor Office, Geneva, in its Legislative series, 1925—Italy 8.)

— — — Legislative decree No. 2338 (November 29, 1925) respecting the dismissal of persons employed by undertakings carrying on public transport services under a concession. (Translation by International Labor Office, Geneva, in its Legislative series, 1925—Italy 8.)

Includes provisions covering the dismissal of employees.

JAPAN. *Laws, statutes, etc.*

Ordinances (No. 152 and 153) under the factory act. (Translation by International Labor Office, Geneva, in its Legislative series, 1926—Japan 1.)

Text of Japanese legislation dealing with compensation for unjust discharge.

MAINE. *Department of Labor and Industry.*

Labor laws of Maine. Augusta, 1931.

Contains (pp. 32, 33) the text of the Maine law covering dismissal notice and compensation in lieu of notice.

— — — *Laws, statutes, etc.*

Revised Statutes, 1916, ch. 49, sec. 35.

Contains provision for dismissal compensation.

MASSACHUSETTS. *Department of Labor.*

Labor law bulletin No. 9. Boston [n. d.].

Contains (p. 30) the text of the law concerning discharge allowance.

— — — *Laws, statutes, etc.*

General Laws, 1921, ch. 149, sec. 159.

The text of the State's law dealing with dismissal notice and allowances is given on page 3039.

MEXICO. *Laws, statutes, etc.*

Decree No. 87 (April 6, 1921) respecting conciliation and arbitration boards. (Translation by International Labor Office, Geneva, in its Legislative series, 1921 (Pt. II)—Mexico 1.)

MEXICO. *Laws, statutes, etc.*

Decree No. 2308 (August 13, 1923) respecting the labor act of the State of Jalisco. (Translation by International Labor Office, Geneva, in its Legislative series, 1923—Mexico 1.)

— — — Decree No. 279 (May 4, 1925) to provide for compensation for industrial accidents (Yucatan). Act (December 30, 1925) under article 4 of the constitution respecting liberty to work. (Translations by International Labor Office, Geneva, in its Legislative series, 1925—Mexico 1, 2.)

— — — Order (March 1, 1927) to provide that the Ministry of Industry, Commerce, and Labor shall deal with all labor disputes in the mining and petroleum industries in the Republic. (Translation by International Labor Office, Geneva, in its Legislative series, 1927—Mexico 1.)

All of these Mexican laws have provisions dealing with compensation for discharge.

NEW JERSEY. *Department of Labor.*

Labor laws administered by the State of New Jersey Department of Labor. Trenton, 1921.

Gives (pp. 26, 27) the law relating to the payment of discharge indemnity.

— — — *Laws, statutes, etc.*

Compiled Statutes, 1910, sec. 79, p. 3039.

New Jersey's law relating to the payment of discharge indemnity.

RUSSIA. *Laws, statutes, etc.*

Order (November 9, 1922) of the A. R. C. E. C. respecting the bringing into operation of the Labor Code of the F. R. S. S. R. (Translation by International Labor Office, Geneva, in its Legislative series, 1922—Russia 1.)

Text of Soviet Russia's Labor Code (before the revision of 1929) which contains provisions for the payment of dismissal compensation in cases of unjust discharge.

YUGOSLAVIA. *Laws, statutes, etc.*

Legislative decree (September 25, 1926) respecting the legal relations between journalists and newspaper proprietors. (Translation by International Labor Office, Geneva, in its Legislative series, 1926—Kingdom of the Serbs, Croats, and Slovenes 1.)

PUBLICATIONS RELATING TO LABOR

Official—United States

NEW YORK.—Department of Labor. *Special Bulletin No. 171: Course of factory employment in New York State from 1921 to 1930, prepared by Division of Statistics and Information.* Albany, 1931. 177 pp., charts.

Prepared for the convenience of those who make use of the current statistics on employment in New York State factories, which appear monthly in the Industrial Bulletin published by the New York Department of Labor.

NORTH DAKOTA.—Workmen's Compensation Bureau. Minimum Wage Department. *Sixth biennial report, for the biennium ending June 30, 1930.* [Bismarck, 1931?] 38 pp.

TENNESSEE.—Department of Labor. Division of Mines. *Thirty-sixth annual report of the mineral resources of Tennessee, 1930.* Nashville, [1931?]. 140 pp., charts, illus.

Includes, among various other data, wage and accident statistics.

WASHINGTON.—Department of Labor and Industries. *Annual report of coal mines, for the year ending December 31, 1930.* Olympia, 1931. 14 pp.

In 1930 coal production in Washington State totaled 2,290,990 tons, with 3,110 men employed and the mines operating 204 days. Compared with the preceding year, there was a decrease of 300,676 tons in production, 178 in the number of men, and of 18.3 in the number of days the mines were in operation.

— — — *Compilation of insurance and medical aid acts administered by Department of Labor and Industries.* Olympia, 1931. 36 pp.

UNITED STATES.—Civil Service Commission. *Forty-eighth annual report, for the fiscal year ended June 30, 1931.* Washington, 1931. 101 pp.

There were 616,837 employees in the executive civil service on June 30, 1931; of these, 71,693 were employed in the District of Columbia. The Postal Service had 316,259 employees, or 51.27 per cent of the total. On June 30, 1931, there were 468,050 positions subject to competitive examination under the civil service act. The number of retirements for age during the year was 3,888.

— Department of Commerce. Bureau of Foreign and Domestic Commerce. *Domestic Commerce Series No. 5: Commercial and industrial organizations of the United States.* Revised edition, September, 1931. Washington, 1931. 386 pp.

— — — *Statistical abstract of the United States, 1931.* Washington, 1931. 898 pp.

— Bureau of Mines. *Annual report for the fiscal year ended June 30, 1931.* Washington, 1931. 61 pp.

The work of the health and safety branch of the bureau during the year included chemical and pathological studies of asphyxia by carbon monoxide, studies of chemical warning agents for fuel gases, and the physical examination of miners. Special field studies were made of health conditions among miners and of the incidence of silicosis, while laboratory studies were carried out on the toxicity and health hazards involved in the use of a number of chemicals.

— Department of Labor. Bureau of Labor Statistics. *Bulletin No. 545: Building permits in the principal cities of the United States in 1930.* Washington, 1931. 94 pp.

Advance summaries of the information obtained in this survey of building permits issued in 1930 were published in the Labor Review for March, April, and May, 1931.

UNITED STATES.—Department of Labor. Bureau of Labor Statistics. *Bulletin No. 547: Wages and hours of labor in cane-sugar refining industry, 1930.* Washington, 1931. 27 pp.

An advance summary of the data obtained in this survey was published in the *Labor Review* for February, 1931 (pp. 134-140).

— Women's bureau. *Bulletin No. 89: The industrial experience of women workers at the summer schools, 1928 to 1930, by Gladys L. Palmer.* Washington, 1931. 60 pp., illus.

An account of the work history and economic status of 609 woman students of 4 industrial summer schools.

— Federal Board for Vocational Education. *Fifteenth annual report, 1931.* Washington, 1931. 129 pp.

Reviewed in this issue.

— Government Printing Office. *Labor: Child labor, women, strikes, wages, workmen's insurance, and compensation. List of publications relating to above subjects for sale by Superintendent of Documents, Washington, D. C.* Washington, 1931. 32 pp. (Price list 33-17th ed.)

— Interstate Commerce Commission. *Forty-fifth annual report.* Washington, 1931. 380 pp.

Includes data on number of employees of Class I railways in July, 1931, with comparative figures for the same month of 1929 and 1930, and of number of persons killed and injured in railway accidents in various years.

— Treasury Department. Bureau of Internal Revenue. *Statistics of income for 1929, compiled from income-tax returns and including statistics from estate-tax returns.* Washington, 1931. 429 pp.

— Public Health Service. *Annual report, for the fiscal year 1931.* Washington, 1931. 354 pp., charts, illus.

The report contains a statement of the activities of the office of industrial hygiene and sanitation during the year which included studies of the effects of different dusts; a study of the hazards in the industrial use of poisonous substances, including radium in the dial-painting industry; a survey of the work of employee mutual-benefit associations and various other special studies.

Official—Foreign Countries

ESTONIA.—Bureau Central de Statistique. *Annuaire de la statistique agricole, 1930.* Tallinn, 1931. 239 pp., maps.

Contains statistical information in regard to agriculture in Estonia in 1930, including prices and wages, labor conditions, productivity, etc.

— Ministère de l'Instruction Publique et des Affaires Sociales. *La protection du travail en Estonie en 1930.* Tallinn, 1931. 48 pp., illus.

Contains a summary of the reports of the labor inspectors in Estonia for 1931, including cases of law violations, industrial disputes, arbitration by labor inspectors, industrial accidents and diseases, and preventive measures against accidents, etc.

The heads of the main tables are in French and Estonian, and there is a French résumé.

FRANCE.—Bureau de la Statistique Générale. *Annuaire statistique, 1930.* Paris, 1931. [Various paging.]

The French statistical yearbook for 1930 contains complete statistics on all phases of the national life in France and its colonies and protectorates. The statistics of interest to labor include those relating to vocational education, production in different industries, wages, hours of labor, savings, insurance, and industrial accidents.

FRANCE.—Commission Supérieure de la Caisse Nationale des Retraites pour la Vieillesse. *Rapport sur les opérations et la situation de cette caisse, 1929. Paris, 1931. 114 pp.*

The annual report of the French national old-age retirement fund for the year 1929.

— Ministère de la Santé Publique. *Rapport du conseil d'administration sur le fonctionnement et l'activité de l'Office National d'Hygiène Sociale du 1^{er} janvier au 31 décembre 1930. Paris, 1931. 19 pp.*

Report of the administrative council of the French National Bureau of Social Hygiene for the year 1930.

— Ministère des Travaux Publics. Direction des Mines. *Statistique de l'industrie minérale et des appareils à vapeur en France et en Algérie, 1929. Paris, [1931?]. 128, 210 pp.*

The annual report of the French Bureau of Mines for the year 1929. In addition to statistics of production of coal and metal mines, the number of workers and wages and hours of labor are given, as well as a statement of the operations of the sickness and old-age and invalidity funds.

— Ministère du Travail et de la Prévoyance Sociale. Conseil Supérieur du Travail. *Trente-quatrième session, novembre 1930. Paris, 1931. 278 pp.*

The proceedings of the 1930 session of the French Superior Labor Council. The subjects on the agenda included legislation on apprenticeship, hygiene and safety in places rented for industrial or commercial use, and application of protective labor legislation.

GREAT BRITAIN.—Home Department. *Welfare Pamphlet No. 8: Cloakrooms, washing facilities, drinking water, and sanitary accommodation in factories and workshops. London, 1931. 26 pp., diagrams, illus. 2d ed.*

— Royal Commission on Unemployment Insurance. *Appendixes to the minutes of evidence taken before the commission, Part IV: Memoranda by the Ministry of Labor on unemployment insurance in oversea countries. London, 1931. 39 pp., charts.*

LEAGUE OF NATIONS.—Commission of Inquiry for European Union. *Unemployment. Geneva, May 5, 1931. 20 pp. (World Peace Foundation, Boston, American agent.)*

NETHERLANDS.—Commissie van Onderzoek naar den Arbeidsduur aan Boord van Zeeschepen. *Rapport. The Hague, 1931. 68 pp.*

Report of the commission for investigation of duration of labor on board the ocean-going ships of 28 lines sailing under the Dutch flag, covering 5,768 seamen. Data on the duration of labor are presented in tabular form, by occupations.

— Departement van Arbeid, Handel en Nijverheid. *Centraal verslag der arbeidsinspectie in het Koninkrijk der Nederlanden over 1930. The Hague, 1931. [Various paging.] Diagrams, illus. (In Dutch with separate English summary.)*

A report on labor inspection in the Netherlands in 1930. Among the subjects covered are legislation for protection of labor, industrial accidents and diseases, accident prevention, social insurance, welfare work, etc. A detailed subject index is appended.

— *Verslag over het haventoezicht uitgeoefend in 1930. The Hague, 1931. 71 pp.*

A report on harbor inspection in 1930 in the Netherlands. Includes data on conditions of labor, accidents, etc.

NEW SOUTH WALES (AUSTRALIA).—Bureau of Statistics. *New South Wales statistical register for 1929-30. Sydney, 1931. 763 pp.*

Includes data relating to housing, rents, prices, and wages.

NORWAY.—Statistiske Centralbyrå. *Arbeidsledighetstillingen 15 januar 1931, ved de offentlige arbeidskontorer*. Oslo, 1931. 103 pp. (*Norges Offisielle Statistikk, VIII, 165.*)

A report on unemployment in Norway as of January 15, 1931, and on the activities of the employment offices.

— — — *Tariffavtaler og arbeidskonflikter, 1930*. Oslo, 1931. 26 pp. (*Norges Offisielle Statistikk VIII, 164.*)

A report on wage agreements and industrial disputes in Norway during 1930, including figures for earlier years.

QUEENSLAND (AUSTRALIA).—Registrar of Friendly Societies, Building Societies, and Industrial and Provident Societies. *Forty-sixth report, containing a general review of friendly societies in Queensland, lists of societies to March 31, 1931, and financial and numerical statements for the year ended June 30, 1930*. Brisbane, 1931. 28 pp.

SWEDEN.—[Socialdepartementet.] Socialstyrelsen. *Anställnings- och avlöningsförhållandena för lägre personal i allmän tjänst*. Stockholm, 1931. 146*, 114 pp., charts.

Contains information and statistics in regard to the labor conditions of civil servants in Sweden from 1927 to 1930, including legislation, wages and salaries, hours of labor, etc.

— — — *Arbetsinställelser och kollektivavtal samt förlikningsmännens verksamhet år 1930*. Stockholm, 1931. 157 pp.

A report on industrial disputes, trade agreements, and conciliation of disputes in Sweden in 1930. Includes data on duration and causes of disputes, and results obtained through conciliation.

Unofficial

CARPENTER, NILES. *The sociology of city life*. New York, Longmans, Green, & Co., 1931. 502 pp.

The effect of city life on social development is the subject of special attention in this work in which the origin and use of the city is shown. The author also deals with the physical setting of cities, government, and methods of supplying city needs. City and regional planning is the subject of a special chapter.

CLARK, HAROLD F. *Economic theory and correct occupational distribution*. New York, Columbia University, 1931. 176 pp.

An effort to find out whether generally accepted economic principles will shed any light upon the problem of the number of persons there should be in each occupation, and what, if any, is the responsibility of public education in the matter of bringing about proper occupational distribution.

CLARK, JANE PERRY. *Deportation of aliens from the United States to Europe*. New York, Columbia University Press, 1931. 524 pp.

CONFERENCE ON PERMANENT PREVENTATIVES OF UNEMPLOYMENT. *Addresses delivered at the conference, January 26–27, 1931, Washington, D. C.* Baltimore, Belvedere Press (Inc.), 1931. 100 pp.

This conference was organized by the three national religious organizations representing the Protestant, Catholic, and Jewish churches in America. The subjects covered in the addresses were: Stabilization, unemployment insurance, public works and construction programs, and moral and ethical implications.

An account of this conference was given in the Labor Review, March, 1931 (p 66).

DEUTSCHE GESELLSCHAFT FÜR GEWERBEHYGIENE. *Schriften aus dem Gesamtgebiet der Gewerbehygiene, Heft 36: Internationale Übersicht über Gewerbekrankheiten, nach dem Berichten der Gewerbeaufsichtsbehörden der Kulturländer über die Jahre 1927 bis 1929*. Berlin, 1931. 162 pp.

Contains a review of industrial diseases in various countries.

FANCHER, ALBERT. *Getting a job and getting ahead*. New York, McGraw-Hill Book Co. (Inc.), 1931. 166 pp.

This book, according to the preface, is based on the actual experiences of men who have proved the success of the methods described.

GARRISON, ELISHA E. *The riddle of economics*. New York, Macmillan Co., 1932. 329 pp.

HALL, T. H., editor and compiler. *Current conflicting views on unemployment insurance*. Chicago, National Research Bureau, 238 East Erie Street, 1931. 148 pp. (Mimeographed.)

HOBSON, J. A. *The economics of unemployment*. New York, Macmillan Co., 1931. 152 pp.

HUBERT, RENÉ, AND OTHERS. *Les assurances sociales. II. Le fonctionnement*. Paris, Librairie Dalloz, 1931. 672, 22* pp.

This is the second part of a study of the French social-insurance system. This volume deals with the provision for the enforcement of the act, and contains the text of the many regulatory decrees and orders which have been issued.

INSTITUTE FOR SCIENCE OF LABOR, KURASHIKI, JAPAN. *Report No. 1: An essay on the population of Japan in the light of social biology*, by G. Teruoka. Kurashiki, 1931. 19 pp.

— *Report No. 2: On the influence of factory work on the psycho-physical function*, by H. Kirihara. Kurashiki, 1931. 9 pp.

— *Report No. 3: Studies on the influence of the day and night shift system upon the physiological functions of laborers*, by T. Ishikawa. Kurashiki, 1931. 11 pp.

— *Report No. 4: On the variations of body weight of young working girls employed in day and night shift work*, by T. Yagi. Kurashiki, 1931. 19 pp.

INTERNATIONAL INSTITUTE OF AGRICULTURE. *International yearbook of agricultural statistics, 1930-31*. Rome, 1931. xxxix, 828 pp. (In English and French.)

INTERNATIONAL SOCIETY FOR CRIPPLED CHILDREN (INC.). *Resolutions adopted by the second world conference on the problem of the cripple, held at The Hague, Netherlands, June 28, July 3, 1931, and the story of The Hague conference*. Elyria, Ohio, 1931. 42 pp.

The crippled children's charter, adopted at this meeting, includes provisions concerning vocational training and placement.

JAUNIAUX, A. *Cent années de mutualité en Belgique*. Bruxelles, L'Églantine, 1930. 162 pp., illus.

A review of the accomplishments of mutual-aid organizations in Belgium during the past century.

KNOOP, DOUGLAS. *The riddle of unemployment*. London, Macmillan & Co. (Ltd.), 1931. 192 pp.

LORENTZ, A. M. *The right to work, or how to stabilize industry and employment*. Boston, Richard G. Badger, 1931. 154 pp.

MASON, LUCY RANDOLPH. *Standards for workers in southern industry*. New York City, National Consumers' League, and Atlanta, Southern Council on Women and Children in Industry, 1931. 46 pp.

Prepared by the general secretary of the Young Women's Christian Association of Richmond, Va., this pamphlet is intended especially for the use of the Southern Council on Women and Children in Industry. It gives for the separate Southern States the main legislative provisions concerning the employment of women and children, educational requirements, age limits, laws concerning night work and hours of labor, voluntary action in respect to the employment of women at night in textile establishments, etc. Some discussion is also given as to the need for the various safeguards suggested, and of the attitude of employers, workers, and the general public toward such provisions.

McCALLUM, E. D. *The iron and steel industry in the United States: A study in industrial organization.* London, P. S. King & Son (Ltd.), 1931. 333 pp., maps, charts.

Covers the importance, growth, size, geographical distribution, and structure of the iron and steel industry, processes of production, industrial combinations, marketing of the product, and labor. The sections on labor include data on wages and earnings, hours of work, accidents, trade-unionism, company unionism, employee stock ownership, etc.

McCRACKEN, DUANE. *Strike injunctions in the new South.* Chapel Hill, N. C., University of North Carolina Press, 1931. 290 pp.

A study of the injunction as a legal remedy, the case for and against injunctions in industrial disputes, and the effects of injunctions in the new South.

McGREGOR, A. G. *World depression to world prosperity.* London, P. S. King & Son (Ltd.), 1931. 118 pp.

MINNESOTA, UNIVERSITY OF. Employment Stabilization Research Institute. *Bulletins, Vol. 1, No. 2: Employment trends in St. Paul, Minneapolis, and Duluth, by William H. Stead and Dreng Bjornaraa.* Minneapolis, University of Minnesota Press, 1931. 135 pp., charts.

A study of employment trends in each of the three cities, St. Paul, Minneapolis, and Duluth, and in the State of Minnesota as a whole. Reviewed in this issue of the Labor Review.

NATIONAL CONFERENCE OF SOCIAL WORK. *Proceedings at the fifty-eighth annual session, held in Minneapolis, Minn., June 14-20, 1931.* Chicago, University of Chicago Press, 1931. 702 pp.

The predominant subject for discussion at this meeting was unemployment, over a dozen papers being centered on this problem. Among the contributions were: What have we learned about unemployment; How case-working agencies have met unemployment; The effect of an unemployment situation in family societies; Is unemployment permanent; International aspects of unemployment; Unemployment insurance; The Government's contribution; Unemployment insurance by industry; Use of public works in the treatment of unemployment; and Public and private relief during the current unemployment emergency.

NATIONAL INDUSTRIAL CONFERENCE BOARD (INC.). *Unemployment benefits and insurance.* New York, 247 Park Avenue, 1931. 127 pp.

In this study, in which the latest information regarding the operation of unemployment-benefit plans in the United States and unemployment-insurance systems in foreign countries is brought together, the conclusion is reached that because of the complexity of the causes of unemployment it is largely an uninsurable risk. The difficulties of applying insurance principles in the case of cyclical unemployment are considered to be insuperable, while the causes of depressional unemployment vary so much at different periods that it is regarded as impossible to arrive at a dependable basis for insurance calculations.

PRENGOWSKI, PIOTR. *Workers' family allowances.* London, Williams & Norgate (Ltd.), 1931. 96 pp.

The author favors the extension of family allowances and suggests that an international adjustment of the amounts paid by employers in this connection would be a highly useful objective for the International Labor Office, the International Conferences of Labor Statisticians, and the League of Nations.

RÉAL, CLAUDE, ET RULLIÈRE, HUMBERT. *La fourrure et la pelleterie.* Paris, G. Doin et Cie, 1931. 346 pp.

A history of the fur industry in France with a section on employers' and employees' organizations.

REDFORD, ARTHUR. *The economic history of England (1760-1860).* New York, Longmans, Green & Co., 1931. 221 pp.

ROBERTS, F. *Guide to industrial and social legislation, with special reference to the local government service.* London, Gee & Co. (Ltd.), 1931. 318 pp.

RUSSELL SAGE FOUNDATION. *Setting up a program of work relief, by Joanna C. Colcord.* New York, 1931. 23 pp.

This pamphlet contains information that will later be published by the Russell Sage Foundation as Part II of a book entitled "Emergency Work Relief." It describes the concepts underlying work relief and the actual steps to be taken in setting up a plan of work relief.

—Library. *Bulletin No. 109: Unemployment relief.* New York, 130 East 22d Street, October, 1931. 4 pp.

A selected and annotated bibliography on unemployment relief in this country. Most of the references are to recent material.

SAMUELS, H. *The law relating to industry.* London, Sir Isaac Pitman & Sons (Ltd.), 1931. 241 pp.

A comprehensive study of English industrial law, covering apprenticeship, contract of employment, wages, conditions of work in factories and workshops and mines, employers' liability, trade-unions and trade associations, national insurance of employees, schemes of cooperation and voluntary welfare, and conciliation and arbitration of labor disputes.

SHARP, WALTER RICE. *The French civil service: Bureaucracy in transition.* New York, Macmillan Co., 1931. 588 pp.

This study of governmental methods in France deals especially with the personal, political, and socio-economic factors in government rather than with the conditions of recruitment, training, compensation, promotion, etc. The author considers that governmental and unofficial bureaucracy in that country is in a state of transition from the highly individualized conditions prior to the war to the more "rationalized" and specialized technique of management prevailing at the present time.

SOUTHARD, FRANK A. *American industry in Europe.* Boston and New York, Houghton, Mifflin Co., 1931. 264 pp.

STAMP, SIR JOSIAH. *Papers on gold and the price level.* London, P. S. King & Son (Ltd.), 1931. 127 pp.

TIPPETT, L. H. C. *The methods of statistics: An introduction mainly for workers in the biological sciences.* London, Williams & Norgate (Ltd.), 1931. 222 pp., diagrams.

UNION HEALTH CENTER. *The health department of organized labor, 1913-1931.* New York, 131 East 17th Street, 1931. 50 pp.

Reviewed in this issue.



