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Contents

This Issue In Brief

Labor conditions among longshoremen at the principal ports of the United States are described in an extensive study recently made by the Bureau of Labor Statistics. Everywhere longshore work was found to be extremely irregular, resulting from the great irregularity in the coming and going of vessels. However, the "casual" character of the work has been mitigated in some ports by a system under which all the workers are registered and jobs so distributed that all workers have substantially the same employment opportunity. Page 1.

A comprehensive survey of "life and labor" in London, now nearing completion, covers substantially the same field as the historic survey made by Charles Booth some 40 years ago. A description of the scope and significance of this new survey is given in an article beginning on page 35.

Business to the amount of nearly $65,000,000 was recorded for 1929 by 656 consumers' cooperative distributive and service societies reporting to the Bureau of Labor Statistics. Their net earnings on this business amounted to $2,980,481, of which $1,746,466 was returned to the members in patronage dividends and interest on share capital. For the four years covered by the bureau's study (1926–1929) dividends and interest paid amounted to $5,102,504. These societies are mainly cooperative stores, but some organizations have branched out into various lines and now supply their members with nearly everything for the home. Page 21.

Failure of employers to pay wages when due continues to be a serious evil. An inquiry just completed by the Bureau of Labor Statistics into the collection of such claims by State labor offices, shows that while 14 of these offices report the settlement in one year of over 26,690 claims aggregating more than $1,352,000, many of the labor officials found themselves greatly hampered in this wage adjustment work by lack of proper legislation. Page 59.

The collection of monthly statistics on the activities of various social agencies has been undertaken by the United States Children's Bureau, beginning July 1, 1930. The statistics cover 18 fields, including family welfare and relief, legal aid, child placing, temporary shelter for the homeless, institutional care of the aged, medical social service, and school health service. Page 111.

Hourly earnings in the cigarette manufacturing industry in the spring of 1930 averaged 37.8 cents for males and 26.8 cents for females, the combined average being 31.8, according to a study made by the Bureau of Labor Statistics (p. 163). Average full-time weekly earnings were $18.86 for males, $13.37 for females, and $15.87 for the industry as a whole. Full-time weekly hours averaged 49.9 for the industry and for both male and female workers.

Earnings of workers in the northern woolen and worsted industry were lower in the early part of 1930 than in 1928. The latest survey of this industry made by the Bureau of Labor Statistics shows that average hourly earnings were 47.3 cents in 1930 as compared with 51.4 in 1928,

the corresponding full-time weekly earnings being $23.32 and $25.34, respectively. Full-time hours per week were the same in 1930 as in 1928—49.3. Data for southern mills were included in the study for the first time in 1930 and covered 12 establishments located in 6 States. Earnings per hour in the southern district averaged 30.8 cents, the full-time weekly earnings, $16.51, and the full-time working hours per week, 53.6. Page 170.

A review of the unemployment insurance legislation in foreign countries gives the principal provisions of these laws in the various countries, together with recent amendments which have been enacted as a result of increased unemployment in several of these countries. At the present time 18 countries in Europe, Mexico, and Queensland in Australia have either voluntary or compulsory insurance schemes, fostered and aided by the State, which are designed for the alleviation and, in some cases, for the reduction of unemployment. Page 82.

A review of the measures for combating unemployment in Europe describes the methods applied and practical steps recently undertaken for the relief of the aggravated unemployment situation in various countries of Europe. An interesting new feature is the organization of stock companies to provide work for the unemployed. Page 76.

Accident compensation for seamen and fishermen is provided in a recent law of Belgium. The right to compensation is granted to such persons whether the accident occurs upon board the vessel or not, or in any task undertaken in connection with the shipping or fishing enterprise. A general fund for the payment of indemnities is maintained by the owners of boats engaged in commerce and another by owners of fishing vessels, by means of an annual tax for each man embarked. These funds are under the supervision, respectively, of the minister of the navy and the governmental office having charge of maritime fishing. Page 131.

Practically all countries compile and publish index numbers of wholesale prices, but these index numbers differ widely as to the number of commodities included and the method employed in their construction. Some are "weighted" so as to insure to each commodity its proper influence in the total, while others assign equal importance to all items. A brief account of the methods of compiling official index numbers of wholesale prices abroad will be found in this issue. Page 42.

MONTHLY
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Longshore Labor Conditions in the United States—Part I

THERE are no less than 120,000 longshoremen in the United States who handle all the foreign and domestic cargoes which pass through our ports. Yet very little has been written on the life and labor conditions of these men. With the exception of Julius Barnes' book, The Longshoremen, published in 1915, which deals most effectively with the case of longshoremen in New York, and a few passages in Ernest Poole's The Harbor, which, though fiction, contain some striking pictures of the life of the workers on the water front of New York, there is no literature dealing with this subject.

The United States Bureau of Labor Statistics has about completed its survey of productivity of longshore labor, which will soon be published in bulletin form. Longshore labor conditions constitute an integral part of this survey, and some of the more important phases of these conditions pertaining to the problem of supply and demand for longshore labor and the earnings of longshoremen are given in the present article.

Nature of Longshore Work

THE longshoreman does not work alone, as an individual. In order to transfer the ship's cargo to the pier and vice versa, the workers are arranged into gangs with definite functions allocated to the separate groups which make up the gang. A gang usually consists of three such groups: One group working on the pier, the second on the deck of the ship, and the third in the hold of the ship. When discharging, the men in the hold of the ship "break out" the individual bags or boxes from their places of stowage and carry them to the center of the hatch where they are placed in drafts or slings. Upon a signal from the hatch tender, the winch operators start the upward journey of the sling from the hold to the deck, then to the side of the ship, and finally onto the apron of the pier. There the sling may be landed on a 4-wheel truck or a power platform and at once taken to the proper place on the pier where it is piled away, thus completing the operations generally assigned to the work of longshoremen, or it may be landed on the floor of the apron, the sling undone and the individual pieces placed upon 2-wheel trucks and then taken to their separate destinations on the pier. In loading, the operations are reversed.

These are the most simple operations involved in loading, or discharging cargo. The methods used vary considerably from port to port, from pier to pier, and from commodity to commodity. At some piers only 2-wheel trucks are used; at other piers only 4-wheel platform trucks. In New York, the method of transferring the loaded slings from the ship to the pier and vice versa, is known as the "Burton" system. In Philadelphia and New Orleans, a variation of this system is used and is called the "whip," while on the West Coast another variation is used, which is known as the "married" or "union" fall. Occasionally the winches are dispensed with altogether and a crane or a conveyor is used instead.

But whatever the system used, the longshoremen are usually required to handle and often also to lift the individual pieces of cargo. A bag of flour ranges from 100 to 150 pounds; a bag of coffee from 135 to 200 pounds; a bag of Porto Rican sugar weighs 250 pounds and a bag of Cuban sugar 330 pounds; cottonseed and linseed cake and meal, nitrates of soda, sulphates, and other fertilizers come in bags from 200 to 300 pounds each. A bale of American cotton weighs 500 pounds and a bale of Egyptian cotton 750 pounds; a bale of crude rubber 224 pounds; a barrel of lubricating oil about 500 pounds; and a hogshead of tobacco from 500 to 1,000 pounds. At once it becomes very clear that the essential requirements for the job of a longshoreman are a mighty arm, a hard muscle, and a large, strong back.

As to the amount of brain and skill involved in the work of loading and discharging cargo the question can not be so simply answered. There is no apprentice system existing in longshore work. The new worker, the inexperienced man (or the "stiff," as the newcomer is commonly called), is placed in the gang on an equal basis with the older men and at equal pay. While it takes time to learn how to handle a 2-wheel truck, this work can hardly be classified as skilled. But when it comes to the handling of the ship's winches or to stowing the cargo in the ship's hold, the degree of training required, the amount of judgment, and the sense of responsibility involved in so placing the cargo as to make the best possible use of the space and to insure that no damage will be done either to the cargo or to the ship during the crossing—such work can be learned only after several years of constant and persevering application. Certainly this part of the work of the longshoreman is undoubtedly skilled labor, and should be classified as such.

Conditions of Employment

THE longshoreman can get work only for the period the ship remains in port for the purpose of discharging or loading cargo. More ships in port mean more jobs for longshoremen; a storm delaying sea traffic means no work for the longshoremen during the delay, followed by a period of feverish activity in order to catch up with the work and enable the ship to sail on time. Ships may arrive and leave the port every day, some after a stay of only a day or two, others after a week or 10 days. Sometimes they straggle in one by one, and sometimes they come in numbers. Again, at certain seasons of the year there may be more ships and more cargo than at other seasons. All of these fluctuations in shipping affect the jobs of the longshoremen.

The shipping companies or the contracting stevedores doing the work of discharging and loading the ships are seldom in a position to know in advance how long the actual work of loading or discharging will last or how many men they will need for this work. Hence there has developed the system of hiring the longshoreman by the hour and hiring him only where and when actually needed. When a ship arrives in port only a handful of men may be put to work at first, for the purpose of rigging up the masts, opening the hatches, setting up the gear, etc. After this is done more men are added until the work of discharging is completed and the loading begins. Then suddenly it may develop that not enough cargo has been assembled on the pier to occupy all the hands engaged, and the entire crew of longshoremen is dismissed until a day or two before sailing time when the men must work day and night to complete the loading and release the ship on schedule time. These are the conditions of the longshore industry which deservedly place it at the head of the list of casual industries.

So far the picture presented above applies equally to all ports in the United States. But when attention is turned to the problem of employment of longshore labor, the methods of hiring and the systems, if any, used in adjusting the supply of longshore labor to the demand, the situation becomes more complicated. Generally speaking, however, and this applies to the ports in Europe as well as in the United States, it is possible to distinguish two groups of ports: Those at which no attempt has been made to regulate the supply and demand of longshore labor, and those at which the difficulties and the casualness of the longshore industry have been recognized and various schemes adopted to adjust the supply of longshore labor to the varying needs of the port. In the first group belong the majority of ports in the United States, with New York as the leading example. Seattle, Portland, Oreg., and Los Angeles are the only three ports in this country which belong to the second group, usually known as "decasualized" ports. In Europe, and particularly in Great Britain, nearly all the ports have been decasualized. London introduced a system of decasualization as early as 1891; Hamburg in 1906; Liverpool in 1911; Rotterdam in 1916; and Antwerp in 1929. Before proceeding with the decasualization plan in the port of Antwerp, the Belgian Government made a thorough investigation of the various systems in vogue in the other principal European ports, and a brief analysis of this survey was published in the August, 1930, number of the Labor Review (pp. 33–41).

Conditions at Ports not Decasualized

A port which has not been decasualized has no definite system of informing the workers as to the exact date or hour the ship will dock at the pier. In the days of the saloon, notices of arrival were posted on bulletin boards especially kept in the saloon for that purpose. In several ports to-day blackboards are placed in pool rooms, soft-drink establishments, cheap restaurants, and other such places near the water front where the longshoremen are known to congregate between spells of work. The more literate longshoremen also follow the reports of ship movements in the daily papers, English or foreign. Finally, the news of the ship's arrival is transmitted by word of mouth from the ship foremen to the gang leaders and from them to the men.

In no case, however, is there the slightest indication given as to the amount of cargo to be handled or the number of men to be engaged. The longshoremen never know whether they will be employed at a given pier and when they are hired they do not know how long their work will last. Three times a day, and in some ports even oftener, the workers must congregate at the entrance to the pier where the hiring foreman selects the men wanted for the job. This gathering of longshoremen seeking work at the pier is known as the "shape." The following description of a "shape" is taken from page 313, Volume III, of Henry Mayhew's book London Labor and the London Poor published in 1861:

> He who wishes to behold one of the most extraordinary and least-known scenes of this metropolis, should wend his way to the London Dock gates at half-past 7 in the morning. There he will see congregated within the principal entrance masses of men of all grades, looks, and kinds. * * *
>
> Presently you know, by the stream pouring through the gates and the rush toward particular spots, that the "calling foremen" have made their appearance. Then begins the scuffling and scrambling forth of countless hands high in the air, to catch the eye of him whose voice may give them work. As the foreman calls from a book the names, some men jump up on the backs of the others, so as to lift themselves high above the rest, and attract the notice of him who hires them. All are shouting. Some cry aloud his surname, some his Christian name, others call out their own names, to remind him that they are there. Now the appeal is made in Irish blarney—now in broken English. Indeed, it is a sight to sadden the most callous, to see thousands of men struggling for only one day's hire; the scuffle being made the fiercer by the knowledge that hundreds out of the number there assembled must be left to idle the day out in want. To look in the faces of that hungry crowd is to see a sight that must be ever remembered. Some are smiling to the foreman to coax him into remembrance of them; others, with their protruding eyes, eager to snatch at the hoped-for pass. For weeks many have gone there, and gone through the same struggle—the same cries; and have gone away, after all, without the work they had screamed for.

The "shape" found any day in New York at any large pier on the North River, in Hoboken, or in Brooklyn, is not much different from the London shape of nearly 70 years ago. Some of the Irish are still there, so are the Poles whom the author speaks of in a passage not quoted above, but in addition there are Germans and Scandinavians, dark Italians and blonde Italians, and a representative body of colored men which grows in number as we move from New York to Philadelphia and Baltimore, and finally becomes the predominant element south of the Hampton Roads ports. It is true that the "scuffling and the scrambling" are not so violent now as when Mayhew described them in London in 1861, and the shouting has almost completely disappeared. But the eyes of all men in the "shape" are fastened upon every move of the hiring foreman who either calls out the men by their names or walks slowly along the "shape" pointing with his finger at a man here in the first row, at another man in the second row, and perhaps still a third man in the last row. A few seconds later he picks a whole group of five or more men who are standing together and sends them to the gate where they give their names to the clerk and receive the brass number which entitles them to the work on the pier; then again he proceeds slowly along the "shape" and picks an occasional man here and another man there until his quota is complete. When the picking is finished, the men who were unfortunate enough to be left behind, sullenly and sadly move away from the pier only to return several hours later in the hope of being more successful in the next "shape."

It is obvious that the hiring foreman occupies a position of the greatest importance on the water front. It is largely left to him to decide who shall be employed and who shall be left behind. He is seldom hampered in his choice, especially in regard to the more casual men. He can take them or reject them. He can call them to-day and ignore them to-morrow. It would indeed be strange if such concentration of autocratic power in the hands of a single person controlling the jobs of so many men did not result in some cases in the abuse of this power. This may be as mild as the acceptance of an occasional drink or a cigar, or it may go so far as to amount to a systematic sharing by the foreman in the earnings of the longshoreman as payment for the job. Such cases are hard to trace. Although the unions of longshoremen and the shipping industry discourage such practices, they persist in several ports.

Every pier of any importance in the port thus becomes a center for the hiring of longshoremen. Some piers, particularly those of the regular passenger and freight lines with a more or less definite schedule of ships arriving and departing, have a larger following of longshoremen than the other piers which have only a ship now and then. It therefore not infrequently happens that certain piers have an oversupply of longshoremen looking for work, while other piers find themselves short of labor. While the longshoremen are wandering from pier to pier in search of work with no means of knowing at what pier men are needed, the employers who are short of men are equally at sea as to where efficient men can be had. Both employers and longshoremen suffer from this failure to make connections, but there is no machinery available to correct this paradoxical condition of a large oversupply and a shortage of labor existing at the same time. The "shapes" are usually formed at all piers at the same hour and when the selection at any one pier has been completed it is too late for those who are left to look for work at another pier.

The casual character of the longshore industry is thus rendered more acute by the practice of making each pier an employment center with its own problem of supply and demand of labor. Each employer aims to have at his pier as large a number of longshoremen as he may need to satisfy the demand on the peak days of shipping; also, to enable the foremen to select better men. The foremen, therefore, look with disfavor upon and may actually refuse work to longshoremen known to participate in the "shape" of another pier, even though only occasionally. Each company thus creates an individual reserve of men, and these reserves when combined constitute a total very much in excess of the actual number of workers needed even on the busiest days of the port.

Irregularity of hours of work is one result of the casualness of the longshore industry and the irregularity of employment. There is no such thing as "regular hours" in the longshore industry. Even where the workers "shape" regularly only once or twice a day, the hour of "shaping" has no direct bearing on the actual hours of work. Ships arrive and leave the port at all hours of the day and night, and the work of longshoremen also begins and ends at all hours of the day and night. Because of the difficulty of getting a job and the uncertainty of its duration, the individual longshoreman remains at work as long as his endurance lasts, or the foreman permits him to remain.

Stretches of 20 to 30 hours of uninterrupted work, except for the short meal periods, are not unknown even at the present time in the ports of New York, Philadelphia, and Baltimore. Even longer stretches of work may be found in New Orleans, Galveston, and Houston in the peak of the cotton season.

Days or weeks of enforced idleness, followed by periods of equally enforced hard labor, are reflected in the weekly earnings of the longshoremen. Even those who are most favored by the foremen and who can be regarded as permanent employees in the sense that they work at one pier only and are given the preference whenever work is available—even they show extreme variations in their earnings from week to week, and some weeks they may have no earnings at all. As to the others, who constitute by far the larger body of longshoremen, those working a day at one pier, half a day at another pier, half a night at still a third pier, and perhaps another day or night at the first or second pier, their earnings are so irregular that it is altogether impossible to measure them with any degree of approximation. And when pay day comes they must go from pier to pier and stand in line at each in order to collect the small amounts of money they earned.

Briefly, the characteristics of a port which has not been decasualized, are:

(1) A large, highly immobile body of workers scattered over the entire water front and ignorant of the actual time and place where work is to be had.

(2) A large number of individual employers each aiming to create as large a reservoir of labor as he may need to satisfy his maximum demands, thus increasing the total supply of workers to a number far in excess of the demands of the entire port.

(3) Complete dependence of the job of the longshoreman on the good will of the foreman and on chance.

(4) Conditions of hiring longshore labor which, because of the autocratic power concentrated in the hands of the foreman, pave the way for unfair practices.

(5) Periods of enforced idleness, alternating with long stretches of hard labor.

Conditions under Decasualization

The object of a port decasualization scheme is to do away with some of the more glaring evils presented above. It is quite obvious that very little can be done as regards demand for longshore labor. Small changes could be effected, as for instance, the concentrated sailings on certain days of the week or the month could be spread out more evenly over the week and the month. But even the most scientific organization of a port will not altogether eliminate the daily and seasonal fluctuations in shipping. Whatever is done, ships will continue to arrive in greater numbers at one time than at another, and there always will be busy periods and slack periods.

Recognizing this as a fact, most of the ports with schemes of decasualization concentrate on the manipulation of the longshore labor supply in the attempt to bring about an adjustment of this supply to the changing demands of the shipping industry. Only the major requirements of such a plan of decasualization are presented here. These requirements are characteristic of all decasualized ports and without them no plan can be effective.

First, there must be complete registration of all longshoremen in the port, these to constitute the total supply of labor which is to be reduced or enlarged in accordance with the demands of the port. Only those on the register should be permitted to work on the water front. Second, all employers on the water front must give up their right to hire longshore labor individually at their piers or elsewhere, and must secure their labor from the central office where the registry of the longshoremen is kept. Without these two important points, namely the workers' giving up the right to seek work individually along the water front and the employers' giving up their right to hire labor individually, no scheme of decasualization can succeed. In fact what decasualization really implies is a coordinated organization of each port as a single employing unit under a single administration with power to direct the supply of labor and to swing it from point to point as needed.

The practical application of a scheme of decasualization, methods of organization, composition of central agencies, systems of distributing and dispatching the workers to the various piers, etc., may vary in accordance with the conditions and the needs of the individual ports. London has one scheme; Liverpool another; and Hamburg still another. In this country the system used in Seattle is different from that used in Portland, which in turn is different from the one used in Los Angeles.

In all cases, however, decasualization does or should accomplish the following:

(1) It guarantees to all the employers an equal chance to obtain workers as needed.

(2) It guarantees to all the longshoremen an equal chance of getting a job when work is available.

(3) It tends to eliminate the power of the hiring foreman and the abuses and favoritism that go with it.

(4) It gradually reduces the total number of longshoremen in port to that approximating the actual needs of the port and thus raises the average earnings of the men left on the register.

Longshore Labor Conditions in Major Ports of United States

THIS contrast between labor conditions in a decasualized port and a port which has not been decasualized will serve to clarify the longshore labor conditions as they now exist in some of our major ports. The port of New York is discussed first partly because it is the largest port, but mainly because the many-sided conditions in New York will help to throw light on the conditions existing in the other ports.

New York

The total number of longshoremen in the port of New York is unknown, but various estimates suggest that 50,000 is a close approximation to the total. Of these, slightly more than half are engaged in handling foreign and intercoastal cargoes and are known as "regular longshoremen," in contrast with the other men, engaged in coastwise trade, in the banana trade, or in loading and discharging lighters and scows. Only the regular longshoremen are organized as members of the International Longshoremen's Association, which has a general

agreement with the employers regulating rates of wages, hours, etc. This agreement, however, has no reference whatever to the problem of supply and demand of longshore labor or to the methods of hiring practiced in the port. It provides only that union men be given preference in employment, and specifies the exact hours for "shaping." Three times a day, at 7.55 a. m., 12.55 p. m., and 6.55 p. m., the longshoremen are required to "shape" at the entrance to each pier, irrespective of whether they have been working on that pier the day before or even that very day, and the hiring foreman selects the men needed at the pier for the next few hours of work. The method of selection is similar to that described for the port which has not been decasualized. Some foremen hire their men by the gang; others form their gangs when a ship first arrives and keep them intact until the work of loading or discharging has been completed. The larger shipping companies, which do their own stevedore work, and some of the contracting stevedore companies have a considerable following of more or less permanent men who are given preference over the other men. These constitute the skeleton organization of the company. When more work is available the permanent gangs are broken up and used as nuclei for a larger number of gangs. When work drops off the newer men are discharged and the original gangs are formed again.

The powers of the hiring foreman in selecting or rejecting the men at will are still unabridged, but due to the cooperation between the union and the employers some of the most flagrant abuses of this power have been eliminated to a certain extent. Much abuse still persists, however, particularly in the so-called "fly-by-night" stevedore companies and in the subcontracting agencies which are small and are often formed to load or discharge an individual ship. But the number of such companies in port is very large.

The union has no strict rules for the regulation of the membership in the numerous locals existing in the port and the rules it has have no relationship to the problem of the supply and demand for labor, although New York is conspicuous for its fluctuations in the employment of longshore labor.

In the special survey of the port conducted in 1920 for the National Adjustment Board by B. M. Squires, these fluctuations in demand for longshore labor, gauged by the quantity of cargo tons entering the port in 1919, indicated a range from 65,700 cargo tons for the week ending March 28, to 221,596 cargo tons for the week ending August 22, or in the ratio of 1 to 3.4; and a range from 104,200 cargo tons leaving the port during the week ending March 28, to 471,200 cargo tons for the week ending May 2, or a ratio of 1 to 4.5. On this basis the National Adjustment Board concluded that it seemed safe to assume that the number of men required is at least three times as great at the peak as at the lowest point of demand.

The fluctuations in demand from day to day are shown to be even more violent than the weekly fluctuations, but nothing has been done either by the union or by the employers to remedy the situation. On the contrary, the practice of dividing the port into smaller sections such as the Chelsea piers, Hoboken, Staten Island, Brooklyn, Newark, etc., without the right of moving labor from section to section; the "shape" at each pier and the "shaping" at all piers at the same

hour—all of these conditions render the situation even more acute than is warranted by the fluctuations in the demand for longshore labor.

All attempts by various agencies to determine the average earnings of longshoremen in New York so far have proved unsuccessful. Upon the passage of the longshoremen's compensation act in 1927, the union and the employers agreed on an average weekly rate of $30 as a basis for computing accident compensation under the law, but this is merely an estimate. Short of personal accounts kept by the individual longshoremen, there is no way of arriving at their average earnings, and this condition will continue as long as the present system of hiring persists in the port of New York.

It is of interest and value, however, to ascertain the limits within which these earnings can be expected to move, and this is made possible by the existence in the port of New York of several big shipping and stevedore companies with large followings of longshoremen of whom a considerable proportion are on a more or less permanent basis. These companies may be regarded as miniature cross sections of the port and to that extent indicative of conditions. Table 1 presents the total weekly pay rolls of three such companies for four months in the year 1928—January and April, which may be considered as average months, and the months of July and October, which are the slackest and the busiest months, respectively. These pay rolls are distributed in $5 groups, ranging from earnings of less than $10 per week to $50 and over. Company A is the largest of the three companies and perhaps the largest in the port. The total number of men hired by this company during any one week ranges from a low of 542 men hired during the week ending January 25, to a high of 1,018 for the week ending October 17. Company B showed a variation from 189 to 493, and Company C from 350 to 509.

TABLE 1.—DISTRIBUTION OF LONGSHORE LABOR ON BASIS OF WEEKLY EARNINGS IN THREE LARGE COMPANIES IN NEW YORK IN SPECIFIED WEEKS OF 1928

Wage group	January				April				July				October			
	Week ending—				Week ending—				Week ending—				Week ending—			
	Jan. 4	Jan. 11	Jan. 18	Jan. 25	Apr. 4	Apr. 11	Apr. 18	Apr. 25	July 4	July 11	July 18	July 25	Oct. 3	Oct. 10	Oct. 17	Oct. 24
Company A																
Under $10	135	83	97	86	162	134	150	82	222	125	189	207	102	194	150	168
$10 and under $15	70	38	60	135	80	80	50	79	80	118	60	37	43	63	82	71
Total	205	121	157	221	242	214	200	161	302	243	249	244	145	257	232	239
$15 and under $20	57	64	57	65	70	99	60	102	62	53	33	28	42	89	66	32
$20 and under $25	56	39	90	60	72	89	95	79	63	48	46	44	41	56	45	62
$25 and under $30	55	106	59	65	69	106	140	126	69	55	34	59	45	49	57	74
Total	168	209	206	190	211	294	295	307	194	156	113	131	128	194	168	168
$30 and under $35	95	85	98	57	148	88	91	79	63	47	23	52	54	85	70	56
$35 and under $40	101	76	42	42	76	127	37	35	80	62	55	76	67	123	129	106
$40 and under $45	76	113	31	20	61	54	32	32	57	53	53	36	107	90	148	108
$45 and under $50	23	60	39	9	59	8	12	23	30	28	32	33	94	79	88	61
$50 and over	49	69	4	3	74	19	38	29	15	83	95	27	204	151	183	142
Total	344	403	214	131	418	296	210	198	245	273	258	224	526	528	618	473
Grand total	717	733	577	542	871	804	705	666	741	672	620	599	799	979	1018	880

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Wage group	January				April				July				October			
	Week ending—				Week ending—				Week ending—				Week ending—			
	Jan. 4	Jan. 11	Jan. 18	Jan. 25	Apr. 4	Apr. 11	Apr. 18	Apr. 25	July 4	July 11	July 18	July 25	Oct. 3	Oct. 10	Oct. 17	Oct. 24
Company B																
Under $10	35	41	71	27	24	99	86	31	53	85	35	91	163	137	59	69
$10 and under $15	80	7	33	136	20	27	58	58	63	40	38	121	28	81	33	31
Total	115	48	104	163	44	126	144	89	116	125	73	212	191	218	92	100
$15 and under $20	113	5	50	17	21	34	57	63	39	19	40	4	3	37	2	66
$20 and under $25	46	1	151	4	36	47	40	13	19	12	51	5	187	13	15	32
$25 and under $30	30	22	22	19	80	15	65	26	40	26	123	-----	57	18	3	7
Total	189	28	223	40	137	96	162	102	98	57	214	9	247	68	20	105
$30 and under $35	9	36	23	21	106	29	36	24	5	37	48	5	12	49	9	45
$35 and under $40	3	9	26	24	12	21	24	18	17	22	7	18	1	13	4	24
$40 and under $45	-----	31	16	4	3	13	20	45	23	30	2	8	6	6	19	26
$45 and under $50	-----	12	10	4	-----	52	28	7	14	58	2	5	-----	2	53	39
$50 and over	-----	25	12	2	1	53	79	5	90	106	3	49	-----	2	129	57
Total	12	113	87	55	122	168	187	99	149	253	62	85	19	72	214	191
Grand total	316	189	414	258	303	390	493	290	363	435	349	306	457	358	326	396
	Jan. 5	Jan. 12	Jan. 19	Jan. 26	Apr. 5	Apr. 12	Apr. 19	Apr. 26	July 5	July 12	July 19	July 26	Oct. 4	Oct. 11	Oct. 18	Oct. 25
Company C																
Under $10	50	29	40	112	90	19	46	31	41	47	51	45	34	49	43	41
$10 and under $15	28	35	16	26	42	93	32	26	29	16	27	17	11	24	25	15
Total	78	64	56	138	132	112	78	57	70	63	78	62	45	73	68	56
$15 and under $20	34	44	40	33	33	51	28	31	16	14	19	23	23	11	42	28
$20 and under $25	22	29	36	35	41	22	37	17	27	26	23	14	14	12	50	32
$25 and under $30	37	39	65	95	48	46	29	42	38	29	31	38	13	16	57	23
Total	93	112	141	163	122	119	94	90	81	69	73	75	50	39	149	83
$30 and under $35	57	60	102	88	47	54	64	93	46	58	38	34	12	26	51	15
$35 and under $40	53	67	38	79	55	58	99	68	63	64	51	54	21	28	76	18
$40 and under $45	64	50	9	35	54	59	24	19	42	54	62	54	42	55	18	26
$45 and under $50	30	16	3	4	26	25	7	10	39	36	70	44	44	87	6	21
$50 and over	26	2	1	2	7	24	-----	20	19	15	22	61	207	120	10	232
Total	230	195	153	208	189	220	194	210	209	227	243	247	326	316	161	312
Grand total	401	371	350	509	443	451	366	357	360	359	394	384	421	428	378	451

Examination of the table shows that no matter how busy or how slack the work of a particular week may be, there are always some men in each of the 10 groups indicated. There are always some men earning less than $10 per week, at least as far as the company in question is concerned, and some earning a little more, others still more, and finally some earning as high as $50 per week and over.

This distribution, which is very different from a normal distribution of earnings in a stabilized industry, suggested a regrouping of the men into three categories—those with earnings of less than $15 per week, who may be classified as casual workers moving from pier to pier to pick up a day's work here and another day's work elsewhere; those with earnings of from $15 to $30 per week, who

may be classified as semipermanent in the sense that they prefer to work at one pier, but would change to another pier when the opportunity of getting work there presented itself; and finally those with earnings of $30 per week and over who remain more or less permanently with one company. The men in the last group are usually given the preference by the foremen and they also know that if there is no work for them during the first part of the week they will probably get day and night work during the balance of the week. These men rarely change to another pier.

The three subgroupings given in the table show that, no matter how large a single company may be or how anxious to give all its work to the so-called permanent men, there will always be a need for a very large number of casual workers and a considerable proportion of semipermanent men. This condition is inherent in the longshore industry, and no single shipping or stevedore company can cope with the difficulties in the way of adjusting the supply to the demand for longshore labor. Instead, the policies of such companies merely result in dividing the workers into groups, some of which can show very high earnings of $50 or more per week, while the others will earn $10 per week or less. The men in the low-earnings group are, of course, privileged to look for work elsewhere but how successful they are in their search is the problem which makes it so hard to determine the earnings of the longshoremen.

But the earnings of even the so-called permanent men are far from being stabilized. Table 2 represents the actual earnings, by months, of eight gangs more or less permanently employed by a single shipping company, designated as Company D. Each gang is supposed to consist of at least 18 men, and the data therefore cover 144 men more or less permanently employed.

TABLE 2.—MONTHLY EARNINGS IN 1928 OF EIGHT GANGS[1] MORE OR LESS PERMANENTLY EMPLOYED BY A LARGE SHIPPING COMPANY (COMPANY D) IN NEW YORK

Month	Monthly earnings per man in—							
	Gang No. 1	Gang No. 2	Gang No. 3	Gang No. 4	Gang No. 5	Gang No. 6	Gang No. 7	Gang No. 8
January	$119.47	$146.53	$104.77	$106.23	$141.10	$135.08	$102.82	$116.58
February	139.10	163.12	113.58	139.05	152.93	123.41	143.60	134.83
March	199.22	186.75	181.73	204.83	201.25	197.48	178.77	185.80
April	130.72	129.73	122.23	131.80	143.30	127.27	128.13	142.98
May	216.67	226.84	200.09	244.83	251.74	228.32	204.20	193.20
June	135.00	149.45	118.73	130.03	145.85	131.65	137.40	127.95
July	155.44	166.85	148.00	134.27	144.67	145.30	134.30	130.29
August	196.75	214.35	177.07	212.47	165.34	187.06	143.47	183.99
September	198.38	195.20	182.75	180.82	185.43	165.50	170.92	175.68
October	165.60	211.22	192.45	188.60	199.00	185.03	165.42	150.85
November	214.52	245.98	222.48	212.30	225.85	214.95	156.36	213.20
December	144.37	139.30	131.38	146.82	146.90	117.80	98.88	127.87
Total	2,015.24	2,175.32	1,895.26	2,032.05	2,103.36	1,958.85	1,764.27	1,883.22
Average per month	167.94	181.28	157.94	169.34	175.28	163.24	147.02	156.94

[1] 18 men in a gang.

The earnings of gangs Nos. 1 and 8 are given in Table 3 and are plotted on the charts on pages 13 and 14. The curves on the left show the variations in the weekly earnings for each week of the year 1928,

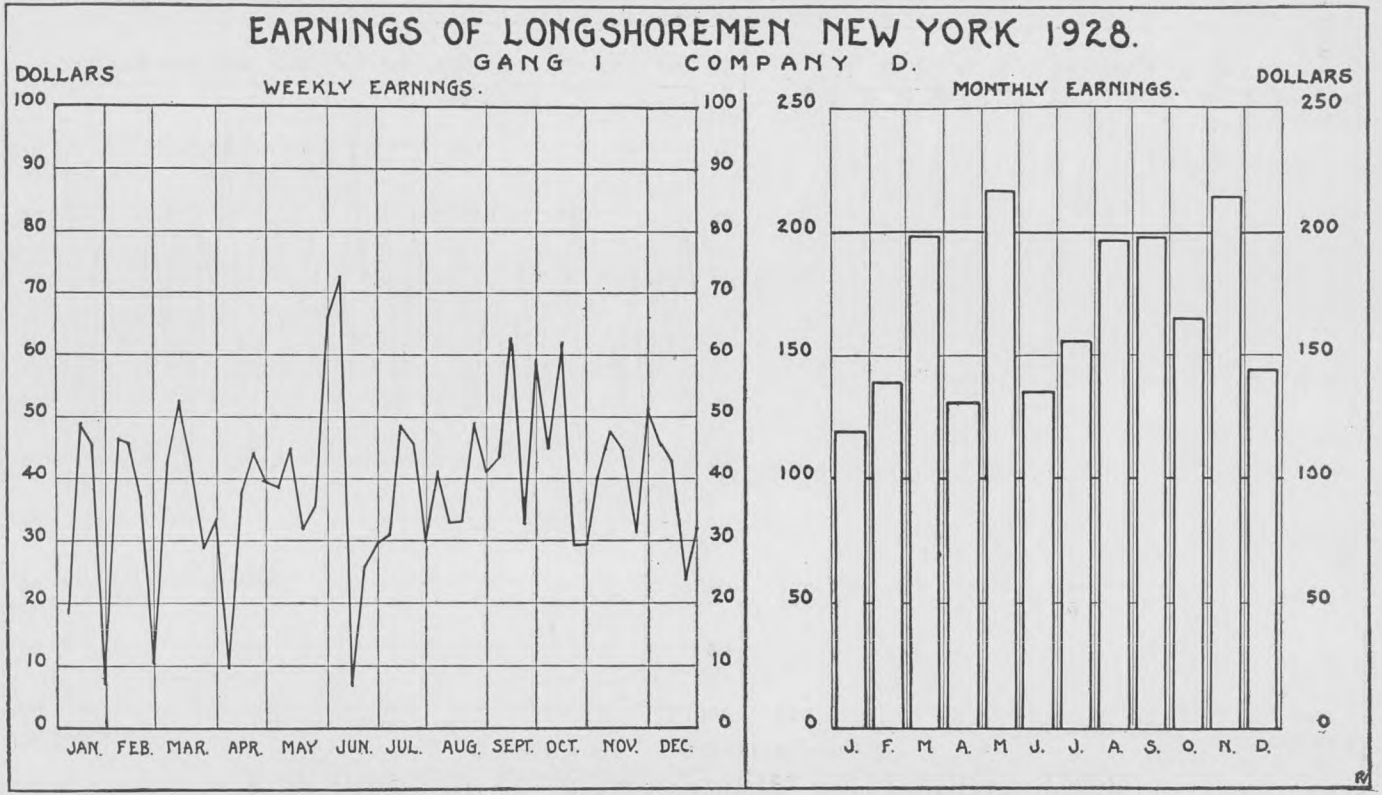
and the columns on the right represent the monthly earnings for the same period. Nothing can better illustrate the instability and the fluctuations in the longshore industry, as far as any one company is concerned, than the ups and downs on these two curves. Even to the so-called permanent workers these ups and downs mean long stretches of hard labor, day and night, followed in turn by long periods of idleness. Some weeks are very lean, others very fat; a slack month or two are followed by months of unceasing industry.

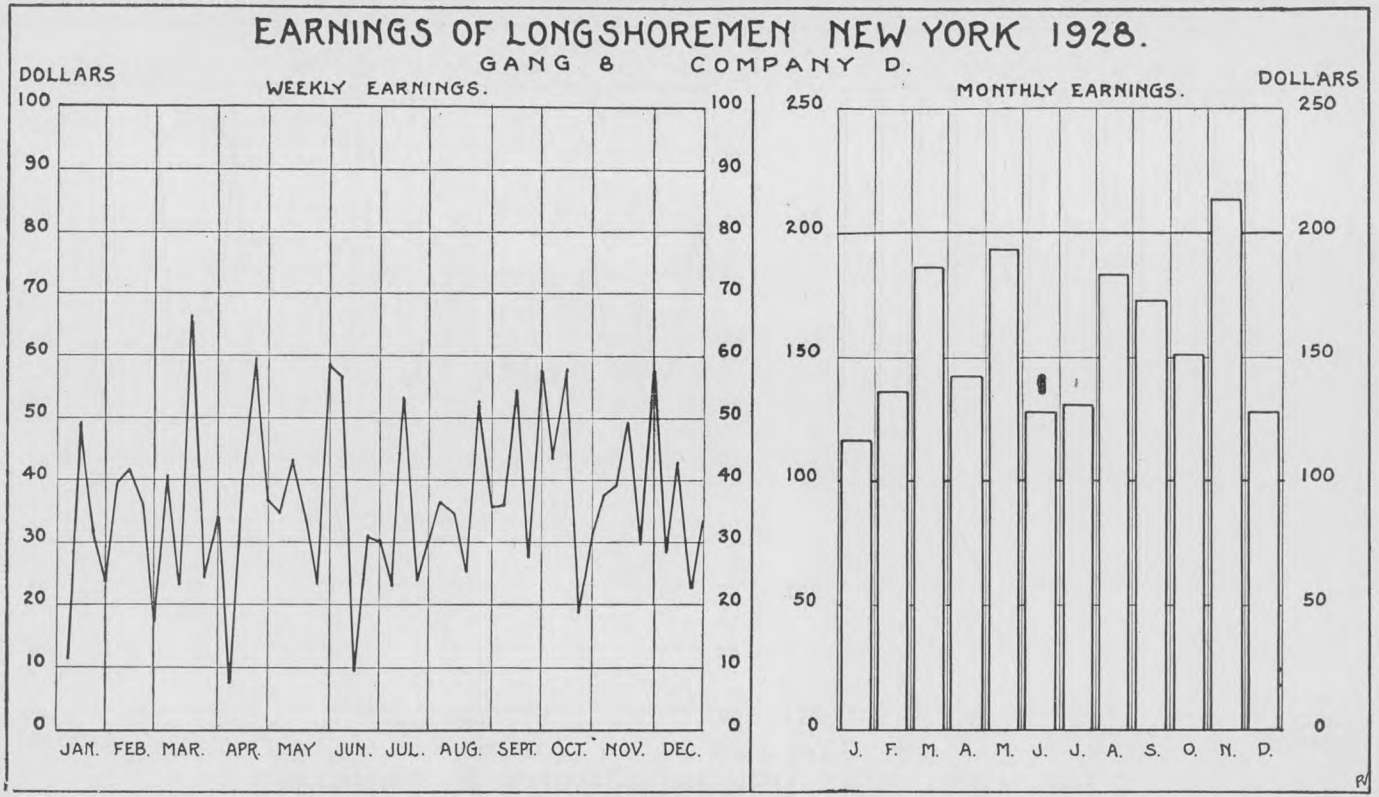
TABLE 3.—WEEKLY EARNINGS IN 1928 BY GANGS NOS. 1 AND 8, EMPLOYED BY COMPANY D, NEW YORK

Week ending—	Earnings per man in—		Week ending—	Earnings per man in—		Week ending—	Earnings per man in—	
	Gang No. 1	Gang No. 8		Gang No. 1	Gang No. 8		Gang No. 1	Gang No. 8
Jan. 5	$18.27	$11.50	May 3	$38.40	$34.40	Sept. 6	$43.73	$35.98
Jan. 12	48.70	49.75	May 10	44.77	43.50	Sept. 13	62.75	54.15
Jan. 19	45.70	31.60	May 17	31.90	33.65	Sept. 20	32.40	27.90
Jan. 26	6.80	23.73	May 24	35.35	23.10	Sept. 27	59.50	57.65
Total	119.47	116.58	May 31	66.25	58.55	Total	198.38	175.68
Feb. 2	46.30	39.90	Total	216.67	193.20	Oct. 4	44.85	43.25
Feb. 9	45.85	41.45	June 7	72.35	56.70	Oct. 11	62.05	57.42
Feb. 16	36.75	36.28	June 14	6.80	9.77	Oct. 18	29.20	18.50
Feb. 23	10.20	17.20	June 21	26.00	31.20	Oct. 25	29.50	31.68
Total	139.10	134.83	June 28	29.85	30.28	Total	165.60	150.85
Mar. 1	42.40	40.45	Total	135.00	127.95	Nov. 1	40.27	37.40
Mar. 8	52.60	23.00	July 5	30.77	22.95	Nov. 8	47.62	39.10
Mar. 15	42.15	66.40	July 12	48.77	53.37	Nov. 15	44.53	49.20
Mar. 22	28.50	22.10	July 19	45.90	23.95	Nov. 22	31.10	29.85
Mar. 29	33.57	33.85	July 26	30.00	30.02	Nov. 29	51.00	57.65
Total	199.22	185.80	Total	155.44	130.29	Total	214.52	213.20
Apr. 5	9.77	7.20	Aug. 2	40.90	36.17	Dec. 6	45.57	28.65
Apr. 12	37.40	39.15	Aug. 9	32.60	34.65	Dec. 13	42.90	42.90
Apr. 19	44.00	59.95	Aug. 16	33.00	25.10	Dec. 20	23.90	22.60
Apr. 26	39.55	36.68	Aug. 23	49.25	52.60	Dec. 27	32.00	33.72
Total	130.72	142.98	Aug. 30	41.00	35.47	Total	144.37	127.87
			Total	196.75	183.99			

Briefly, the longshore labor situation in New York may be summarized as follows: On the one hand, a considerable percentage of longshoremen making high wages, and a smaller proportion with very high earnings; on the other hand, a large number of casual workers, with indeterminate but undoubtedly low earnings, and a very low standard of living; and finally, a very large body of longshoremen with earnings between these two extremes.

The longshore labor conditions in the other Atlantic ports differ from those of New York primarily because of the great difference in the size of these ports as compared with New York. In New York the Chelsea pier section alone supplies work to more longshoremen than any other port on the Atlantic or any other port in the country. Undoubtedly, as far as size is concerned, New York stands in a class by itself, and this difference must be considered in any comparison made with this port.


EARNINGS OF LONGSHOREMEN NEW YORK 1928.
GANG 1 COMPANY D.
DOLLARS
WEEKLY EARNINGS.
100
90
80
70
60
50
40
30
20
10
0
JAN. FEB. MAR. APR. MAY JUN. JUL. AUG. SEPT. OCT. NOV. DEC.
MONTHLY EARNINGS.
DOLLARS
250
200
150
100
50
0
J. F. M A. M J. J. A. S. O. N. D.


EARNINGS OF LONGSHOREMEN NEW YORK 1928.
GANG 8 COMPANY D.
DOLLARS
WEEKLY EARNINGS.
100
90
80
70
60
50
40
30
20
10
0
JAN. FEB. MAR. APR. MAY JUN. JUL. AUG. SEPT. OCT. NOV. DEC.
MONTHLY EARNINGS.
DOLLARS
250
200
150
100
50
0
J. F. M. A. M. J. J. A. S. O. N. D.

Boston

In Boston all the longshoremen engaged in foreign and intercoastal trade belong to the three locals of the International Longshoremen's Association, with a total registered membership of 1,761. Of these only 1,300 are classified as active members more or less permanently engaged in longshore work. A high initiation fee and other strict rules operate as a limitation on the membership, which is largely Irish or Irish-American of the second generation. The agreement between the union and the employers has more reference to the problem of supply and demand of longshore labor than the New York agreement. The men are required to "shape" at the piers only when the ship first arrives in port. Once selected and the gangs formed, the longshoremen remain with the ship until the work of discharging and loading has been completed. The "shaping" and the process of selecting the men are not much different from the practices in New York. There is no rotation scheme of any kind for the purpose of equalizing the earnings of the men and, as in New York, there is no way to measure their actual earnings. Also, because of the comparatively small quantity of cargo handled in the port by the individual companies, the pay roll of any one company may not be representative of earnings in the port.

TABLE 4.—EARNINGS OF LONGSHOREMEN IN BOSTON, 1928

Week ending—	Total pay rolls	Average earnings	Week ending	Total pay rolls	Average earnings
Jan. 8	$34,648.71	$26.65	July 7	$34,266.49	$26.36
Jan. 15	45,226.04	34.79	July 14	39,937.41	30.72
Jan. 22	48,847.74	37.58	July 21	38,287.83	29.45
Jan. 29	26,144.30	20.11	July 28	35,996.11	27.69
Total	154,866.79	119.13	Total	148,487.84	114.22
Feb. 4	32,180.40	24.75	Aug. 4	31,577.90	24.29
Feb. 11	38,952.97	29.96	Aug. 11	41,890.00	32.22
Feb. 18	43,976.18	33.83	Aug. 18	41,744.68	32.11
Feb. 25	26,713.08	20.55	Aug. 25	38,159.65	29.35
Total	141,822.63	109.09	Total	153,372.23	117.97
Mar. 3	40,161.43	30.89	Sept. 1	44,393.20	34.15
Mar. 10	44,715.00	34.40	Sept. 8	30,134.37	23.18
Mar. 17	35,971.00	27.67	Sept. 15	39,697.80	30.54
Mar. 24	37,936.00	29.18	Sept. 22	35,875.45	27.60
Mar. 31	26,593.15	20.46	Sept. 29	35,602.27	27.39
Total	185,376.58	142.60	Total	185,703.09	142.86
Apr. 7	28,766.46	22.13	Oct. 6	41,351.64	31.81
Apr. 14	33,940.73	26.11	Oct. 13	30,154.89	23.20
Apr. 21	33,959.67	26.12	Oct. 20	34,837.23	26.80
Apr. 28	36,398.73	28.00	Oct. 27	37,713.92	29.01
Total	133,065.59	102.36	Total	144,057.68	110.82
May 5	39,432.35	30.33	Nov. 3	25,208.45	19.39
May 12	47,583.09	36.60	Nov. 10	36,554.02	28.12
May 19	26,794.38	20.61	Nov. 17	37,847.56	29.11
May 26	44,064.00	33.90	Nov. 24	29,801.10	22.92
Total	157,873.82	121.44	Total	129,411.13	99.54
June 2	51,019.33	39.25	Dec. 1	31,504.84	24.23
June 9	50,075.72	38.52	Dec. 8	43,399.07	33.38
June 16	30,966.17	23.82	Dec. 15	41,372.11	31.82
June 23	38,311.12	29.47	Dec. 22	31,245.18	24.03
June 30	33,858.04	26.04	Dec. 29	35,763.81	27.51
Total	204,230.38	157.10	Total	183,285.01	140.97

It was possible, however, to combine the total weekly pay rolls of all the employers of longshore union labor, which are shown in Table 4, and which indicate approximately the variations in the demand for labor in the port. These were divided by the number of active longshoremen in the three locals, the quotient thus representing the average weekly earnings of the men in Boston. The earnings vary from $19.39 for the week ending November 3, to $39.25 for the week ending June 2, 1928, with the larger number of weeks averaging from $25 to $35. These averages are somewhat higher than the actual averages because they do not include the 461 union longshoremen who, while absent from the water front for more than six months, nevertheless do work now and then as longshoremen, particularly in the busy periods, and to that extent lower the average earnings in the port. On the whole it would seem that the figure of $27 per week on which the union and the employers agreed as a basis for accident compensation would come very close to the average. But the average throws no light on the actual earnings of the individual men. Here as in New York some men earn considerably more than the average and some considerably less. The differences may not be as extreme as in the case of New York, but they exist nevertheless.

Philadelphia

There are from 4,000 to 5,000 longshoremen in the port of Philadelphia, of whom about 2,500 are organized in one local of the International Longshoremen's Association. The membership is fairly evenly divided between colored and white, the white workers being predominantly Polish or of other Slavic nationalities.

The agreement with the employers provides that the longshoremen shall "shape" three times a day at all piers, but customarily the majority of men "shape" in one section of the water front, near Washington Street. The foremen pick their men there, load them into trucks, and dispatch them to their respective piers. This custom provides a somewhat unified system for the port, which has its piers and docks scattered for miles along both sides of the Delaware River.

Some stevedore companies have a permanent following of men, organized into permanent gangs, but the majority of the foremen pick their men and form them into gangs at each "shape." There is no system of dividing the work among the men, and because of the fact that many longshoremen do work for several employers during any one week, it is impossible to determine the average earnings of the port.

Table 5 gives the distribution, according to weekly earnings, of longshoremen employed by two companies in the port. For Company E data were available only for October, November, and December, 1929. This particular company is known to have a permanent following of longshoremen organized into permanent gangs, but in spite of this, more than 30 per cent of the men earn less than $15 per week. Of the 8,575 pay envelopes issued by the company during the 13 weeks shown in the table, 3,308 contained less than $15, and 5,635, or nearly two-thirds of the total, contained amounts under $30 per week. A similar distribution of the pay rolls of Company F, for

the same period, shows that slightly less than half of the total pay envelopes contained amounts less than $15 per week and more than three-fourths of the total amounts less than $30 per week. Undoubtedly, some of the men employed by these two companies worked also for other companies during the same period, but there is at present no way of telling either their number, or their additional earnings.

TABLE 5.—DISTRIBUTION, ACCORDING TO EARNINGS, OF LONGSHOREMEN EMPLOYED BY TWO COMPANIES (E AND F) IN PHILADELPHIA, 1929

Week ending—	Number of men earning—			Total
	Under $15	$15 and under $30	$30 and over	
Company E				
Oct. 3	207	134	274	615
Oct. 10	199	197	197	593
Oct. 17	212	143	259	614
Oct. 24	223	159	228	610
Oct. 31	302	212	303	817
Nov. 7	309	156	134	599
Nov. 14	244	135	310	689
Nov. 21	353	210	296	859
Nov. 28	197	182	150	529
Dec. 5	292	230	284	806
Dec. 12	235	160	202	597
Dec. 19	275	176	215	666
Dec. 26	260	233	88	581
Total	3,308	2,327	2,940	8,575
Company F				
Oct. 4	270	165	86	521
Oct. 11	118	70	72	260
Oct. 18	138	66	81	285
Oct. 25	176	84	101	361
Nov. 1	180	106	110	396
Nov. 8	153	78	6	237
Nov. 15	122	93	80	295
Nov. 22	200	139	121	460
Nov. 29	208	115	69	392
Dec. 6	198	117	92	407
Dec. 13	172	125	85	382
Dec. 20	225	132	171	528
Dec. 27	202	54		256
Total	2,362	1,344	1,074	4,780

Table 6 gives the average weekly earnings of the longshoremen employed by Company G during a whole year, from July 6, 1927, to June 27, 1928. Very few of these men ever work for another company, and the averages shown in this table come very close to representing the actual weekly earnings of the men. These averages are shown to vary from $19.09 per man, during the week ending on September 14, 1927, to $39.38 during the week ending on May 16, 1928, earnings in the greater number of weeks falling within the $25 to $30 range.

TABLE 6.—AVERAGE WEEKLY EARNINGS OF LONGSHOREMEN EMPLOYED BY COMPANY G, IN PHILADELPHIA, JULY 6, 1927, TO JUNE 27, 1928

Week ending—	Number of men	Average earnings per man per week
1927		
July 6	190	$31.81
July 13	181	25.31
July 20	182	27.14
July 27	250	27.54
Total		111.80
Aug. 3	259	30.00
Aug. 10	317	27.63
Aug. 17	221	24.93
Aug. 24	153	23.59
Aug. 31	191	23.24
Total		129.39
Sept. 7	184	22.67
Sept. 14	142	19.09
Sept. 21	169	24.87
Sept. 28	184	26.98
Total		93.61
Oct. 5	180	27.37
Oct. 12	191	35.42
Oct. 19	155	33.46
Oct. 26	178	26.61
Total		122.86
Nov. 2	233	22.78
Nov. 8	254	27.84
1927—Con.		
Nov. 16	135	$30.90
Nov. 23	204	31.86
Nov. 30	216	18.07
Total		131.45
Dec. 7	152	31.50
Dec. 14	210	23.30
Dec. 21	157	32.84
Dec. 28	147	26.75
Total		114.39
1928		
Jan. 4	131	27.94
Jan. 11	166	25.95
Jan. 18	117	24.18
Jan. 25	179	32.80
Total		110.87
Feb. 1	171	20.71
Feb. 8	161	30.97
Feb. 15	159	31.57
Feb. 22	162	31.23
Feb. 29	158	35.05
Total		149.53
1928—Con.		
Mar. 7	164	$34.32
Mar. 14	122	26.77
Mar. 21	211	37.82
Mar. 28	147	35.01
Total		133.92
Apr. 3	147	27.88
Apr. 11	160	37.91
Apr. 18	136	29.80
Apr. 25	142	27.15
Total		122.74
May 2	140	25.49
May 9	162	36.65
May 16	186	39.38
May 23	150	30.01
May 30	182	31.52
Total		163.05
June 6	162	27.95
June 13	129	28.84
June 20	152	31.13
June 27	174	28.58
Total		116.50

Baltimore

Longshore labor conditions in Baltimore are very similar to those existing in Boston. As in Boston all foreign and intercoastal cargoes are handled entirely by union labor, members of the International Longshoremen's Association. In Baltimore, however, the longshoremen are made up of approximately 60 per cent colored and 40 per cent white, the white workers being largely of Slavic origin. As in Boston a high initiation fee and strict rules operate to keep a more or less definite limit on the total supply of labor in port. All men are organized in gangs, the foremen of which are approved by the employers and the unions. The hiring, therefore, is also done in gangs. The men are required to "shape" twice a day from 8 to 10 in the morning for the day shift, and from 3 to 5 in the afternoon for the night shift. With the exception of a small number of men "shaping" on the Canton piers, all longshoremen "shape" around the union headquarters at the entrance to the B. & O. pier. Very little actual "picking" of men takes place there, however, as the gang leaders are usually notified in advance where and when to bring their men. There are about 100 gangs altogether, the majority of which are assigned to individual companies. It is the aim of each of these companies to keep all their work for their own gangs, but as in the case of New York, this aim falls very short of its mark due to the fluctuations in the number of ships in port. There is no system of rotating the gangs working for any one employer or of changing them from one employer to another for the purpose of equalizing the earnings

of the men. The result is that certain gangs, particularly those which are known to specialize in the handling of certain commodities like tin plate, steel rails, lumber, etc., are known to make considerably higher wages than the other gangs. No check is kept on the gangs or on the individual men as they go from one employer to another and, therefore, there is no way of telling their actual earnings.

As in the case of Boston, however, it was possible to combine the weekly earnings of the port for a whole year, and this total figure when divided by the total number of active longshoremen in the port gives an approximation of the average weekly earnings of the men in Baltimore. There were, in 1927, altogether 2,159 members in the two cargo and one grain locals in the port, and of these only 1,948 men were classified as active members engaged exclusively in longshore work. The weekly averages of these men for the year 1927, shown in Table 7, ranged from $14.43 for the week ending October 21, to $33.44 for the week ending March 4, with the larger number of weeks averaging from $20 to $30. These averages are somewhat lower than they might have been if it had been possible to eliminate those men in the union who are away from the water front more than six months in the year, as was done in the case of Boston.

TABLE 7.—EARNINGS OF LONGSHOREMEN IN BALTIMORE, 1927

Week ending—	Total pay rolls	Average earnings per man	Week ending—	Total pay rolls	Average earnings per man
Jan. 7	$38,475.39	$19.75	July 1	$41,057.63	$21.08
Jan. 14	47,300.18	24.28	July 8	31,857.02	16.35
Jan. 21	54,670.22	28.06	July 15	47,519.38	24.39
Jan. 28	47,879.04	24.58	July 22	45,762.29	23.49
			July 29	56,244.82	28.87
Total	188,324.83	96.67	Total	222,441.14	114.18
Feb. 4	62,585.14	32.13			
Feb. 11	45,066.20	23.13	Aug. 5	49,067.11	25.19
Feb. 18	39,829.73	20.45	Aug. 12	45,451.74	23.33
Feb. 25	54,190.70	27.82	Aug. 19	46,357.72	23.80
			Aug. 26	49,644.59	25.48
Total	201,671.77	103.53	Total	190,521.16	97.80
Mar. 4	65,150.65	33.44			
Mar. 11	47,205.30	24.23	Sept. 2	45,811.61	23.52
Mar. 18	47,119.10	24.19	Sept. 9	43,164.59	22.16
Mar. 25	50,012.34	25.67	Sept. 16	36,708.20	18.84
			Sept. 23	44,714.22	22.95
Total	209,487.39	107.53	Sept. 30	46,361.50	23.80
			Total	216,760.12	111.27
Apr. 1	58,327.71	29.94			
Apr. 8	60,194.66	30.90	Oct. 7	43,401.16	22.28
Apr. 15	41,036.80	21.07	Oct. 14	41,576.09	21.34
Apr. 22	47,946.35	24.61	Oct. 21	28,104.20	14.43
Apr. 29	51,979.83	26.68	Oct. 28	56,576.50	29.04
Total	259,485.35	133.20	Total	169,657.95	87.09
May 6	64,494.53	33.11	Nov. 4	50,696.22	26.02
May 13	47,311.33	24.29	Nov. 11	43,048.00	22.10
May 20	52,677.32	27.04	Nov. 18	51,208.02	26.29
May 27	48,782.44	25.04	Nov. 25	48,872.67	25.09
Total	213,265.62	109.48	Total	193,824.91	99.50
June 3	42,512.50	21.82	Dec. 2	57,059.31	29.29
June 10	53,125.15	27.27	Dec. 9	53,351.22	27.39
June 17	37,094.13	19.04	Dec. 16	42,379.75	21.76
June 24	54,880.95	28.17	Dec. 23	60,261.27	30.93
			Dec. 30	61,957.14	31.81
Total	187,612.73	96.30	Total	275,008.69	141.18

In addition to the above averages, Table 8 presents the actual monthly earnings of 10 of the 20 more or less permanent gangs employed by one of the largest stevedore companies in the port. Here is a condition not much different from the picture presented for the port of New York, namely, weeks and months of low earnings alternated by periods of very high wages, with the weekly earnings ranging all the way from less than $10 to $50 and over. Whether or not the slack periods for any one company were supplemented by work with another company is a question which can not be answered in Baltimore any more than in New York or in Boston, although the comparatively low averages for the whole port would indicate a negative answer.

TABLE 8.—MONTHLY EARNINGS OF 10 GANGS[1] OF LONGSHOREMEN EMPLOYED BY A LARGE STEVEDORE COMPANY IN BALTIMORE, 1927

Month	Monthly earnings per man in—				
	Gang No. 1	Gang No. 2	Gang No. 3	Gang No. 4	Gang No. 5
January	$106.20	$153.80	$143.20	$129.20	$141.95
February	156.60	132.80	148.20	130.00	72.00
March	200.40	175.20	134.00	141.20	130.00
April	168.20	153.00	100.60	70.60	115.80
May	157.45	141.40	157.00	77.15	160.00
June	211.60	154.60	153.40	136.00	169.80
July	129.20	119.40	103.00	66.80	116.40
August	191.60	144.20	130.00	85.80	138.90
September	138.80	103.65	80.20	75.40	117.60
October	117.80	91.65	104.40	86.05	89.85
November	184.75	139.30	133.75	190.00	155.75
December	141.35	136.80	156.80	145.35	131.85
Total	1,903.95	1,645.80	1,544.55	1,333.55	1,539.90
Average per month	158.66	137.15	128.71	111.12	128.33
	Gang No. 6	Gang No. 7	Gang No. 8	Gang No. 9	Gang No. 10
January	$133.00	$152.40	$119.20	$131.05	$94.00
February	144.60	167.80	153.00	170.20	117.20
March	134.20	158.20	180.10	178.40	157.50
April	165.80	153.20	70.80	107.00	132.00
May	153.30	189.80	95.60	164.15	163.80
June	201.70	177.20	177.40	219.20	178.10
July	120.60	130.20	121.40	115.55	111.60
August	189.60	128.00	126.60	128.20	140.80
September	137.00	134.00	121.00	133.20	104.80
October	97.45	121.25	104.05	122.85	102.65
November	118.30	166.00	151.10	166.30	156.10
December	134.85	141.80	131.65	135.75	102.10
Total	1,730.40	1,819.85	1,551.90	1,771.85	1,560.65
Average per month	144.20	151.65	128.50	147.65	130.05

[1] 18 men in a gang.

Consumers' Cooperative Societies in 1929

THE present article covers 656 cooperative societies—604 consumers' distributive or service associations and the store departments of 52 cooperative marketing associations—data for which were obtained as part of the Bureau of Labor Statistics' general study of cooperative societies. Housing and insurance societies are also consumers' organizations, but as they do not readily lend themselves to the same tabulation as the store and service societies they have been treated separately. The data for the wholesale societies have already been presented in a previous issue of the Labor Review.[1]

The data obtained show that the societies reporting operate 845 establishments of various kinds and employ 4,046 full-time workers.

The combined membership at the end of 1929 was 204,368, of which 60 per cent belonged to the store societies and about 20 per cent to the cooperative oil associations. About 70 per cent of the whole number of societies and 60 per cent of the membership are found in the North Central States. The data show that there are 34 societies in the United States having 1,000 members or more and 14 which have 2,000 or more.

The consumers' societies have an aggregate capital stock of $7,987,090 and reserves of $4,324,375. Their business for 1929 amounted to $64,665,369, on which they realized net earnings of $2,980,481. Patronage dividends and interest on the members' share capital, for 1929, amounted to $1,746,466; and for the four years covered by the bureau's study (1926–1929) to $5,102,504.

Reports were received from 52 associations whose principal business is the marketing of the members' crops; in addition to the marketing business, however, these associations have a store department which supplies the members with groceries, work clothing, general farm supplies, etc. There are many farmers' marketing organizations which have a retail department dealing exclusively in supplies used for the business (i. e., production) of the farm. Such goods can not, however, be considered as consumers' goods, and organizations dealing only in supplies used for the business of the farm were therefore excluded. The present study covers only organizations which handle consumers' goods (groceries, clothing, house furnishings, general merchandise, etc.). In the case of the distributive departments of the farmers' marketing associations, the figures relate in all cases only to the retail, not the marketing, business.

The other societies were classified according to their main business activity. Thus, an organization which operates one or more general stores may also operate a bakery, but if the merchandise business is the principal line, the society is here classed with the general stores; notations are made, however, where several lines of activity are carried on.

As the following table shows, the 422 store societies operate 506 stores and 38 other establishments. Altogether the 656 associations covered in the table run 561 stores, 198 gasoline stations, 20 bakeries,

[1] Labor Review, May, 1930, pp. 108–110.

17 boarding houses, 13 restaurants or cafeterias, 4 food shops, 8 dairies or milk-distributing plants, 3 laundries, 3 feed mills, 1 tailor shop, 2 coffee roasteries, 1 dance hall, 2 pool or billiard parlors, 1 plant for smoked meats, 1 tea room, 1 public dock, 3 fuel yards, 1 cheese factory, 1 establishment for cleaning beans, 1 blacksmith shop and garage for repairing automobiles, 1 steam bath, and 2 funeral parlors.

TABLE 1.—LINES OF BUSINESS OF CONSUMERS' COOPERATIVE SOCIETIES, AND NUMBER OF WORKERS EMPLOYED

Type of society	Number of societies reporting	Establishments operated in main line of business	Other establishments	Employees	
				Number of societies reporting	Number
Distributive departments of marketing associations	52	[1] 53	----------	51	309
Retail store societies dealing in—					
General merchandise	299	[2] 345	13	290	[3] 1,351
Groceries	60	[4] 59	5	55	198
Groceries and meat	48	[5] 81	18	47	479
Dry goods	1	1	----------	1	1
Coal	2	2	----------	2	5
Students' supplies	12	18	2	12	[3] 188
Total	422	506	38	407	[6] 2,222
Gasoline filling stations	146	[7] 198	----------	111	[8] 565
Bakeries	8	8	2	8	133
Creameries	2	3	----------	2	435
Restaurants	6	11	6	6	266
Boarding houses	16	16	----------	16	84
Laundries	2	2	----------	2	26
Funeral associations	2	2	----------	2	6
Grand total	656	799	46	605	[9] 4,046

[1] Stores operated; 15 of these societies, in addition to merchandise, sell coal and 5 gasoline.
[2] In addition to general merchandise, 17 societies also handle coal, 11 handle gasoline, 3 operate bakeries, 1 runs a boarding house, 1 distributes milk, 2 do trucking, and 38 do some marketing for members.
[3] And 3 part-time employees.
[4] In addition to groceries, 5 societies handle coal, 5 handle gasoline, 2 operate bakeries, 1 runs a laundry, and 3 do some marketing for members.
[5] In addition to groceries and meat, 1 society handles coal, 1 gasoline, 5 operate bakeries, 2 operate restaurants, and 4 distribute milk.
[6] And 6 part-time employees.
[7] In addition to gasoline and motor oils, 3 societies handle coal and 1 handles farm machinery.
[8] And 1 part-time employee.
[9] And 7 part-time employees.

In addition to the usual lines of goods handled by the store societies, 6 associations carry athletic goods, 4 jewelry, 1 certain lines of drugs, 11 clothing (3 men's clothing only and 1 work clothing only), 25 shoes, 4 furniture and house furnishings, 1 victrolas, 2 radios, 10 feed, 7 fertilizer, 22 farm machinery or implements, 5 general farm supplies, 32 hardware, 5 building materials, 2 paints, 1 ice, 1 electricity, 2 automobile tires, and 2 automobile parts. Forty-one societies also do some marketing of members' produce (cream, eggs, potatoes, forest products, etc.) as a side line to the store business. Of the store departments of the farmers' marketing associations, 2 also handle work clothing, 2 shoes, 1 radios, 1 building materials, 4 feed, 4 farm implements or machinery, and 1 general farm supplies.

In some instances the cooperative group has branched out into several lines of activity. Thus, one society has five stores, a bakery, a coal yard, a milk-distributing plant, and a coffee-roasting establishment. Another society which has a general store also has a

gasoline station and a fuel yard. A third has three grocery and meat stores, a dairy, and a bakery, and has recently started the manufacture of ice cream. A society in New York has six stores, a restaurant, a bakery, and a billiard parlor. A New England society which operates two grocery stores and meat markets, also sells milk, coal, paint, and furniture, and runs a coffee-roasting plant, a bakery, and a restaurant and delicatessen store. Other societies have preferred to expand their activities in a single line, as, for instance, one Michigan society which has nine grocery and meat stores and a bakery; an Ohio society which has seven grocery and meat stores and smokes its own meats; and a New York society with eight stores and a dairy.

At the end of 1929 two consumers' associations each had a credit union whose membership was drawn from the members and employees of the cooperative society.[2] Since the beginning of 1930 a credit society has been formed in a third association.

Membership

AT THE end of 1929 the 609 societies which furnished membership data had more than 200,000 members. The store societies (which form the largest single group of societies) accounted for more than 60 per cent of this membership, but the gasoline filling stations which formed less than 20 per cent of the total number of societies accounted for 27 per cent of the membership. The creamery societies had the largest average membership, but this was due to the inclusion in this group of the society which is the largest cooperative distributive organization in the United States. The next largest average was that of the restaurants, but here again the average was raised decidedly by another very large society. The details are shown in Table 2:

TABLE 2.—MEMBERSHIP OF VARIOUS TYPES OF CONSUMERS' SOCIETIES AT END OF 1929

Type of society	Number of societies reporting	Members	
		Number	Average per society
Distributive departments of marketing associations	52	11,787	227
Retail store societies	407	123,317	303
Gasoline filling stations	118	55,313	469
Bakeries	7	2,743	392
Creameries	2	4,864	2,432
Restaurants	6	4,107	685
Boarding houses	15	1,971	131
Laundries	2	266	133
Total	609	204,368	336

The same data are shown, by States and geographic divisions, in Table 3. It is seen that Massachusetts, Minnesota, Illinois, and New York, in the order named, are the most important States as regards cooperative membership of retail store societies; Minnesota, Illinois, and Iowa, as regards membership of gasoline stations; and New York and Minnesota as regards restaurants and boarding houses. As regards total membership of consumers' societies, the

[2] Data for these are included in the report on credit societies which will appear in a later issue.

leading States are Minnesota, Illinois, and Massachusetts. Seven States have more than 10,000 members each in consumers' cooperative societies. The North Central divisions together account for slightly more than 70 per cent of the societies and 60 per cent of the total membership, while the New England and Middle Atlantic States account for about 15 per cent of the societies and 22 per cent of the membership.

TABLE 3.—MEMBERSHIP OF VARIOUS TYPES OF CONSUMERS' SOCIETIES AT END OF 1929, BY STATES AND GEOGRAPHIC DIVISIONS

State or geographic division	Store societies		Gasoline stations		Restaurants and boarding houses		Other societies		Total	
	Number reporting	Members	Number reporting	Members	Number reporting	Members	Number reporting	Members	Number reporting	Total
State										
Alaska	1	120							1	120
Arizona	1	2,000							1	2,000
Arkansas	5	538							5	538
California	5	8,549							5	8,549
Colorado	1	50	2	301			1	34	4	385
Connecticut	4	3,218					1	21	5	3,239
Idaho	3	327							3	327
Illinois	22	10,814	13	11,022	5	559	1	52	41	22,447
Indiana					1	58	1	73	2	131
Iowa	15	1,880	16	10,019			4	1,094	35	12,993
Kansas	26	3,558	3	378			9	2,729	38	6,565
Kentucky	4	738							4	738
Maine	15	3,127							15	3,127
Maryland	2	192							2	192
Massachusetts	17	16,599					5	1,431	22	18,030
Michigan	31	9,188			6	549	3	210	40	9,947
Minnesota	69	13,985	41	20,688	5	1,045	4	4,782	119	40,500
Missouri	14	2,208	2	406			6	697	22	3,311
Montana	1	260					1	450	2	710
Nebraska	23	2,652	26	7,907			5	491	54	11,050
New Hampshire	4	664							4	664
New Jersey	5	3,435							5	3,435
New Mexico			1	600					1	600
New York	17	10,338			1	3,255	2	1,312	20	14,905
North Carolina	2	135							2	135
North Dakota	12	1,207	2	470					14	1,677
Ohio	10	2,969			1	304	1	850	12	4,123
Oklahoma	2	156					3	771	5	927
Oregon	2	4,426					1	390	3	4,816
Pennsylvania	13	1,893							13	1,893
Rhode Island	3	344							3	344
South Dakota	10	849	2	1,044			3	849	15	2,742
Tennessee	2	170							2	170
Texas	5	2,316					2	593	7	2,909
Virginia	8	4,364							8	4,364
Washington	20	3,057					2	171	22	3,228
West Virginia	3	830							3	830
Wisconsin	29	5,762	10	2,478	2	308	7	2,493	48	11,041
Wyoming	1	499					1	167	2	666
Total	407	123,317	118	55,313	21	6,078	63	19,660	609	204,368
Geographic division										
New England	43	23,952					6	1,452	49	25,404
Middle Atlantic	35	15,666			1	3,255	2	1,312	38	20,233
East North Central	92	28,733	23	13,500	15	1,778	13	3,678	143	47,689
West North Central	169	26,239	92	40,912	5	1,045	31	10,642	297	78,838
South Atlantic	15	5,521							15	5,521
East South Central	6	908							6	908
West South Central	12	3,010					5	1,364	17	4,374
Mountain	7	3,136	3	901			3	651	13	4,688
Pacific	27	16,032					3	561	30	16,593
Total	406	123,197	118	55,313	21	6,078	63	19,660	608	204,248
Alaska	1	120							1	120

The following table shows the distribution of the societies, classified by size. As is seen, 30 per cent of the societies have fewer than 100 members each, and nearly 60 per cent have fewer than 200 members. On the other hand, one-seventh of the number have 500 members or more, while 5.6 per cent have 1,000 or more.

TABLE 4.—DISTRIBUTION OF CONSUMERS' SOCIETIES ACCORDING TO MEMBERSHIP OF SOCIETY

Type of society	Number of societies having classified number of members								Total
	Under 50	50 and under 100	100 and under 200	200 and under 300	300 and under 500	500 and under 750	750 and under 1,000	1,000 and over	
Distributive departments of marketing associations	3	15	15	7	7	2	2	1	52
Retail store societies	48	97	133	64	34	9	2	20	407
Gasoline filling stations	1	10	22	25	24	18	8	10	118
Bakeries	-------	-------	2	2	1	-------	1	1	7
Creameries	-------	-------	-------	-------	1	-------	-------	1	2
Restaurants	-------	2	1	1	1	-------	-------	1	6
Boarding houses	6	2	3	1	3	-------	-------	-------	15
Laundries	1	-------	-------	1	-------	-------	-------	-------	2
Total	59	126	176	101	71	29	13	34	609
Per cent	9.7	20.7	28.9	16.6	11.7	4.7	2.1	5.6	100.0

All but one of the students' cooperative societies reporting membership have more than 1,500 members each. Apart from these, the 10 largest consumers' distributive societies in the United States, in point of membership, are as follows:

	Members
Franklin Cooperative Creamery Association, Minneapolis, Minn	4, 474
Range Cooperative Oil Association, Virginia, Minn	[3] 3, 387
Consumers' Cooperative Services, New York, N. Y	3, 255
Cooperative Trading Association, Brooklyn, N. Y	2, 451
Macon County Supply Co., Decatur, Ill	2, 000
La Salle County Farm Supply Co., Ottawa, Ill	1, 700
Cooperative Trading Association, Waukegan, Ill	1, 527
Tamarack Cooperative Association, Calumet, Mich	1, 522
Cooperative Managers' Association, Corvallis, Oreg	1, 426
Cloquet Cooperative Society, Cloquet, Minn	1, 301

Funds of Societies

THE consumers' societies reporting as to share capital have an aggregate amount of $7,987,090, an average of $13,607 per society, and $45 per member. Reserves amount to $4,324,375, or $7,379 per society. The data for the various types of societies are shown in Table 5.

[3] Membership of societies which own the oil association.

TABLE 5.—CAPITAL AND RESERVES OF VARIOUS TYPES OF CONSUMERS' SOCIETIES

Type of society	Share capital				Reserves	
	Number of societies reporting	Amount	Average per society	Average per member [1]	Number of societies reporting	Amount
Distributive departments of marketing associations	[2] 46	$1,043,885	$22,693	$112	49	$334,402
Retail store societies	[3] 383	4,653,197	12,149	46	396	2,875,296
Gasoline filling stations	[4] 129	1,182,214	9,164	21	109	604,940
Bakeries	8	52,260	6,533	17	8	69,198
Creameries	2	944,975	472,488	194	2	261,076
Restaurants	6	72,343	12,057	18	5	149,989
Boarding houses	[5] 11	29,126	2,648	16	16	19,474
Laundries	2	9,090	4,545	34	----	----
Funeral associations	([6])	([6])	----	----	1	10,000
Total	[7] 587	7,987,090	13,607	45	586	4,324,375

[1] Based on societies reporting both membership and capital.
[2] Not including 3 societies which are nonstock organizations.
[3] Not including 14 societies which are nonstock organizations.
[4] Not including 2 societies which are nonstock organizations.
[5] Not including 5 societies which are nonstock organizations.
[6] No data.
[7] Not including 24 societies which are nonstock organizations.

Amount of Business Done by Cooperative Societies

DURING 1929 the 416 store societies reporting had sales of nearly $38,000,000, an average of more than $90,000 each. More than $10,000,000 worth of business was done by the oil associations. Altogether the business done by the various types of consumers' societies amounted to nearly $65,000,000.

Table 6, below, shows the 1929 business done by each of the principal types of societies, by States and by geographic divisions. It is seen that the major part of the consumers' cooperative business is concentrated in the North Central divisions; these account for nearly 70 per cent of the total, while the Northeastern States, their nearest competitor for the position, account for 17 per cent.

Minnesota was the leading State in sales in 1929, its cooperative business amounting to more than twice that of either Illinois or Nebraska (its nearest rivals in point of business), and more than that of all the Northeastern States combined.

TABLE 6.—SALES OF VARIOUS TYPES OF CONSUMERS' SOCIETIES IN 1929, BY STATES AND GEOGRAPHIC DIVISIONS

State or geographic division	Retail store societies		Gasoline filling stations		Other types		Total	
	Number reporting	Business	Number reporting	Business	Number reporting	Business	Number reporting	Business
State								
Alaska	1	$230,900	----	----	----	----	1	$230,900
Arizona	1	46,143	----	----	----	----	1	46,143
Arkansas	6	364,602	----	----	----	----	6	364,602
California	5	840,498	----	----	----	----	5	840,498
Colorado	1	19,315	1	$37,597	1	$123,560	3	180,472
Connecticut	4	601,716	----	----	1	9,637	5	611,353

TABLE 6.—SALES OF VARIOUS TYPES OF CONSUMERS' SOCIETIES IN 1929, BY STATES AND GEOGRAPHIC DIVISIONS—Continued

State and division	Retail store societies		Gasoline filling stations		Other types		Total	
	Number reporting	Business	Number reporting	Business	Number reporting	Business	Number reporting	Business
State—Continued								
Idaho	3	$333,131					3	$333,131
Illinois	22	2,366,097	14	$2,035,050	7	$600,064	43	5,001,211
Indiana	1	89,694			2	83,460	3	173,154
Iowa	14	871,419	16	1,344,568	4	579,078	34	2,795,065
Kansas	26	1,326,441	4	240,162	9	3,365,595	39	4,932,198
Kentucky	4	225,834					4	225,834
Maine	15	1,129,802					15	1,129,802
Maryland	2	221,019					2	221,019
Massachusetts	18	2,911,822			5	303,376	23	3,215,198
Michigan	31	4,149,424			9	341,969	40	4,491,393
Minnesota	72	5,009,332	49	3,587,117	9	3,554,386	130	12,150,835
Missouri	15	1,435,657	2	26,287	6	658,798	23	2,120,742
Montana	1	96,854			1	469,000	2	565,854
Nebraska	23	1,564,490	39	2,377,429	4	1,147,001	66	5,088,920
New Hampshire	4	250,766					4	250,766
New Jersey	4	999,889			1	240,400	5	1,240,289
New Mexico			1	250,000			1	250,000
New York	18	2,611,403			4	1,112,641	22	3,724,044
North Carolina	2	58,940					2	58,940
North Dakota	12	1,074,612	2	115,587			14	1,190,199
Ohio	11	1,346,402			2	73,743	13	1,420,145
Oklahoma	2	72,765			3	546,668	5	619,433
Oregon	3	391,379			1	92,236	4	483,615
Pennsylvania	13	616,249					13	616,249
Rhode Island	3	195,886					3	195,886
South Dakota	10	411,907	2	214,818	3	1,362,058	15	1,988,783
Tennessee	2	134,000					2	134,000
Texas	5	517,682			2	66,474	7	584,156
Vermont	1	39,000					1	39,000
Virginia	7	810,146					7	810,146
Washington	21	1,894,580			2	229,320	23	2,123,900
West Virginia	3	279,333					3	279,333
Wisconsin	29	1,978,675	9	493,434	9	886,296	47	3,358,405
Wyoming	1	179,756	1	60,000	1	340,000	3	579,756
Total	416	37,697,560	140	10,782,049	86	16,185,760	642	64,665,369
Geographic division								
New England	45	5,128,992			6	313,013	51	5,442,005
Middle Atlantic	35	4,227,541			5	1,353,041	40	5,580,582
East North Central	94	9,930,292	23	2,528,484	29	1,985,532	146	14,444,308
West North Central	172	11,693,858	114	7,905,968	35	10,666,916	321	30,266,742
South Atlantic	14	1,369,438					14	1,369,438
East South Central	6	359,834					6	359,834
West South Central	13	955,049			5	613,142	18	1,568,191
Mountain	7	675,199	3	347,597	3	932,560	13	1,955,356
Pacific	29	3,126,457			3	321,556	32	3,448,013
Total	415	37,466,660	140	10,782,049	86	16,185,760	641	64,434,469
Alaska	1	230,900					1	230,900

The distribution of the consumers' societies according to amount of sales in 1929 is shown, for each type of society, in Table 7. The largest group of societies is that with sales of from $50,000 to $100,000, 34.4 per cent falling in that group, while 27.4 per cent had sales of from $25,000 to $50,000.

TABLE 7.—NUMBER AND PER CENT OF EACH TYPE OF CONSUMERS' SOCIETIES HAVING CLASSIFIED AMOUNT OF SALES IN 1929

Number

Type of society	Number of societies having classified amount of sales							Total
	Less than $25,000	$25,000 to $50,000	$50,000 to $100,000	$100,000 to $200,000	$200,000 to $300,000	$300,000 to $500,000	$500,000 and over	
Distributing departments of marketing associations	4	7	13	11	8	4	4	51
Retail store societies	50	113	154	64	18	11	6	416
Gasoline filling stations	16	47	46	23	4	4		140
Bakeries		2	4		1	1		8
Creameries			1				1	2
Restaurants		2		2	1		1	6
Boarding houses	9	3	3					15
Laundries	1	1						2
Funeral associations	1	1						2
Total	81	176	221	100	32	20	12	642

Per cent

Distributing departments of marketing associations	7.8	13.7	25.5	21.6	15.7	7.8	7.8	100.0
Retail store societies	12.0	27.2	37.0	15.4	4.3	2.6	1.4	100.0
Gasoline filling stations	11.4	33.6	32.9	16.4	2.9	2.9		100.0
Bakeries		25.0	50.0		12.5	12.5		100.0
Creameries			50.0				50.0	100.0
Restaurants		33.3		33.3	16.7		16.7	100.0
Boarding houses	60.0	20.0	20.0					100.0
Laundries	50.0	50.0						100.0
Funeral associations	50.0	50.0						100.0
Total	12.6	27.4	34.4	15.6	5.0	3.1	1.9	100.0

An interesting feature of the table is that 64 societies, or nearly 10 per cent of the whole number reporting, had sales of $200,000 or more, and 12 societies had sales of half a million dollars or more. Excluding the students' societies, the 10 leading consumers' societies in the United States in point of sales in 1929 are listed below:

	Sales
Franklin Cooperative Creamery, Minneapolis, Minn	$3,342,291
Cooperative Trading Association, Waukegan, Ill	797,567
Soo Cooperative Mercantile Association, Sault Ste. Marie, Mich	686,514
Consumers' Cooperative Services, New York, N. Y	612,226
Cloquet Cooperative Society, Cloquet, Minn	546,567
Cooperative Trading Association, Brooklyn, N. Y	471,523
North Star Cooperative Store Co., Fairport Harbor, Ohio	465,260
Virginia Work People's Trading Co., Virginia, Minn	422,404
Tamarack Cooperative Association, Calumet, Mich	388,185
United Cooperative Society, Fitchburg, Mass	371,325

It is seen that the societies with the largest membership are not necessarily the societies with the largest sales. Only 6 of the 10 societies with the largest number of members occur in the above list.

Table 8 shows, for each type of consumers' societies, the amount of business done in each of the four years covered by the study.

TABLE 8.—AMOUNT OF BUSINESS DONE BY VARIOUS TYPES OF CONSUMERS' SOCIETIES, 1926 TO 1929

Type of society	1926		1927		1928		1929	
	Number of societies reporting	Amount of business	Number of societies reporting	Amount of business	Number of societies reporting	Amount of business	Number of societies reporting	Amount of business
Distributive departments of marketing associations	28	$4,468,886	29	$5,552,868	36	$7,304,882	51	$10,058,195
Retail store societies	295	27,073,211	316	28,475,404	361	32,917,283	416	37,697,560
Gasoline filling stations	21	1,725,193	52	3,208,772	77	6,049,481	140	10,782,049
Bakeries	6	704,187	6	722,411	7	737,127	8	965,915
Creameries	1	3,398,659	1	3,341,740	2	3,511,542	2	3,434,527
Restaurants	3	855,983	3	893,390	5	1,082,550	6	1,211,236
Boarding houses	9	266,450	7	155,939	12	350,504	15	427,293
Laundries	2	34,744	2	37,509	2	37,470	2	35,422
Funeral associations	1	29,526	1	32,413	2	52,908	2	53,172
Total	366	38,556,839	417	42,420,446	504	52,043,747	642	64,665,369

Goods Manufactured by Consumers' Societies

THAT the consumers' cooperative movement in the United States has not yet attempted much in the way of production of its own goods is shown by the fact that only 16 of the 656 societies reported manufactures of any kind. In 6 instances bakery products were the goods manufactured, in 2 cases feed, and in 1 case each ruled paper, tailor-made clothing, and butter and ice cream [4]; in the remaining 5 cases the kind of goods produced was not stated. The 16 societies reporting, however, together produced goods valued at $1,580,113, as is shown in the table below:

TABLE 9.—VALUE OF GOODS MANUFACTURED BY CONSUMERS' COOPERATIVE SOCIETIES IN 1929

Type of society	Number of societies	Value of goods produced
Distributing departments of marketing associations	2	$238,073
Retail store societies	13	511,985
Creameries	1	830,055
Total	16	1,580,113

In some localities the societies have taken a first step toward the ultimate manufacture of commodities, by having goods of specified kind and quality packed for them under the cooperative label. This is being done by two of the wholesales [5] and by a group of societies in the Central States Cooperative League.

Operating Expenses

A GRATIFYINGLY large number of societies furnished detailed statements of operating expenses for 1929. Although some were discarded

[4] Since the beginning of 1930 another society has begun the manufacture of ice cream.
[5] One of these also manufactures bakery products.

because they did not cover the whole year or because they were not in sufficient detail, usable reports were obtained from 180 store societies, 62 oil associations, and 13 societies of other types—255 in all.

The table following shows, for each of the types of societies, the low, high, and average rate of operating expense for 1929:

TABLE 10.—LOW, HIGH, AND AVERAGE RATE OF OPERATING EXPENSE IN 1929, OF VARIOUS TYPES OF CONSUMERS' COOPERATIVE SOCIETIES

Type of society	Low	High	Average
Retail store societies:			
General stores	4.4	30.7	11.5
Grocery stores	5.6	19.2	11.7
Grocery and meat stores	7.7	26.2	15.2
Coal yards	14.0	19.7	18.2
Students' supply stores	11.5	19.9	14.9
All store societies	4.4	30.7	12.3
Gasoline filling stations	3.8	45.8	15.2
Bakeries	21.5	50.1	32.2
Creameries	30.3	32.3	31.6
Restaurants	23.3	58.9	53.2
Laundries	103.6	112.2	105.9
Wholesale societies	6.4	9.7	8.8

Table 11 shows for each type of society the per cent of net sales expended for each item of overhead in 1929. As in the preceding table, the operating expenses of the three wholesale societies handling groceries and other merchandise are also included for purposes of comparison.

TABLE 11.—OPERATING EXPENSES OF CONSUMERS' COOPERATIVE SOCIETIES IN 1929

Item	Per cent of net sales expended for each item by store societies					
	General stores (116)	Grocery stores (32)	Grocery and meat stores (26)	Coal yards (2)	Students' supply stores (4)	Total (180)
Sales expense:						
Wages	7.1	7.1	9.7	13.9	10.1	7.8
Advertising	.2	.2	.2	----	.8	.2
Wrappings	.2	.2	.3	----	(1)	.2
Total	7.5	7.5	10.2	13.9	11.0	8.2
Miscellaneous delivery expense (except wages)	.4	.6	.7	2.2	(1)	.5
Rent	.3	.7	.6	.2	1.1	.4
Light, heat, power, water	.4	.3	.5	.2	.1	.4
Insurance and taxes	1.0	.7	.7	1.1	.7	.9
Interest on borrowed money	.3	.4	.3	----	.1	.3
Office supplies and postage	.1	.1	.1	(1)	.1	.1
Telephone and telegraph	.1	.1	.1	.2	.3	.1
Repairs	.1	.1	.2	.2	.1	.1
Depreciation	.5	.4	.5	----	.4	.5
Bad debts	.2	.1	(1)	----	.1	.2
Miscellaneous	.7	.8	1.0	.3	.9	.8
Grand total	11.5	11.7	15.2	18.2	14.9	12.3

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

TABLE 11.—OPERATING EXPENSES OF CONSUMERS' COOPERATIVE SOCIETIES IN 1929—Continued

Item	Per cent of net sales expended for each item by—					
	Gasoline filling stations (62)	Bakeries (6)	Creameries (2)	Restaurants (3)	Laundries (2)	Wholesale societies (3)
Sales expense:						
Wages	[2] 10.6	21.2	16.7	33.1	67.8	4.1
Advertising	.2	.2	.8	----	.6	.6
Wrappings	----	.4	2.4	[1]	----	.5
Total	10.8	21.8	19.9	33.2	68.4	5.2
Miscellaneous delivery expense (except wages)	.8	2.0	4.2	.1	2.0	.2
Rent	.4	.9	.7	.5	3.0	.1
Light, heat, power, water	.2	.9	1.9	.4	8.9	.3
Insurance and taxes	.7	2.3	.5	.9	3.2	.2
Interest on borrowed money	.1	.5	.1	----	.6	.2
Office supplies and postage	.2	.1	.3	----	.2	.3
Telephone and telegraph	.1	.1	.1	[1]	.4	.2
Repairs	.1	.5	.2	9.2	2.9	[1]
Depreciation	.9	1.2	2.4	7.9	4.8	.3
Bad debts	.1	.6	.6	----	----	.2
Miscellaneous	.9	1.4	.8	1.0	11.4	1.8
Grand total	15.2	32.2	31.6	53.2	105.9	8.8

[1] Less than one-tenth of 1 per cent. [2] Includes drivers' commissions.

The retail store societies are classified below, according to the expense ratio in 1929:

	Number of societies
Under 5 per cent	1
5 and under 7.5 per cent	14
7.5 and under 10 per cent	35
10 and under 12 per cent	37
12 and under 15 per cent	39
15 and under 17.5 per cent	32
17.5 and under 20 per cent	19
20 and under 25 per cent	1
25 and under 30 per cent	1
30 and under 35 per cent	1
Total	180

The following table shows the operating expenses of each type of consumers' society in 1929 as compared with 1925, when the bureau's last previous study was made. It is seen that the expenses have decreased slightly for all the societies except the general stores (in which there was no change) and the restaurants (whose expenses increased). The great increase in the expenses of the restaurants appears to be due in the main to heavier expenditure for wages and repairs and to a greater marking off for depreciation.

TABLE 12.—COMPARISON OF OPERATING EXPENSES OF CONSUMERS' SOCIETIES FOR 1925 AND 1929

Type of society	Rate of operating expense in—	
	1925	1929
	Per cent	*Per cent*
General stores	11.5	11.5
Grocery stores	13.4	11.7
Grocery and meat stores	17.3	15.2
Coal yards	19.3	18.2
Gasoline filling stations	16.1	15.2
Bakeries	33.2	32.2
Creameries	31.8	31.6
Restaurants	36.9	53.2

Net Gain

OF 603 societies reporting as to net gain on the 1929 operations, 30 reported losses aggregating $78,234, while 537 made gains amounting to $3,058,715 and 36 "came out even." The advantageous position occupied by the cooperative gasoline and oil associations is markedly brought out by Table 13 below, for it shows that the profits of 140 stations were nearly as great as those of the more than twice as many store societies. The net gain made by the gasoline stations was at the rate of 12 per cent of the sales, a figure not even remotely approached by any of the other consumers' societies. Figured on the basis of return on share capital, the earnings of all groups were good and in two cases remarkable.

TABLE 13.—PROFITS AND LOSSES OF VARIOUS TYPES OF CONSUMERS' SOCIETIES IN 1929, AND RATE BASED ON CAPITAL AND SALES

Type of society	Number of societies having neither gain nor loss	Loss		Gain		Total net gain		Rate (per cent) of total net gain, based on—	
		Number of societies having	Amount	Number of societies having	Amount	Number of societies	Amount	Sales [1]	Share capital [2]
Distributing departments of marketing associations	5	[3] 2	[3] $11,233	42	$170,906	[3] 44	$159,673	1.7	14.1
Retail store societies	22	[4] 24	[4] 62,264	335	1,367,935	[4] 359	1,305,671	3.8	26.8
Gasoline filling stations				140	1,326,791	140	1,326,791	12.0	107.1
Bakeries	1			7	16,105	7	16,105	1.8	31.9
Creameries				2	132,931	2	132,931	3.9	14.1
Restaurants		1	1,705	5	40,851	6	39,146	3.2	54.1
Boarding houses	8	2	1,815	6	3,196	8	1,381	.6	5.5
Laundries		[5] 1	[5] 1,217			[5] 1	[6] 1,217		
Total	36	30	78,234	537	3,058,715	567	2,980,481		

[1] Based on sales of societies which reported either profit or loss.
[2] Based on share capital of societies which reported either profit or loss.
[3] Not including 2 societies which reported a loss but did not state amount.
[4] Not including 7 societies which reported a loss but did not state amount.
[5] Not including 1 society which reported a loss but did not state amount.
[6] Loss.

Table 14 shows, for each of the four years covered, the net earnings of each type of consumers' society:

TABLE 14.—NET EARNINGS OF EACH TYPE OF CONSUMERS' SOCIETY, 1926 TO 1929

Type of society	1926		1927		1928		1929	
	Number of societies reporting [1]	Net gain [a]	Number of societies reporting [1]	Net gain [a]	Number of societies reporting [1]	Net gain [a]	Number of societies reporting [1]	Net gain [a]
Distributing departments of marketing associations	[2] 31	[2] $66,827	[2] 34	[2] $128,427	[2] 37	[2] $142,311	[3] 49	[3] $159,673
Retail store societies	[4] 269	[4] 976,667	[4] 293	[4] 1,084,420	[4] 335	[4] 1,178,674	[4] 379	[4] 1,305,671
Gasoline filling stations	26	258,088	55	375,523	77	476,111	140	1,326,791
Bakeries	[2] 5	[2] 14,510	[2] 5	[2] 17,268	[2] 5	[2] 10,319	8	16,105
Creameries	1	57,710	1	67,499	2	97,050	2	132,931
Restaurants	3	32,719	3	31,028	5	50,033	6	39,146
Boarding houses	9	4,755	8	883	12	3,403	16	1,381
Laundries	2	1,019	2	1,724	[2] 1	[2] 648	[2] 1	[5] 1,217
Total	[6] 346	[6] 1,412,295	[6] 401	[6] 1,706,772	[7] 474	[7] 1,958,549	[7] 601	[7] 2,980,481

[1] Including also those societies which reported having neither gain nor loss.
[2] Not including 1 society which reported a loss but did not state amount.
[3] Not including 2 societies which reported a loss but did not state amount.
[4] Not including 7 societies which reported a loss but did not state amount.
[5] Loss.
[6] Not including 9 societies which reported a loss but did not state amount.
[7] Not including 10 societies which reported a loss but did not state amount.
[a] After subtracting losses of those societies which sustained a loss.

Division of Profits

FROM the net profits on the year's business, provision is made for reserves, educational fund, etc., a regular fixed rate is paid in interest on share capital, and the remainder is usually returned to the members as patronage rebates. Of the 544 consumers' societies reporting on the subject of dividends, only 285 actually returned dividends on the 1929 business. There were various reasons for this. In the first place, 30 societies operated at a loss and 36 societies just "broke even"; none of these therefore had any profits to divide. In 4 cases the store was consumed by fire, presumably causing a loss, 1 society applied its 1929 profits to the payment of a mortgage on the store building, 1 is using its profits for the formation of a fund for the erection of its own building, and a third is using them to pay for the building it occupies. One society reports that it has just paid off the deficits incurred during the years 1920 to 1923 and will hereafter be in a position to use its earnings for the payment of patronage rebates, 5 other societies are still paying off deficits, while still another had its reserves wiped out as a result of the failure of a local bank in which its funds were deposited and is using its profits to build up another reserve fund.

As stated, 285 societies paid patronage rebates on the 1929 business, in a sum amounting to $1,408,879. To these may also be added 12 other societies which operate on a cost-plus basis, and whose members therefore have already had what amounts to a rebate—in the form of lower prices.

Interest paid on share capital in 1929 amounted to $337,587, making a total return for the year of $1,746,466. During the four years covered by the bureau's study, these consumers' societies have returned to their members, in dividends and interest, the sum of $5,102,504. The details are shown in the table following.

TABLE 15.—PATRONAGE REBATES AND INTEREST ON SHARE CAPITAL PAID BY CONSUMERS' SOCIETIES, 1926 TO 1929

Type of society	1926		1927		1928		1929	
	Number of societies	Amount	Number of societies	Amount	Number of societies	Amount	Number of societies	Amount
Patronage rebates								
Distributing departments of marketing associations	7	$15,861	10	$58,054	12	$36,699	13	$33,051
Retail store societies	[1] 113	[1] 465,335	[1] 128	[1] 553,300	143	627,132	152	693,777
Gasoline filling stations	[2] 27	[2] 210,111	[3] 54	[3] 264,278	[4] 82	[4] 354,829	[5] 117	[5] 674,628
Bakeries			1	300	2	301	2	459
Creameries								
Restaurants	1	6,572	1	6,624	1	7,818	1	6,964
Boarding houses								
Laundries								
Total	[6] 148	[6] 697,879	[7] 194	[7] 882,556	[4] 240	[4] 1,026,779	[5] 285	[5] 1,408,879
Interest on capital								
Distributing departments of marketing associations	20	25,677	24	30,611	26	24,818	30	31,296
Retail store societies	157	119,951	174	133,528	190	143,375	[8] 217	[8] 173,217
Gasoline filling stations	[2] 26	[2] 15,063	[2] 57	[2] 36,860	82	55,700	[9] 122	[9] 71,996
Bakeries					2	445	2	431
Creameries	1	48,635	1	47,555	2	57,908	2	56,950
Restaurants	1	1,858	1	2,253	1	2,722	1	3,119
Boarding houses	2	133	2	128	2	78	2	76
Laundries	1	509	1	503	1	514	1	502
Total	[2] 208	[2] 211,826	[2] 260	[2] 251,438	306	285,560	[10] 377	[10] 337,587
Grand total		909,705		1,133,994		1,312,339		1,746,466

[1] Not including 1 society which paid 2 per cent but did not state amount.
[2] Not including 1 society which paid 8 per cent but did not state amount.
[3] Not including 1 society which paid 7 per cent and 1 which paid 2 per cent, but did not state amount.
[4] Not including 1 society which paid 7 per cent but did not state amount.
[5] Not including 1 society which paid 5 per cent, 1 which paid 6 per cent, 1 which paid 8 per cent, and 1 which paid 18 per cent, but did not state amount.
[6] Not including 1 society which paid 2 per cent and 1 which paid 8 per cent but did not state amount.
[7] Not including 2 societies which paid 2 per cent and 1 which paid 7 per cent but did not state amount.
[8] Not including 7 nonstock associations.
[9] Not including 2 societies which paid 8 per cent but did not state amount.
[10] Not including 7 nonstock associations, and 2 societies which paid 8 per cent but did not state amount.

Some of the returns made by individual store societies are of interest. Thus, the Embarrass Cooperative Association, Embarrass, Minn., during the period 1916 to 1929 returned patronage dividends amounting to $52,237; the Cloquet Cooperative Society, Cloquet, Minn., from 1921 to 1929 returned $107,711; the Cooperative Trading Association, Waukegan, Ill., from 1926 to 1929 returned interest and dividends of $93,831; the Soo Cooperative Mercantile Association, Sault Ste. Marie, Mich., during the period 1913 to 1929 returned in interest, patronage rebates, and bonuses to employees[6] a total of $259,587; and the Tamarack Cooperative Association, Calumet, Mich., which has been in business since 1890, has in that time paid rebates and interest amounting to $1,953,346. Mention has been made in a previous issue of the Review of the most successful of the cooperative oil associations, one of which returned interest and dividends amounting to $127,664 in five years, another $96,713 in six years, and a third $198,456 in eight years.

[6] This association each year pays each of its employees a bonus on wages at the same rate as the dividend paid to members on purchases.

New Survey of London Life and Labor

By L. C. Marsh, Formerly Assistant Secretary to the Survey

THE pioneer work of the Right Hon. (then Mr.) Charles Booth in social and economic investigation applied at first to the East End of London only, and was begun as far back as 1886; but as the survey was supplemented by inquiries into London's industries and into a great variety of agencies and influences affecting "the life and labor of the people," and was extended in scope to the whole of London, it was not until 1903 that the final volume appeared. That is to say, the London discovered and described uniquely by Charles Booth, was the London of the "nineties."

After the war, there was general agreement among all those who knew Charles Booth's great work, as to the value that a new survey made on the same general lines would have, giving, as it would, not only a complete picture of the general condition of the people to-day but one which could be compared with that presented by the original survey.

The first task was to secure financial assistance and to build up the organization necessary for such a vast piece of social research, and through the initiative of Sir William Beveridge and the London School of Economics this was begun two years ago. Since then, under the directorship of Sir Hubert Llewellyn Smith, formerly chief economic advisor to His Majesty's Government, the initial problems of the task have been overcome and steady progress has been made in all branches of the survey. Profiting from the experience of the Booth survey itself (Sir Hubert Llewellyn Smith was one of the original collaborators with Charles Booth), from that gained in economic and social investigation since, and from the new sources and agencies available to-day, it has been possible to plan the survey in a more systematic form than that taken by Charles Booth's work. The first volume of the new survey will be out soon after these words appear in print. At present it is only possible, in addition to describing the methods which are being used, to outline the general scope and character of the other branches of the work, progress in all of which is at varying stages at the moment.

First (Preliminary) Volume

THE first task of the survey, in order of presentation of results at least, was to provide some link between the time of the original investigations and to-day, as a "control" and a background for the new survey proper. The completion of this task has resulted in a volume which is in some ways unique, the result of assembling for one great urban area all the figures—mainly from official and quasi-official sources—which bear on the particular question of the change in social and economic conditions over the last 40 years. The subjects which have been chosen to cover this ground, and for which some measurable index or indexes have been compiled, are: The population of London, its origin and composition; cost of living, wages, earnings, and hours of labor; rents and housing; health, education, and public amenities;

traveling facilities; occupations and industries; unemployment; pauperism and poor relief; and crime.

The problems which arise in using, interpreting, and welding together so far as possible into a related whole, long-period data of this type are of course of quite a different nature from the problems of a static survey. These are it is true difficulties of technique common to any ordinary statistical investigation and not special to the London survey, but their number and extent for an inquiry ranging over the subjects detailed above, each with its special statistical problems, extending in many cases back to and beyond the date at which reliable data are available, and involving the use of figures relating to a "London" which has a dozen different sizes for different purposes,[1] are not likely to be easily realized by those who merely read the results.

In the preparation of this first volume of the report, the cooperation of many experts, in addition to the director and Professor Bowley, has been secured. Sir William Hamer has been responsible for the chapter dealing with health, the changes in the mortality rates from different groups of diseases, and the development of public-health services; Sir William Beveridge for that on unemployment and its treatment; and Sir Edward Troup for the chapter on crime. The measurement of the course of working-class cost of living; wages, earnings, and hours; rents, housing, and overcrowding; and of elementary education, and the public amenities and disamenities of the metropolis have been under the direction of Sir Hubert Llewellyn Smith. The chapters on the population and occupations and industries of London have been under the direction of Professor Bowley. The net result is therefore an authoritative survey of social changes during recent years, which, though preliminary to the detailed static survey of social and economic conditions, has a general interest which needs little stress, and apart altogether from its general social interest, it does not appear too much to claim that this volume should have a special interest in suggesting the possibilities (though also showing the difficulties) which lie in the coordination of the body of "public" statistical information which now exists for so many important towns.

The Poverty Survey

THE most widely known of Charles Booth's methods and results are his classification of the population by percentages in four (subdivided into eight) poverty-wealth grades "A" to "H", and the representation of the economic and social conditions of the inhabitants of every London street by colors corresponding to these grades, in a "poverty map."

The task which Charles Booth himself described as the determination of "the numerical relation which poverty, misery, and depravity bear to regular earnings and comparative comfort" and "the general conditions under which each class lives," and which constitutes the major object of the survey, has actually been undertaken in the new survey by means of two distinct inquiries, the one following closely Booth's original method, the other being an application of the now well-known "sample" method.

[1] The survey area itself, however, chosen as the area to be investigated for comparisons with the Booth survey which would take account of the growth of London in the interval, is definitely defined, and comprises the County of London and nine districts or boro ghs adjacent to it.

A. *The street survey.*—The method of the street survey is to obtain information indirectly, from those whose ordinary work gives them intimate knowledge of the economic condition of the section of the population with which they deal. Chief among these are the school attendance officers of London, the equivalent of the school board visitors whose value was originally realized by Charles Booth. Each of these attendance officers has for his district, in which he may have worked for years, reliable knowledge, supplemented by the record in his books, of the status of all the families with school children living in that area. This information, obtained from some 200 officers belonging to the survey area, through the courtesy and the cooperation of the London County Council, has been recorded on appropriate cards by a special team of interviewers, carefully coached and aided by written instruction so as to secure as nearly as possible uniform standards of entry.

On the basis of this material alone it is possible to obtain a fairly good first approximation of (a) the percentage assignable to each grade in the borough of which the officers' districts are subdivisions, and (b) the "color" of each street in the district.

But these primary data are in fact supplemented in several ways. In the first place additional information, analyzed so as to relate to the street as a unit, has been secured from (a) the employment exchanges (number of unemployed), (b) the boards of guardians (persons relieved), and (c) the police authorities, to assist in the determination of the "CD" (poor), "B" (very poor), and the former (Booth) "black" or "A", streets and classes. At the other end of the scale, data as to the ratable value of houses and the social grades of their occupants have been obtained from real-estate agents, for the streets of the upper grades.[2]

The next step is rightly to assess for each street this body of information for the purposes of the poverty map[3] and the classification of the population. In this part of the survey it is intended that the grading shall be determined not solely by the income measure, but by "the actually observed social and economic conditions, however caused," of the families included—an intention which is rightly influenced by the consideration that each card or street is really a separate problem.

Three additional checks will further be available to supplement these results: (1) As a direct check on assessment, detailed information as to certain indexes of economic conditions has in a number of sample streets been obtained for each house in the street, the results from which can be compared with those obtained from the ordinary cards. (2) A large number of streets, including all in which classification is doubtful, have been or will be the subject of personal visitation. (3) Additional light will be thrown on the classification of the population into categories by the information derived from the results of the sample inquiry, which in this as in a number of the other branches of the survey's work will be available if needed, to provide a means of "control" or check.

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[2] For a fuller description of the "classes" and of the modification adopted by the new survey and an account of the technique of determining the "poverty line" (which separates classes A, B, and CD from those above them) comparable with that used by Charles Booth, see the article by Sir Hubert Llewellyn Smith in the Journal of the Royal Statistical Society, Pt. IV, 1929.

[3] Although in general the street is the unit for coloration, it is hoped by treating difficult cases in sections to avoid the need for a "mixed" street color.

B. *The sample inquiry.*—Whereas in the street survey the mode of investigation is indirect, and the unit of investigation is the street, the sample inquiry is a direct investigation in which the household is the unit; for each unit a much wider range of information is obtained than for the streets.

This part of the new survey, which is under the supervision of Professor Bowley, represents the application, to a "London" population of more than 5,500,000, of the methods adopted in the investigations in certain provincial towns made by him and his collaborators in 1914 and 1924.[4] The "sample" it was decided to take was one-sixtieth of all the families in London, and in order to do this it was found that roughly 1 in every 40 houses would have to be the subject of inquiry (the houses being chosen automatically, so as to exclude bias, from street lists, etc.). The ratio necessary to obtain one-sixtieth of the families was estimated for each borough from census data, and the cards now in confirm that on the average about 1 in every 40 of the houses in London has been "sampled."

The resulting material will comprise over 33,000 cards (the majority of which are already in the hands of the survey staff) showing for that number of working-class families[5] details of the number of persons in the family, their age and sex, their occupations and income, the rent and accommodations of the house, and the birthplaces of the adults. It is of course a general rule of the survey that every precaution must be taken to insure that no information by which a family could be identified shall be published.

As distinct from the street survey card, every sample inquiry card has been necessarily the subject of a personal call on the householder, and on account of the amount of field work involved alone, this extension of the survey has been vastly facilitated by the fact that the work has been undertaken by the London school-attendance officers. Not only does their special experience make them particularly successful interviewers, but they are an organized body for whom it is easy to arrange the issue of instructions, submission of queries, etc., necessary to secure uniformity of procedure and definition.

This part of the new survey is expected to yield a great deal of information of the highest importance. The plan of tabulation at present in operation will produce for every borough a series of tables showing (a) the composition, particularly in respect of the relative number of earners and dependents, of working-class families; (b) house rents, carefully distinguishing cases of subtenancy, and conditions of housing and overcrowding, as far as these can be measured by relation of the family to the number of rooms and bedrooms occupied; (c) the classification of working-class families according to income (full-time and otherwise), and their relation to the poverty line—determined on a "minimum needs" basis consistent with that adopted for the street survey; and (d) an analysis of such of the causes of poverty as are measurable or discernible, e. g., unemployment, the relation of wages earned to size of family, the decease or absence of

[4] Livelihood and Poverty, by A. L. Bowley and A. Burnett-Hurst; and Has Poverty Diminished? by A. L. Bowley and Miss Hogg. The latter gives a full account of the technique employed, and is the basis from which that used in the new survey has been built up.

[5] "Working-class families" being delimited by the operation of certain necessarily arbitrary rules which result in the exclusion of most families in which the occupation of the head is professional, managerial, or clerical, and his income over £250 a year.

the male head. These groups are sufficient to produce more than a score of tables for each borough alone, but whether these results will be presented by boroughs or for larger unit areas is not yet certain. Some of the other information also, e. g., that relating to birthplaces, may be reserved for special treatment. Even this amount of tabulation of the material contained on the cards, however, will probably not exhaust their usefulness, and this body of statistical data, for the first time obtained in this way for London, is among the most important of the new features of the present survey.

The Industrial Survey

THE poverty survey will be the subject of at least two volumes of text and two volumes of "poverty maps." Two further volumes will be devoted to the second branch of the main survey, a study of all the important industries of London, approached from the same general point of view as that which guided the original survey—their significance in the life and labor of the London population—tracing the changes which have taken place, and resurveying in particular such special problems (e. g., casual labor) as have a close bearing on poverty.

The method followed in the new survey has been to intrust the survey of each industry or industrial group to a specially qualified investigator and to define the scope of the inquiry under only the broadest heads—the importance, localization, and special features of the industry in London; the character of the work and workers; conditions of employment, wages and earnings, method of recruitment, etc.; the organization of the industry and organization among employees and workers; and current problems. Personal investigation, supplemented by the information obtainable from existing agencies such as the employment exchanges, trade-unions, the port registration (dock labor) authorities, employers' associations, etc., and from published or "public" sources (such as the census, or statistics of wages, unemployment, etc., from the Ministry of Labor or other Government departments), is looked to as the means of obtaining the details of the picture of the labor of modern London, and when these are obtained it may be possible to add a summary chapter or chapters, and studies on certain special problems such as, for instance, decentralization in London industry.

In some of the industrial groups (building, metal and engineering, clothing, dock labor, domestic service, etc.), investigations are now nearing completion, and an industries volume is likely to be the second to appear in print.

Final Volume: Working-Class Life and Use of Leisure

IT IS not possible to do more than to state on broad lines what, in addition to summary chapters for the whole of the survey, the material of the important final volume will be. But there remain, when the poverty and industry surveys are complete, the complex of factors in working-class life not directly dealt with by either, many of them entirely new, most of them changed since the Booth survey was made. Broadly, they relate to the use of leisure time: and the

fact confirmed for London in the introductory volume, that real wages have increased at the same time that weekly hours of labor have been reduced, shows its significance for the present survey. A whole range of possible inquiries invites consideration under this head, topics so diverse as indoor and outdoor recreation, amusement and holidays, facilities for education and improvement and the use made of them, the extent and influence of various types of political and social organization, and the prevalence and problems of drinking, vice, and crime. It is not yet certain how what is likely to be at once one of the most interesting and the most difficult of the branches of the survey will be dealt with; though some tentative beginnings (to mention one—the question of cookery in relation to poverty and well-being) have already been made. For this is a range of subjects whose exhaustive treatment would demand far more than the resources of the new survey, and in which even a beginning offers scope for the most diverse methods of research.

Schedule used for street survey

Borough and officer's area _____
Number of houses in section _____
Street or section of street _____
S. A. O. description _____
Police description _____
Other information _____

For office use

	A	B	C D	E	F	G	H	Letter classification
Children 3 to 14								Color
Total families								Officer
Families with school children								Interviewer

Schedule used for sample inquiry

Name_____ Address_____

Borough_____

LONDON SCHOOL OF ECONOMICS, UNIVERSITY OF LONDON. SOCIAL SURVEY OF LONDON

File No.

Wage earners (including unemployed)						Hours		Earnings				State insurance deductions	
Relationship	Age	Occupation	Employer	Place of work	Cost of transport weekly	Last week	Full time	Last week		Full week			
								s.	*d.*	*s.*	*d.*	*s.*	*d.*
NON-WAGE EARNERS Sex													
NON-WAGE EARNERS Age													
NON-WAGE EARNERS Relationship													
INCOME FROM OTHER SOURCES													
Date_____ Interviewer_____													

GENERAL REMARKS, ETC.

Birthplaces of adults:

RENT, WEEKLY
(Including rates, receipts from subtenants not deducted)

PERSONS AND ACCOMMODATION
(This refers to family as on face of card)

Number of persons_____
Number of bedrooms_____
Parlor_____
Kitchen_____
Scullery_____
Pantry or larder_____
Bath_____
Yard_____
Garden_____
Allotment_____
Remarks on accommodation_____

Outline of Index Numbers of Wholesale Prices in Foreign Countries [1]

IN THIS article the attempt is made to present an outline embodying the principal features of leading official index numbers of wholesale prices now being published by foreign countries. In cases where there is no index computed by a Government agency, series regarded as semiofficial have been included in the account.

The price "index number" is an attempt to express in a single figure the average of a number of price changes at some definite time in relation to some other definite time designated as the base. Prof. Irving Fisher says: "An index number of prices, then, shows the average percentage change of prices from one point of time to another. The percentage change in the price of a single commodity from one time to another is, of course, found by dividing its price at the second time by its price at the first time. The ratio between these two prices is called the price relative of that one particular commodity in relation to two particular times. An index number of the prices of a number of commodities is an average of their price relatives." [2]

This average of price relatives may be either simple or weighted. If simple, it is obtained by adding the price relatives and dividing by their number. A variation of this is the "geometric average," which is obtained by multiplying the price relatives together and extracting that root which corresponds to the number of such price relatives. A weighted average may be had by multiplying each individual price relative by a figure representing its importance, adding the several results, and dividing their sum by the sum of the multipliers, or "weights." Still another method, known as the "aggregative," is to multiply the money price of each commodity at a particular time by a figure denoting its importance, add the several results, and then divide their sum by a similar sum for the period selected as the base. This method is the one employed by the Bureau of Labor Statistics in calculating its index numbers of wholesale prices.

Australia

Compiling agency: Bureau of Census and Statistics.
Number of commodities: 92.
Base period: 1911, also July, 1914.
Groups:

	Number of items
I. Metals and coal	14
II. Jute, leather, etc	10
III. Agricultural products	16
IV. Dairy products	9
V. Groceries	21
VI. Meats	5
VII. Building materials	10
VIII. Chemicals	7

[1] Bulletin No. 284 of the Bureau of Labor Statistics, issued in October, 1921, contained a brief description of the more important index numbers of wholesale prices in existence at that time, as far as the information was available. This bulletin brought up to date the information in Bulletin No. 173, published in July, 1915.

[2] Fisher, Irving: The Making of Index Numbers. Boston and New York, Houghton Mifflin Co., 1927, p. 3.

Group values: No values of groups are shown in connection with the index numbers, but weights for individual commodities are given in certain publications.

Method of selecting items: Selection is made from important staple articles of Australian production and consumption. Commodities included in the index consist largely of raw materials.

Weighting method: The prices of commodities are weighted according to the "aggregate expenditure" method. By this method the cost of an unvarying bill of goods is calculated at the varying prices prevailing at different dates. The weights have, in general, been obtained by adding to the production of each commodity in Australia the amount of imports and from this sum subtracting the amount of exports during the five years 1906 to 1910, inclusive.

Source of current information: Quarterly Bulletin of Australian Statistics.

Austria

Compiling agency: Federal Statistical Bureau.

Number of commodities: 47.

Base period: January–June, 1914.

Groups:

I. Foodstuffs—Domestic wheat, imported wheat, rye, barley, oats, maize, potatoes, rice, sugar, milk, beef, veal, pork, horseflesh, wine, coffee, tea, cocoa—total, 18 items.

II. Industrial materials—Cotton, wool, flax, hemp, jute, sole leather, upper leather (cowhide and calfskin), rubber, petroleum, paraffin, benzene, hard coal, soft coal, coke, firewood, lumber, brick, roofing tile, cement, bar iron tin plate, copper, lead, tin, zinc, nickel, aluminum, cellulose—total, 29 items

Group values: No values are shown in connection with the group index numbers, but prices and index numbers are given for each of the 47 items.

Method of selecting items: Not specifically stated.

Weighting method: The weighting coefficients are based on quantities of goods consumed in the year 1926. The weights are applied directly to the price relatives of individual commodities and the sum of the results is divided by the sum of the weights to obtain the weighted index. Weights are as follows:

Foodstuffs:	Weight
Domestic wheat	5. 4
Imported wheat	10. 9
Rye	10. 0
Barley	4. 4
Oats	7. 4
Maize	4. 1
Potatoes	6. 8
Rice	. 8
Sugar	11. 6
Milk	26. 0
Beef	15. 1
Veal	4. 8
Pork	28. 9
Horseflesh	. 3
Wine	4. 6
Coffee	2. 1
Tea	. 6
Cocoa	. 9
Total	144. 7

Industrial materials:	Weight
Cotton	3. 1
Wool	3. 8
Flax	. 4
Hemp	. 5
Jute	. 1
Sole leather	5. 3
Cowhide	1. 3
Calfskin	3. 1
Rubber	. 7
Petroleum	. 8
Paraffin	. 2
Benzene	2. 3
Hard coal	13. 3
Soft coal	6. 5
Coke	2. 1
Firewood	4. 0
Lumber	11. 0
Brick	. 8
Roofing tile	. 2
Cement	2. 3
Bar iron	2. 4

Industrial materials—Con.	Weight
Tinplate	1. 7
Copper	1. 7
Lead	. 7
Tin	. 3
Zinc	. 1
Nickel	. 3
Aluminum	. 1
Cellulose	2. 6
Total	71. 7

Source of current information: Statistische Nachrichten.

Belgium

Compiling agency: Ministry of Industry, Labor, and Social Welfare.

Base period: April, 1914.

Number of commodities: 132 (126 related to base period).

Groups:

	Number of items
I. Foodstuffs	16
II. Fuels	4
III. Coal tar and derivatives	3
IV. Metal products	18
V. Petroleum products	7
VI. Pottery ware	10
VII. Glassware	3
VIII. Chemicals	12
IX. Chemical fertilizers	5
X. Fats	7
XI. Textiles	19
1. Woolen	5
XI. Textiles—Continued.	
2. Linen	5
3. Jute	2
4. Cotton	7
XII. Building materials	14
XIII. Resinous products	2
XIV. Skins and leather	9
XV. Tobacco	1
XVI. Paper	1
XVII. Rubber, crude	1
Total	132

Group values: None are shown in connection with the group index numbers.

Method of selecting items: Items selected for the index are those commodities which are most important in consumption in Belgium. Prices are obtained from manufacturers, merchants, trade associations, etc.

Weighting method: Items are not weighted, but important ones are given increased representation. Index numbers are geometric averages of individual price relatives.

Source of current information: Revue du Travail.

Canada

Compiling agency: Dominion Bureau of Statistics.

Number of commodities: 502.

Base period: Year 1926.

Groups:

	Number of price series
I. Vegetable products (grain, fruits, etc.)	124
II. Animals and their products	74
III. Fibers, textiles, and textile products	60
IV. Wood, wood products, and paper	44
V. Iron and its products	39
VI. Nonferrous metals and their products	15
VII. Nonmetallic minerals and their products	73
VIII. Chemicals and allied products	73

Commodities are also classified—

	Number of items
According to purpose:	
I. Consumers' goods	204
II. Producers' goods	351
According to origin:	
I. Articles of farm origin	316
II. Articles of marine origin	16
III. Articles of forest origin	52
IV. Articles of mineral origin	183

Group values: No values are shown in connection with the group index numbers, but prices are currently published for a limited number of important commodities.

Method of selecting items: Not specifically explained, but apparently selection is based on the importance of commodities in commerce.

Weighting method: Individual commodities are weighted by the approximate quantity marketed in 1926 in most cases. Where weights for that year were not deemed to be representative, conditions in other years were considered. In some instances an average of several representative years was taken. Duplication was avoided by making deductions, where possible, when the commodity is included in another form, as wheat and flour. Subgroup index numbers are again weighted by a figure which represents as far as possible the total value of all commodities that might be included in the subgroup. Finally, group index numbers are weighted in arriving at the index number for all commodities, the weights being the total estimated importance in exchange of all commodities that can be classified in that particular group. Group weights are as follows:

	Weight
I. Vegetable products	30
II. Animals and their products	16
III. Fibers, textiles, and textile products	9
IV. Wood, wood products, and paper	15
V. Iron and its products	12
VI. Nonferrous metals and their products	6
VII. Nonmetallic minerals and their products	9
VIII. Chemicals and allied products	3
Total	100

The index numbers are constructed according to the aggregative method.

Source of current information: Prices and Price Indexes, Department of Trade and Commerce, Dominion Bureau of Statistics, Ottawa.

China

Compiling agency: National Tariff Commission.
Number of commodities: 147.
Base period: February, 1913.
Groups:

Item	Number of commodities	Importance in base period	Item	Number of commodities	Importance in base period
		Per cent			*Per cent*
Cereals	14	9.5	Building materials	14	9.5
Other foods	26	17.7	Industrial materials	21	14.3
Textiles	27	18.4	Miscellaneous	22	14.9
Metals	11	7.5			
Fuel and light	12	8.2	Total	147	100.0

Group values: The relative importance of the groups in the base period is shown above. No group values are published in connection with the current index numbers.

Method of selecting items: The commodities were selected with reference to their importance in wholesale trade.

Weighting method: No weights are employed, the simple arithmetic average being used both for the groups and for the general index numbers.

Source of current information: Publications of National Tariff Commission.

Czechoslovakia

Compiling agency: Central Bureau of Statistics.
Base period: July, 1914.
Number of commodities: 69.
Groups:

	Number of items
I. Foodstuffs and fodder:	
a. Vegetable foods	12
b. Animal foods	9
c. Other foods	13
Total, foods	34
d. Feed	2
Total, foods and feed	36
II. Raw materials and manufactured products:	
a. Minerals	10
b. Textiles	7
c. Other products	16
Total	33
Total commodities	69

Group values: None are shown in connection with the group index numbers.

Method of selecting items: It is stated that chambers of commerce, agricultural societies, wholesale houses, and manufacturers were consulted in making up the list of commodities for inclusion in the index.

Weighting method: Direct weighting is not attempted, owing to lack of adequate data for production and consumption. Rough weighting was arrived at by taking certain products at different stages of manufacture. The general index number is the arithmetic average of individual indexes.

Source of current information: Rapports sur les Prix, Office de Statistique.

Denmark

Compiling agency: Statistical Department.
Number of commodities: 118.
Base period: Year 1913.
Groups:

I. Vegetable foodstuffs—Wheat, rye, wheat flour (2 quotations), rye flour (3 quotations), barley, oatmeal (2 quotations), potatoes, sugar, coffee, vegetable oils (2 quotations), cocoa, beer—total, 17 quotations. Weight, 523.
II. Animal foodstuffs—Beef, veal, pork, butter, milk, cheese, eggs—total, 7 quotations. Weight, 345.
III. Feed—Barley (2 quotations), oats, corn (2 quotations), oil cake (6 quotations), bran (2 quotations)—total, 13 quotations. Weight, 333.
IV. Fertilizers—5 quotations. Weight, 60.

V. Fuel and oils—Coal (2 quotations), coke, briquettes, petroleum (2 quotations), gasoline, lubricating oil—total, 8 quotations. Weight, 237.
VI. Metals and metal products—Pig iron (2 quotations), iron and steel semimanufactures (4 quotations), iron and steel manufactures (8 quotations), zinc, tin, lead—total, 17 quotations. Weight, 139.
VII. Cement, lime, brick, glass—Lime, brick (3 quotations), roofing tile, cement, window glass—total, 7 quotations. Weight, 46.
VIII. Wood and paper—Lumber (3 quotations), doors and sash (2 quotations), newsprint paper, writing paper (2 quotations), wrapping paper (2 quotations), cardboard—total, 11 quotations. Weight, 124.
IX. Textiles and clothing—Wool, cotton, woolen yarn, cotton yarn, woolen cloth (2 quotations), cotton cloth (2 quotations), clothing (6 quotations)—total, 14 quotations. Weight, 299.
X. Hides, leather, and shoes—Cowhides, calfskins, sheep pelts, sole leather, upper leather, men's shoes, women's shoes—total, 7 quotations. Weight, 83.
XI. Chemicals, etc.—Oils (2 quotations), tallow, salt, chemicals (2 quotations), motor vehicle tops (3 quotations), soap, matches, bottles—total, 12 quotations. Weight, 61.

Method of selecting items: Articles in the index were selected on the basis of their importance in wholesale trade and their relationship to the commodities for which retail prices are published.

Weighting method: The weight assigned to each group is based on the combined sales value of the commodities in it during the year previous to January, 1925. The weight is applied to the relative for the current month as compared with the preceding month and the result related back to 1913 as the base.

Source of current information: Statistiske Efterretninger.

Finland

Compiling agency: Central Statistical Office.
Number of commodities: 120.
Base period: Year 1926.
Groups:

I. Agricultural products—Meats (4 quotations), dairy products (4 quotations), eggs, fish, potatoes, grain (3 quotations), feed (4 quotations), hides—total, 19 quotations.
II. Domestic industrial products—Machinery (5 quotations), metal products (4 quotations); cement, brick and glass (5 quotations), oils and rubber products (4 quotations), leather products (2 quotations), textile products (9 quotations), paper and pulp (6 quotations), lumber and wood products (7 quotations), food products (11 quotations), chemicals (2 quotations)—total, 55 quotations.
III. Imported goods in wholesale trade—Animal foodstuffs (2 quotations), grains and grain products (6 quotations), feed (4 quotations), fruit and colonial goods (4 quotations), spinning materials (3 quotations), textile products (5 quotations), hides and leather (2 quotations), machinery (2 quotations), metal products (5 quotations) coal, tar, and rubber products (2 quotations), oils (3 quotations), dyes (2 quotations), salt, fertilizers (3 quotations), chemicals—total, 46 quotations.

Group values: No group values are shown in connection with the index numbers.

Method of selecting items: The commodities included in the index were selected on the basis of their importance in wholesale trade.

Weighting method: No direct weighting is attempted. Indirect weighting is accomplished through judicious selection of commodities,

each subordinate group being represented by the number of commodities corresponding to its estimated importance in wholesale trade. All averages are arithmetical.

Source of current information: Tilastokatsauksia.

France

Old Series [3]

Compiling agency: General Statistical Bureau.
Number of commodities: 45.
Base period: 1901–1910, also July, 1914.
Groups:

	Number of price series
General index	45
Food products	20
Vegetable foods	8
Animal foods	8
Sugar, coffee, cocoa	4
Industrial materials	25
Minerals and metals	7
Textiles	6
Miscellaneous	12

Group values: No values are given in connection with the group index numbers but price relatives are shown for each of the 45 items.
Method of selecting items: Not stated.
Weighting method: No weights are employed, the group and general index numbers being simple arithmetic averages of price relatives.

New Series (since 1928)

Compiling agency: General Statistical Bureau.
Number of commodities: 126.
Base period: Year 1913.
Groups:

	Number of price series
General index	126
Farm and food products	39
Products of vegetable origin	24
Products of animal origin	15
Industrial products	87
Minerals and metals	17
Textiles	19
Hides and leather	14
Chemical products	25
Rubber	2
Paper	2
Lumber	2
Cement, brick, glass, etc	6

Group values: No values are given with the index numbers of the various groups, but index numbers are shown for a large list of individual articles.
Method of selecting items: Articles have been selected according to their importance in trade, and for which 1913 prices could be obtained.
Weighting method: The weights adopted are based on the estimated quantities of the articles produced in the base year 1913, to

[3] Still published currently.

which have been added the quantities imported and from which has been deducted the part that did not enter into commerce. The following weights, totaling 10,000, have been used as multipliers for the various index numbers of individual commodities:

Food products	4, 645
1. Vegetable origin	2, 900
Wheat	950
Oats	300
Rye	80
Barley	80
Buckwheat	30
Maize	60
Rice	25
Potatoes	230
Dried beans	25
Bran	80
Food pastes	25
Starch	10
Olive oil	10
Peanut oil	60
Oil cake	20
Malt	40
Hops	5
Wine	540
Sugar	200
Coffee	100
Cocoa	30
2. Animal origin	1, 745
Beef	400
Veal	150
Mutton	120
Pork	230
Imported lard	5
Margarine	10
Milk	350
Butter	230
Cheese	80
Eggs	120
Fish	50
Industrial products	5, 355
1. Minerals and metals	1, 425
French coal	230
Imported coal	170
Coke	80
Iron ore	80
Pig iron	230
Steel semimanufactured	70
Merchant steel	210
Structural steel	60
Steel sheets	100
Tinplate	10
Aluminum	15
Copper	90
Tin	20
Lead	25
Zinc	25
Nickel	10
Industrial products—Continued.	
2. Textiles	2, 325
Cotton	280
Cotton yarn	150
Cotton cloth	380
Wool	320
Wool yarn and cloth	500
Raw silk	140
Silk yarn and cloth	250
Flax	50
Linen yarn and cloth	130
Hemp	15
Hemp yarn and cloth	30
Jute	30
Jute yarn and cloth	50
3. Hides and leather	455
Cattle hides	110
Calf skins	40
Horsehides	5
Leather	300
4. Chemical products	460
Denatured alcohol	10
Sulphuric acid	30
Hydrochloric acid	5
Soda carbonate	10
Soda sulphate	5
Chloride of lime	5
Calcium carbonate	5
Turpentine	10
Sulphur	10
Copper sulphate	10
Soda nitrate	30
Sulphate of ammonia	10
Chlorate of potash	5
Superphosphate of lime	40
Slag	20
Benzol	5
Petroleum	60
Gasoline	40
Linseed oil	15
Rapeseed oil	10
Tallow	10
Stearine	10
Oleine	10
Glycerine	5
Soap	90
5. Rubber	50
6. Paper	150
7. Lumber	380
8. Cement, brick, glass	110
Lime	15
Cement	25
Plaster	10
Brick	40
Window glass	20

Source of current information: Bulletin de la Statistique Générale.

Germany

Compiling agency: Federal Statistical Bureau.
Number of commodities: 400 commodities, 800 price quotations.
Base period: Year 1913.
Groups:

Item	Number of—		Weight (per cent)
	Commodities	Quotations	
I. Agricultural products:			
1. Vegetable foods	15	25	11.7
2. Animals	4	14	10.2
3. Animal products	7	10	8.5
4. Feed	[1] 16	[1] 23	4.6
Total	40	70	35.0
5. II. Colonial products	10	15	3.0
III. Industrial raw materials and semimanufactured products:			
6. Coal	7	16	6.8
7. Iron	14	19	6.8
8. Metals	11	11	2.5
9. Textiles	12	17	6.3
10. Hides, leather	8	16	2.3
11. Chemicals	26	27	1.1
12. Artificial fertilizers	10	14	2.5
13. Industrial oils and fats	11	11	1.5
14. Rubber	1	2	0.8
15. Paper materials and paper	7	11	1.7
16. Building materials	[2] 16	[3] 27	5.7
Total	120	170	38.0
IV. Finished industrial goods:			
17 Producers' goods	125	285	10.3
18. Consumers' goods	105	260	13.7
Total	230	545	24.0
V. General index number	400	800	100.0

[1] Two of these are included also in group 1.
[2] Three of these are included also in groups 7 and 8.
[3] One of these is included also in groups 7 and 8.

Method of selecting items: Not stated.
Weighting method: The above weights are based on the relative importance of the articles in the national consumption during the periods 1908–1913 and 1925. The weights are applied to the price relatives of the individual articles. The general index number is obtained by taking a weighted arithmetic average of all articles.
Source of current information: Wirtschaft und Statistik.

India

Bombay

Compiling agency: Labor Office, Bombay.
Number of commodities: 44.
Base period: July, 1914.

Groups:

	Number of items
A. Foods:	
1. Cereals	7
2. Pulses	2
3. Sugar	3
4. Other foods	3
B. Nonfoods:	
5. Oil seeds	4
6. Raw cotton	5
7. Cotton manufactures	6
8. Other textiles	2
9. Hides and skins	3
10. Metals	5
11. Other raw and manufactured articles	4

Group values: No group values are shown in connection with the index numbers.

Method of selecting items: The items selected for inclusion in the index numbers represent important commodities entering into wholesale trade.

Weighting method: The index numbers are not weighted.

Source of current information: Bombay Labor Gazette.

Calcutta

Compiling agency: Department of Commercial Intelligence and Statistics.

Number of commodities: 72.

Base period: July, 1914.

Groups:

	Number of items
Food grains:	
Cereals	8
Pulses	6
Sugar	5
Tea	3
Other food articles	9
Oilseeds	3
Oil, mustard	2
Textiles:	
Jute, raw	3
Jute, manufactures	4
Cotton, raw	2
Cotton manufactures	7
Other textiles (wool and silk)	2
Hides and skins	3
Metals	6
Other raw and manufactured articles	8
Building materials (teakwood)	1
All commodities	72

Group values: No values are shown in connection with the group index numbers.

Method of selecting items: The method of selection is not specifically stated, but apparently is based on the relative importance of commodities in trade.

Weighting method: The index numbers are not weighted.

Source of current information: Indian Trade Journal.

Italy

Compiling agency: Prof. Riccardo Bachi (none by government).
Number of commodities: 138. Has varied in past.
Base period: Year 1913, also 1926.
Groups:

	Number of items
Vegetable foods	29
Animal foods	17
Chemical products	15
Textile materials	21
Minerals and metals	22
Building materials	9
Sundry vegetable products	8
Sundry industrial articles	17
Total	138

Also classified into—

	Number of items
Foods	46
Raw materials	37
Semiraw materials	37
Finished products	18
Total	138
Articles produced and consumed in Italy	95
Imported articles	49
Exported articles	33

Group values: None are shown in connection with the group index numbers, but prices of each of the 138 articles are given in a separate statement.
Method of selecting items: Not stated.
Weighting method: No weights are employed, the index numbers being geometric averages of individual price relatives.
Source of current information: Bollettino di Notizie Economiche.

Japan

Compiling agency: Bank of Japan, Tokio.
Number of commodities: 56.
Base period: October, 1900, also July, 1914.
Groups: No grouping of commodities is attempted, the individual articles being arranged as follows: Rice, barley, naked barley, wheat, soybeans, red or white beans, wheat flour, ammonium sulphate, fish fertilizer, oil cake, sugar, tea, salt, miso, soy, sake, dried bonito, eggs, beef, oil, cigarettes, raw silk, Habutaye silk, silk handkerchiefs, Kaiki silk, silk for linings, silk floss, cotton yarn, imitation nankeens, cotton shirtings, cotton, ramie and China grass, worsted yarns, mousseline, woolen cloth, indigo, timber, steel (bars and rods), nails, copper, lead, stone, brick, roofing tile, Portland cement, mattings, glass plates, kami (Japanese paper), paper, caustic soda, leather, matches, coal, kerosene oil, charcoal, fuel wood—total, 56 items.
Group values: None.
Method of selecting items: None stated.
Weighting method: The index numbers are unweighted, being the simple arithmetic averages of the relative prices of individual commodities.
Source of current information: Publications of the Bank of Japan.

Netherlands

Compiling agency: Central Bureau of Statistics.
Number of commodities: 48 commodities, 71 items.
Base period: 1901–1910, also year 1913.
Groups:

I. Vegetable foodstuffs—Wheat, rye, barley, oats, corn, rice, macaroni, grits, peas, sago, potatoes, sugar, coffee, tea, cocoa, pepper, alcohol, oleomargarine, hay—total, 19 items.
II. Animal foodstuffs—Butter, eggs, cheese, milk, beef, veal, mutton, pork—total, 8 items.
III. Chemical products—Hydrosulphide of ammonia—total, 1 item.
IV. Textiles—Cotton, hemp, flax—total, 3 items.
V. Metals—Silver, iron, tin—total, 3 items.
VI. Building materials—Lumber, brick—total, 2 items.
VII. Hides and leather—Horsehides, cattle hides, sole leather—total, 3 items.
VIII. Other articles—Newsprint paper, candles, linseed oil, kerosene oil, turpentine, rosin, salt, coal, coke—total, 9 items.

Group values: No values are shown in connection with the group index numbers.
Method of selecting items: No specific method is stated, but selection apparently was made from commodities entering largely into wholesale trade.
Weighting method: The index numbers are not weighted, the simple arithmetic averages of price relatives being used.
Source of current information: Maandschrift van het Centraal Bureau Voor de Statistiek.

New Zealand

Compiling agency: Census and Statistics Office.
Number of commodities: 177 (variable).
Base period: 1909–1913.
Groups:

Item	Number of items	Relative importance (percentage)
I. Foodstuffs, etc., of vegetable origin:		
a. Agricultural products	15	10.7
b. Fresh fruits and vegetables	5	2.1
c. Milled agricultural products	4	4.3
d. Other vegetable foodstuffs, etc	25	11.9
II. Textiles	17	12.7
III. Wood and wood products	16	5.5
IV. Animal products:		
a. Meats	5	11.0
b. Semimanufactured animal products (not food)	12	1.7
c. Leather	7	1.1
d. Foodstuffs of animal origin	7	5.1
V. Metals and their products	14	14.3
VI. Nonmetallic minerals and their products:		
a. Mineral oils	5	6.8
b. Coal	4	7.1
c. Other products	16	2.9
VII. Chemicals and manures	25	2.8
Total	177	100.0

Group values: No values are shown in connection with the group index numbers, but above percentages apply to groups in base period.

Method of selecting items: All of the more important commodities offered on the wholesale market are included in the index numbers. The prices are obtained from wholesale merchants and traders, also from official sources.

Weighting method: The prices of commodities are weighted according to the "aggregate expenditure" method. The weights allotted to the different items are based on the amount consumed, both in households and in industry. No attempt is made to avoid double counting in allotting weights.

Source of current information: Monthly Abstract of Statistics.

Norway

Compiling agency: Central Bureau of Statistics.

Number of commodities: 95 commodities, 174 price quotations.

Base period: Year 1913.

Groups:

I. Vegetable foodstuffs—Grain products (4 commodities), potatoes, coffee, sugar (2 commodities), cocoa—total, 9 commodities, 14 price quotations.

II. Animal foodstuffs—Meats (5 commodities), lard, butter, margarine, milk, eggs, cheese (3 commodities), fish (4 commodities)—total, 17 commodities, 28 price quotations.

III. Feed and fertilizers—Grains (2 commodities), malt, hay, meal cake (3 commodities), fertilizers (3 quotations)—total, 10 commodities, 12 price quotations.

IV. Fuel and oils—Coal (3 commodities), wood (3 commodities), oil—total, 7 commodities, 16 price quotations.

V. Iron and other metals—Pig iron, iron products (5 commodities), wire (2 commodities), other metals (3 commodities)—total, 11 commodities, 16 price quotations.

VI. Brick, cement, and glass—Brick, tile, cement, glass—total, 4 commodities, 5 price quotations.

VII. Lumber—Rough (3 commodities), dressed (3 commodities)—total, 6 commodities, 19 price quotations.

VIII. Pulp and paper—Pulp (3 commodities), paper (5 commodities)—total, 8 commodities, 8 price quotations.

IX. Textiles—Wool, yarns (5 commodities), woolen cloth, cotton cloth, woolen knit goods, cotton knit goods, lace—total, 11 commodities, 34 price quotations.

X. Hides and leather—Hides, leather (2 commodities), shoes (3 commodities)—total, 6 commodities, 13 price quotations.

XI. Miscellaneous—Linseed oil, fish oil, soap, zinc white, salt, matches—total, 6 commodities, 9 price quotations.

Group values: Basic values in 1913 for the several groups are as follows:

	Millions of crowns
I. Vegetable foodstuffs	102. 6
II. Animal foodstuffs	212. 8
III. Feed and fertilizers	43. 2
IV. Fuel and oils	91. 1
V. Iron and other metals	36. 3
VI. Brick, cement, and glass	11. 1
VII. Lumber	34. 0
VIII. Pulp and paper	15. 2
IX. Textiles	113. 7
X. Hides and leather	45. 4
XI. Miscellaneous	14. 8
Total	720. 2

Method of selecting items: Selection was made from the principal commodities produced in the country for domestic consumption or imported for the wholesale trade, or those passing from producers to local exporters.

Weighting method: The physical quantities of commodities entering into wholesale trade in 1913 were multiplied by the prices for that year to produce the base. For other years, the prices for the year were multiplied by the 1913 quantities, the results added, and their sum divided by the corresponding sum for 1913. This produces an "aggregative" index number.

Source of current information: Statistiske Meddelelser.

South Africa

Compiling agency: Office of Census and Statistics.
Number of commodities: 188.
Base period: Year 1910.
Groups:

	Number of items
I. Metals	18
II. Jute, leather, hides, etc	20
III. Grains, meals, etc	23
IV. Dairy products	6
V. Groceries	37
VI. Meats	5
VII. Building materials	28
VIII. Chemicals	14
IX. Fuel and light	7
X. Textile products	17
XI. Miscellaneous	13

Group values: No values are shown in connection with the group index numbers, but prices of the commodities are shown in separate tables.

Method of selecting items: In the selection of articles due consideration was given to their relative importance in the economy of the country. Only staple commodities were included.

Weighting method: In computing the index numbers for the several groups of commodities the average prices of the individual articles are weighted in proportion to the quantities consumed in the Union in 1922 to 1924. In the great majority of cases the estimates of consumption are based on the quantities given in the annual statement of imports and exports and in the report of the census of manufactures.

Source of current information: Monthly Bulletin of Union Statistics.

Spain

Compiling agency: Department of Labor.
Number of commodities: 74.
Base period: Year 1913.
Groups:

	Number of items
A. Foods:	
1. Animal foodstuffs	11
2. Vegetable foodstuffs	16
3. Beverages, etc	9

B. Industrial products:	Number of items
4. Fuel, gas, and electricity	8
5. Textiles and leather	6
6. Metals	8
7. Building materials	8
8. Chemicals, etc	8
Total	74

Group values: No values are shown in connection with the group index numbers, but prices of each of the 74 commodities are given in separate tables, together with price relatives of individual commodities and aggregates for groups of commodities.

Method of selecting items: The articles included in the index were selected on a basis of their importance in consumption.

Weighting method: The index number is not weighted, the group and general index numbers being arithmetic averages of the individual price relatives.

Source of current information: Boletin de Estadistica.

Sweden

Compiling agency: Royal Board of Trade.
Number of commodities: 160.
Base period: Year 1913.
Groups:

Item	Number of commodities	Weight
I. Vegetable foodstuffs	14	483
II. Animal foodstuffs	20	235
III. Feeds	5	88
IV. Fertilizers	5	44
V. Fuel and oils	13	171
VI. Metals and metal products	20	115
VII. Brick, cement, tile, and glass	12	37
VIII. Lumber	6	78
IX. Pulp and paper	9	41
X. Textiles	28	302
XI. Hides and leather	12	13
XII. Rubber products	4	10
XIII. Chemicals	12	44

Group values: No values are shown in connection with the group index numbers but their relative importance in the base year is shown above.

Method of selecting items: All commodities with sales of 5,000,000 crowns or more in 1913 were included, but in addition a few with sales values as low as 1,000,000 crowns were also taken in order to give proper influence to the several groups.

Weighting method: Fixed weights were computed from the total sales values of commodities in 1913, due consideration being given to the difference in turnover for different qualities and markets. Price relatives of individual commodities are computed each month with the price for the corresponding month in 1913 as the base. These price relatives are then combined into weighted arithmetical averages for groups and for all commodities.

Source of current information: Kommersiella Meddelanden.

Switzerland

Compiling agency: Federal Office of Industry, Arts and Trades, and Labor.

Number of commodities: 118.

Base period: July, 1914; also 1926–27.

Groups:

Item	Number of items	Weight
		Per cent
I. Animal foodstuffs	13	39.3
II. Vegetable foodstuffs	16	12.6
III. Foodstuffs entering into other products	7	3.5
IV. Building materials	11	5.9
V. Metals	13	4.8
VI. Textiles, leather, rubber	21	16.9
VII. Fuel	9	6.8
VIII. Chemicals	11	2.6
IX. Feed	9	6.4
X. Fertilizers	8	1.2
Total	118	100.0

Group values: No values are shown in connection with the group index numbers, but above weights show influence assigned to each group.

Method of selecting items: No method is specifically stated. Items are mostly raw materials, the wholesale market for finished products being rather limited.

Weighting method: The group indexes and the general index number are weighted arithmetic averages of individual price relatives.

Source of current information: La Vie Economique, or Wirtschaftliche und Sozialstatistische Mitteilungen.

United Kingdom

Compiling agency: Board of Trade.

Number of commodities: 150.

Base period: Year 1913, also year 1924.

Groups:

I. Cereals—Wheat (3 quotations), flour (3 quotations), bread, barley (5 quotations), oats (2 quotations), maize, rice, tapioca—total, 17 price quotations.

II. Meat and fish—Beef (6 quotations), mutton (3 quotations), pork (5 quotations), poultry (2 quotations), fish—total, 17 price quotations.

III. Other foods—Milk, butter (4 quotations), cheese (2 quotations), fruits and vegetables (5 quotations), sugar (2 quotations), tea, coffee, cocoa, tobacco (2 quotations)—total, 19 price quotations.

IV. Iron and steel—Pig iron (5 quotations), wrought iron (3 quotations), steel (4 quotations), finished steel products (12 quotations)—total, 24 price quotations.

V. Coal—10 price quotations.

VI. Other minerals—Petroleum (2 quotations), copper (4 quotations), lead, nickel, tin, zinc—total, 10 price quotations.

VII. Cotton—Raw cotton (2 quotations), yarns (7 quotations), cloths (7 quotations)—total, 16 price quotations.

VIII. Wool—Raw wool (4 quotations), yarns (5 quotations)—total, 9 price quotations.

IX. Other textiles—Linen yarns (2 quotations), raw silk (2 quotations), jute, hemp—total, 6 price quotations.

X. Miscellaneous—Chemicals (5 quotations), tallow, oil, paper (2 quotations), leather (4 quotations), rubber, timber (4 quotations), glass bricks, stone (2 quotations)—total, 22 price quotations.

Group values: No values are shown in connection with the group index numbers.

Method of selecting items: No specific method is stated. The articles appear to have been selected on the basis of their importance in production and consumption in the United Kingdom.

Weighting method: None employed as such. It is explained that "instead of multiplying the price percentages by suitable factors the number of separate prices used will be increased, so that articles of special importance, such as wheat, coal, iron, and cotton, will be represented by several quotations." Group and general index numbers are obtained by taking the geometric average of individual price relatives.

Source of current information: Board of Trade Journal.

COLLECTION OF WAGE CLAIMS

Efforts of State Labor Offices to Enforce Payment of Wages

THE machinery of justice in this country is still far from adequate for collecting wage claims for workers too poor to pay for counsel. This fact is clearly brought out through an inquiry just made by the United States Bureau of Labor Statistics into the collection of such claims by State labor offices. The reports of two previous surveys made by this bureau on the same subject were published, respectively, in the March, 1921, and June, 1927,[1] issues of the Labor Review. The results of the third and latest investigation may be briefly summarized as follows:

1. Failure to pay wages when due continues to be a serious and widespread evil in the United States. Thus in 1929 [2] in 14 States [3] for which fairly complete reports were obtained, wage claims settled only after the intervention of State labor officials numbered over 26,690, representing an aggregate collection of more than $1,352,000. While some of the these cases, of course, arose from misunderstanding on the part of employees, there were, as in 1926, various instances of seemingly intentional fraud. Moreover, there are undoubtedly numerous legitimate claims that are never pressed.

2. Although the average amount of money collected per settled claim reported by these same 14 States was less than $51 for the year under review, the failure to pay wages when due, as pointed out in the preceding report, frequently means great hardship to the workers and their wives and children.

3. As found in the previous investigation, State labor offices are rendering valuable service in collecting wages for indigent workers or workers ignorant of their legal rights.

4. Since the inquiry of 1926 the wage-adjustment work has increased substantially in certain labor offices, the California labor office reporting the settlement of 17,966 claims in 1929 as compared with 16,121 in 1926, and the New York labor office 2,242 as against 1,005 in the earlier year.

5. While it is again shown that certain labor offices, notably California and Massachusetts, have effective legal support for the collection of small wage claims, a number of offices are greatly hampered by lack of adequate legislation for such work. Some labor offices, however, notwithstanding weak laws or lack of specific legal authority, are successful in adjusting such claims.

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[1] This report was submitted by the United States Commissioner of Labor Statistics to the 1927 convention of the Association of Governmental Labor Officials of the United States and Canada.

[2] Fiscal or calendar year; in 2 cases the year 1929–30.

[3] Arizona, Arkansas, California, Colorado, Kansas, Maine, Massachusetts, Nevada, New Jersey, New York, Oregon, Texas, Washington, and Wyoming.

Number and Amount of Wage Claims, 1920, 1926, and 1929

TABLES 1 and 2 bring together the statistics on wage collection by State labor offices which reported in such form as to permit of tabular presentation. The figures for 1920 and 1926 were secured in the two previous surveys referred to above.

TABLE 1.—TOTAL NUMBER OF WAGE CLAIMS SETTLED, 1920, 1926, AND 1929, REPORTED BY STATE LABOR OFFICES [1]

State labor office of—	1920		1926		1929 [2]	
	Number of claims		Number of claims		Number of claims	
	Submitted or handled	Settled	Submitted or handled	Settled	Submitted or handled	Settled
Arizona	[3]	[3]	[4] 236	[4] 110	642	276
Arkansas	[5]	[5]	297	146	404	208
California	7,603	5,362	27,813	16,121	28,419	17,966
Colorado	1,300	915	961	525	827	471
Kansas	[5]	[5]	[5]	[5]	55	23
Louisiana	[6] 1,872		[7] 1,200	[7] 900	[8]	[8]
Maine	[5]	[5]	[5]	15	6	6
Massachusetts	733	344	1,947	1,947	2,501	1,688
Michigan	[5]	[5]	[5]	[5]	3,499	[6]
Montana	[5]	[5]	27	2	[8]	[8]
Nebraska	117	68	[9]	[9]	[9]	[9]
Nevada	[10] 77	[10] 60	[11] 201	[11] 76	224	192
New Jersey	7	6	590	[12] 350	1,783	1,160
New York	251	221	1,796	1,005	2,860	2,242
Oklahoma	1,326	1,193	188	[13] 32	239	[5]
Oregon	[14] 1,440	[14] 572	[10] 1,049	[10] 436	1,466	488
Porto Rico	217	77	[15] 542	[15] 222	1,373	842
Texas	[5]	[5]	73	18	[5]	405
Utah	[5]	[5]	245	245	617	286
Washington	1,590	1,401	2,122	1,170	3,731	1,410
West Virginia	[5]	[5]	200	196	[5]	[5]
Wyoming	467	373	[5]	174	219	157

[1] The 1920 and 1926 statistics with the exception of the Porto Rican figures for 1926 are taken from the previous report of the United States Bureau of Labor Statistics, published in the Labor Review, June, 1927.

[2] Figures were reported for fiscal or calendar year 1929. Arkansas, Maine, and Porto Rico reported for fiscal year 1929–30 and Utah for fiscal year 1927–28.

[3] No Department of Labor in 1920.

[4] Nine months.

[5] Not reported.

[6] Average based on 4-year record. All their claims were referred to legal aid society.

[7] Approximate.

[8] No reply received to questionnaire.

[9] In 1926 all complaints except out-State cases referred to municipal judge; in 1929 claimaints were referred to public defender in Omaha and assistant city attorney in Lincoln. Out-State claimants advised to file suits.

[10] Average.

[11] 8 months.

[12] Paid-up cases.

[13] Not including cases handled by telephone.

[14] 10 months.

[15] Porto Rico. Departamento de Agricultura y Trabajo. Negociado del Trabajo. Undécimo informe anual 1927. San Juan, 1927, p. 49. (Figures for fiscal year 1925–26.)

TABLE 2.—AMOUNTS COLLECTED IN WAGE CLAIMS, 1920, 1926, AND 1929, AS REPORTED BY STATE LABOR OFFICES [1]

State labor office of—	1920		1926		1929 [2]	
	Amounts collected		Amounts collected		Amounts collected	
	Total	Average per claim reported settled	Total	Average per claim reported settled	Total	Average per claim reported settled
Arizona	([3])	([3])	[4] $1,866	$16.96	$14,096	$51.07
Arkansas	([5])	([5])	4,021	27.54	4,829	23.22
California	$206,389	$38.49	[6] 976,368	[6] 60.57	1,051,925	58.55
Colorado	33,642	36.77	13,896	26.47	10,821	22.97
Kansas	([5])	([5])	([5])	([5])	513	22.30
Louisiana	([7])	([7])	15,000	16.67	([8])	([8])
Maine	([5])	([5])	([5])	([5])	300	50.00
Massachusetts	5,749	16.71	28,705	14.74	54,629	32.36
Michigan	([5])	([5])	[9] 9,332	([5])	32,867	([5])
Montana	([5])	([5])	41	20.38	([8])	([8])
Nebraska	12,678	186.44	([10])	([10])	([11])	([11])
Nevada	[12] 7,500	125.00	[13] 12,784	168.21	11,746	61.18
New Jersey	[14] 90	[15] 15.00	10,863	[16] 31.04	24,252	20.91
New York	([5])	([5])	31,169	31.01	57,969	25.86
Oklahoma	24,850	20.83	[17] 3,120	97.49	[18] 10,490	([19])
Oregon	[20] 23,781	41.58	[12] 20,147	46.16	16,392	33.59
Porto Rico	1,254	16.29	[21] 12,052	[21] 22.24	14,459	17.17
Texas	([5])	([5])	([5])	([5])	32,257	79.65
Utah	([5])	([5])	12,377	50.52	13,206	46.17
Washington	87,873	67.72	73,584	62.89	67,290	47.72
West Virginia	([5])	([5])	4,000	20.41	([22])	([22])
Wyoming	15,204	40.76	8,594	49.39	5,748	36.61

[1] The 1920 and 1926 statistics, except for Porto Rico in 1926, are taken from the previous report of the United States Bureau of Labor Statistics on the same subject, published in the Labor Review, June, 1927.

[2] Figures were requested for fiscal year 1929—Arkansas, Maine, and Porto Rico reported for fiscal year 1929–30, and Utah for fiscal year 1927-28.

[3] No labor department in 1920.

[4] Nine months.

[5] Not reported.

[6] Includes also amounts collected in part payment of claims still pending.

[7] Cases involving less than $50 referred to legal aid society. According to records of preceding 4 years average number of cases referred in 1920 was 1,872, involving approximately $10,000.

[8] No reply received to questionnaire.

[9] Not including claims settled directly with the claimant.

[10] All complaints referred to municipal judge, except out-State cases which department handled by correspondence.

[11] Claimants residing in State referred to public defender in Omaha or assistant city attorney in Lincoln. Out-State claimants advised to file suit.

[12] Average.

[13] 8 months.

[14] Money involved.

[15] Based on money involved.

[16] Based on claims paid.

[17] Not including cases handled by telephone, which would increase amount substantially.

[18] Labor department instrumental in adjusting claims to this amount; money was not handled by labor office.

[19] Number settled not reported.

[20] 10 months.

[21] Porto Rico. Departamento de Agricultura y Trabajo. Negociado del Trabajo. Undécimo informe anual 1927. San Juan, 1927, p. 49. (Figures for fiscal year 1925–26.)

[22] No department handling wage claims.

Table 1 shows that in some of the States there was a very substantial increase in the number of claims handled and adjusted by labor offices in the calendar or fiscal year 1929, as compared with 1926. In California the number of claims submitted rose from 27,813 in 1926 to 28,419 in 1929, an increase of 606, while the number of claims settled was 16,121 in the former year and 17,966 in the latter, an increase of 1,845. The New York record for 1929 also shows marked expansion over 1926, the increase in the number of wage claims handled being 1,064 and in the number settled 1,237. The labor offices of Colorado, Massachusetts, and Wyoming, however, reported fewer cases settled in 1929 than in 1926. An analysis of the causes of increase or decline in wage-collection work in the individual States is beyond the scope of this article and would involve the consideration of numerous factors, including local industrial conditions and legislative changes.

It will be noted from Table 2 that the California labor office has collected by far the largest amount in wage claims—$1,051,925 in 1929, the amounts collected by the other offices ranging from $300 in Maine to $67,290 in Washington State.[3] The average amount collected per claim reported settled, according to the latest figures, ranged from $17.17 in Porto Rico and $20.91 in New Jersey to $79.65 in Texas, the average for 14 States being under $51.

In addition to the statistics from the labor offices included in the preceding tables, the following data were secured from the labor offices indicated: Wage claims are handled by the Connecticut Department of Labor, the Missouri Labor and Industrial Inspection Service, and the Wisconsin Industrial Commission. The Connecticut office gave no figures, the Missouri office reported 80 cases handled, but stated it was impossible to estimate the amount collected, while the Wisconsin office in certain cases writes the employer when the wage claims are too small to warrant legal action and there seems to be a deliberate intention to defraud the claimant, or in some instances refers cases to the legal aid society. The good offices of the Iowa Labor Bureau are occasionally used to adjust wage claims, but as the State law gives no discretionary power to the labor commissioner with reference to such cases, no settlements are claimed to have been made by that bureau. While the Industrial Commission of Minnesota from time to time receives communications from persons requesting the adjustment of wage claims, that office takes the position that matters of this kind are entirely outside the jurisdiction of the State department of labor and industry. The Ohio Department of Industrial Relations reported two complaints about wages referred to that office in a period of 18 months, which were in turn referred to the public defender at Columbus.

The replies from the labor offices of the following States indicate that no wage claims were handled by them in the fiscal or calendar year 1929: Florida, Illinois, Indiana, Kentucky, Maryland, Mississippi, New Hampshire, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, South Dakota, Tennessee, and West Virginia.

[3] According to the California Department of Industrial Relations, its wage-collection scheme is attracting international attention. Visitors in search of information have come from Ceylon, China, Germany Japan, Mexico, and Poland. (The Garment Worker, New York, Aug. 1, 1930, p. 5.)

While no response was received from the Louisiana Bureau of Labor and Industrial Statistics and the Philippine Bureau of Labor, the biennial report of the former office for 1929–30 (pp. 3 and 8) states that thousands of wage claims are received annually, some being adjusted by it and others being referred to some attorney with the request that he render assistance to the plaintiffs. In 1928 the Philippine office collected about $11,450 in connection with the adjustment of claims and complaints, but certain of these cases involved matters other than wages.[4]

The Delaware, Georgia, and Montana labor offices also failed to reply to the questionnaire sent out in the recent inquiry. The last-mentioned office was doing some wage-collection work in 1926, as noted in the tabulation for that year. The latest published report at hand (for the fiscal year 1928) of the Georgia commissioner of commerce and labor includes no record of activities along the line under review. The duties of the Labor Commission of Delaware have to do mainly with the protection of woman and child workers.[5]

No questionnaire was sent to Alabama, Alaska, Hawaii, Idaho, or New Mexico, as the character or status of their present State offices indicate that they were not engaged in the special activity covered in this inquiry.

Laws under which Labor Offices Handle Wage Claims

The Arizona Industrial Commission in handling wage claims has recourse to section 4877 of the Revised Code of Arizona, 1928 (p. 1103), providing that "whenever an employee quits the service or is discharged therefrom he shall be paid whatever wages are due him in lawful money of the United States or by check of even date. * * * Any person violating this section shall be guilty of a misdemeanor."

The Arkansas commissioner of labor and statistics reports that Act No. 380 of the Acts of 1923 provides that in the case of a wage claim for less than $200, verified and filed with that official, when the claimant is not worth $25 over and above his wearing apparel and household goods, the commissioner may institute court action without giving bond for costs.

The chief of the *California Division of Labor Statistics and Law Enforcement* and his duly authorized representatives are empowered under section 7 of the State wage collection law [6] to take assignments of wage claims and prosecute actions for the collection of wages and other demands of persons who are financially unable to employ counsel in cases in which, in the judgment of the designated labor official, the claims for wages are valid and enforceable in the courts; to issue subpœnas, to compel the production of the papers or records; and to administer oaths and to examine witnesses under oaths, as well as to take depositions and affidavits for the purpose of carrying out the provisions of this act.

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[4] Labor Review, June, 1930, p. 75.

[5] United States Department of Labor. Bureau of Labor Statistics. Bulletin No. 370: Labor laws of the United States, with decisions of courts relating thereto. Washington, 1925, p. 273.

[6] California. Stats. 1883, ch. 21, p. 27, as amended by Acts of 1919, ch. 228, p. 330; Acts of 1923, ch. 257, p. 511; and Acts of 1929, ch. 231.

According to the *Colorado Bureau of Labor Statistics*, that office has no direct legal power to handle wage claims. It has, however, an appropriation of $100 per month to pay a wage-claim clerk.

The Department of Labor and Factory Inspection of Connecticut utilizes the provisions of the weekly pay day law (Acts of 1919, ch. 216) in connection with wage claims.

The *labor commissioner of Iowa* reports that there is no State law giving him discretionary power with reference to wage claims, and that, although the good offices of "the department are sometimes used to settle such, no settlements are claimed to have been made here."

The *Kansas commissioner of labor and industry* while not authorized by law to collect wages, writes to employers of wage claimants, asking that payment be made, and states that these efforts are fairly successful considering that it can go no further toward making collections.

The Kentucky Department of Agriculture, Labor, and Statistics states that no wage claims were submitted to it in 1929 but cites the following legal authorization for handling such claims: State Constitution, section 244; Kentucky Stats., sections 1350; 576a–1 and 2; 4758a–1, 2, 3, 4, and 4758b–1.[7]

The Maine Department of Labor and Industry has recourse to the weekly payment of wages law [8] in its wage-collection work, using such law "as a club, taking chances of course, in doing so."

The Massachusetts Department of Labor and Industries may make complaint against any person for a violation of section 148 of the weekly wage payment law. Such complaint is to be made within three months after the date of the violation and "on the trial no defense for failure to pay as required, other than the attachment of such wages by trustee process or a valid assignment thereof or a valid set-off against the same, or the absence of the employee from his regular place at the time of payment, or an actual tender to such employee at the time of payment of the wages so earned by him, shall be valid." [9]

Under the Missouri statutes, the *labor and industrial inspection department* of that State is not authorized to collect wage claims but has often helped through diplomacy to do so.

The Nevada labor commissioner is authorized (Acts of 1915, ch. 203, sec. 4, as amended by Acts of 1921, ch. 138) "to take assignment of wage claims and prosecute actions for collections of wages and other demands of persons who are financially unable to employ a counsel in cases in which, in the judgment of the commissioner, the claims for wages are valid and enforceable in the courts." When cases are not settled, assignments are taken and referred to the district attorney for prosecution.

The New Jersey Department of Labor uses as authority for its activities on behalf of wage complainants the act providing for the payment of wages every two weeks (Pub. Laws, 1899, ch. 38, as amended by Acts of 1904, ch. 195, Acts of 1928, ch. 150, and Acts of 1929, ch. 235).

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[7] See Kentucky Labor Bulletin No. 32, pp. 80–84.
[8] Maine Rev. Stats. of 1916, ch. 49, sec. 34.
[9] Massachusetts. Department of Labor and Industries. Division of Industrial Safety. Labor Law Bulletin No. 9. Boston, p. 29.

The Department of Labor of New York settles wage claims under section 211 of the labor law (Consol. Laws, 1909, art. 7), which provides that "the commissioner shall cooperate with any employee in the enforcement of a just claim against his employer and for his protection against frauds and other improper practices on the part of any person, public or private."

The Department of Labor of Oklahoma acts to bring about the settlement of wage claims but does not handle any of the money, as the State has no legal authorization to enforce wage payments.[10]

The Oregon Bureau of Labor reports that there is no law giving it authority to collect wages and that it is simply doing what it can to be helpful to the workers. Of the 1,466 claims, 978, amounting to $39,287, were unadjusted.

The Department of Agriculture and Labor of Porto Rico quotes the following provision as authority for its wage collection work:

> The wage protection and claim bureau, as created by law, shall consist of the following personnel:
>
> One claim agent who shall be a competent attorney-at-law of integrity, who shall receive, consider, and decide all complaints filed by workmen and employees against employers negligent in the payment of their wages or salaries, or who have refused to make such payments. He shall take action on such complaints and claims and shall institute civil or criminal proceedings against such employers as the case may be, where such procedure is necessary, and he shall interpret and supervise wage or metayer labor contracts.

The commissioner of labor statistics of Texas is charged with the duty of enforcing the semimonthly pay day law applicable to cases in which 10 or more persons are employed and of instituting prosecutions in connection therewith. "Every person, partnership or corporation, willfully failing or refusing to pay the wages of any employee at the time and in the manner provided in this statute shall forfeit to the State of Texas the sum of $50 for each and every such failure, and suits for penalties accruing under this act shall be brought in any court having jurisdiction of the amount in the county in which the employee should have been paid or where employed."[11] Many small claims, however, are settled without recourse to the law, as a matter of tacit obligation.

The industrial commissioner of Utah is authorized to enforce the provisions of chapter 71 of the Acts of 1919, relating to the regulation of the payment of wages. Section 3687 of the Compiled Laws of 1917 provides for a small attorney fee.

The Vermont commissioner of industries cites chapter 244 of the General Laws of that State as the only statutory provision relating to the payment of wages in Vermont and adds that complaints under this chapter rarely reach his office.

The Department of Labor and Industries of Washington adjusts wage complaints under a law stipulating that an employee must be paid forthwith when he ceases work either by discharge or voluntary withdrawal,[12] but as there is no penalty clause, the provision is "practically unenforceable."

The Wisconsin Industrial Commission states that it has no specific power to take any action relative to adult wage claims unless they

[10] Oklahoma. Department of Labor Bulletin No. 10–A. Annual report for the calendar year 1929. Oklahoma City [1930?], pp. 22, 23.
[11] Acts of 1915, ch. 25, sec. 3.
[12] Remington and Ballinger's Code, 1910, sec. 6560.

involve a violation of the minimum wage law, which affects minors, and the "oppressive wage" law, which affects adult women. The commission does, however, suggest to wage claimants that they secure the services of an attorney when the amounts involved are large enough to warrant legal action, and in cases involving smaller amounts the commission itself writes to the employer and sometimes refers complainants to the legal aid society.

The commissioner of labor and statistics of Wyoming collects wages but reports that he has no legal authority for so doing.

As shown above, some labor offices adjust wage claims when, according to their own reports, they are not specifically authorized to do such work.

The labor offices of the following States which reported no wage collections for the fiscal or calendar year stated that they had no legal authorization for such work: Florida, Indiana, Maryland, Minnesota, Mississippi, Nebraska, New Hampshire, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Tennessee, Virginia, and West Virginia.

All the States except Alabama, Delaware, Florida, Idaho, and Washington have some form of wage-payment legislation and certain of these acts have been found helpful by labor offices as a background for wage adjustment.

Procedure

In labor offices which do not at once refer wage claims to other agencies, the initial procedure in the handling of cases does not vary greatly from State to State. Claims are taken up by correspondence, telephone, personal calls, and conferences.

In California, if the employer disputes the claim, a joint hearing is set at which both the employer and claimant are present, the employer being allowed representation by counsel. If the employee can afford to hire counsel his wage claim may not be assigned to the labor commissioner, who is the chief of the division of labor statistics and law enforcement. When a wage claim is filed it is assigned to the labor commissioner for collection.

The Maine Department of Labor and Industry threatens prosecution unless the claims are settled.

The Michigan Department of Labor and Industry mails two form letters to the employer, and if no response is received, subpœnas him to the office for a hearing. When the matter can not be adjusted by such preliminary procedure the next steps differ somewhat from State to State.

In cases in which the Massachusetts office fails to bring about an adjustment recourse is had to court action.

When the employer does not comply with the request of the New York Department of Labor for a settlement within a brief specified period, a subpœna is issued ordering him to appear at a hearing to decide the matter of the nonpayment of wages. In the event that this subpœna is not obeyed a court summons is served on the employer, and the Labor Bureau of the Department of Law of the State of New York prosecutes the case in a magistrate's court or before a justice of the peace under section 1272 of the Penal Law relating to wages.

The New Jersey Department of Labor holds informal hearings, and every effort is made to adjust the case amicably. If such attempt fails and the case merits prosecution, complaint is made in court as the law provides.

The wage claims division of the Porto Rico Department of Agriculture and Labor in most cases cites the employer and wage claimant to appear at a hearing before the attorney in charge of the division. If no settlement can be effected and the employer refuses to pay the amount of wages that has been determined upon as due to the claimant, criminal or civil action is started.

When no response is received to its written demand for a settlement of a wage claim under section 3687, Compiled Laws of the State of 1917, the Industrial Commission of Utah allows a specified time for compliance under threat of legal action of some kind. If there is still no reply, the collection of the claim is turned over to an attorney for whose service the claimant must pay.

When the claim is too small to warrant legal action and there seems to be a deliberate intention to defraud the claimant, the Wisconsin Industrial Commission writes to the employer. When the amount involved is large enough to warrant legal action, the commission suggests that the claimant secure the services of an attorney. Sometimes indigent claimants are referred to the legal aid society.

When wage claims are filed with the Wyoming Department of Labor and Statistics, complainants are told quite frankly that the labor commissioner has no power to collect wages. They are advised, however, with respect to their rights under the law and urged to avail themselves without delay of its provisions.

Causes for Nonpayment of Wages

Among the outstanding causes for the nonpayment of wages which led to the presentation of claims at State labor offices, according to replies to the latest inquiry, are the following:

1. Lack of understanding as to rates of pay.
2. Personal disagreement between employers and employees, sometimes resulting in discharge or quitting the job.
3. Insufficient capital for business projects, financial reverses or insolvency.
4. Lack of principle on the part of employers.
5. Inadequate wage payment legislation.

It should be noted, however, that not all of these causes are cited by every labor office. The labor offices of Colorado, Kansas, Missouri, New York, Oregon, Texas, and Utah all cite as a cause lack of principle or responsibility on the part of employers.

In this connection the Oregon Bureau of Labor states that recalcitrant employers know that office has no authority to take assignments of claims and force collections and that claimants are unable to raise money to engage an attorney, while the Wyoming Department of Labor and Statistics reports many cases of seemingly intentional fraud. On the other hand, the Department of Labor and Industries of Washington states that responsible firms rarely attempt to defraud workers except in case of business failure.

Recommendations of Labor Offices

THE recommendations of various labor offices with reference to improvements in the matter of collecting wage claims are given in brief below; a considerable number of offices, however, made no statement on this subject.

The representative of the labor department of the Industrial Commission of Arizona is in favor of the enactment of a law which would not conflict with the constitution and would provide that the employer pay all costs, plus wages. "This should be mandatory upon the courts to execute."

A small claims court would be the best agency to handle disputes over wage payments in Colorado, the bureau of labor statistics of that State holds. At present none of the claims which the bureau is unable to settle is taken into courts, as the claimants have no funds to enter suit.

In the judgment of the commissioner of labor and industry of Kansas, it would be of great service to wage earners in that State if he were given authority by the legislature to collect wages.

While no reply was received from the Louisiana Department of Labor and Industrial Statistics, the fifteenth biennial report of that office, for 1929–30 (p. 4), states: "Because of the thousands of complaints that come to the department annually in connection with unpaid wages, the commissioner feels that he and his assistants should be authorized to force the payment of wages."

The Department of Labor and Industry of Michigan recommends that Act No. 62 of the Acts of 1925 of that State be amended to give the department more jurisdiction in the matter of collecting wages.

The labor commissioner of Nevada advocates that the present law should be amended to make it cover intent to defraud, for failure to pay wages when due.

The reply to the questionnaire sent the New York Department of Labor states that there is quicker action by that department in these cases than can be obtained through any other agency or through civil court proceedings. Moreover, the State assesses no costs against the complainant or respondent.

The Department of Labor of Oklahoma believes that a law providing for specified times of payment of wages, for the payment of wages at the termination of employment, and for frequency of payment, along the lines of the California act, would be a desirable arrangement.

The Oregon Bureau of Labor will recommend to the next legislature, as it did to the last, a bill providing more fully for the payment and collection of wages and for designated pay days; for the assignment of wages to the State labor commissioner, who is the enforcing officer under the bill, and for the giving of a bond to that Officer in certain instances, guaranteeing the payment of wages due for a given ensuing period. This proposed measure includes "penalties for violations, among them being the forfeiture of charters by domestic corporations and forfeiture of right to do business for foreign corporations." Funds for the enforcement of the act would be "derived from fines paid for violations of the law now provided for under existing statutes."

The wage claims division of the Porto Rico Department of Agriculture and Labor recommends that wages be legally declared preferred credits.

According to the Bureau of Labor Statistics of Texas, it would be desirable for the State to have a small claims court where worthy and deserving claims could be handled or prosecuted without cost to the claimant.

The wage collection division of the Utah Industrial Commission suggests that there should be in the various States, so far as is possible, uniformity in wage collection legislation "with real strong teeth in it" so that employees going from State to State may understand what to do when employers refuse to pay wages due.

The Washington Department of Labor and Industries is attempting to get a new law enacted to empower that office to hold hearings and, if necessary, sue on behalf of workers who can not afford an attorney.

The Industrial Commission of Wisconsin believes that "the only way in which wage claims can be handled satisfactorily is to work out a simple procedure whereby the parties can be brought in to confront each other, and the relative facts quickly and inexpensively. developed. The procedure developed would be comparable to that already existing under workmen's compensation."

The Wyoming Department of Labor and Statistics advocates the enforcement of the law providing for a jail sentence for intentional failure to pay wages.

Special Agencies for Handling Small Wage Claims

THE labor offices of the following States report a small claims court or small claims courts in such States: Arizona, California, Connecticut, Kansas (small debtors' courts), Maryland (people's court), Massachusetts, Minnesota (conciliation courts), Nevada, New Jersey, New York (municipal court and certain other special courts), Oregon, South Dakota, and Washington.

The latest available data on legal aid organization in the United States show that in 1929 there were 86 of these agencies, including public defenders, in 67 cities in 28 States and the District of Columbia.[13]

Conclusion

WHILE the findings of the investigation show that an increasing amount of valuable work is being done by various State labor offices in behalf of indigent wage claimants, the inquiry also discloses that in many States much more might be accomplished along this line under improved legislation. Indeed, this third survey of the United States Bureau of Labor Statistics on the collection of small wage claims emphasizes anew the pronouncement made several years ago by the late Chief Justice William H. Taft that "Something must be devised by which every one, however lowly and however poor, however unable by his own means to employ a lawyer and to pay court costs, shall be furnished the opportunity to set this fixed machinery of justice going." [14]

[13] Report of the standing committee on legal aid work to the American Bar Association, May 20, 1930. For detailed figures see p. 117 of this issue.

[14] United States Bureau of Labor Statistics Bul. No. 398: Growth of legal aid work in the United States. Washington, January, 1926, p. III.

It is pertinent to cite as a forward step toward the ideal outlined in the above statement the cooperation of the International Association of Governmental Officials in Industry with the National Association of Legal Aid Organizations.[15]

Cooperation of National Associations in Interest of Model Wage-Collection Legislation[16]

AT THE eleventh annual meeting of the Association of Governmental Labor Officials of the United States and Canada, at Chicago, in 1924 a motion was carried to appoint a committee to confer with the National Association of Legal Aid Organizations to strengthen the collecting of wage debts. At the next convention of the association in 1925 a report of progress was made by that committee and the delegates agreed to an appropriation to help defray the expenses of a committee charged with the drafting of model legislation for facilitating the enforcement of small wage claims. The American Bar Association and the International Association of Industrial Accidents Boards and Commissions also agreed to render financial assistance for the committee's work.

In 1927 Ethelbert Stewart, United States Commissioner of Labor Statistics, submitted to the convention of the International Association of Governmental Labor Officials the report for that association's committee on legal aid work. The report included the results of an inquiry made by the United States Bureau of Labor Statistics into the collection of small wage claims by State labor offices in 1926 and also a statement from Reginald Heber Smith, chairman of the committee on legal aid work of the American Bar Association, that a draft of a model statute for the enforcement of wage claims had been made by Prof. John M. Maguire of the Harvard Law School.

In the course of his report the United States Commissioner of Labor Statistics urged that each State form a direct contact and enter into a specific agreement with the nearest representative of the National Association of Legal Aid Organizations for such coordination of the work as is deemed best for that locality. "In the nature of things this is not a matter for the Association of Governmental Labor Officials of the United States and Canada[17] to do as such. It can only urge upon its membership the advisability of thus linking up with the National Association of Legal Aid Organizations. However, the association, as such, may well keep in touch with the general movement and advise its membership annually upon the general situation, the progress of the model law, and many other things that are of general interest."

The first draft of a model statute for the enforcement of wage claims was submitted by the standing committee on legal aid work of the American Bar Association at the 1927 meeting of that organization.

[15] Some details of this cooperation are given in the following article of this issue.

[16] Except where otherwisen oted, data are from proceedings of meetings of the Association of Governmental Officials in Industry of the United States and Canada, for the years 1924, 1925, 1927, and 1928 (U. S. Bureau of Labor Statistics Buls. Nos. 389, 411, 455, and 480); reports of annual meetings of the American Bar Association for 1928 and 1929; and Report of Standing Committee on Legal Aid Work to be presented at the meeting of the American Bar Association, Buffalo, N. Y., Aug. 31, Sept. 1, and 2, 1927.

[17] Name changed in 1928 to Association of Governmental Officials in Industry of the United States and Canada.

It was expected that a second draft would be presented to the 1929 convention of the association but no mention of this model law was made in the annual report of the association's standing committee on legal aid work in that year. It was stated, however, in that report that the committee had on hand a study concerning wage payment legislation which required some research. Under date of August 27, 1930, however, Reginald Heber Smith, chairman of this committee wrote the United States Commissioner of Labor Statistics as follows:

The wage payment law presented in 1927 was widely distributed and all comments on it were carefully considered. In our opinion that draft was far and away better than any alternative plans submitted to us. Consequently we have stood on that draft.

Bear in mind that this was not designed to be a uniform law. Differences among the States made that impossible. It is only a model or a starting point. It will give to any legislator in any State all the essential clauses and point out to him the places where local adaptation is necessary.

In view of the above recent indorsement, the following reproduction of several sections of the draft of the model law for the enforcement of wage claims, which was presented to the 1927 convention of the American Bar Association, should be of interest. In a preliminary statement to this draft it is pointed out that a vigorous administrative agency is essential to successful law enforcement and that a good wage law must show so many effective teeth that its threat will be ever present to all whom it is meant to curb.[18]

Wage claimants as a class pitifully lack the means for enduring even a moderate amount of delay. That law helps them most which forestalls wrongs meditated but yet undone, not confining its effect to the correction of wrongs already done. And since some cases of correction must be encountered and quickly dealt with, there is a double reason for giving the administrative agency more than one clear method of inflicting prompt painful pressure on defaulting employers. The agency should have a set of thumbscrews so assorted as to fit every unfairly grasping hand.

FIRST DRAFT OF A MODEL STATUTE FOR FACILITATING ENFORCEMENT OF WAGE CLAIMS [19]

* * * * * * *

SECTION 2. Any employer may designate regular pay days for employees or any class or group of employees. Pay days so designated shall occur not less often than_____ in each calendar month and at intervals of not more than _____ days. In the absence of such designation, regular pay days shall fall on Friday of each week. When any regular pay day falls on a holiday or a Sunday, it shall shift to the next preceding business day. Every employer shall post and keep posted at each regular place of business in a position or positions easily accessible to all employees one or more notices on forms supplied from time to time by the commissioner containing (1) a copy or summary of the provisions of this act (chapter, etc.), (2) a statement of the regular pay days, and (3) a statement of the place or places and the time or times for payment of employees.

SEC. 3. Every employer shall pay employees as follows:

(a) On demand after a discharge or decrease of compensation has become operative with respect to any employee such employer shall pay said employee in full to the time of discharge or decrease of compensation.

(b) On each regular pay day such employer shall pay in full each employee voluntarily leaving employment on or since the last preceding regular pay day.

(c) On each regular pay day such employer shall pay each other employee in full for services rendered to within _____ working-days of said pay day.

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[18] Report of standing committee on legal aid work presented at the meeting of the American Bar Association, Buffalo, N. Y., Aug. 31, Sept. 1 and 2, 1927.

[19] Alternative wordings are put in parentheses; tentative provisions, in brackets. Secs. 1 and 11, which are omitted, deal respectively with definition of terms and possible unconstitutionality of provisions. It is proposed that a final section provide for repealing previous legislation.

(d) If because of absence from the place of payment any employee is not paid on any regular pay day the sums then payable under this section, he shall be paid at any time thereafter on demand said sums, or he shall, if he so demands, be paid said sums by mail, less the actual cost of transmission.

(e) The mailing of compensation in the medium described by section 1, paragraph c, of this act (chapter, etc.) to an employee in time to reach his post-office address by usual course of mail on the proper regular pay day shall be due compliance with the requirements of this section.

None of the foregoing provisions shall make unlawful more frequent or earlier payment of any employee. Violation of any of the foregoing provisions of this section [shall give rise to a civil right of action on any resulting wage claim, and violation of any of said provisions] or of any provision of the last sentence of section 2 of this act (chapter, etc.) shall be a misdemeanor punishable on complaint of the employee affected or of the commissioner as hereinafter provided.

SEC. 4. Any employer may not less than _____ days after the death of any employee and before the filing of a petition (application, etc.) for letters testamentary or of administration in respect of the decedent's estate, make payment of decedent's compensation [if not in excess of the maximum amount of a wage claim as above defined] to the wife, children, father or mother, brother or sister of the decedent, giving preference in the foregoing order; or, if no such relatives survive, may apply such payment or so much thereof as may be necessary to paying creditors of the decedent in the order of preference prescribed for satisfaction of debts by executors and administrators. The making or application of payment in this manner shall be a discharge and release of the employer to the amount thus paid or applied.

SEC. 5. Any employee may sue his employer on a wage claim without giving security for payment of costs. In any such proceeding the court may allow the prevailing party, in addition to all ordinary costs, a reasonable sum not exceeding _____ dollars for expenses. No assignee of a wage claim shall be benefitted or affected by this section except as expressly provided by paragraph b of section 6.

SEC. 6. It shall be a (the) duty of the commissioner to enforce the provisions of this act (chapter, etc.), and to that end he shall have the following powers:

(a) He may investigate and attempt equitably to adjust controversies between employers and employees in respect of wage claims or alleged wage claims.

(b) He may take assignments of wage claims in trust for the assigning employees. All such assignments shall run to the commissioner and his successors in office. The commissioner may sue employers on wage claims thus assigned with the benefits and subject to the provisions of section 5. He may join in a single proceeding any number of wage claims against the same employer, but the court shall have discretionary power to order a severance or separate trials or hearings.

(c) He may make complaint in a criminal court for any violation of the provisions of section 3 or of the last sentence of section 2. Such complaint shall be made not later than _____ months after the violation complained of. The employer complained against shall, if found guilty, be liable to a fine of not less than _____ dollars nor more than _____ dollars. Judgment may be entered for such fine and costs and may be enforced by execution and otherwise in the same manner as if rendered in a civil proceeding [but payment may not be enforced by imprisonment]. [Any such judgment shall have the same preference as a judgment for taxes in favor of the State.]

(d) He may after entry of final judgment against an employer in any proceeding in pursuance of section 5 or the foregoing paragraphs of this section, require such employer to execute and deliver to him a bond conditioned upon the full performance for a period of one year from its date of the provisions of section 3 and the last sentence of section 2. Every such bond shall run to the commissioner and his successors in office, shall be for a sum not exceeding _____ the average aggregate compensation payable monthly by such employer to employees in the business with respect to which judgment was entered, and shall be executed by one or more sureties satisfactory to the commissioner [or approved in the same manner as bail in criminal proceedings]. In determining the maximum amount for such a bond, there shall be computed the monthly average of the aggregate compensation paid and payable for services rendered by employees in such business over the six months' period immediately preceding the commissioner's written notice or over the period during which said employer has been conducting said business, whichever period is shorter.

Before requiring such bond the commissioner shall give such employer not less than seven days' notice in writing to enable the employer to show cause why such bond should not be executed and delivered. Unless such bond is executed and delivered when duly required, any court shall on suit by the commissioner enjoin such employer from doing business in this State until the requirement is met, or shall make other, and may make further, orders appropriate to compel compliance with the requirement. In any legal proceeding respecting such bond, the employer shall have the burden of proving the amount thereof to be excessive.

The commissioner shall prosecute all legal proceedings [as a corporation sole] under his official title.

SEC. 7. Violation of any provision of section 3 or of the last sentence of section 2 by a corporation organized and existing under the laws of this State shall be sufficient cause for forfeiture of its charter, and such violation by a foreign corporation shall be sufficient cause for forfeiture of its right to do business in this State. At the request and upon the advice of the commissioner the attorney general may commence proper proceedings to enforce the forfeiture prescribed. Before commencing such proceedings the attorney general shall give the corporation affected not less than seven days' notice in writing to enable it to present reasons why forfeiture should not be enforced. In such proceedings a prior civil judgment against the defendant on a wage claim shall place upon the defendant the burden of disproving its liability to forfeiture and a prior judgment under complaint made in accordance with paragraph c of section 6 shall be conclusive evidence of such liability.

SEC. 8. The remedies provided in this act (chapter, etc.) shall be additional to and not in substitution for other remedies now or hereafter existing or provided, and may be enforced simultaneously or consecutively so far as not inconsistent with each other. No payment or tender after the filing of a criminal complaint or commencement of any proceeding by the commissioner or the attorney general shall affect the liability therein of an employer for expenses, or prevent such employer from being subject to fine or forfeiture, or to the giving of bond for the performance of the provisions of this act (chapter, etc.). So far as any civil proceeding hereunder is brought in [or appealed to] a court of limited jurisdiction, allowance to the prevailing party for expenses shall be taxed as additional costs, shall not oust such court of jurisdiction, and may be enforced despite the fact that the total judgment thus rendered exceeds the ordinary maximum jurisdictional amount.

SEC. 9. For the purpose of paying expenses and costs of the commissioner's proceedings under this act (chapter, etc.) there is hereby created a [trust] fund to be known as the contingent fund of the commissioner, and to be payable at any time or from time to time on order of the commissioner. This fund shall be self-sustaining. All sums collected by the commissioner for costs, expenses, and fines shall become part of this fund. A reasonable portion of the amount recovered on any assigned wage claim may also be added to the fund if the court in which judgment is entered so orders at the request of the commissioner. For the establishment of said contingent fund the sum of _____ dollars is hereby appropriated to be placed to the credit of said contingent fund as a temporary loan and paid out from time to time on order of the commissioner. This loan so far as availed of shall be repaid to the State treasury by applying any accumulations above _____ dollars in said fund on the _____ day of _____, 192__, and by applying subsequent accumulations annually thereafter until repayment without interest is completed.

SEC. 10. No employer may, by special contract or any other means, exempt himself from any provision of or liability or penalty imposed by this act (chapter, etc.) except so far as the commissioner in writing approves a special contract or other arrangement between an employer and one [or?] more of such employer's employees. The commissioner shall not give his approval unless he finds that such contract or arrangement will not prejudicially affect the interests of the public or of the employee or employees involved, and he may at any time retract such approval, first giving the employer not less than 30 days' notice in writing. None of the provisions of this act (chapter, etc.) shall [affect the right of any employer under lawful contract to retain part of the compensation of any employee for the purpose of affording such employee insurance, or hospital, sick, or other similar relief; nor shall any of said provisions] diminish or enlarge the right of any person to assert and enforce a lawful set-off or counterclaim or to attach, take, reach, or apply an employee's compensation on due legal process.

EMPLOYMENT CONDITIONS AND RELIEF

Preliminary Returns from the United States Unemployment Census of 1930

THE following is a reprint of a statement issued by the United States Census Bureau under date of August 23, 1930:

The Director of the Census to-day announced that according to preliminary returns covering the entire continental United States, the total number of persons usually working at a gainful occupation who were reported at the time of the census in April as without a job, able to work, and looking for a job, amounted to 2,508,151, or 2.0 per cent of the total population of the United States (122,698,190). The attached table gives the figures by States, showing the population of each State and the percentage of the population returned as out of a job, able to work, and looking for a job. Incidentally it may be noted that the percentage of the total population represented by this preliminary count of the jobless for the country as a whole agrees very closely with the percentage shown by the release made on June 26, which covered a little less than one-fourth of the population, thus substantiating the assumption then made, that the earlier release formed a representative sample. In fact, computed to the nearest tenth, the percentages are identical (2 per cent), and only when the computation is carried out to two or three decimal places (giving 2.044 per cent for the total and 1.987 per cent for the sample) does the slight increase in the final figure appear.

The percentages of unemployment shown in the table are based on the total population rather than on the number of gainful workers because the total population figures are now available and the gainful worker figures are not. Percentages based on the number of gainful workers will be made public as soon as the necessary information can be tabulated. Meanwhile it may be noted that the number of gainful workers is probably not far from 40 per cent of the total population of the United States. The percentage in 1920 was 39.4, varying as between States from 32 in North Dakota to 48.5 in Nevada.

The percentages of unemployment given for the different States range from 0.5 per cent of the total population in South Dakota and Mississippi to 3.2 per cent in Rhode Island and New Jersey, and 3.3 per cent in Michigan.

The group of persons out of a job, able to work, and looking for a job would undoubtedly constitute by far the major part of the total number of unemployed under any definition that might reasonably be adopted. For this reason, and because the returns for this group were in such shape that they could be readily and quickly counted, it has been made the basis for the preliminary announcements of the results of the unemployment census. Returns were made on the

unemployment schedule for several other classes of persons not at work on the day preceding the enumeration. Figures will be published later, as soon as the formal tabulation can be completed for the other classes, making in all seven classes, as follows:

Class A.—Persons out of a job, able to work, and looking for a job. (This is the group covered by the present announcement.)

Class B.—Persons having jobs but on lay-off without pay, excluding those sick or voluntarily idle.

Class C.—Persons out of a job and unable to work.

Class D.—Persons having jobs, but idle on account of sickness or disability.

Class E.—Persons out of a job and not looking for work.

Class F.—Persons having jobs but voluntarily idle, without pay.

Class G.—Persons having jobs and drawing pay, though not at work (on vacation, etc.).

Class B will be made up in part of persons who are working on part time or who are idle for relatively short periods for seasonal or other temporary reasons, though it will include also many persons who have been laid off from their jobs for relatively long periods, some of whom are in very much the same economic position as the jobless in class A. Class B will be particularly important in certain counties where coal mining is a prominent industry, since the coal miners tend to report that they still have a job, even though they have done no work for a fairly long period. Several of the other classes are composed mainly of persons who would not, even under the most elastic interpretation of the term, be considered unemployed. The schedule questions were made to include all persons usually working at a gainful occupation but not at work on the last regular working-day preceding the enumerator's call, however, in order to make sure that no persons actually unemployed should be omitted by reason of the enumerator's misunderstanding of a more restricted definition.

The tabulations of the unemployment returns will include a classification by sex, age, color, nativity, marital condition, and family relationship; they will also show the occupation and industry in which these persons usually work; the number of weeks each had been out of work; and the reasons given for being out of work or for losing the last job. It is believed that these classifications will contribute materially to a complete and satisfactory analysis of the unemployment situation.

NUMBER OF PERSONS OUT OF A JOB, ABLE TO WORK, AND LOOKING FOR A JOB, BY STATES

[The figures in the column headed "Persons out of a job, etc.," represent persons usually working at a gainful occupation who were returned on the unemployment schedule as out of a job, able to work, and looking for a job. Returns were also made for other classes of persons not at work on the day preceding the enumeration, such as those having a job but sick or temporarily laid off; data for these other classes will be given out later. All figures are preliminary and subject to correction]

State	Population 1930 (preliminary)	Persons out of a job, able to work, and looking for a job	Per cent of population
New England:			
Maine	800,056	13,244	1.7
New Hampshire	465,293	8,493	1.8
Vermont	359,092	5,419	1.5
Massachusetts	4,253,646	115,987	2.7
Rhode Island	687,232	22,193	3.2
Connecticut	1,604,711	32,192	2.0
Middle Atlantic:			
New York	12,619,503	364,617	2.9
New Jersey	4,028,027	127,615	3.2
Pennsylvania	9,640,802	211,877	2.2
East North Central:			
Ohio	6,639,837	168,277	2.5
Indiana	3,225,600	66,390	2.1
Illinois	7,607,684	236,926	3.1
Michigan	4,842,280	160,506	3.3
Wisconsin	2,930,282	49,780	1.7
West North Central:			
Minnesota	2,566,445	47,987	1.9
Iowa	2,467,900	22,633	0.9
Missouri	3,620,961	62,031	1.7
North Dakota	682,448	5,937	0.9
South Dakota	690,755	3,600	0.5
Nebraska	1,378,900	15,440	1.1
Kansas	1,879,946	22,236	1.2
South Atlantic:			
Delaware	238,380	2,741	1.1
Maryland	1,629,321	23,973	1.5
District of Columbia	486,869	8,870	1.8
Virginia	2,419,471	30,355	1.3
South Atlantic—Con.			
West Virginia	1,728,510	21,396	1.2
North Carolina	3,170,287	29,114	0.9
South Carolina	1,732,567	12,226	0.7
Georgia	2,902,443	27,406	0.9
Florida	1,466,625	33,887	2.3
East South Central:			
Kentucky	2,623,668	31,153	1.2
Tennessee	2,608,759	21,402	0.8
Alabama	2,645,297	21,400	0.8
Mississippi	2,007,979	10,758	0.5
West South Central:			
Arkansas	1,853,981	12,591	0.7
Louisiana	2,094,496	31,444	1.5
Oklahoma	2,391,777	42,392	1.8
Texas	5,821,272	79,552	1.4
Mountain:			
Montana	536,332	11,808	2.2
Idaho	445,837	6,367	1.4
Wyoming	224,597	4,245	1.9
Colorado	1,035,043	22,793	2.2
New Mexico	427,216	5,436	1.3
Arizona	435,833	7,232	1.7
Utah	502,582	9,886	2.0
Nevada	90,981	2,850	3.1
Pacific:			
Washington	1,561,967	36,089	2.3
Oregon	952,691	24,849	2.6
California	5,672,009	172,556	3.0
Total	122,698,190	2,508,151	2.0

Measures to Combat Unemployment in Certain European Countries

Czechoslovakia

THE Minister for Social Welfare recently invited a deputation from the central offices of all trade-union organizations in Czechoslovakia to discuss the present unemployment crisis and the measures for dealing with it.[1]

The representatives of the trade-unions complained of nonfulfillment of the 8-hour law, of dismissals even on State undertakings, and the slowness of public enterprises. They asked for a speeding up of work, State subsidies for all building enterprises, and an increase in the number of factory inspectors, together with more effective methods of dealing with employers who violate industrial laws. The labor union representatives also demanded local discussions between political authorities and local government bodies in all districts where unemployment is considerable, and they also asked governmental help as regards clothing and food for the families of the unemployed.

Summarizing the discussion, the Minister of Social Welfare stated that a general discussion of the whole economic crisis and the unem-

[1] Report by Mr. A. C. Ratshesky, U. S. Minister at Prague, July 22, 1930.

ployment problem would be instituted at a later date, but that meanwhile local discussions, as requested by the trade-unions, would take place. Public enterprises will be requested not to dismiss workers, and all public authorities will be urged to speed up their plans so as to create more work. Everything will be done to encourage building. The ministry will do its best to see that violations of industrial laws are stopped. The trade-unions are requested to present concrete proposals for the extension of Government relief in supplying clothing and food on a large scale.

The new unemployment law of June 5, 1930, was put into effect by a governmental decree on June 28, 1930. This law provides for certain measures against unemployment.[2] In the future, work undertaken by the State, the Provinces, districts, communes, or public corporations may be considered as emergency work for the unemployed and may be subsidized by the State. Such work will include the building of new roads, the reconstruction of old ones, reforestation, cultivation of waste lands, the cleaning of streets, public buildings, etc. In this work those persons especially are to be employed who are in receipt of trade-union and State unemployment benefits, and such persons are obliged to accept such employment unless there is a strike or lockout or their physical strength or their technical qualifications would be injured by such work. Acceptance of work is compulsory even if it involves going to another district, unless the support of the family would thereby be seriously threatened; transport expenses will be paid by the State.

A State grant of 10 crowns (30 cents) per man for eight hours of work per day will be given to building contractors who undertake emergency work, providing they submit all details of the proposed undertaking for the approval of the State (especially the number of unskilled workers to be employed) and providing favorable reports are received from the local public employment office and the local trade-union organization. Within a month after the granting of this State allowance the contractor must submit his pay roll to the Ministry of Social Welfare. At the close of the work the contractor must present a report to the Ministry of Social Welfare containing all details of the work accomplished, such as costs, number of workers employed, wages paid, State grants received, number of working days, etc.

Germany

Changes in Unemployment Insurance

On July 26, 1930, a presidential decree was issued making certain changes in the unemployment insurance system, especially in the financial matters, in Germany.[3] The chief object of the decree seems to be to insure the financial solvency of the insurance system. The decree, which came into effect on August 1, 1930, leaves the framework of the system practically unaffected. It raises the contribution rate from 3½ per cent to 4½ per cent of wages, paid in equal shares by the wage earner and his employer, with the exception of those establishments in which the unemployment risk appears to be above

[2] Report of Mr. A. C. Ratshesky, U. S. Minister at Prague, July 2, 1930.
[3] Germany. Reichsarbeitsministerium. Reichsarbeitsblatt, Aug. 5, 1930, pp. I, 150–152.

the average. In such establishments the employer's share is somewhat larger than that of the workers.

The longest "waiting time" (*Wartezeit*), 14 days, which was formerly applied only to young workers under 21 years of age if they were members of a family of another person, is extended by the decree to all insured unemployed persons without dependents. However, the "waiting time" for an unemployed worker with one to three dependents is 7 days, and with three or more dependents, 3 days. The conditions under which the unemployment benefit is payable are made considerably more rigid. For instance, the full rate of benefit is paid in the higher wage classes (VII–XI) only if the unemployed insured workers have made contributions for at least 52 weeks during the period of 18 months immediately preceding the date of registry of claim for benefit.[4]

Another provision of the decree requires that if the wife or husband of the unemployed person drawing benefit at the rate applicable to the higher-wage classes quoted is also receiving the standard benefit, in such cases the lower benefit of the two is to be reduced by one-half. Further, the benefit granted to unemployed married persons is to be decreased by the amount by which the income of the wife or husband exceeds 35 marks ($8.33) a week, unless there are two or more dependents in respect of whom benefit is payable. Under this provision unemployment benefit is not to be considered as income.

A worker under 17 years of age is granted unemployment benefit only in case he has no family or person whose legal duty it is to support him.

A person who has voluntarily left his work place or has been dismissed as a result of his own fault loses his right to unemployment benefit for six weeks.

There are a number of other minor changes of a financial character, designed like the above, to reduce expenditures and increase the income. It is expected that the economies in expenditure (estimated at about 100,000,000 marks ($23,800,000) a year) and the increase of revenue from the increase of contributions will reduce the deficit of the public employment service and unemployment insurance system for the fiscal year ending June 30, 1931, from about 447,000,000 marks ($116,386,000) to about 170,000,000 marks ($40,460,000), which must be met by other means.

Financing of Public Works

On August 3, 1930, a "German Stock Company for Public Works" (*Deutschen Gesellschaft für öffentliche Arbeiten, A.-G.*) was organized. Its main purpose is to finance public works for the unemployed workers in Germany through the money advanced by the Federal and Provincial Governments on shares and through domestic and foreign loans and made under certain guaranties.[5]

The company has a board of directors (*Vorstand*) appointed by the Federal Government, and an advisory council composed of representa-

[4] According to the German labor-union statistics there are about 60 per cent of such unemployed workers in higher wage classes who have not worked 52 weeks and therefore have not made 52 weekly contributions during the 18 months immediately preceding the claim. (Arbeit and Wirtschaft, Vienna, Aug. 15, 1930, p. 635.)

[5] Wirtschaftsdienst, Aug. 8, 1930, p. 1370; Gewerkschaftszeitung, Aug 9, 1930, p 503; and Arbeitgeber, Aug. 15, 1930, p. 454.

tives of various Government departments, and is in fact a Government enterprise organized along the lines of a private concern.

The company has started its activities with a working capital of 150,000,000 marks ($35,700,000) and a reserve capital of 105,000,000 marks ($24,990,000). It plans, during the next two or three years, to make foreign loans up to 200,000,000 marks ($47,600,000) through the Federal Credit Co. and German Building and Land Bank.

The public employment service will present the more important projects of public works to the company for approval and financing.

By this means the German Government apparently hopes to separate the financing of public works from the usual public budgets, free it from political influences, and place it on a more solid and permanent basis.

Speeding up Railway Work

The German Railway Co. has recently made an agreement with the Federal Government in regard to an issuance of treasury certificates up to the sum of 350,000,000 marks ($83,300,000) for the purpose of speeding up railway building and repair works, which, in turn, would help the general industrial activities in the country.[6]

The first two installments of certificates—150,000,000 marks ($35,700,000) and from 50,000,000 to 75,000,000 marks ($11,900,000 to $17,850,000)—will be offered and sold to the public on the open market, while the rest will be taken over by the banks. The certificates will be issued for five years' duration at 6 per cent.

The amount of material expected to be bought from the steel mills was 65,000 tons per month, but since March of this year the amount fell to 35,000 tons and very recently to 20,000 tons per month. It is hoped that the monthly quota will be raised to 50,000 tons. For the building material 80,000,000 marks ($19,040,000) will be spent. For track work, as far as it is still possible,20,000,000 marks ($4,760,000) will be spent this year. The sum of 80,000,000 marks ($19,040,000) which was intended to be spent for rolling stock in the first half of 1931, will be spent this year, in order that the producers may be ready with the stock when asked for. For the building of bridges and safety additions 12,000,000 marks ($2,856,000) will be spent this year. It is also planned to spend 50,000,000 marks ($11,900,000) for new buildings and 30,000,000 marks ($7,140,000) for railway workshops.

Italy

To RELIEVE the seasonal unemployment in Italy the sales tax was increased on July 1, 1930. Out of the proceeds of this increased tax the sum of 100,000,000 lire ($5,300,000) will be spent for public works in the coming winter.[7]

According to a report of the Minister of Agriculture, 1,122,000,000 lire ($59,466,000) will be expended on various land reclamation schemes, during the fiscal year of 1930–31. Of this sum, the State will provide 700,000,000 lire ($37,100,000).[8] The land improvements will consist of road making and road repairing, draining of marshy land, irrigating of arid lands, bridge and canal building, building new aqueducts for drinking water, etc. It is expected that this work will provide regular employment for about 90,000 workers. During

[6] Der Deutsche Eisenbabahner, Berlin, Aug. 17, 1930, p. 266.
[7] Carriere della Sera, June 29, 1930.
[8] Il Lavoro Fascista, July 13, 1930.

the summer months they will be released for regular agricultural work and will return after the harvest in October and November. The completion of the entire land reclamation scheme will require 12 years, engaging nearly 100,000 workers in winter, and will considerably change the character of farming regions in Italy.

On March 25, 1930, the Fascist Grand Council made a number of proposals for the relief of unemployment among agricultural workers in winter, and instructed the Agricultural Corporation to work out the proposals in detail and to give them effect.[9]

The corporation called upon the Ministry of Agriculture for a report on the employment opportunities in farming and on the number of workers available for agriculture, and upon the employers' and workers' associations for data as to the minimum labor staff which the agricultural undertakings might employ under collective agreements.

The Agricultural Corporation submitted its report on May 30 and 31, 1930. In this report the corporation recommends that farmers should provide steady employment throughout the year for as many farm hands as possible without prejudice to the technical and economic welfare of farming undertakings and points out the desirability of transforming agricultural day laborers into permanent settlers on reclaimed lands. The corporation came to the conclusion that the problem of agricultural employment could be solved through organization of migration within the country, and that the movement of agricultural workers to reclaimed areas should take place in large groups assisted by the Government. To this end the corporation proposed the creation of an inland migration commission, the immediate task of which would be the transfer of about 60,000 unemployed workers from the Po Valley to Southern Italy, and suggested that the transfer would be considerably facilitated by means of settlement bonuses granted to families taking up permanent residence in the reclaimed areas in Southern Italy.

Netherlands

It is planned by the city authorities of Amsterdam to establish a limited liability corporation with a view to reducing unemployment. The share capital is to be fixed at 100,000 florins ($40,200), in which the Province of North Holland is expected to participate to an amount of 30,000 florins ($12,060), while in addition to Amsterdam, several other industrial cities in this Province will be invited to become shareholders.[10]

The program of the corporation will be as follows: As soon as the corporation has a certain project in view which it considers to be adaptable to relief work, an estimate will be drawn up of the expenses necessary to carry out the work in question, such as purchase of land, wages, and other working expenses, as well as the receipts which may be expected, such as from sale of improved land and other income. The city authorities interested will then be asked whether, and to what extent, they are willing to place unemployed on the work planned, under the obligation of proportionately sharing in the necessary capital and in the estimated deficit. If the municipalities

[9] Industrial and Labor Information, Aug. 11, 1930, p. 212.
[10] Report of Mr. Charles L. Hoover, U. S. Consul General, Amsterdam, July 21, 1930.

consider the expenses of certain work too high and disproportionate to the number of unemployed to be set at work, they may decline to participate in the project.

It is intended that the Government as well as the Provinces shall continue to pay the usual subventions for relief work.

Between the first of December, 1929, and the end of April, 1930, the Government of the Netherlands advanced 4,915,097 florins ($1,975,869) to various municipalities and building associations under the authority of a law designed to encourage the building of dwelling houses for wage earners. The total number of dwellings to be constructed with the funds provided by these loans is 1,848, but in a number of cases the money is to be used for the purchase of land upon which buildings are to be erected, the amount to be employed for this purpose being 300,118 florins ($120,647). Of the 29 corporations borrowing money, 10 were municipalities and 19 were building associations. The largest single borrower was the city of Amsterdam, which obtained 2,402,100 florins ($965,644), which is to be used for the construction of 694 workmen's dwellings.

The rate of interest on these advances was 4¾ per cent in all cases, and the terms of repayment run from 30 to 75 years, the annuities running from 4.9 per cent to 6.3 per cent, although in certain cases the borrowers are permitted to make supplementary payments on the debt, Amsterdam, for example, being accorded the privilege of making a maximum annual supplementary payment of 25,261 florins ($10,155).

During the months of April, May, and June, 1930, there have been calls for the construction of 3,802 buildings of all kinds, although the majority of projected houses were of smaller and cheaper variety, which, as a rule, are to be built by companies or individuals for rental purposes. The simplest type of builders' hardware and sanitary appliances of the kind produced in the home country are to be used. Most dwellings of this group are constructed of brick and tile.

Unemployment in Greece, Second Quarter of 1930

THE Greek Government has worked out a project for the establishment of an office to be charged with the handling of labor problems, especially those connected with unemployment.

Although there are no official data available in regard to the extent of the existing unemployment in Greece, the Piraeus Labor Federation has compiled an estimate, according to which the total is said to be approximately 138,000 for the entire country in the second quarter of 1930. These unemployed persons are classified according to their trades and occupations as follows: [1]

	Number		Number
Building trades	25,000	Stevedores	8,500
Leather workers	10,000	Food workers	2,500
Tobacco workers	17,000	Clerks	20,000
Woodworkers	3,500	Others	6,600
Mechanical trades	3,400	Nonunion workers	12,000
Textile workers	11,000		
Marine workers	12,000	Total	138,000
Clothing industry	6,500		

[1] Report of United States consul, Edwin A. Plitt, at Athens, July 15, 1930.

UNEMPLOYMENT INSURANCE

Unemployment Insurance in Foreign Countries

AN ARTICLE describing very briefly the unemployment insurance systems in foreign countries was printed in the December, 1928, issue of the Labor Review. In view of the many requests made to the bureau for information on this subject, the article referred to has been brought up to date as fully as could be done with the information available, and, as thus revised, is reprinted below.

The first national unemployment insurance act enacted in any country was put into effect in Great Britain in 1911. Prior to that time the trade-unions of Great Britain and certain continental countries had established the policy of paying regular allowances to members who were out of work, and later unemployment relief was granted by the public authorities of municipalities or communes of several countries, or the trade-unions' unemployment funds were subsidized from the public funds. France in 1905, Norway in 1906, and Denmark in 1907 introduced the latter system, known as the Ghent system, on a State, as opposed to a communal basis, but with certain important modifications, and these systems were the forerunners of the establishment of compulsory unemployment insurance on a national scale.

At the present time 18 countries in Europe, Mexico, and Queensland in Australia have either voluntary or compulsory insurance schemes fostered and aided by the State, which are designed for the immediate relief of unemployment, and which in some instances utilize the period of enforced idleness in training workers for jobs in which there is a better prospect of securing employment, or organize needed public works for the employment of the surplus workers.

Australia—Queensland

UNEMPLOYMENT insurance in Queensland was established on a compulsory basis by the act of October 18, 1922. The act applies to all wage earners 18 years of age or over, whose wages are fixed under collective agreements or by arbitration decisions and also includes public officials.

The act established a fund which is supported by equal payments made by the Government, the employers, and the workers. The weekly payments for each employed worker were fixed in April, 1928, at 18d. (36.5 cents), the government, the employer, and the worker each contributing 6d. (12.2 cents).

A worker who has contributed to the fund for six months or more is entitled, if unemployed, to a weekly payment known as a sustenance allowance, varying in amount according to locality and as between married and unmarried workers. Additional benefits are paid for each child under 16, but not to exceed four.

Benefits are payable, after a waiting period of 14 days, for a maximum of 15 weeks in one year. The act provides that if a worker becomes unemployed solely through his own fault he shall not be entitled to the sustenance allowances for a maximum period of two months, while if a worker leaves his employment voluntarily, payment of the sustenance allowance shall be deferred for a period varying according to circumstances.

A new supertax was imposed on all incomes and wages in the first part of 1930, this supertax, which is deducted from the wages, amounting to 2d. (4 cents) on each pound ($4.87).

Austria

THE Austrian unemployment insurance law, enacted March 24, 1920, has been the subject of numerous amendments owing to the continued economic depression. The insurance is in theory compulsory for all wage earners, but certain classes, such as agricultural and forestry workers (except workers employed exclusively or mainly in sawmills) and domestic servants, are excluded.

The costs of the insurance system are divided among employers and employees, and are fixed at a percentage of the normal contribution for sickness insurance, which may not exceed 75 per cent of this contribution. Employers pay one-third and employees two-thirds of the amount, as in the sickness insurance system. The Federal Government contributes to the expenses of the management of the district industrial commissions and certain unemployment offices and toward the costs of supervision of unemployment insurance, the Government subsidy amounting to one-third of these expenses.

Insured persons, in order to have a claim to unemployment benefit, must have been employed for at least 20 weeks within the previous 12 months in an occupation subject to insurance, but in necessitous cases this period may be fixed at 20 weeks in the previous 24 months. The benefit varies according to whether the worker is married or single or has other dependents, but it may not exceed 80 per cent of the last week's earnings. Employees are classified in 10 wage groups.

The payment of benefit begins on the eighth day of unemployment. The normal benefit period was fixed by the act of December 17, 1927, at 30 weeks in a period of 12 months, but in periods of crisis this may be extended, the special allowance amounting to 80 per cent of the statutory benefit. There is a four to eight weeks' period of suspension of benefit imposed on workers who give up their work without justifiable cause.

The act of December 20, 1928, prolonged until December 31, 1930, the measures according to which unemployed persons after receiving the statutory benefits for 30 weeks may still receive emergency benefit at the rate of 80 per cent of the ordinary benefit.

The act provides for "productive unemployment relief," financial assistance being granted by the State for the carrying on of public works which furnish employment for persons who would otherwise receive benefit. During periods of serious industrial depression the State may compensate employers to the amount of the unemployment benefit if they retain in their employment workers whom they are entitled to discharge.

Belgium

THE various decrees relating to unemployment insurance funds in Belgium, the first of which was issued December 30, 1920, were coordinated and amended by the orders of May 15 and December 10, 1924. The system of insurance is voluntary and applies in principle to the workers in all trades. The subsidy paid by the State to the funds was increased by a decree of March 21, 1927, from 50 per cent of the fees paid by the members of the funds to two-thirds of that amount. In addition, many of the communes voluntarily grant subsidies proportionate to the benefits paid by the funds. The contributions of members vary in the different funds and there is a corresponding variation in the amount of benefits paid, but the amount of benefits paid to the unemployed from all sources combined can not exceed in any case, three-fourths of the wages paid to the heads of families with three or more children in the same category as the unemployed worker. Additional benefits are paid for children under 14 years of age and for those between the ages of 14 and 16 who are attending school or are physically incapable of working.

The national emergency fund, financed by State subsidies and by subscription and other voluntary contributions, assists involuntarily unemployed persons who are members of approved unemployment societies when such societies become unable to meet their liabilities toward the persons insured with them. Grants may also be made from it to unemployed persons who have exhausted the benefit due them and who are in want, up to a maximum of 30 grants a year, which, however, may be extended when it is found impossible to give such persons employment in another industry. Family allowances are not paid from the fund except in necessitous cases. Fifteen per cent of the payments by the national emergency fund is to be charged to the insurance societies, which must repay the amount.

In order to receive unemployment relief, membership for at least one year prior to the payment of benefits is required, during which time the regular fees must have been paid.

Individuals excluded from unemployment relief include those who are incapacitated for work, those unemployed as a result of a strike or lockout, and persons who have been discharged from their former employment and who refuse to accept employment for which they are qualified.

Bulgaria

COMPULSORY unemployment insurance was established in Bulgaria by the act of May 5, 1925, effective January 1, 1926. The act applies to wage earners generally, between the ages of 15 and 60, with the exception of domestic servants and such workers and employees in the public services as are entitled to special benefits. Seamen are included, and those agricultural workers who are engaged in undertakings which are recognized in a special legislative act as "model" enterprises.

Benefits are paid from an unemployment fund established in connection with the social insurance funds and supported by contributions from the workers, the employers, and the State, at the rate of 1 leva (0.72 cent) per insured person per week. The State as an employer pays 1 per cent of the credits allowed for wages into the unemployment fund.

Benefits are paid for a maximum period of 12 weeks per annum, on condition that the insured person has been paying contributions for at least 52 weeks over a period of two years. The benefits are payable after the eighth day of unemployment and amount to 16 leva (11.5 cents) per day for heads of families, and 10 leva (7.2 cents) per day for unmarried persons.

In order to deal with acute unemployment the Minister of Commerce, Industry, and Labor and the Minister of Finance are authorized, on the advice of the Superior Labor Council and the Social Insurance Council, to organize public works for the unemployed and to order the reduction of hours of work and of wages in order to allow private undertakings to continue work. If an unemployed person is unable to secure work because of the inadequacy of his qualifications, he may be sent to a school by the employment exchange or may be compelled to take courses, but the period of study may not exceed the period for which unemployment allowance is paid.

Czechoslovakia

THE voluntary insurance system in Czechoslovakia, established by the act of July 19, 1921, applies in principle to wage earners in all trades, provided they are compulsorily insured against sickness. The insurance is administered through the trade-union funds, and the employees' contributions vary from fund to fund. Employers do not contribute. An amending bill was passed June 5, 1930, which increased the grant made by the State in respect of each case of unemployment from 13 to 26 weeks. The rate of the grant was raised considerably according to a sliding scale based on the length of membership of the unemployed person in a trade-union fund, his domestic responsibilities, etc., the maximum contribution by the State being 18 crowns (54 cents) per day.

The total amount of the benefit granted by the trade-union and the State may not exceed two-thirds of the last wage drawn by the unemployed person and may be paid for a period of 26 weeks. After the expiration of this period the unemployed person may receive benefit at a lower rate during another 13 weeks, and if, at the end of this period he is still unemployed and has no means of subsistence he is entitled to emergency relief for a further period of 13 weeks. Subject to reciprocity of treatment, foreigners are entitled to this emergency relief under the same conditions as citizens of Czechoslovakia.

The law also provides that the Minister of Social Welfare may use part of the credits allotted in the budget to unemployment for the organization or encouragement of works likely to provide work for unemployed persons. For this purpose the State may grant the employer an allowance not exceeding 10 crowns (30 cents) a day for each unemployed worker engaged. These amendments are to come into force January 1, 1931.

Under a law of June 28, 1930, provision is made for emergency work for the unemployed, such as the building or repair of roads, reforestation, etc. In giving work to the unemployed, preference is to be given to persons who are in receipt of trade-union or State unemployment grants and such persons are required to accept such employment if they are qualified for it.

Denmark

THERE is no State system of unemployment insurance in Denmark but by the act of December 22, 1921, the voluntary insurance funds attached to the trade-unions are recognized by the State and receive subsidies from the State and the communes.

Membership in the funds receiving Government grants is restricted to wage earners between the ages of 16 and 60 whose resources do not exceed 15,000 crowns ($4,000).

The State subsidy amounts to 35 per cent of the contributions and the communal subsidy is optional, with a maximum of 30 per cent. Employers do not contribute to the primary funds but employers participating in compulsory industrial accident insurance are required to contribute 5 kroner ($1.33) annually per worker to the reserve fund. In the case of agricultural and forestry workers the contribution is 2 kroner (53.3 cents). The contributions of workers vary from one fund to another.

The benefit may not exceed two-thirds of the normal wages provided it does not fall below 1 krone (26.7 cents) per day or exceed 3½ kroner (93.3 cents) for unmarried workers and 4 kroner ($1.07) for workers maintaining a family. There is a supplementary allowance for each dependent child, paid from the central unemployment fund. The length of the benefit period varies in the different funds but may not be less in any case than 70 days in a period of 12 consecutive months.

An act which came into force October 1, 1927, abolished the special and emergency benefits which were allowed during the period of depression. The State unemployment fund, from which subsidies were granted for this purpose, was greatly reduced as a result, and the employers' contributions were also reduced and will eventually be abolished altogether.

An official order of October 22, 1927, provided that although recognized unemployment funds should suspend all payment of benefits in case of a strike or lockout, these payments may be resumed in the case of workers indirectly affected but in no case may benefits be paid to members who participate directly in the strike or lockout.

The act of July 1, 1927, discontinued the payment of emergency unemployment benefits but allowed special emergency funds to be set up by individual unemployment insurance funds to meet the need of emergency benefit. These special funds did not prove a success, and to remedy this situation an amendment was passed April 4, 1928, by which such funds set up before July 1, 1928, were entitled to an extra initial public contribution not exceeding 10 crowns ($2.66) per member and a loan up to 5 crowns ($1.33) per member. An amendment of November 9, 1928, modified the basis for the definition of emergency unemployment. For the purpose of determining the normal unemployment, the average for the preceding 16 years, minus the four years of highest unemployment was taken instead of the average for the 10 preceding years.

Finland

THERE is a voluntary insurance system in Finland established by an order of November 2, 1917, amended May 8, 1920. Persons between the ages of 15 and 60 are eligible for insurance.

Benefits are paid for 90 days in a period of 12 consecutive months, but after the maximum amount has been paid during 36 months, the payment of benefits is suspended for one year. The State subsidy varies from one-third to one-half of the benefit paid, the employers do not contribute, and the employees' contributions vary according to the fund. The benefits paid range from 1 mark to 10 marks (2.5 cents to 25.2 cents) per day.

France

THERE is no State system of unemployment insurance in France, but the voluntary unemployment insurance funds have been subsidized by the State since 1905. The amount of the Government subsidy has been changed at various times according to employment conditions. In 1927 the total payment by the Government to the departmental and municipal funds amounted to 60 per cent of the allowances granted by the funds but these subsidies applied only to 60 days' benefit in a period of 12 months. Membership in the funds is open, in principle, to all wage earners. The contributions of the workers and the benefits vary according to the individual fund.

A decree of September 21, 1929, provided that the maximum rate of the subsidy paid by the State to unemployment relief funds, which formerly varied only in proportion to the number of unemployed persons relieved by the funds and the extent of the relief granted, will vary also in proportion to the family responsibilities of such unemployed persons. Under the decree the maximum benefit for every unemployed person who is a bachelor or head of a household and for every unemployed member of a family belonging to the unemployment fund remains at 8 francs (31 cents), but it also provides that the State shall pay a subsidy for the wife of an unemployed person receiving benefit and for each of his parents or children when such persons are maintained by the unemployed person and are not in receipt of wages or, if they receive wages are earning less than 2 francs (7.8 cents) a day. For such persons the State subsidy shall be estimated at a rate not exceeding 2.50 francs (9.8 cents) per head per day. The local relief allowed to a single household will only be taken into account for the calculation of the State subsidy up to a maximum of 16 francs (62 cents), but in the applications of this limit allowances granted to members of the unemployed person's family who themselves belong to the unemployment fund will not be taken into account.

An act of February 15, 1929, provided that seamen, in case of capture, shipwreck, or declared unseaworthiness of the ship are entitled to an indemnity for the whole period of unemployment, with a maximum of two months' wages, at the rate of wages provided in the contract.

Germany

THE German system of unemployment relief out of public funds was replaced by a system of compulsory insurance of workers and employees through the act of July 16, 1927, which came into force October 1, 1927. The insurance applies to all classes of workers liable to compulsory health insurance (the wage limit being 3,600 reichsmarks ($857.83) per year), to employees covered by compulsory old-age

and sickness insurance (limited to persons earning not more than 8,400 reichsmarks ($2,001.61) annually), and to crews of vessels. Seasonal workers are also included. The number of wage earners insured against unemployment is approximately 18,200,000. Exemptions are made in respect of persons employed in forestry or fishing who live on the proceeds of their work and are in the employ of other persons less than six months a year, workers subject to long-term contracts, and apprentices serving an apprenticeship of not less than two years. The contributions, which are equally divided between employers and employees and are fixed by the executive board of the Federal Bureau for Employment and Unemployment Insurance, may not exceed 3 per cent of the wages or salaries forming the basis of calculation. The States and the Federal Government also contribute, the Government contributions being used to cover deficits in State labor districts and to create an emergency fund which may not fall below a stated amount.

The benefit includes the benefit proper and a family allowance amounting to 5 per cent of the wages or salaries received by the unemployed. The wages or salaries are divided into 11 classes, and in each wage class a standard wage or salary is set, a certain percentage of which constitutes the benefit. These standard wage rates range from 8 reichsmarks ($1.91) per week for the lowest grade to 63 reichsmarks ($15.01) for the highest, and the average benefit, including family allowance, ranges from 80 per cent of the standard wage for the lowest group to 60 per cent for the highest.

Benefits are payable for 26 weeks, beginning with the eighth day of unemployment, but in times of economic crises persons who have exhausted their right to unemployment benefit are taken care of by the emergency relief fund. A resolution adopted by the Reichstag August 21, 1928, extended this additional benefit from 26 weeks to 39 weeks, and for the unemployed over 40 years of age to a maximum of 52 weeks. The emergency fund is also used for the payment of benefits to unemployed persons who are deserving but who have not yet acquired a full claim to benefit. Such persons and young persons under 21 years of age are obliged to accept any work offered to them; the same requirement is made of other recipients of unemployment relief who have received benefits for nine weeks. Short-time workers receiving insufficient or irregular wages are granted a supplementary benefit out of the Federal bureau's funds. The benefit is not granted during strikes and lockouts except in case of indirect participation and to avoid special hardship.

The duties of the authorities include the institution of special measures for the prevention of unemployment. Aside from finding work for the unemployed, traveling expenses may be paid to workmen and employees being transferred to other places out of funds of the Federal bureau, also working equipment may be furnished and eventually there may be a limited contribution to the wages or salaries.

A law was passed October 4, 1929, amending the original law in the following particulars:

The law defines an unemployed person as an industrial wage earner who is temporarily out of employment and who does not earn his living by some individual work such as that of agriculturist, merchant,

craftsman, or industrialist. No claim for unemployment benefit will be allowed if the unemployed wage earner can assist in earning a common means of subsistence in an undertaking belonging to his parents, children, brothers, or sisters especially where such persons live in a common household.

The time in which a wage earner must have worked during the last two years in order to be entitled to unemployment benefit is extended from six months to one year.

In cases where the last place of assistance and the last place of work are different the amount of the insurance benefit is fixed according to the agreement wages ("tarif") in effect at the place of payment of benefit, instead of on the basis of actual earnings in the former employment. The waiting period remains at 7 days but the present act allows a reduction to 3 days for unemployed persons having more than 4 dependents and increases it to 14 days for young persons under 21 who have no dependents. The benefit rate for persons normally engaged in occupations subject to seasonal unemployment was reduced on account of the high risk of unemployment in such occupations. On the other hand, seasonal workers, who were formerly eliminated from the insurance system at the end of six weeks' benefit and transferred to the special relief system, remain in the regular insurance system and are no longer required, as they were under the special relief act, to prove that they are in need.

The amount of insurance benefits will be based on the average earnings of the last six months instead of the last three, as formerly. The rates of benefit remain the same, but subsidies or pensions which the unemployed person may receive from another source will in future be deducted from the benefit in so far as the additional benefits exceed the sum of 30 marks ($7.14).

By an act of December 27, 1929, effective January 1, 1930, to June 30, 1930, the rate of contribution payable under the German employment exchanges and unemployment insurance act as amended in October, 1929, was temporarily increased from 3 to 3½ per cent of the worker's wage, half paid by the employer and half by the worker.

A new tax on tobacco came into force January 1, 1930. As this tax was expected to lead to the discharge of a considerable number of workers and employees, an amendment to the act provided that any such persons should be entitled to benefit even if they had not been employed in the industry for three months. Such benefits were to be paid by the unemployment insurance institute, which would be reimbursed by the Federal Government for amounts in excess of the normal obligations of the insurance system.

Orders issued March 8 and 20, 1930, provided for the payment of benefits to persons discharged from the Army and the Federal water police who have served six months or over but are not entitled to a pension. The period of benefit is 26 weeks but may be reduced according to the cause of discharge.

By an act of April 14, 1930, the temporary increase in the rate of contributions to 3½ per cent of wages was fixed at that figure until it should be changed by further legislation. An annual subsidy of varying amount, fixed for 1930 at 150,000,000 marks, will be granted to the unemployment insurance institute by the Government, and during 1930 a special subsidy amounting to 80,000,000 marks was to

be granted by the Government, 50,000,000 marks of which was to be drawn from the resources of the Industrial Securities Bank and 30,000,000 marks from the proceeds of the wages tax, provided the income from this tax exceeded 1,425,000,000 marks. If these reserves proved insufficient, the Government was required to make the necessary advances to enable the institute to pay the statutory benefits, in accordance with the unemployment insurance act. If this occurred, however, the Government was required to introduce a bill at once providing for the recovery of these advances either through increasing the contributions, reform of the insurance system, or by recourse to further taxation. It was also decided by the Reichstag that if the state of the labor market on June 1, 1930, indicated that the average number of unemployed entitled to benefit would exceed 1,200,000 an amending bill should be introduced at once by the Government. As the insurance system was facing a deficit on that date a bill was introduced by the Government in June, 1930, amending the unemployment insurance act in several important particulars.

By a decree dated July 26, 1930, the rate of contribution was raised from 3½ to 4½ per cent of the insured person's wage—this increase to remain in effect until March 31, 1931. The increased contribution is imposed upon the employers alone in undertakings in which the unemployment risk is shown to be appreciably above the average. The waiting period is increased to 14 days for all unemployed persons without dependents. The full rate of benefit is payable to persons in the four highest wage classes only if they have paid contributions for at least 52 weeks during the 18 months prior to the lodging of the claim. Benefits are also reduced in the case of married persons who are both entitled to benefit unless there are two or more dependents in respect of whom benefit is payable. These and certain other minor reforms are expected to result in a saving of approximately 100,000,000 marks.

Great Britain and Northern Ireland

THE British national insurance act of 1911 introduced a compulsory unemployment insurance system in Great Britain which, as it was of an experimental nature, was applied only to workers in the building, engineering, and shipbuilding industries since these workers were particularly subject to unemployment. The law was gradually extended to cover other groups of workers through a series of amendments and in December, 1927, a new law was passed recasting and consolidating all the legislation dealing with unemployment insurance.

The unemployment insurance acts provide, subject to certain exceptions, for compulsory insurance against unemployment of substantially all employed persons. The principal classes of persons who are excepted from such compulsory insurance are juveniles under 16 years of age, and (since January 2, 1928) persons aged 65 and over, persons employed otherwise than by way of manual labor at a rate of remuneration exceeding in value £250 ($1,212.63) per annum, persons employed in agriculture and private domestic service, and outworkers. Persons employed by local public authorities, railways, and certain other public-utility undertakings, members of the police forces, and persons with rights under a statutory superannuation scheme, may in certain circumstances also be excepted.

Contributions are paid by the employers, employees, and the State, the weekly rates of contribution being as follows:

WEEKLY RATES OF CONTRIBUTION UNDER BRITISH UNEMPLOYMENT INSURANCE ACT

Sex and age	Employer's contribution	Employee's contribution	Government's contribution
	d.[1]	d.	d.
Men aged 21 to 65 years	8	7	6
Women aged 21 to 65 years	7	6	4½
Young men aged 18, 19, and 20 years	7	6	5¼
Young women aged 18, 19, and 20 years	6	5	3¾
Boys aged 16 and 17 years	4	3½	3
Girls aged 16 and 17 years	3½	3	2¼

[1] Penny=2.03 cents.

Benefits are graduated according to the scale of contributions. Men and women between the ages of 21 and 65 receive 17s. ($4.12) and 15s. ($3.64) per week, respectively; young men aged 18, 19, and 20 receive a benefit of 10, 12, and 14 shillings ($2.43, $2.92, and $3.40), respectively, while the benefits for young women of the corresponding ages are 8, 10, and 12 shillings ($1.94, $2.43, and $2.92); and boys aged 16 and 17 receive 6s. ($1.46) and girls 5s. ($1.21) per week. A weekly benefit amounting to 7s. ($1.70) is allowed for one adult dependent and one of 2s. (48.5 cents) for each child under 14 who is maintained wholly or mainly by the claimant as well as for any child aged 14 or 15 who is under full-time instruction in a day school and is wholly or mainly maintained by the claimant. A claimant is not entitled to benefit unless he has paid into the fund at least 30 contributions (or in the case of disabled ex-service men, 15 contributions) within two years preceding the date of his claim. There is a waiting period of six days for which no benefit is payable. If a claimant satisfies the conditions governing the receipt of benefit, he is entitled to this benefit as long as he is genuinely unemployed, but after the lapse of a reasonable interval he is required to accept any suitable work which may be offered him or further benefit will be withheld.

The law provides that grants may be made out of the unemployment fund toward the cost of approved courses of instruction for boys and girls of the ages of 16 and 17 who are insured or who are normally employed or likely to be employed in an insurable occupation.

There are certain causes which disqualify an insured contributor for the receipt of unemployment benefit for varying periods. These include loss of employment as a result of a strike, loss of employment through misconduct or voluntarily leaving employment without just cause, and imprisonment or confinement in a workhouse or other institution supported by public funds.

All claims for unemployment benefit and questions arising in connection with claims are determined by statutory officers known as insurance officers, and appeals from decisions are carried before a court of referees composed of a chairman appointed by the Minister of Labor and an equal number of representatives of employers and of the insured contributors.

An act was adopted by the British Parliament July 26, 1929, providing for an increase in the exchequer contribution to the unemploy-

ment fund to one-half of the aggregate contributions of employed persons and employers. Under the previous regulations, the exchequer contribution was less than 40 per cent of the aggregate contributions of the other parties. This was a temporary measure adopted to save the fund from being exhausted before the whole position could be studied and permanent measures adopted.

A new unemployment insurance bill became law in December, 1929. The bill provided that the minimum age for entry into unemployment insurance should be lowered from the present age of 16 to 15 if and when legislation comes into force raising the school-leaving age to 15 or more. The rates of benefits for persons aged 17, 18, and 19 were raised to 9s. ($2.19) for males 17 years of age and 14s. ($3.41) for those 18 and 19 years of age and in the case of females to 7s. 6d. ($1.83) and 12s. ($2.92), respectively. The allowance for an adult dependent was increased from 7s. to 9s. ($1.70 to $2.19). The provision in the earlier law requiring a claimant to prove that he is genuinely seeking work but is unable to secure employment was repealed and the onus of showing that suitable employment is available placed in the first instance on the administrative authorities. The provision that a claimant who has not paid 30 contributions in the last two years has to prove that he has, during the two years immediately preceding the date of his application for benefit, been employed in an insurable employment to such an extent as was reasonable, was repealed. An amendment was also adopted providing that the unemployment insurance bill shall remain in force only until March 31, 1933.

In view of the increasing number of unemployed, an act dated August 1, 1930, provides for increasing the borrowing powers of the unemployment insurance fund from £50,000,000 to £60,000,000.

Irish Free State

THE British unemployment insurance act of 1920 is still in force in the Irish Free State as the fundamental unemployment insurance act. The insurance is compulsory and the exemptions are similar to those specified in the British act. The maximum duration of benefit is 26 weeks, and the benefit for males aged 18 and over is 15s. ($3.64), for females 12s. ($2.91), and for those under 18 years of age, half of the above rates. Extra allowances are also paid for dependent children. The weekly contributions vary for men, women, young persons, and boys and girls.

Italy

THE Italian unemployment insurance system established by a decree of October 19, 1919, was reorganized by a decree issued December 30, 1923. By the terms of this decree a special insurance fund was created for each Province and for groups of Provinces but the general management was vested in the National Social Insurance Fund, thereby combining the administration of unemployment insurance with that of other branches of social insurance.

Unemployment insurance is compulsory for all wage earners of both sexes, 15 to 65 years of age, with the exception of agricultural workers; employees earning more than 800 lire ($41.84) per month; employees in public or private establishments which guarantee steady

employment; home workers; domestic servants; theatrical and moving-picture artists; employees of the State, the royal household, Provinces and communes; and employees of charitable institutions and of State railroads and public transportation enterprises; and casual workers.

The insurance funds are supported solely by the contributions of the workers and employers. The contributions are fixed at 0.70, 1.40, or 2.10 lire (3.7, 7.3, and 11 cents) fortnightly, according to the wage earned by the insured person. The lowest contribution is paid for persons earning 4 lire (20.9 cents) or less per day and the highest contribution for those earning over 8 lire (41.8 cents). The employers are entirely responsible for the payment of these contributions, one-half of which is charged to the workers.

Benefits amount to 1.25, 2.50, and 3.75 lire (6.5, 13.1, and 19.6 cents) per day according to the amount of the contribution. These rates are payable only on condition that 24 contributions have been paid in to the credit of the claimant during the preceding two years. They may be paid for a period of 90 days, which may be increased to 120 days if 36 contributions have been made to the fund.

There is a national unemployment fund which assists provincial or interprovincial funds which are unable to meet the demands for unemployment relief. This fund receives part of the contributions paid to the provincial funds, the only contribution of the State being one-half of the fines received for contraventions of the legal provisions on unemployment insurance.

As a preventive measure against unemployment, the carriers of unemployment insurance may organize vocational courses, attendance at which may be made compulsory for unemployed persons in receipt of relief. The National Social Insurance Fund may advance money from the unemployment fund equal to one-fifth of the resources of the funds for the carrying out of general or local public-utility work.

Luxemburg

UNEMPLOYMENT allowances in the Grand Duchy of Luxemburg are regulated under an act of August 6, 1921. The State advances the funds necessary for the payment of benefits, thereafter recovering one-quarter from the municipalities and one-half from the employers and workers.

A decree of February 9, 1927, amending the rate of allowance, advanced the maximum benefit from 3 francs (8.3 cents) per day to 9 francs (25 cents). The family allowances were also increased so that the maximum allowance of a skilled worker is now 15 francs (41.7 cents) per day.

The right to benefit begins on the third day of unemployment and if unemployment exceeds eight days it is retroactive to the first day.

Mexico

THE Mexican Government had decided in August, 1929, to set up an unemployment fund to be formed by grants from the public authorities and compulsory contributions from civil servants, agricultural and industrial workers. The contribution would be deducted from wages higher than 5 pesos ($2.50) a day to the amount of two days' wages for each worker liable to such a tax.

Netherlands

VOLUNTARY unemployment insurance in the Netherlands was established by an order of December 2, 1916, which has been the subject of various amendments since that time. It applies in principle to wage earners in all trades.

The State contributions vary from an amount equal to that paid by the insured persons to twice that amount. Half of the amount paid by the State is recovered from the communes. The employees' contributions vary between the different funds and employers do not contribute.

The normal benefit period is 60 days per year for persons regularly employed and 36 days for seasonal workers.

Norway

VOLUNTARY unemployment insurance funds in Norway are subsidized by the State, the Government paying 50 per cent and in exceptional cases two-thirds of the benefit. Two-thirds of these amounts, however, are recovered from the communes. Membership in insurance funds is open in general to all workers. The benefits amount to 50 per cent of the normal salary. The regular benefit is for a period of 90 days per year, and in exceptional cases may be increased to 120 days.

Poland

AN UNEMPLOYMENT insurance law was passed in Poland July 31, 1924, which provided for compulsory insurance of all wage earners over 18 years of age who are under contract in industrial, mining, metallurgical, or commercial undertakings, in transport undertakings, or in all other enterprises which although not conducted for profit are managed on the same principles as industrial undertakings, provided more than five workers are employed. Intellectual workers were included in a decree of May 1, 1927.

The funds are maintained by contributions by the State, the employers and the employees, amounting to 3 per cent of the wages paid to the insured workers. Of this amount, the State pays 1 per cent, the employers 1½ per cent, and the employees one-half of 1 per cent. The State is entitled to recover from the communes one-half of the amount it contributes.

In order to be eligible for unemployment benefit it is required that a claimant shall have been employed for at least 20 weeks during the year preceding the declaration of unemployment in an undertaking liable to compulsory unemployment insurance.

Allowances for unmarried workers amount to 30 per cent of the wage last received; for those with from one to two dependents, 35 per cent; for families with from three to five dependents, 40 per cent; and for families over five, 50 per cent. In computing these allowances, however, any part of the wage in excess of 5 zlotys (56 cents) per day is not taken into account. There is a waiting period of 10 days before benefits are paid. In 1929 the rates of benefit were increased by 10 per cent and the contributions reduced in the same proportion.

The normal benefit period is 13 weeks but in exceptional cases may be extended to 17 weeks. The right to unemployment allowance is forfeited if suitable employment at a normal wage offered

by the State employment office is refused, an exception being made of employment in an establishment involved in a strike. Employment will be considered suitable if it does not endanger health and if it does not involve the worker in any difficulty in resuming his ordinary occupation. It is permissible to refuse an offer of employment if housing accommodations can not be secured in the neighborhood of the place of employment.

By an act of March 25, 1929, the age for admission to insurance was lowered from 18 to 16 years and the maximum wage for the calculation of unemployment benefit was raised to 10 zloty ($1.12) a day. It was also provided that all workers should be compulsorily insured irrespective of the number of workers employed in the undertaking, but this provision will not come into force until January 23, 1931.

Russia

THE payment of unemployment benefit in Russia is based on the labor code adopted November 9, 1922. Insurance is compulsory, but the employers bear the entire cost. As a large number of the undertakings are nationalized, however, this amounts to a State contribution in the case of these industries.

The maximum benefit period is fixed at nine months for eacn year of unemployment.

Benefits were fixed by a regulation dated December 14, 1927, as follows: The workers are divided into three classes, of which members of the first class receive benefits varying from 11 chervonetz rubles ($5.67) per month in the zone where the cost of living is lowest, to 26 rubles ($13.39) in the zone where it is highest. Workers in the second class receive benefits varying from 8 to 19 chervonetz rubles ($4.12 to $9.79), according to the cost of living, and members of the third class receive benefits varying from 6 to 15 rubles ($3.09 to $7.73) per month. Additional allowances are granted for dependents. In addition to the regular benefit, trade-union members are entitled to a special benefit varying in amount according to their length of membership.

Benefit is payable to unemployed persons in the first class irrespective of the period during which they have been employed as wage earners. This applies also to industrial workers who are trade-unionists who come within the second class; to young persons under 18; to soldiers of all ranks who have been definitely or temporarily demobilized or transferred to the reserve; and to persons disabled in industry who have recovered their ability to work. Workers in the third class belonging to trade-unions are not entitled to benefit unless they have worked as wage earners for six consecutive months before becoming unemployed; for salaried employees who are members of trade-unions the qualification period is 12 consecutive months, and for all other classes of unemployed, 36 consecutive months. Unemployed persons must have been registered at an employment office or trade-union within three months of loss of employment.

Emergency relief works are organized by the unemployment relief institutions and a bimonthly system of rotation on these works is used so as to benefit as large a number of the unemployed as possible.

Refusal to work without good reason or failure to register regularly at the employment exchange will deprive workers of benefit for one

month and a second offense will result in being permanently dropped from the rolls.

An order issued by the social insurance council October 19, 1929, amending the decree of December 14, 1927, provided that insured persons who wish to establish their claim to benefit must prove that they have been employed for two years as wage earners if they belong to trade-unions and three years in other cases. A probationary period as wage earners is required of young persons under 20 years of age. No unemployed person is entitled to benefit unless he is registered with an employment exchange, if his family is in receipt of a certain minimum income, or if he or any member of his family has means other than wages. Unemployed persons residing in villages are eligible for benefits only if they are members of trade-unions, if they belong to a peasant family whose farm is not liable to income tax, and if they were previously employed in the village where they live. The period of benefit remains unchanged but there must have been a minimum period of six months of wage-paid employment before the right to unemployment benefit recommences. Seasonal workers are eligible for benefits only if employed in undertakings subject to seasonal interruptions, if engaged in undertakings where the social insurance system is fully applicable, if they belong to a peasant family not liable to income tax, and if they are permanently resident in a town.

Spain

THE Spanish insurance system is voluntary but is subsidized by the State, the decrees governing the operation of the system having been issued March 18, 1919, and April 27, 1923. The insurance applies to wage earners between the ages of 18 and 65 whose annual earnings do not exceed 4,000 pesetas ($661.30).

Benefits may not exceed 60 per cent of the daily wages and the maximum benefit period during which funds may pay unemployment benefits is 90 days per annum, subject to the penalty, if this is exceeded, of the loss of Government subsidies. Local, provincial, or national unemployment insurance associations may receive the State subsidies.

Switzerland

A LAW was passed in Switzerland October 17, 1924, which placed on a permanent basis the system of subsidizing the voluntary unemployment insurance funds. The law fixed the amount of the subsidy paid by the Federal Government at 40 per cent of the benefits paid out in the case of public and private unemployment funds administered by joint bodies of employers and workers, and at 30 per cent in the case of funds established by trade-unions. These rates may be temporarily increased 10 per cent by the Federal Assembly.

An amendment of December 20, 1929, provided that the amount of the Federal subsidy shall be proportionately reduced when the total subsidies granted by public authorities exceed 80 per cent of the benefits paid by the fund. It was also provided that the Federal subsidy will not be paid to funds having less than 200 members except in the use of newly established funds and in case no other fund is accessible to the members.

An amendment of April 9, 1925, provided that the minimum contribution of members of a fund must represent a minimum of 30 per cent of the total daily benefits even though the public contributions exceed 70 per cent of the daily benefits. The amendment of December 20, 1929, provided that any surplus over the current needs of a fund shall be paid into a reserve fund and that when a fund is obliged to have recourse to the reserve fund the Federal Department of Labor must be notified immediately.

The daily unemployment benefit may not exceed 60 per cent of the insured person's daily normal earnings if he has dependents and 50 per cent in the case of persons without dependents.

The normal duration of benefit is 90 days in a period of 360 days, but this may be prolonged in exceptional circumstances. The payment of unemployment benefit may not begin until three days after registration of the unemployed insured person at a public employment exchange.

Persons are excluded from receiving benefits if they are out of work as a result of a strike or if they are incapacitated for work. Benefits are forfeited if an insured person refuses to accept suitable work, if he does not comply with the regulations of the fund, or for fraudulent attempts to obtain benefit.

In cases of partial unemployment (part-time or short-time work) unemployment benefit may be paid but the benefit plus wages may not exceed 80 per cent of the normal earnings of persons with dependents, and 70 per cent in the case of those without dependents.

Under the Federal law the Cantons are free to adopt either compulsory or voluntary insurance systems and early in 1930 all but one of the Cantons—Unterwalden—had adopted some form of unemployment insurance legislation. The systems followed are of three types; namely, compulsory systems, voluntary systems which allow the local authorities to introduce compulsory insurance, and purely voluntary systems.

Present Status of English Unemployment Insurance Scheme [1]

TWICE during the current year it has been found necessary to raise by parliamentary action the amount the unemployment insurance fund is permitted to borrow. The unemployment insurance (No. 2) act, which received the royal assent on April 15, raised the debt limit from 40 to 50 million pounds, while the unemployment (No. 3) insurance act, assented to August 1, increased this limit to 60 million. In introducing the second bill the Minister of Labor stated that at that time (July, 1930) the annual expenditure of the fund was exceeding its revenues by £25,000,000, and that the debt had reached £43,000,000. Not unnaturally, the whole scheme is under consideration and there is serious discussion of the need for recasting it.

The unemployment insurance scheme was established by an act passed in 1911, under which contributions became payable in July, 1912, and benefits in January, 1913. For each insured worker in

[1] Except as otherwise noted the data on which this article is based are from Great Britain, Ministry of Labor, report on national unemployment insurance to July, 1923, London, 1923; Ministry of Labor Gazette, August, 1930, p. 280; and Parliamentary Debates, Apr. 4, 1930, c. 1689 and 1727, and July 3, 1930, c. 2185 and 2190.

employment, a weekly contribution was made by the worker, the employer, and the Government. No worker could draw benefit until he had made a certain number of contributions, and the benefit period, which was limited to one week for each weekly contribution made on behalf of the worker concerned, was further restricted to a maximum of 15 weeks in any one insurance year, no matter how many contributions had been paid. At first the plan was limited to certain industries, including about two and a quarter million persons aged 16 and over, but in 1916 it was extended to cover a number of additional occupations, mostly those connected with war activities, in which it was supposed that there would be severe unemployment as soon as the war was over. Great care had been taken in working out the relation between contributions and benefits, the probable incidence and extent of unemployment had been closely studied, and every effort had been made to base the scheme on sound actuarial principles. Apparently the effort was successful, for by July 17, 1920, which marked the end of six complete years of the plan's operation, while the number of workers covered was 4,197,000 and the amount paid out in benefit for the current year was £1,009,126, the fund had a reserve balance on hand of £21,287,647.

In that year, however, it became evident that the wave of postwar prosperity was rapidly receding, and that preparation must be made for meeting severe unemployment. As part of this preparation, the act of 1920 was passed, extending the insurance scheme to cover approximately 8,000,000 workers who had not been contemplated in the original plan, and for whom no reserves had been built up. Moreover, as the situation grew worse, the Government felt it necessary to relax the various restrictions which had been devised to insure the actuarial soundness of the scheme. Many of those newly brought under the insurance plan had no opportunity to make the required number of contributions before unemployment overtook them; some who had met this condition found themselves unemployed for periods far in excess of the original benefit period. Not only the unemployed workers themselves, but their dependents also were reduced to want. It was felt that the scheme must be modified to meet the needs of the situation. Allowances for dependents were added to the benefits originally planned, and progressively conditions as to number of contributions required, waiting period, and duration of benefit periods were relaxed. In an account of the operation of the scheme published in 1923, the Government, after describing the distress from unemployment existing even among the insured, thus explains the earlier modifications.

> The remedy adopted was to graft onto the original scheme of what may be called "covenanted" benefit (i. e., benefit drawn as of right by virtue of conditions), a system of "uncovenanted" benefit. Uncovenanted benefit was allowed as a discretionary grant to unemployed persons who were normally wage earners in insured trades and were genuinely seeking whole-time employment, but who had exhausted their rights derived from payment of contributions, or who even, in exceptional cases, had paid no contributions at all. The history of the unemployment insurance scheme from 1921 onwards is largely that of the passing of one act after another granting further extensions of uncovenanted benefit on account of the very large numbers who remained unemployed.

At first it was supposed that these were only temporary measures, and that it would soon be possible to return to the statutory conditions of benefit, but the depression remained severe, and it was considered necessary to continue and increase the modifications. The effect upon the finances of the fund was marked. Within a year the reserves were exhausted, and the Government found it necessary to advance money as a loan, in order to assure the payment of benefit. Since then the amount of the debt of the unemployment insurance fund at the end of each calendar year has varied as shown in the following table, taken from the annual report of the Ministry of Labor for 1929:

Dec. 31—	Debt [2]
1921	£7, 600, 000
1922	15, 613, 480
1923	12, 497, 054
1924	5, 093, 549
1925	7, 262, 569
1926	22, 640, 000
1927	23, 180, 000
1928	31, 720, 000
1929	37, 850, 000

It is an added disadvantage to the scheme that interest has to be paid upon this debt at rates varying from 4⅝ per cent to 6 per cent. During the current year, according to the statement of the Minister of Labor already referred to, the debt has increased by over 5,000,000 pounds.

The debates which preceded the passage of the acts permitting the increased borrowing limit of the fund showed a general conviction that the time had come for a drastic reorganization. The actuarial principles on which the plan was based were, it was pointed out, in abeyance, and the scheme is being used largely as a relief measure. At the beginning this use of the fund might have had some justification, as no one dreamed that the depression would be more than temporary, and it seemed that the only alternative to modifying the insurance plan was to force the unemployed to seek poor law relief. Apart from the natural objection to placing the stigma of pauperism upon men whose only fault was that they could not find work, poor relief was singularly ill adapted to the existing situation. Such relief is met from the rates, that is, from local taxes. Naturally, the districts in which there was the greatest need for relief were those in which ordinary business was hardest hit, and to relieve unemployment by poor relief meant adding the whole burden of supporting those out of work to the local taxes at a time when the districts were least able to bear even the ordinary taxation. Giving relief in the form of unemployment insurance had at least the merit of spreading the burden over a wider field. But it is felt that this has been carried too far, and that the present situation is an injustice to the industries which are doing moderately well, and to the workers who find sufficient employment not to need benefit beyond what is actuarially possible under the original terms of the scheme. As to the first point, one member presented some figures as to the position of different industries. A number, he stated, had paid into the fund more than their workers had drawn out in benefits, so that they had a credit

[2] Pound sterling at par=$4.8665.

balance, while with a number of others the case was precisely the reverse. The position of some of the industries of these two groups was, in round numbers, as follows:

Creditor industries:	Credit balance
Food, meat and tobacco trades	£1, 250, 000
Distributing trades	9, 620, 000
Banking and commerce	2, 250, 000
Government employments	8, 800, 000
Debtor industries:	Debit balance
Shipbuilding and ship repairing	£10, 250, 000
Coal mining	8, 800, 000
Cotton	3, 250, 000

In the same manner, it is pointed out, numbers of those insured under the system have never had occasion to draw benefit at all, and others have drawn only small amounts, so that they may well be considered to have credit balances. The present method of mixing relief and insurance not only endangers their balances, but throws upon them an undue share of the provision it is necessary to make for the less fortunate. Mr. Winston Churchill, who as Chancellor of the Exchequer under the Conservative administration was brought very closely into contact with the whole problem, put the matter concretely:

> It does seem to me that men who have been insured for eight or nine years in this fund, and who have never been thrown upon it at all, never come once upon it, have a right to ask whether this is in fact the best system of raising the money to provide for all the other persons who are unemployed; and it seems to me a very wrong thing that a man who has paid every penny, who for years and years has had a large balance owing to him individually, if he is thrown out of work temporarily after a very long period of steady employment should be placed in the same category as persons who have shown themselves utterly incapable of earning a livelihood.

The debates brought out a number of less important criticisms of the system and a number of defenses of its work, but there seemed to be no denial of the unsound position of the fund at present or of the fact that the relief features which have been added to it have swamped the original actuarial plan. There was a strong current of opinion that a new plan should be formed, separating the two features of insurance and relief, and the Minister of Labor made an appeal for nonpartisan cooperation in deciding upon some way of remedying the situation.

> These problems can not be treated as party problems. Whatever party is in power there must be unemployment insurance. * * * We earnestly hope that the parties opposite will be willing to enter into consultation with us with a view to an agreed solution of these problems. We have our ideas; they have theirs. Let us pool them and see if in this way we can obtain some measure of agreement on the next unemployment insurance bill to be brought before Parliament. In the meantime, while these investigations and consultations are going on, the fund must have money, and that is the reason why I have moved the second reading of this bill.

The appeal was successful, for the bill was passed and a nonpartisan committee was promptly formed. According to a dispatch from the United States Embassy at London, the committee consists of six members, Miss Bondfield and Mr. Hartshorn representing Labor, Sir Henry Betterton and Major Elliot representing the Conservatives, and Messrs. Ernest Brown and Isaac Foot being the Liberal members.

OLD-AGE PENSIONS

Financing Railroad Pension Plans

SEVERAL studies of industrial pension plans which have recently appeared have emphasized the rapid growth in the cost of such systems as the number of pensioners increases, and the danger of their coming to grief unless they have been based upon a careful study of their future cost and an intelligent provision for meeting these costs as they develop. In its issue for August, 1930, the Electric Railway Journal, presenting a survey of the pension plans of a number of street railway companies, points out that in most of these the pensions are paid out of current earnings, that in many of them the cost is already becoming embarrassingly high, and that in several cases it has been considered necessary to recast the system entirely or at least to change the pension rate at first established.

A company which, in addition to supporting a pension plan, also carries group insurance for its employees writes: "Our payments for 1929 were much in excess of the maximum estimate when these forms of gratuity were adopted." This company rewrote its entire plan recently. Existing pensions will be carried on as heretofore, but the pensions of employees who retire in the future will be considerably reduced below the former figure. Even so, the mounting costs of this form of relief are causing the management serious concern. The Boston Elevated Railway has been obliged to reduce its pension allowance 1 per cent, effective September 1, 1929.

Another and more striking example of the same kind is cited in the review of the industrial pension situation published by the Carnegie Foundation for the Advancement of Teaching in the twenty-fourth annual report of its president and treasurer.

Beginning June 1, 1929, in accordance with action taken by the advisory committee on April 23, 1929, the Pennsylvania system pension department announced a "pro rata reduction in the superannuation allowance." The basis of the allowance has been and still is the average salary for the 10 years immediately preceding retirement, which, of course, makes it impossible to know the cost in advance. The reduction became necessary "because superannuation payments had increased to a point where the surplus fund was rapidly being depleted, and for several years past it has been necessary to draw on current funds for part of the money needed to pay the allowances."

The position of the railroads in regard to carrying their pension plans has been difficult in the past, for up to 1928 the regulations of the Interstate Commerce Commission did not permit them to make any charge to operating accounts for pensions except as these were actually paid out. In other words, they were unable to build up proper reserves, and had to follow the dangerous and expensive plan of paying pensions out of current earnings. In response to their protests against this situation, the commission issued an order, published December 17, 1928, permitting the formation of pension reserves

when a road had established a definite contractual obligation for pension payments. The pertinent parts of the order were as follows:

> If the carrier has definitely undertaken by contract to pay pensions to employees when regularly retired for superannuation and/or disability and has established a fund to be held in trust for such pension purposes, it shall charge to this account monthly amounts determined through the application of equitable actuarial factors to the current pay rolls, which together with interest accruals on the trust funds will, as nearly as may be, provide for the payment of such pensions, or for the purchase of annuities corresponding thereto. The amounts so charged shall be concurrently credited to a reserve account under account 769, "Liability for provident funds." The amounts accrued in each year shall correspond to the aggregate of the amounts paid into the trust fund and expended directly by the carrier for pensions or annuities during the year. The carrier shall maintain a complete record of the actuarial computations through which the accrual each month of its pension liabilities is established.
>
> Upon the adoption of the accrual plan of accounting, pension payments to employees retired before the adoption of such plan shall be charged to an existing pension reserve or to profit and loss.
>
> Before adopting the accrual plan of accounting for pensions the carrier shall inform the commission of the details of its pension plan, giving full statement of the facts which in its judgment establishes a contractual obligation for pension payments, together with the actuarial formula under which it proposes to create its pension trust fund, and also a copy of the declaration of trust under which the fund is established.
>
> No charge to this account shall be made in anticipation of discretionary pension payments in the future.

Specialists in pension plans have pointed out that the importance of this order can hardly be overestimated, since it makes it possible for the roads to assure the continued solvency of their pension systems, and bases the employee's hopes for the future on a definite contractual relation rather than on the kindly intention of the employers.

Methods of Funding Plans

THE Railway Age in its issue for August 2, 1930, contains a discussion of various methods of funding plans under this order, by a member of the Equitable Life Assurance Co. The costs to be provided for under a funding system, he points out, consist of three parts: First, there is the present value of future pension payments to persons already on the pension roll; next, there is the present value of the pension which must hereafter be paid to present members of the force in consideration of the years of service which they have already rendered, and finally there is the cost of the pensions to be paid for the services which are now being rendered and which will be rendered after the system is completely funded.

The first of these three items is a definite amount, not subject to variation on account of salary changes or withdrawal rates. It is suggested that a desirable method of handling it, if the commission would permit, would be to calculate the full amount required and to amortize it by payments charged to operating expenses distributed over a 10-year period. The second item should be determined as a lump sum, also, and amortized in a similar manner by charging to operating expenses monthly either a lump sum or a percentage of the pay roll. The third item should be determined in the form of a percentage of the pay roll, and charged out month by month as an operating expense charged to the pension fund. This would give, in effect, three funds, of which the first, covering the pensions already

being paid, would diminish and finally be extinguished as the present pensioners die; the second, covering the part of the future pension already earned by those still in active service, would be maintained for a longer period but would finally disappear; and the third, to which each month would be added the amounts necessary to provide the pensions for the service rendered that month, would continue so long as the pension system lasted.

These three funds would take care of the liability incurred before the funding plan was adopted, and would provide for current liability as it accrues. Together they would require each month an amount larger than that paid out in current pensions, and reserves would thus be created. In deciding upon the methods of handling these funds, several considerations are to be taken into account. The company might set up reserves on its own books, retaining the funds for use in its business. This, however, would mean in effect that it was adding the business of an insurance company to its own particular line, or rather, that it was taking up one of the most technical and specialized branches of insurance. "Group annuities and pensions are probably the most complicated branch of the life-insurance business and require the most expert of actuaries for proper handling. * * * To pursue this method with financial safety and stability, it would be necessary to create an organization similar in function to that of the actuarial and accounting departments of an insurance company." Moreover, under this method the railroad still remains responsible for the solvency of the fund.

As a second method, the company might put the funds under a trustee for the sole benefit of the pensioners. This would probably give the employees a feeling of added security, but this would be more psychological than real "because trusts of this kind are always revokable." Also the company would still have the same work and the same responsibility as under the first method.

As a third method, the funds might be placed in the hands of an insurance company under a contract that would guarantee pension payments either on a deferred or an immediate annuity basis. Under this plan, the insurance company would do the actuarial work, keep the necessary records, and guarantee the solvency of the fund, the railroad being relieved of all liability upon payment of the stipulated premium. Under this plan, however, the railroad would not be able to use the funds in its business except as the insurance company might invest them in its securities. This is such an important consideration that a fourth method is tentatively suggested.

Under this fourth method immediate annuities would be purchased for employees at the time of retirement and funds accumulated during the active service of employees would be handled by a trustee under a trust agreement that would permit the railroad to borrow this part of the funds for use in the business. At the time of retirement a sufficient amount would be taken from the trust fund handled by the trustee to purchase the annuity from the life insurance company. This fourth method fulfills all of the requirements stated and while it is, perhaps, not ideal, it is reasonably safe and practical and can be employed with considerable advantage to the railroad company.

Partial Funding

TO MAKE the entire change from an unfunded to a funded system at one step would involve such a large increase in the charges to operating expense that it might not be practical. In such a case, it

is suggested, it might be well to adopt a program of partial funding, the object being to wipe out or fund the accrued liability by degrees instead of doing it all at once. This might be done by arranging to purchase annuities at the time of retirement for all employees retired after adopting the plan and at the same time arranging to finance on an annuity basis all pensions already in effect. This latter step is not really necessary, if it proves inconvenient, since the existing pension roll will inevitably be wiped out in time by death. The essential matter is to prevent any additions to the existing pension roll on a cash disbursement basis, and if this is accomplished it is not really of very great importance whether the pensions already operative are quickly funded by purchasing annuities or gradually extinguished by the death of the pensioners.

There are only two elements in the cost of partial funding. The first is the cost of annuities purchased for employees currently retired and is determined by the number of retirements and the annuity rates used. The second element of cost is the payment of pensions directly to the survivors of pensioners on the roll at the time the plan was adopted. Obviously this latter element of cost will constantly decrease and will disappear when the old pension roll is eliminated.

The distribution of these two elements of cost should be controlled by a budget that may be determined on the yearly basis or for 5-year periods, based on actuarial computations.

Such a plan, it is pointed out, should be regarded only as preparatory to the installation of a fully funded system.

The cost of carrying out the partial funding program should be budgeted as a fixed amount each year until such time as the pension roll in existence at the beginning of the program is eliminated through the purchase of immediate annuities or death. When this point is reached the complete funding program, which provides for the cost as a constant percentage of pay roll, should be started.

New Zealand Pensions and National Provident Fund

THE thirty-second annual report of the Pensions Department of New Zealand gives the following table, showing the situation as to pensions at the close of the fiscal year 1929–30:

PENSIONS IN FORCE MARCH 31, 1930, AND TOTAL PAYMENTS

[Conversions on basis of par value of pound=$4.87]

Class of pension	Number	Total payments, 1929–30	
		Pounds	U. S. currency
World War	20,739	1,207,748	$5,881,733
Old age	26,909	1,107,993	5,395,926
Widows	4,373	323,419	1,575,051
Maori War	209	11,498	55,995
Miners	779	51,684	251,701
Epidemic	160	7,302	35,561
Blind	311	14,737	71,769
Boer War	60	2,606	12,691
Sundry pensions and annuities	113	11,055	53,838
Civil service act, 1908	33	10,548	51,369
Family allowances	3,868	61,008	297,109
Total	57,554	2,809,598	13,682,743

It will be seen that while old-age pensioners constitute the most numerous single group the largest amount was paid to pensioners of the World War, who received £1,207,748 ($5,881,733), or approximately 43 per cent of the total pension payments made during the year. These war pensions were at their maximum in 1921, when they amounted to £1,886,952 ($9,189,456). Since that time they have shown an irregular movement, the general trend being downward, but each of the three years since 1927 has seen an increase over the amount of the previous year, the increase for the year ending March 31, 1930, being £23,745 ($115,538).

The old-age pensioners showed a net increase of 799 during the year, and the amount paid them was £47,233 ($230,025) greater than in 1928–29. The average pension was £41 17s. ($203.66) per annum, and the average cost per capita of European population was 15s 7d. ($3.79). This pension system has been in operation since 1898. The pensionable age is 65 for males and 60 for females, unless the applicant has two or more dependent children under 15, in which case the age limit for each sex is five years lower. Claimants must have resided in New Zealand for 25 years continuously and must meet certain requirements as to character and income. Aliens, naturalized citizens who have been naturalized for less than one year, and Chinese and other Asiatics, whether or not British subjects by birth, are excluded, and so are certain classes of Maoris. On March 31, 1930, the European old-age pensioners formed 1.79 per cent of the total European population, but owing to the variations in the age requirements it is difficult to estimate the percentage they formed of different age groups. An approximation to this percentage, however, can be made in the case of pensioners aged 65 and over. The census of 1921 showed 4.87 per cent of the total population, excluding Maoris, in the group aged 65 and over. In 1929 the population, again excluding Maoris, was estimated at 1,404,961, so that if the age distribution of 1921 remained unchanged, there would be 68,422 aged 65 and over. On March 31, 1930, the European old-age pensioners aged 65 and over numbered 21,724, thus forming 31.75 per cent of the total group of that age in the European population one year earlier. As the population had probably increased somewhat during the year, this estimate may be rather too large, but the exact percentage can not be given.

Family allowances were first granted in the year ending March 31, 1928, and up to the date of this report a total of 5,595 had been allowed. During the first year 3,154 applications were approved, but in the second the number sank to 1,437 and in the third to 1,004. At the close of the fiscal year 1929–30 the total number in force was 3,868, the children in respect of whom the allowances were granted numbering 19,474.

National Provident Fund

THE National Provident Fund came into operation March 1, 1911, as a means whereby persons of limited incomes might make some provision for the future. It is open to all citizens of New Zealand between the ages of 16 and 50 whose annual income during the three years previous to their application for membership has not exceeded £300 ($1,460). After contributing for one year the member is en-

titled to maternity benefits, in the form of medical care and nursing, not to exceed £6 ($29.20) for each confinement; after five years of contributions, the member is entitled to an allowance, based on the number of his dependent children under 14, during incapacity for a period not exceeding three months, and in case of his death his family may claim benefits. On reaching age 60, the member becomes entitled to a weekly pension, varying, according to the scale of his contribution, from 10s. to 40s. ($2.43 to $9.73), and the receipt of this pension does not affect his claim to an old-age pension under the pension act. The various benefits are guaranteed by the State, which subsidizes the system to the extent of one-fourth of the amount paid in as contributions.

Beginning with receipts of £1,863 ($9,073) in the year ending December 31, 1911, the income of the system has risen to £442,450 ($2,154,732) in the year ending December 31, 1929, while the amount of the fund at the end of the year has increased from £1,826 ($8,893) to £2,598,981 ($12,657,037). Benefits paid during 1929 amounted to £164,457 ($800,906), maternity benefits accounting for £41,974 ($204,413), incapacity allowances for £3,302 ($16,081), allowances on death of contributor to widows and children for £10,158 ($49,469), and retirement allowances for £23,523 ($114,557). At the close of the year there were 27,155 male and 3,754 female contributors, a total of 30,909. The great majority of these, 20,583, were contributing for a retiring allowance of 10s. ($2.43) a week, 2,973 for 20s. ($4.87) a week, 367 for 30s. ($7.30), and 673 for 40s. ($9.73).

INDUSTRIAL AND LABOR CONDITIONS

Labor Investigations Authorized in Massachusetts, Relating to Employees' Stock Purchases and Causes of Unemployment

THE Massachusetts Department of Labor and Industries was authorized and directed by the 1930 State legislature, to study and investigate two subjects of importance to labor. By resolve (ch. 30) the department of labor was directed to study the general question of the relation of employer and employee in the cooperative shoe shops of the State. According to the provisions of the resolve—

> Said department shall in the course of its study and investigation consider the circumstances attending the purchase of stock by the employee as a condition precedent to his employment; the nature and extent of the representations made by the employer to the employee; the remedies open to the employee where stock has no market value; and the desirability of permitting this practice to continue.

A fund for the purpose of the investigation was authorized, not to exceed $2,500.

The second investigation authorized (resolve, ch. 60) was to cover the causes of existing unemployment, especially "among men and women over 45 years of age." If such unemployment was found to exist, the department of labor was authorized "to ascertain and report to what extent it results from the working of laws relative to workmen's compensation or to group insurance, from removal of industries from the Commonwealth on account of excessive taxes or otherwise, from consolidations and mergers of employers of labor, from the use of labor-saving machines and devices, from the existence of a surplus of labor owing to immigration, or from other causes." The study was also to include methods of remedying unemployment.

For the purpose of this study the department was authorized to expend not to exceed $5,000.

Upon the completion of the study of the two above subjects, the department is directed to report to the general legislative court the results of the investigations and its recommendations, if any, together with drafts of legislation necessary to carry the same into effect.

Survival of Handicrafts in Germany

A GERMAN Government committee appointed to investigate the conditions of production and marketing in German industries has recently published the results of its investigation of handicrafts.[1]

The investigation was based upon a census carried out in cooperation with the craft chambers, showing the number of craft under-

[1] International Labor Office. Industrial and Labor Information, Geneva, July 14, 1930, pp. 98-99.

takings and the number of persons engaged in handicrafts. The figures for 1926 are as follows:

Number of undertakings	1, 307, 876
Heads of craft undertakings	1, 320, 515
Journeymen employed	1, 517, 046
Apprentices	666, 600
Salaried employees	109, 325

The investigation revealed the fact that outside the craft enterprises there were employed in large-scale industries 2,466,826 workers who had been previously trained as craftsmen. In 1925 the general occupational census gave the number of handicraft undertakings as 1,430,410, defining them as enterprises employing less than 10 persons. The difference between the figures given by the general occupational census in 1925 and these of the investigation is to be explained by a difference in definition.

Including the members of the families of persons earning their family income by handicrafts, the total number so engaged was 7,871,628, or 12.6 per cent of the total population. If all those persons who were engaged in handicrafts without being employed in handicraft enterprises be added, the total number will amount to 12,472,273, or 20 per cent of the total population. The money turnover of the handicraft undertakings during 1928–29 amounted to 20,600,000,000 marks ($4,902,800,000), or between 14 and 16 per cent of the total money turnover of the entire country. The investigation revealed that there was a multitude of handicrafts, but that 19 principal crafts covered 80 per cent of all the handicraft industries.

In these enterprises handwork still played a considerable part, but the use of small machines, especially small motors, was increasing. It was chiefly due to the widespread use of electric motors in the country districts that the craftsmen (or as they are termed in the United States, "independent workers") had been able to adapt themselves to modern industrial methods of production.

They are thus changing their methods and technically reorganizing their work, but there is no tendency toward their disappearance or even decrease. The report of the committee states that the investigation revealed that there was no longer any question of a decline in handicrafts such as occurred in the nineteenth century. German handicrafts have shared and are sharing in the general postwar economic depression in Germany, but they seem to be strong enough to maintain and even strengthen their position by improving their technical and commercial organization.

English Coal Mines Act of 1930

THE coal mines bill, introduced into the House of Commons on December 11, 1929, received the royal assent and became law on August 1, 1930. Its terms are summarized in the Ministry of Labor Gazette for December, 1929, and August, 1930, and discussed at some length in the Labor Magazine, the official monthly journal of the labor movement, for August, 1930. The general purpose of the act is to regulate the production, supply, and sale of coal through arrangements or "schemes" worked out by the coal owners themselves

which, when approved by the Board of Trade, are to have legal force. It provides for a central, coordinating plan for the whole of Great Britain, and for local schemes for the various districts into which the coal fields are divided. It intends that these schemes shall be operated by the coal owners themselves, and it provides for their being so framed as to insure that within reasonable limits the quantity of coal offered for sale from any mine and the price charged for it shall accord with the state of current demand.

The first part calls for the formation of an interdistrict or central council, composed of representatives of all the coal-mine owners of Great Britain, who shall be responsible for coordinating the district schemes. Each of the 21 districts into which the coal fields are divided is to have a district executive board, elected by the mine owners of the district, to be responsible for the operation of the plan in that district. Two or more districts, however, may amalgamate for the purpose of operating one plan in common, provided such an amalgamation is desired by a majority of the owners (on a tonnage basis) in each of the districts affected.

The central council is to decide from time to time, in consultation with the district bodies, upon the national requirements for coal for a reasonable time ahead, and is then to allocate to each district the proportion of this amount which it may produce within the time set.

Having received a district allocation from the central council, the executive board, elected in each district by all the coal owners to administer the district scheme, will establish the method of apportioning this allocation among the pits or undertakings in the district. This will be done by fixing a standard tonnage for each pit or undertaking and applying uniformly to all the pits in a district a percentage or quota to the standard tonnage. The standard tonnage for each mine will be fixed with regard to the special circumstances of the mine, including the efficiency and economy of the working of the mine, the extent to which it has been developed or is being developed for economic working and the extent to which its output has been increasing or decreasing. In the first determination of standard tonnage it also has to be fixed in relation to the output of the mine during some recent period when voluntary regulation of output was not in force.

A separate standard tonnage may be fixed for any class of coal, and a separate quota then applied to that class. This provision for the varying of quotas according to class of coal supplies an element of elasticity which should go a long way to prevent complaints of difficulty in securing supplies of particular kinds of coal.

Provision must be made in all the schemes whereby any cases of dispute or difficulty arising out of the operation of the schemes between one district or another, or between a district and the central council, or between an individual coal owner and the executive board for a district, may be referred for decision to independent arbitrators.

Since the act definitely permits the council to set minimum prices for each kind of coal, there has been some anxiety as to the effect on the consumer, but careful provision has been made to safeguard his interests.

The public interest is protected by the fact that all details of every scheme require to be approved by the Board of Trade, and further by the provision made in the bill for the formation of a national committee of investigation, containing representatives of consumers, whose duty it will be to inquire into any complaints made as to the operation of the central scheme and for similar committees with similar duties in every district. These investigation committees are given the necessary powers to enable them to obtain information relevant to their inquiries; and provision is made that, if complaints reported by them to the Board of Trade as to the operation of a scheme in any district are not rectified to the satisfaction of the board, the board may direct that the scheme shall cease to have statutory

effect, and that, unless they are satisfied that voluntary arrangements have been made in the district for securing the necessary cooperation with other districts and compliance with the central scheme, the board may make a new scheme for the district.

The second part of the bill, introduced during its passage through Parliament, provides for the formation by the Board of Trade of a commission of five members, one of whom is to be chairman. Its function is to further the reorganization of the coal-mining industry with a view to facilitating the production, supply, and sale of coal by the owners of the mines, and for that purpose it is to promote and assist, by the preparation of schemes and otherwise, the amalgamation of undertakings where it considers that such amalgamations are in the national interest.

The third part provides for the reduction of the maximum daily working hours underground from 8 to 7½, beginning December 1, 1930. This is modified by a proviso that the Board of Trade may issue an order for any district permitting the hours to be calculated on the basis of 90 to the fortnight, instead of on the daily basis. Such an order, however, may not be issued unless the representative organizations of the owners and the employees in the district have agreed in asking for it and their request has then been approved by the Mining Association of Great Britain, which is the national body of the owners, and the Miners' Federation of Great Britain, which is the corresponding body of the workers.

The fourth part authorizes the Board of Trade to set up a coal mines national industrial board with power to investigate and report upon any dispute as to the terms of a proposed agreement respecting wages or working conditions in any district, if there has been a failure to settle the dispute locally.

SOCIAL STATISTICS

Collection of Social Statistics by United States Children's Bureau

By GLENN STEELE, UNITED STATES CHILDREN'S BUREAU

THE registration of social statistics, formerly a joint project of the National Association of Community Chests and Councils and the local community research committee of the University of Chicago, was taken over by the Children's Bureau, United States Department of Labor, on July 1, 1930. The community chests and councils will continue to assemble from local institutions and agencies in 39 metropolitan areas data which will be tabulated and analyzed by the Children's Bureau.

As organized, the scope of the study was limited to the fields of dependency, delinquency, and health. A plan to assemble monthly reports of the service given to individuals by all types of agencies included under these three broad classifications was prepared in 1927 by the joint committee for the registration of social statistics. The subsequent collection of statistics, under this plan, for the years 1928 and 1929, enabled the committee to determine the essential services which could be included in the program, with the result that for 1930 reporting was established in the following 18 fields:

Family welfare and relief; legal aid; travelers' aid; court work for delinquent and dependent or neglected children; child placing and the institutional care of dependent or neglected children; protective case work for young people; care of children in day institutions; adult probation; temporary shelter for homeless or transient persons; institutional care for the aged, indigent, or chronically ill; maternity homes; hospital in-patient service; clinic and dispensary out-patient service; city or county noninstitutional medical care of the sick poor; medical social service; psychiatric social service; public-health nursing; and school health service.

The Children's Bureau will continue the program of the joint committee with but slight modification. The reporting on court work for delinquent and dependent or neglected children, under the registration, will be dropped, since the bureau already has in operation a system of collecting juvenile-court statistics from an area wider than that established for the registration of social statistics in 1930.

Registration in most of the remaining fields will be maintained by the Children's Bureau either for the purpose of providing a measure of service direct to children or to show community child welfare needs in relation to other social services. There are many social and statistical problems to be worked out before comparable statistics in all of the fields can be secured. For their solution the bureau expects to receive much assistance from the joint committee which initiated the

work and which will be continued with some changes as an advisory committee to the Children's Bureau.

The cities participating in the registration for 1930 are Akron, Berkeley, Bridgeport, Buffalo, Canton, Chicago, Cincinnati, Cleveland, Columbus, Dayton, Denver, Des Moines, Detroit, Duluth, Grand Rapids, Harrisburg, Hartford, Indianapolis, Kansas City, Lancaster, Louisville, Minneapolis, Newark, New Haven, New Orleans, Norfolk, Omaha, Orange, Richmond, Sharon, Sioux City, Springfield (Ill.), Springfield (Mass.), Springfield (Ohio), St. Louis, St. Paul, Washington (D. C.), Wichita, and Wilkes-Barre.

Trend of Relief Expenditures

OF THE varied information which has been assembled during the past two years through the registration service, that on relief expenditures by public and private agencies in the family welfare field is of especial interest at present in connection with the appraisal of the unemployment situation.

For 15 cities submitting complete reports on relief for the years 1928 and 1929, the following table on aggregate expenditures by months is shown in the chapter on the family welfare field in the 1929 report [a] of the registration.

TABLE 1.—RELIEF [1] GIVEN BY ALL AGENCIES FOR FAMILY WELFARE AND RELIEF IN 15 CITIES [2] DURING EACH MONTH OF THE YEARS 1928 AND 1929

Month	Amount of relief given		Month	Amount of relief given	
	1928	1929		1928	1929
January	$600,279	$570,373	July	$367,861	$445,339
February	577,265	548,693	August	370,292	444,301
March	564,084	535,991	September	355,401	444,142
April	457,812	484,070	October	391,016	516,555
May	426,482	456,328	November	421,389	631,589
June	383,491	430,097	December	496,512	911,181

[1] Including mothers' aid but excluding veterans' relief.
[2] Akron, Cincinnati, Cleveland, Dayton, Des Moines, Detroit, Grand Rapids, Lancaster, Minneapolis, New Orleans, Omaha, Sioux City, Springfield, Ill., St. Paul, and Wichita.

The report shows that in all of the cities, with the exception of New Orleans where private agencies alone contributed, the relief was given by both private and public agencies, and that in most of the cities the major portion of relief came from the public treasury. In this connection it must be noted that the figures presented include money expended for mothers' aid.

Concerning the fluctuation in the relief expenditures shown in Table 1, the report for 1929 states:

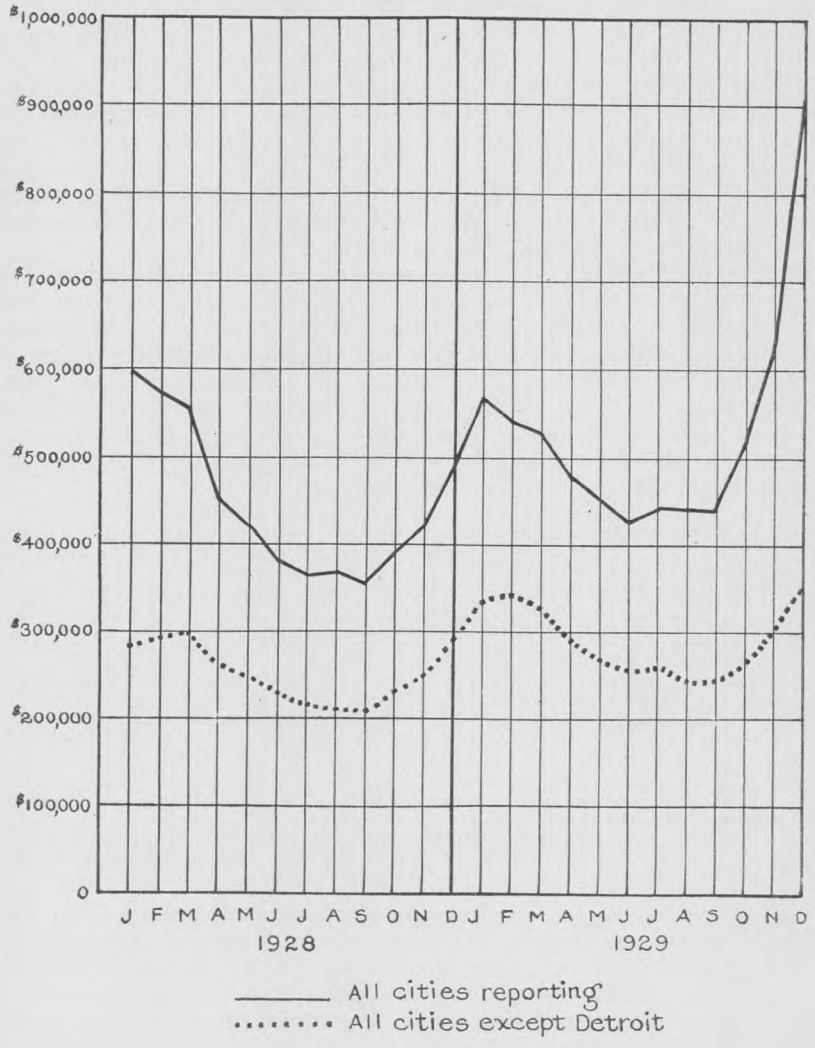
> The expenditure for the month of January, 1928, was slightly in excess of $600,000 and was the highest recorded in that calendar year. A seasonal recession commenced in February and continued until the low point for the year was reached in September, when expenditures were about $350,000. At the close of the year relief expenditures were still more than $100,000 less than they had been in January, 1928. The relief expenditures in January, 1929, were somewhat less

[a] Registration of Social Statistics for the Year 1929, Ch. I, by Helen R. Jeter and A. W. McMillan.

than in January, 1928, but after the winter and spring peak of 1929 had been passed expenditures did not fall off as they did in 1928.

During none of the summer months of 1929 were relief expenditures as low as in the corresponding months of 1928. * * * In other words, relief expen-

AMOUNT OF RELIEF GIVEN MONTHLY DURING 1928 AND 1929 IN 15 CITIES[1] REPORTING AND IN SAME CITIES EXCLUSIVE OF DETROIT



ditures during the summer of 1929 did not fall to the level that might have been expected. They were the forerunner of mounting expenditures during the fall and winter of 1929 that not only denote a period of need of major proportions but that also reflect the struggle of the agencies to rise to meet the need.

Detroit, with a population of 1,573,985 announced for 1930 by the United States Bureau of the Census, is the largest city in this group.

[1] Akron, Cincinnati, Cleveland, Dayton, Des Moines, Detroit, Grand Rapids, Lancaster, Minneapolis, New Orleans, Omaha, Sioux City, Springfield, Ill., St. Paul, and Wichita.

As would be expected, its actual expenditures for relief in both 1928 and 1929 exceeded those in any of the 14 less populous cities, but in addition, the findings show that Detroit led the list in the amount of relief given per capita in 1929. Furthermore, of the $6,418,659 disbursed for relief in that year by the 15 cities, $2,937,525 or 46 per cent of the total was expended in Detroit.

The chart on page 113 shows the trend, previously discussed, taken by relief expenditures over the 2-year period for the 15 cities. Deleting Detroit from the picture, to obviate its weighting of the group, a curve for the remaining cities is also presented. Comparing the two curves, a general similarity in contour is observed from January, 1928, to August, 1929. However, from September to December of the latter year, the rise in relief grants for the group of cities in which Detroit is included is much sharper than that shown by the curve representing the reporting cities, exclusive of Detroit.

Reports on relief for the first six months of 1930 are being received by the Children's Bureau, but are not sufficiently complete to permit a presentation of total figures by cities. However, in each of 19 cities, the principal agency which has carried the load of relief for family distress has submitted monthly reports of amounts expended from January to June, 1930. From these reports and the 1929 reports of the same agencies submitted last year to the joint committee for registration, the following table on the total monthly relief expenditures by the 19 agencies has been prepared.

TABLE 2.—AMOUNT OF RELIEF [1] GIVEN MONTHLY FROM JANUARY, 1929, TO JUNE, 1930, IN 19 CITIES [2] BY THE PRINCIPAL AGENCY PROVIDING FAMILY RELIEF IN EACH

Month	Amount of relief given		Month	Amount of relief given	
	1929	1930		1929	1930
January	$173,239	$257,350	July	$95,816	
February	171,867	239,113	August	96,589	
March	152,243	232,035	September	90,932	
April	117,484	204,387	October	106,873	
May	115,449	186,353	November	130,885	
June	95,799	169,644	December	189,888	

[1] Excluding mothers' aid and veterans' relief.
[2] Akron, Canton, Chicago, Cincinnati, Cleveland, Columbus, Dayton, Des Moines, Grand Rapids, Kansas City, Lancaster, Louisville, Minneapolis, Omaha, Richmond, Sharon, Sioux City, St. Louis, Wichita.

The figures submitted are from private case-working agencies and public departments giving out-door relief. None of the agencies included was of the type giving veterans' relief only, and departments giving aid to mothers—usually permanent support of the children of widows—were not considered, as their contributions are not appreciably affected by seasonal or economic changes.

While the amounts shown in Table 2 do not represent the total volume of relief by months for the 19 cities, they are significant for the purpose of tracing the trend of relief operations over the period from January, 1929, to June, 1930.

The peak of expenditures was reached in January of 1930. There followed a decrease month by month from winter to summer of this year, but the expenditures were on a higher level than those for the corresponding months in the first half of 1929. By June of 1930 the

agencies were still obliged to foot a relief bill far in excess of their June obligation of the preceding year and only slightly below the normal call for winter months, as expressed by disbursements in January and February of 1929.

The reports from which these data are taken do not classify the amounts expended, by cause for expenditure, and therefore the specific amount of increase due to unemployment can not be stated.

Temporary Shelter for the Homeless

THE registration service affords further information applicable to the general relief situation from its reports on temporary shelter for homeless or transient persons. These reports are received from the Salvation Army, missions, shelters, municipal lodging houses and other agencies in this field. Lodgings or meals or both are included in the service given. In each of the same 19 cities for which data were compiled in Table 2, the principal agency providing shelter has reported monthly on service given to "different persons." In the following table the figures for these agencies in the 19 cities are summarized.

TABLE 3.—NUMBER OF DIFFERENT PERSONS CARED FOR MONTHLY FROM JANUARY, 1929, TO JUNE, 1930, IN 19 CITIES BY THE PRINCIPAL AGENCY PROVIDING TEMPORARY SHELTER FOR THE HOMELESS OR TRANSIENT IN EACH

Month	Number of different persons cared for		Month	Number of different persons cared for	
	1929	1930		1929	1930
January	17,413	19,345	July	7,949	
February	14,926	18,703	August	8,024	
March	16,944	19,768	September	9,104	
April	11,876	14,183	October	11,675	
May	8,934	13,598	November	15,943	
June	7,044	11,645	December	16,238	

As in Table 2, the summation purports to show trend rather than, volume of service. The findings are in line with those for family relief, in that more persons were provided shelter during the first six months of 1930, when relief also was at a higher level, than in the corresponding months of the preceding year. The peak of care however, was not reached until March of 1930. In the first quarter of 1930, 57,816 persons were cared for, as compared to 49,283 in the first quarter of 1929. In the second quarter of 1930, shelter was given to 39,426 persons, as compared to 27,854 persons in the previous year.

Considering the seasonal influence on the service, it is interesting to note that in the more severe months of the first yearly quarter, 8,533 more persons received aid this year than last in these 19 cities, whereas in the second quarter, 11,572 more persons were assisted in 1930 than in 1929, in spite of the milder weather conditions. More comprehensive figures in the fields discussed will be available when the reporting for 1930 has been completed.

Through the continuation and development of the registration service, the Children's Bureau hopes to promote and assemble more complete current statistics in child welfare and related fields.

LEGAL AID

Report on Work of Legal Aid Organizations in 1929

DURING 1929 the legal aid organizations in the United States received more than 165,000 new cases and in thousands of instances collected sums legally due their clients, so that while the average amount recovered was small the total collections in 1929 exceeded three-quarters of a million dollars. Furthermore, the largest and most efficient legal aid offices carry on their practice at a cost of less than $3 per case. These figures were presented in the 1930 report of the standing committee on legal aid work to the American Bar Association, from which the following extract is also taken:

> More and more the control and leadership of the legal aid movement is being exercised by the National Association of Legal Aid Organizations in which virtually all the local legal aid societies and bureaus are members. This trend is entirely sound. The national association operates in a manner that is analogous to the American Bar Association. Various topics are assigned to appropriate committees for investigation and report, the reports are published, the executive committee meets each January, and annually there is a general meeting for all members.

The development of the legal aid movement is attributed by the committee to two outstanding causes:

1. The fact that legal aid lawyers in the various cities have a thorough knowledge of their jobs, and are building up a highly efficient technique founded on years of experience. By way of example, it is stated that it is no exaggeration to say there are no more experienced attorneys in conducting workmen's compensation cases before industrial accident commissions than can be found on the Boston and Chicago legal aid staffs.
2. The growing interest of the leaders of the bar in seeing that legal aid work is well done. As symbolic of this interest, the support of legal aid work by Chief Justice Hughes and the late Chief Justice Taft is cited, the former succeeding the latter as honorary president of the National Association of Legal Aid Organizations.

The legal aid organizations now wish to extend their usefulness in the far Western States and the South. In December, 1929, a west coast conference of legal aid organizations was held. It is thought that gradually local groups will become active in setting up legal aid offices in the cities of the far West which need such service. A committee of southern attorneys has been collecting data and studying conditions in their sections of the country. It is planned to call a meeting in 1931 of delegates from southern legal aid offices, representatives of southern courts, industrial accident commissions, and social agencies to define the need for legal aid in the south and to formulate measures to meet such need.

The tabulation following was presented as an appendix to the report of the American Bar Association's committee on legal aid work.

STATISTICS OF LEGAL AID WORK IN 1929

Legal aid organization	Year founded	Approximate population served	New cases received	Amount collected for clients	Gross cost of work
Akron	1918	210,000	(1)	(1)	(1)
Albany	1923	130,000	611	$17,441	$3,845
Atlanta	1924	300,000	1,236	8,137	5,828
Baltimore	1908	800,000	650	8,000	4,500
Boston	1900	2,000,000	8,953	152,037	41,124
Bridgeport Legal Aid Bureau	1922	160,000	412	7,202	5,470
Bridgeport Public Defender	1923		(1)	(1)	(1)
Buffalo	1912	550,000	5,695	33,814	(1)
Cambridge	1912	124,000	212	4,011	601
Camden	1922	120,000	(1)	(1)	(1)
Canton	1926	90,000	39	4,000	(1)
Cedar Rapids	1925	50,000	(1)	(1)	(1)
Chicago Legal Aid Bureau	1886	3,102,000	20,449	127,049	38,065
Chicago Criminal Courts Branch			432		7,110
Chicago Bureau Jewish Charities	1902	275,000	521	5,607	(1)
Cincinnati Legal Aid Bureau	1907	450,000	5,389	20,353	12,528
Cincinnati Public Defender	1929		519	(1)	1,500
Cleveland	1905	1,249,000	6,855	10,858	26,730
Columbus	1925	240,000	(1)	(1)	(1)
Covington	1928	60,000	(1)	(1)	(1)
Dallas Legal Aid Bureau	1927	212,000	4,000	22,597	1,800
Dallas Public Defender	1929		(1)	(1)	(1)
Dayton	1914	191,500	1,515	4,500	(1)
Denver	1924	285,000	1,013	9,000	4,762
Detroit	1909	1,500,000	12,183	28,118	15,055
Duluth	1913	120,000	1,738	29,119	3,465
Erie	1925	95,000	(1)	(1)	(1)
Grand Rapids	1921	175,000	1,203	4,271	5,377
Harrisburg	1929	85,000	50	300	426
Hartford Legal Aid Bureau	1927	175,000	(1)	(1)	(1)
Hartford Public Defender	1923		(1)	(1)	(1)
Hoboken	1918	70,000	(1)	(1)	(1)
Indianapolis	1928	315,000	(1)	(1)	(1)
Jersey City	1894	322,000	(1)	(1)	(1)
Kalamazoo	1925	50,000	(1)	(1)	(1)
Kansas City	1910	450,000	7,523	17,000	6,200
Lansing	1922	60,000	(1)	(1)	(1)
Long Beach, Calif	1925	75,000	(1)	(1)	(1)
Los Angeles Legal Aid Bureau	1929	1,350,000	660	500	2,500
Los Angeles City Police Court Defender	1915		7,373	(1)	(1)
Louisville	1913	320,000	3,858	21,800	7,611
Madison	1928	50,000	10	(1)	(1)
Memphis Legal Aid Bureau	1924	179,000	665	2,000	1,900
Memphis Public Defender			(1)	(1)	(1)
Milwaukee	1916	536,000	3,184	7,236	8,367
Minneapolis Legal Aid Bureau	1913	500,000	1,989	1,213	8,787
Minneapolis Public Defender	1923		( )	(1)	(1)
Montreal Legal Aid Bureau	1923	200,000	548	25,493	5,500
Montreal Jewish Legal Aid	1923	618,379	(1)	(1)	(1)
Nashville	1915	150,000	197	800	3,000
Newark	1901	467,000	(1)	(1)	(1)
New Bedford	1923	119,500	(1)	(1)	(1)
New Haven Legal Aid Bureau	1927	185,000	(1)	(1)	(1)
New Haven Public Defender	1923		(1)	(1)	(1)
New Orleans Legal Aid Bureau	1918	425,000	(1)	(1)	(1)
New Orleans Bar Association	1929		(1)	(1)	(1)
New York Legal Aid Society	1876		35,103	137,283	124,343
New York Education Alliance	1902		2,777	13,700	8,354
New York National Desertion Bureau	1911	5,970,000	1,371	(1)	22,656
New York Voluntary Defenders' Committee [2]	1919		1,016		31,000
New York Working Women's Protective Union	1863		(1)	(1)	(1)
Oakland Legal Aid Bureau	1929	572,000	467		1,681
Oakland Public Defender	1925		1,380	249	9,785
Omaha	1916	250,000	2,684	4,266	2,600
Peoria	1927	108,500	77	2,481	(1)
Philadelphia	1902	2,350,000	14,559	30,762	30,000
Pittsburgh	1908	1,185,908	1,044	(1)	8,810
Plainfield	1917	50,000	96	(1)	(1)
Portland, Maine	1925	70,000	(1)	560	(1)
Portland, Oregon	1927	260,000	(1)	(1)	(1)
Providence	1920	275,000	594	4,124	5,067
Reading	1928	110,000	55	(1)	(1)

[1] Figures have not yet been received.

[2] The Voluntary Defenders' Committee is a department of the New York Legal Aid Society and its figures are included in those of the legal aid society given above. They are here set forth separately for the information of persons desiring statistics as to criminal cases handled by legal aid organizations.

STATISTICS OF LEGAL AID WORK IN 1929—Continued

Legal aid organization	Year founded	Approximate population served	New cases received	Amount collected for clients	Gross cost of work
Rochester Legal Aid Bureau	1910	333, 614	2, 349	$8, 805	$7, 420
Rochester Public Defender	1928		1, 141	(1)	100
St. Louis Public Defender	1928	892, 000	(1)	(1)	(1)
St. Paul	1919	250, 000	(1)	(1)	(1)
Salt Lake City	1925	120, 000	137	50	900
San Antonio	1929	316, 000	1, 550	(1)	1, 256
San Diego	1919	140, 000	3, 000	(1)	2, 400
San Francisco Legal Aid Bureau	1916	733, 000	2, 578	12, 204	10, 447
San Francisco Public Defender	1925		(1)	(1)	(1)
Santa Barbara	1929	38, 000	(1)	(1)	(1)
Seattle	1925	320, 000	(1)	(1)	(1)
Springfield, Mass	1925	160, 000	1, 220	15, 388	6, 550
Toledo	1927	250, 000	(1)	(1)	(1)
Union City	1928	50, 000	(1)	(1)	(1)
Washington Associated Charities	1923	450, 000	97	(1)	(1)
Winnipeg	1923	192, 000	(1)	(1)	(1)
Youngstown	1927	135, 000	(1)	(1)	(1)
			171, 961	802, 328	464, 420

[1] Figures have not yet been received.

PRODUCTIVITY OF LABOR

Labor Efficiency in English Farming

AN ARTICLE on labor efficiency in English farming, published in the International Labor Review for May, 1930, summarizes information obtained on this point in a study of farming efficiency in England made by an investigator between 1926 and 1928 with the assistance of the National Institute of Industrial Psychology and of the Agricultural Economics Research Institute, Oxford. The items covered in the article are potato harvesting, milking of cows, fruit and hop picking, and poultry work.

Potato Harvesting

THE study of efficiency in the harvesting of potatoes covered 12 farms, each averaging about 30 acres of potatoes harvested. Remarkable variations were found in the money cost of the harvesting as between the different farms, the cost ranging from 12s. to 15s. ($2.92 to $3.65) per ton for early potatoes and from 4s. to 10s. 3d. ($0.97 to $2.49) per ton for the main crop. In this money cost were included labor, draught power, depreciation, and foremen's supervision, no allowance being made for overhead expenses.

The potatoes were harvested by first being unearthed by means of a digger drawn by a tractor or horses, followed by a harrow to uncover the potatoes not exposed by the digger. The potatoes were then collected by hand and thrown into receptacles. In some cases the harrowing followed the hand collection.

There was a considerable amount of unproductive time, some of which was to be expected. The pickers must work in collaboration with the digger, and some time is unavoidably lost through the digger's becoming choked with weeds and haulm or breaking down. Unproductive time of the digger, it is said, might reasonably be expected to amount to 35 per cent of the total time of completed runs. It was found, however, to average 50 per cent and occasionally was as high as 70 and 75 per cent, in two cases reaching 78 and 87 per cent. On one farm, where weather and soil were good, the driver keen, and the field exceptionally long, only 15 to 30 per cent of the total time was lost. Unproductive time of the pickers, which in the investigator's opinion should not exceed 25 per cent of the aggregate total time worked, averaged 30 per cent. The highest percentage of unproductive time was shown by the fast pickers, as they waited for the slower workers. Unproductive time of individual pickers, based on records of one fast worker and one slow worker selected from each farm, ranged from 10 to 67 per cent.

Some of the conditions which caused loss of time were controllable, probably the most important being lack of discrimination in selection of workers, who worked at very uneven rates. An adequate

supply of receptacles of optimum size is important, and much carelessness on this score was observed, the workers frequently being kept idle for lack of baskets or sacks. Sacks were often poor, and no attempt had been made to determine the best size and shape of basket. Also, the systems of carting and the height of the carts were often unsuitable.

The most efficient work was obtained with a small, carefully selected group of pickers assigned to areas suited to the relative capacity of each, and furnished with a generous supply of baskets of suitable size, and with the transferring of the potatoes from basket to cart efficiently carried out. This gang averaged 7 hundredweight per hour per worker, or about 250 per cent more than workers in badly organized gangs, whose output was perhaps 2 hundredweight per hour per worker. The average earnings of the more efficient gang, however—3s. 9d. (91 cents) per day—working on piece rates were only about 7 per cent more than the average time earnings, which were 3s. 6d. (85 cents) per day. It is reported that the women and girls who did the picking, and who were seasonal or casual workers, were usually paid from 5d. to 7d. (10 cents to 14 cents) per hour.

Records of the average number of pounds picked per minute by slow and by fast workers on three farms showed that the number of pounds of early potatoes picked by the slow workers on the several farms ranged from 1.2 to 3 as compared with an output of from 5 to 7 pounds per minute by the fast workers; on the main-crop potatoes, the slow workers averaged from 5.5 to 7 pounds per minute and the fast workers from 9 to 12 pounds. Early potatoes being much smaller than the main crop, the weight picked per minute is less. The number of main-crop potatoes picked per minute varied from 44 to 80 and one very slow worker averaged only 30 per minute. The yield of potatoes also influences the rate of picking, which may be reduced as much as 25 per cent by a poor yield and "may advance from 10 pounds per minute to 17 pounds per minute" with an increasingly heavy crop. It was found that an equal weight of very large potatoes (12 ounces each) could be picked seven times as fast as very small ones (1 ounce each).

Machine Versus Hand Milking of Cows

TIME records of both machine and hand milking of 26 cows on one farm showed that the saving of time effected by machine milking amounted to nearly two men's time, or 65 per cent. The following table shows the amount of time taken for the different methods:[1]

AMOUNT OF TIME TAKEN IN DIFFERENT METHODS OF MILKING OF COWS

Item	Hand milking	Machine milking
Number of labor minutes for whole operation	277	102
Number of labor minutes for milking	196	74
Number of labor minutes in actual productive milking	156	43

[1] The whole operation included fetching and tying up cows, carrying milk to churns, and washing up; "milking" included incidental fetching and carrying of utensils from one cow to another; "actual productive milking" was the time spent on that process only.

Machine milking is more exacting than hand milking and there was a tendency for the worker to expect a higher rate of pay. However, it is said that with good equipment under a good man, and with a milking herd of not less than 25 cows, machine milking is to be encouraged as an undoubted labor economizer, and the investigator is reported to consider that the outcome of the experiment conducted is a good example in proof of the contention that the introduction of machinery can permit of the payment of higher wages.

Fruit and Hop Picking

HAVING gone into the matter of labor efficiency in fruit picking in an earlier report,[2] the author treated it only briefly in the present study. The fruits referred to in the summary given in the International Labor Review are black currants and strawberries. The influence of the provision of seats on the output of four workers picking black currants was observed, but while the seats naturally provided greater comfort for the workers the effect on their output was negligible, two workers showing a slight increase and two a slight decrease.

In the case of strawberries, observations were made to ascertain the effects of methods of wage payment on output and to find out the fastest rate of picking attainable by the workers. The crop on a certain farm being very light, it was not thought feasible to have it picked on the usual piece-rate (weight) basis, so a test was made to see if the paying of time rates would induce careless work—the leaving unpicked of ripe berries. A repicking of a number of rows after the regular pickers had finished with them yielded nearly half as much fruit as the original pickers obtained, which showed that piece-rate payment would have been preferable. In the test to determine the fastest rate of picking attainable, for which two money prizes were offered, the two winners picked 24 and 23 pounds in 35 and 40 minutes, respectively, as compared with a smaller amount picked by the slowest pickers in 1 hour and 5 minutes. The accepted normal rate being about 16 pounds per hour, the contrast between this rate and the results obtained in the competition was considered very suggestive of the increase in harvesting output which might be obtained by adopting progressive premium wages, i. e., rates increasing on a progressive sliding scale with the amount of work done.

Unproductive time was the subject of investigation in connection with hop picking, the employer wishing to determine the slowest pickers in order that he might eliminate them the following year. It was found that individual rates of picking varied from 40 to 160 per minute. The best pickers not only picked at a faster rate when working, but wasted less time by not working. However, unproductive time, which consisted mainly in fetching new pieces of bine and in picking leaves out of the bins, in half of the cases observed amounted to as much as 40 per cent of the total time. This could have been reduced, it is said, by the use of larger pieces of bine and by the exercise of more skill in avoiding the accumulation of leaves.

[2] National Institute of Industrial Psychology. An investigation of certain processes and conditions on farms. London, 1927. (Some parts of this paper were analyzed in the International Labor Review for November, 1927, pp. 703–704.)

Poultry Work

THE investigation of poultry work was confined to a study of the possibility of cutting down working hours and the economic gain that might result therefrom. The means considered were better equipment and better routing or arrangement of the daily tasks. The foreman and his wife, who did all of the work on the farm studied, were estimated to work 50 hours and 30 hours per week, respectively, in the summer; the work in the winter and spring was heavier owing to incubation and rearing of the poultry.

Checking by a pedometer showed that the foreman walked 14 miles a day, about half of his working time being spent reaching the exact spots where the actual work was done. It was found that a revised program of jobs would have cut down this walking time by 7 hours per week, and better equipment would have effected a further saving of 6 hours 25 minutes per week, in addition to the saving of fatigue which would have accompanied the improvements suggested.

Conclusion

THE information obtained in the present study of farming efficiency is said to have confirmed the previous general impression that "the use made of human labor in agriculture is often, measured by modern standards, ineffective, careless, and wasteful. * * * The casualness of setting about and carrying on farm operations on thousands of farms all over the world puts farming at a constant disadvantage, and must involve an uneconomic waste of time running into millions of hours year after year."

CHILD LABOR

Laws Governing Night Work of Minors

LEGISLATION prohibiting night work for minors has been enacted in all of the States except Montana[1] and Washington,[2] and also in the District of Columbia, Hawaii, Porto Rico, and the Philippine Islands. The constitutionality of these laws has been upheld under the police power of the State as being for the protection of the life, health, and safety of minor children.

Several of the States prohibit the engaging of minors within certain hours at night in any gainful occupation, while in other jurisdictions specified occupations and industries are enumerated. In approximately 30 jurisdictions there are special provisions regulating the night hours of messengers. The most common period during which night work is prohibited in this group is from 10 p. m. to 5 a. m. The prohibition of street trades within certain hours at night is also provided in many of the States, these hours ranging from 7 or 8 p. m. to 5 or 6 a. m.

Agriculture and domestic service are as a rule excluded from the prohibitory provisions, as well as minors employed in mercantile establishments during the holiday season (usually December 17–24) and inventory periods.

LAWS GOVERNING NIGHT WORK FOR MINORS

[M=males; F=females]

State	Age		Hours during which work is prohibited	Occupations or industries specified	Citation
	M.	F.			
Alabama	16	16	7 p. m.–6 a. m.	Any gainful occupation (agricultural labor or domestic service excepted).	Code, 1923, sec. 3495.
	18	18	10 p. m.–6 a. m.	Messengers	Idem, sec. 3497.
	16	------	8 p. m.–5 a. m.	Street trades	Idem, secs. 3513, 3516.
Arizona	16	18	7 p. m.–7 a. m.	Gainful occupations (domestic service and farm labor excepted).	Rev. Code, 1928, sec. 1373.
	21	21	10 p. m.–5 a. m.	Messengers in incorporated cities	Idem, sec. 1372.
Arkansas	16	16	7 p. m.–6 a. m.	Any occupation	Digest, 1921, sec. 7090.
	------	18	9 p. m.–7 a. m.	Manufacturing, mechanical or mercantile establishments, laundries, or employment in any express or transportation company.	Idem, sec. 7103.
	18	18	10 p. m.–6 a. m.	Any occupation	Idem, sec. 7091.
California	18	18	10 p. m.–5 a. m.	----do	Acts of 1919, ch. 259, sec. 2.
	18	------	9 p. m.–6 a. m.	Messengers in towns of more than 15,000 population.	Idem, sec. 3.
	15–18	15–18	After midnight.[a]	Theatrical employments [a]	Idem, sec. 5.

[a] Work may be performed up to midnight only with consent of commissioner of labor.

[1] Minors under 16 are, however, prohibited from working in factories at any time.
[2] Work by minors under 18 is prohibited from 7 p. m. to 6 a. m., by order of the Industrial Welfare Committee.

LAWS GOVERNING NIGHT WORK FOR MINORS—Continued

State	Age		Hours during which work is prohibited	Occupations or industries specified	Citation
	M.	F.			
Colorado	16	16	After 8 p. m.	Any gainful occupation	Comp. Laws, 1921, sec. 4219.
	14	14	8 p. m.–7 a. m.	do	Idem, sec. 4208.
Connecticut	18	18	10 p. m.–5 a. m.	Messengers in cities of 20,000 population or over.	Gen. Stats., Rev. of 1918, sec. 2611.
	16	16	After 6 p. m.[2]	Mercantile establishments	Idem, sec. 5303 (as amended by Acts of 1921, ch. 220; Acts of 1925, ch. 156; Acts of 1927, ch. 144).
	------	([3])	10 p. m.–6 a. m.	Manufacturing, mechanical or mercantile establishments.	Do.
	16	16	do	Restaurants, cafés, dining rooms, barber shops, beauty parlors or photograph galleries.	Idem, sec. 5306 (as mended by Acts. of 1925, ch. 208)
	16	16	6 p. m.–6 a. m.	Mills, canneries, workshops, factories, or manufacturing establishments.	Acts of 1921, ch. 188, sec. 1.
	14–16	14–16	After 6 p. m.[4]	Bowling alleys, shoe-shining establishments, billiard or pool rooms.	Acts of 1925, ch. 158.
Delaware	21	21	10 p. m.–6 a. m.	Messengers in places of over 20,000 population.	Rev. Code, 1915, 3150 sec. 50 (as amended by Acts of 1917, ch. 232).
	([5])	([5])	7 p. m.–6 a. m.	Any establishment or occupation	Idem, 3159 sec. 59 (as amended by Acts of 1923, ch. 203).
	16	16	do	Street trades	Idem, 3160 sec. 60–A (as amended by Acts of 1923, ch. 204).
District of Columbia.	16	18	7 p. m.–7 a. m.	Any gainful occupation (agricultural work and housework or distribution or sale of newspapers excepted).	D. C. Code, 1929, title 7, sec. 112.
	16–18	------	10 p. m.–6 a. m.[6]	do	
	18–21	------	12 p. m.–5 a. m.	Messengers	Idem, sec. 116.
	------	18–21	7 p. m.–6 a. m.	do	Do.
	16	------	------do	Street trades	Idem, sec. 128.
Florida	16	16	8 p. m.–5 a. m.	Mills, factories, workshops, laundries, mines.	Rev. Gen. Stats., 1927, sec. 5949.
	18	18	10 p. m.–5 a. m.	Messengers	Idem, sec. 5951.
Georgia	16	16	9 p. m.–6 a. m.	Messengers	Acts of 1910, p. 117, No. 486, sec. 1.
	14–16	14–16	7 p. m.–6 a. m.	Mills, factories, laundries, manufacturing establishments, workshops.	Acts of 1925, p. 291, sec. 2.
Hawaii	16	16	9 p. m.–5 a. m.	Any occupation	Rev. Laws, 1925, sec. 4490.
Idaho	14	14	9 p. m.–6 a. m.	Mines, factories, workshops, mercantile establishments, stores, telephone or telegraph offices, laundries, restaurants, hotels, apartment houses, messengers.	Comp. Stats., 1919, sec. 1024.
	16	16	do	Any gainful occupation	Idem, sec. 1027.
Illinois	16	16	7 p. m.–7 a. m.	do	Rev. Stats., 1917, ch. 48, sec. 20h (as amended by Acts of 1921, p. 435, and Acts of 1929, p. 429).

[2] On more than one day in each calendar week, except from December 17–25 when work until 10 p. m. is permitted.
[3] Over 16.
[4] On any day preceding a school day, and after 10 p. m. any time.
[5] Any child.
[6] Boys between 16 and 18 may not be employed in stuffing newspapers more than one night in any one week.

LAWS GOVERNING NIGHT WORK FOR MINORS—Continued

State	Age		Hours during which work is prohibited	Occupations or industries specified	Citation
	M.	F.			
Indiana	------	(a)	10 p. m.–6 a. m.	Manufacturing	Burns' Ann. Stats. 1914, sec. 8023.
	14–16	14–18	7 p. m.–6 a. m.	Any gainful occupation (farm labor or domestic service or caddying excepted).	Acts of 1921, ch. 132, sec. 21, (as amended by Acts of 1929, ch. 76).
	18	------	10 p. m.–6 a. m.	Messengers	Acts of 1921, ch 132, sec. 23.
Iowa	16	16	6 p. m.–7 a. m.	Mines, manufacturing establishments, shops, factories, mills, laundries, slaughter or packing houses, stores, or mercantile establishments (where more than 8 persons are employed), livery stables, garages, places of amusement, messenger service.	Code, 1927, sec. 1527.
	11–16	------	7.30 p. m.–4 a.m.[7]	Street trades	Idem, sec. 1538.
	18	18	10 p. m.–5 a. m.	Messengers in cities of 10,000 population or over.	Idem, sec. 1539.
Kansas	16	16	6 p. m.–7 a. m.	Factories, canneries, workshops, theaters, mills, packing houses, operating elevators, messenger service, hotels, restaurants, or mercantile establishments.	Rev. Stats., 1923, sec. 38–603.
Kentucky	16	16	-----do-----	Factories, mills, workshops, mercantile establishments, stores, offices, printeries, bakeries, laundries, restaurants, hotels, apartment houses, theaters or motion-picture establishments, or messenger service.	Carroll's Ky. Stats., 1930, sec. 331a–7.
	21	21	9 p. m.–6 a. m.	Messengers in cities of first, second or third class.	Idem, sec. 331a–11.
	14–16	------	8 p. m.–6 a. m.	Street trades	Idem, sec. 331a–15.
Louisiana	16	18	7 p. m.–6 a. m.	Any occupation. (Does not apply to persons working in stores or mercantile establishments on Saturday nights where more than 5 persons are employed.)	Laws, 1908, No. 301 (as amended by Acts of 1916, No. 177).
Maine	16	16	6 p. m.–6.30 a. m.	Workshops, factories, manufacturing or mechanical establishments, laundries, bowling alleys, pool rooms.	Acts of 1915, ch. 350 (*see* Rev. Stats., p. 1650), as amended by Acts of 1919, ch. 191.
Maryland	18	18	10 p. m.–6 a. m.	Messengers in cities of 20,000 population or over.	Ann. Code, 1924, vol. 2, art. 100, sec. 26.
	16	16	7 p. m.–7 a. m.	Mills, factories, workshops, mechanical establishments, restaurants, office buildings, hotels, tenements, manufactories or workshops, bakeries, apartment houses, barber shops, shoe-shining stands, public stables, garages, laundries, drivers in brick or lumber yards, messenger service, repairing buildings, boarding houses, mercantile establishments, clubs, places of amusement, stores, offices, sale of merchandise.	Idem, sec. 24.
	16	16	8 p. m.–6 a. m.	Street trades	Idem, sec. 34.
Massachusetts	18	21	10 p. m.–5 a. m.	Factories, workshops, manufacturing, mechanical or mercantile establishments, and other specified employments.	Gen'l Laws 1921, ch. 149, sec. 66.
	------	21	After 11 p. m.	Telephone operators in regular service.	
	18	21	After 6 p. m.	Manufacture of textiles	
	21	21	10 p. m.–5 a. m.	Messengers (with certain exceptions).	Idem, sec. 68.

[a] Any female.

[7] 8.30 p. m. to 4 a. m. during summer school vacation.

LAWS GOVERNING NIGHT WORK FOR MINORS—Continued

State	Age M.	Age F.	Hours during which work is prohibited	Occupations or industries specified	Citation
Massachusetts—Continued.	14	14	6 p. m.–6.30 a. m.	Factories, workshops, mercantile, manufacturing or mechanical establishments, public stables, garages, barber shops, shoeshining stands, brick or lumber yards, telephone exchanges, telegraph or messenger offices, construction and repair of buildings, work carried on in tenements.	Idem, sec. 60 (as amended by Acts of 1921, ch. 410).
	16	16	do	do	Idem, sec. 65 (as amended by Acts of 1921, ch. 410).
	14	14	8 p. m.–6 a. m.	Street trades	Idem, sec. 69 (as amended by Acts of 1921, ch. 410).
	16	------	9 p. m.–5 a. m.	do	Idem, sec. 73.
Michigan	16	16	6 p. m.–6 a. m.	Manufacturing establishments, workshops, quarries, mines, messenger service.	Comp. Laws, 1915, sec. 5330, as amended by Acts of 1927, No. 21; Acts of 1929, No. 299).
	18	18	10 p. m.–5 a. m.	Transmission, distribution, or delivery of messages or merchandise.	Do.
	------	18	6 p. m.–6 a. m.	Manufacturing establishments	Do.
Minnesota	18	------	9 p. m.–5 a. m.	Messengers	Gen. Stats., 1923, sec. 4104.
	16	16	7 p. m.–7 a. m.	Any gainful occupation	Idem, sec. 4100.
	[8]14–16	----	8 p. m.–5 a. m.	Street trades in cities of first, second, and third class.	Idem, sec. 4106.
Mississippi	14–16	14–16	7 p. m.–6 a. m.	Mills, canneries, workshops, factories, manufacturing establishments.	Acts of 1914, ch. 164 (as amended by Acts of 1924, ch. 314, sec. 2).
Missouri	16	16	7 p. m.–7 a. m.	Any gainful occupation (domestic and farm labor excepted). Does not apply to selling of newspapers or magazines, or (when school is not in session) to industries employing less than 6 persons.	Acts of 1921, p. 184, sec. 3 (as amended by Acts of 1923, p. 129; Acts of 1929, p. 130).
Montana	16	16	No hours stated.	Employment of children under 16 in factories, etc., is generally prohibited while school is in session, with certain qualifications.	Rev. Code, 1921, sec. 1136.
Nebraska	16	16	8 p. m.–6 a. m.	Theaters, concert halls, mercantile and manufacturing establishments, offices, hotels, laundries, service as messenger or driver, packing houses, bowling alleys, beet fields, stores, elevators, factories, workshops.	Comp. Stats., 1922, sec. 7678.
Nevada	18	18	10 p. m.–5 a. m.	Messengers in incorporated cities and towns.	Rev. Laws, 1919, p. 2650, sec. 7.
New Hampshire	16	16	7 p. m.–6.30 a. m.	Any gainful occupation (domestic and farm labor excepted).	Public Laws, 1926, ch. 118, sec. 23.
	18	18	10 p. m.–5 a. m.	Messengers. (Boys of 14 may deliver newspapers after 5 a. m., and boys of 12 between 4 and 8 p. m.)	Idem, secs. 22, 23.
New Jersey	16	16	7 p. m.–7 a. m.	Factories, mills, places where manufacture of goods of any kind is carried on, workshops.	Comp. Stats., 1910, p. 3025, sec. 24 (as amended by Acts of 1919, ch. 36).
	16	16	do	Mercantile establishments	Acts of 1911, ch. 136, sec. 2 (as amended by Acts of 1919, ch. 37).
	21	21	10 p. m.–5 a. m.	Messengers, etc. (with certain exceptions), in cities of first class.	Acts of 1911, ch. 363, sec. 1.
	18	18	do	Messengers, etc. (with certain exceptions), in other municipalities.	
New Mexico	16	16	9 p. m.–6 a. m.	Any occupation	Stats., 1929, sec. 80–104.
	16	16	7 p. m.–7 a. m.	Any gainful occupation	Idem, sec. 80–108.
	16	------	8 p. m.–7 a. m.	Messengers	Idem, sec. 80–112.

[8] And children of 12 and 13, who are given work permits only when school is not in session.

LAWS GOVERNING NIGHT WORK FOR MINORS—Continued

State	Age M.	Age F.	Hours during which work is prohibited	Occupations or industries specified	Citation
New York	16–18		12 p. m.–6 a. m.	Factories (except canneries between June 15 and Oct. 15).	Consol. Laws, 1909, ch. 31 (as amended by Acts of 1921, ch. 50, art. 5, sec. 171; Acts of 1924, ch. 375).
	16–18		do	Mercantile establishments, distribution or transmission of merchandise or articles (except period Dec. 18 to 24 and two additional days during year for stock taking).	Idem, ch. 31, sec. 180a (as amended by Acts of 1924, ch. 375).
	21		10 p. m.–5 a. m.	Messengers in cities of first or second class.	Idem, ch. 31, sec. 185.
		[9]	9 p. m.–6 a. m.	Factories (except canneries between June 15 and Oct. 15).	Idem, ch. 31, sec. 172 (as amended by Acts of 1927, ch. 453; Acts of 1930, ch. 868).
		[3]	10 p. m.–7 a. m.	Mercantile establishments (except period Dec. 18 to 24). Does not apply to female writers, or reporters in newspaper offices and licensed pharmacists.	Idem, ch. 31, sec. 181 (as amended by Acts of 1927, ch. 453; Acts of 1928, ch. 567; Acts of 1930, ch. 867).
		[3]	10 p. m.–6 a. m.	Restaurants in cities of first and second class (with certain exceptions).	Idem, ch. 31, sec. 182.
	16	16	5 p. m.–8 a. m.	Factory	Idem, ch. 31, sec. 170 (as amended by Acts of 1925, ch. 622).
		[10]	10 p. m.–7 a. m.	Operation of freight or passenger elevators (with certain exceptions).	Idem, ch. 31, sec. 183.
	16	16	6 p. m.–8 a. m.	Mercantile establishments, hotels, restaurants, theaters, bowling alleys, barber shops, places of amusement, messenger service, offices, telegraph offices, apartment houses, shoe-shining establishments.	Idem, ch. 31, sec. 180.
	16		8 p. m.–6 a. m.	Sale of newspapers	Idem, ch. 16, sec. 626 (as amended by Acts of 1921, ch. 386).
	[11]		7 p. m.–6 a. m.	Street trades	Idem, ch. 16, sec. 638 (as amended by Acts of 1928, ch. 646).
North Carolina	16	16	do	Mills, factories, canneries, workshops, laundries, bakeries, hotels, restaurants, mercantile establishments, garages, messenger service, stables, lumber yards, manufacturing establishments, offices, barber shops, places of amusement, brick yards, bootblack stands. (Boys' and girls' canning clubs authorized by State agricultural department are exempt.)	Consol. Stats., 1919, sec. 5033 (as amended by Acts of 1927, ch. 251).
North Dakota	16	16	7 p. m.—7 a. m.	Any occupation (domestic service and agricultural labor excepted).	Acts of 1923, ch. 155, sec. 8.
Ohio	16	18	6 p. m.–7 a. m.	Factories, workshops, canneries, mercantile or mechanical establishments and other specified employments.[12]	Gen. Code, 1910, sec. 12996 (as amended by Acts of 1919, p. 532).[12]
	18		10 p. m.–6 a. m.	Factories, etc.[12]	Do.[12]
		21	do	do	Do.
	18		9 p. m.–6 a. m.	Messengers	Idem, sec. 12996–1 (as amended by Acts of 1913, p. 864).
Oklahoma	16	18	6 p. m.–7 a. m.	Factories, factory workshops, steam laundries, theaters, bowling alleys, pool halls.	Comp. Stats., 1921, sec. 7213 (as amended by Acts of 1929, ch. 35).

[3] Over 16. [9] Under 21. [10] Over 18. [11] No boy. [12] See also extended list covered in Section 12993.

LAWS GOVERNING NIGHT WORK FOR MINORS—Continued

State	Age		Hours during which work is prohibited	Occupations or industries specified	Citation
	M.	F.			
Oregon	16	16	6 p. m.–7 a. m.	Any occupation	Acts of 1920, sec. 6695.
	18	18	10 p. m.–5 a. m.	Messengers	Idem, sec. 6706.
Pennsylvania		21	9 p. m.–6 a. m.	Any establishment (girls over 18 employed as telephone operators exempted.)	Stats., 1920, sec. 13544.
	([13])	([13])	8 p. m.–6 a. m.	Messengers	Idem, sec. 13290.
	14–16		do	Any occupation	Idem, sec. 13288.
Philippine Islands	16	16	6 p. m.–6 a. m.	Factories, shops, or other places of labor.	Acts of 1923, No. 3071, sec. 12.
Porto Rico	16	16	6 p. m.–8 a. m.	Any gainful occupation (domestic, farm and garden labor excepted).	Acts of 1921, No. 75, sec. 3 (as amended by Acts of 1925, No. 64).
	16		10 p. m.–5 a. m.	Messengers	Idem, sec. 6.
Rhode Island	21	21	do	do	Gen. Laws, 1923, ch. 85, sec. 32.
	16		9 p. m.–5 a. m.	Street trades	Idem, ch. 143, sec. 5.
	16	16	7 p. m.–6 a. m.	Factories, manufacturing, or business establishments.	Idem, ch. 85, sec. 1 (as amended by Acts of 1923, ch. 482; Acts of 1926, ch. 812; Acts of 1928, ch. 1222).
South Carolina	16	16	8 p. m.–6 a. m.	Factories, mines, or textile manufactories. (In certain cases children under 16 may work 1 hour later to make up lost time caused by accident or breaking down of machinery.)	Code, 1922, vol. 2, sec. 414.
	18	18	10 p. m.–5 a. m.	Messengers in cities of 5,000 population or over.	Idem, sec. 418.
South Dakota	14	14	After 7 p. m.	Children under 14 are permitted to work until 7 p. m. during vacations and outside of public school hours.	Rev. Code, 1919, sec. 10015 (as amended by Acts of 1923, ch. 308).
Tennessee	18	18	10 p. m–5 a. m.	Messengers	Thompson's-Shannon's Code, 1918, sec. 4342a–47.
	14–16	14–16	7 p. m.–6 a. m.	Mills, factories, workshops, canneries, laundries, telegraph or telephone offices, messenger service.	Idem, sec. 4342a–47.
Texas	15	15	10 p. m.–5 a. m.	Any occupation (farm and dairy labor excepted).	Rev. Crim. Stats. 1925, title 18, ch. 4, art. 1576 (as amended by Acts of 1925, ch. 42; Acts of 1929, ch. 180).
Utah	([14])	([14])	After 9 p. m.	Street trades	Comp. Laws, 1917, sec. 1871.
	21	21	9 p. m.–5 a. m.	Messengers in cities of first and second class.	Idem, sec. 1866.
Vermont	16	16	7 p. m–6 a. m.	Railroad or manufacturing work, hotels, billiard or pool rooms, bowling alleys, messenger service.	Gen'l Laws, 1917, sec. 5833.
Virginia	16	16	6 p. m.–7 a. m.	Any gainful occupation (farms, orchards, or gardens excepted).	Acts of 1922, ch. 489, sec. 2.
	18	21	10 p. m.–5 a. m.	Messengers	Idem, sec. 14.
West Virginia	16	16	7 p. m.–6 a. m.	Any gainful occupation (agricultural or domestic service excepted).	Acts of 1919, ch. 17, sec. 6.
Wisconsin	17		7.30 p. m.–5 a. m.	Sale or offering for sale newspapers, magazines, or periodicals in any city of the first class.	Stats., 1923, sec. 103.28.
	21	21	8 p. m.–6 a. m.	Messengers in cities of first, second, and third class.	Idem, sec. 103.05 (3), (a).
	16	16	6 p. m.–7 a. m.	Any gainful occupation (domestic and farm labor excepted).	Idem, sec. 103.05 (8), (a).
Wyoming	16	16	7 p. m.–7 a. m.	Any occupation (domestic and farm labor excepted).	Comp. Stats., 1920, sec. 3881 (as amended by Acts of 1923, ch. 48).

[13] Minor.

[14] No child.

New Jersey Commission to Study Employment of Migratory Children

BY A joint resolution (No. 6) adopted at the 1930 session of the New Jersey Legislature, a commission of four members was created "for the purpose of inquiring into and making a study of the migratory child labor problem in the State of New Jersey, and the conditions surrounding the employment of migratory children."

Governor Larson appointed the following on the migratory child survey commission:[1] Mrs. Helen M. Berry, representing the State Department of Health; Mr. Wesley O'Leary, Assistant Commissioner of Education; Mr. Henry B. Weiss, representing the Department of Agriculture; and Isabelle M. Summers, Director of the Bureau for Women and Children, representing the Department of Labor. Under the joint resolution, as approved, it was provided that a representative of each of the above departments should constitute the commission. For the purpose of carrying the survey into effect, an appropriation of $5,000 was made.

[1] The Industrial Bulletin, published by the Department of Labor of New Jersey, July, 1930.

WORKMEN'S COMPENSATION

Recent Workmen's Compensation Reports

Ohio

REVISED premium rates for workmen's compensation insurance in Ohio became effective on July 1, according to the Ohio Industrial Commission Monitor for August, 1930. The revision was based on the individual experience of the various industrial classifications during the 5-year period 1925–1929. Favorable experience for 103 classifications resulted in reductions of the basic rates ranging from 2 cents to $2 per $100 of pay roll. The opposite condition for 166 classifications necessitated increases in the rates for these, ranging from 2 cents to $4 per $100 of pay roll. The remaining 326 classifications were not affected. The occupational disease rate also remained unchanged at 1 cent per $100 of pay roll.

As a result of the law requiring all employers having three or more employees to insure in the State insurance fund, unless accepted as self-insurers, these rates govern the amount of premium paid by 43,000 private employers.

The financial statement of the fund for the calendar year 1929 shows total assets on December 31 of $56,366,885.80, which includes a reserve of $46,778,588.50 to cover further payments on previous accidents. The pay roll covered for the year amounted to $1,578,-886,096, or 7.3 per cent more than the pay roll for 1928.

The number of claims filed during the year totaled 234,314, an increase of 15 per cent over the number filed in 1928.

Oregon

THE financial report of the State Industrial Accident Commission of Oregon, for the fiscal year ending June 30, 1930, shows an excess of receipts over disbursements for the year of $387,199.54. Receipts of premiums by the State accident fund amounted to $2,995,927.15 from the employers and $333,757.47 from the workers, a total of $3,329,684.62. Interest, penalties, and other receipts increased the amount to $3,666,324.

Disbursements, totaling $3,279,124.46, included payments for time loss, $1,133,592.48; medical aid, $828,405.88; pensions, $697,379.81; burial expense, $18,300; permanent partial disability (less than 24 months), $217,361.26; physiotherapy, rehabilitation, etc., $63,920.38; administrative expense, $320,164.65.

Workmen's Compensation for Seamen in Belgium

A BELGIAN law[1] enacted December 30, 1929, which became effective July 1, 1930, provides for the payment of compensation to seamen and fishermen injured as a result of work carried on in the execution of the labor contract, whether the accident occurs upon board the vessel or not, or in any task undertaken in connection with the shipping or fishing enterprise.

Accidents which cause temporary total incapacity for work entitle the injured person to a daily indemnity equal to 50 per cent of his wages or average daily earnings. If the temporary incapacity is or becomes partial the payment should be equal to 50 per cent of the difference between the wages of the injured person prior to the accident and those which he is able to earn before complete recovery. If at the expiration of 28 days the temporary incapacity is still total, the daily benefit is increased to two-thirds of the average daily wage, and if the incapacity is or becomes permanent an annual allowance of two-thirds of the average wages is paid, which may be increased to a maximum of 80 per cent in case the condition of the injured person is such that he requires the assistance of another person. The injured person is also entitled to medical, surgical, pharmaceutical, and hospital care as well as to such prosthetic and orthopedic appliances as are necessary, and provision is also made for payment for the renewal of such appliances. The injured person has free choice of a physician, unless the shipowner or one of the communal insurance funds maintains a comprehensive medical service, but in this case the payments allowed are limited to an established scale of prices.

In case of death a benefit of 750 francs ($20.85) is paid for funeral expenses and the surviving husband or wife, if not separated or divorced, receives an amount equal to 30 per cent of the annual wages of the deceased, provided the marriage took place before the accident. Additional allowances are paid for children under 18 years of age and in the absence of such heirs benefits not to exceed 20 per cent of the wages of the insured person are paid to the parents of the deceased or, if they are not living, to other more distant relatives. In certain cases a lump sum not exceeding one-third of the total amount due may be paid to the insured person or his heirs.

When the boat may be presumed to be lost because of lack of news the benefits will be payable to the heirs six months from the date of the sailing of the vessel or of the last day on which it was heard from. This term is reduced to three months in the case of fishing boats.

In the calculation of the benefits, wages or profits in excess of 20,000 francs ($556) are not considered. Temporary benefits are payable every fortnight, annual allowances and arrears are paid quarterly, and funeral costs are paid during the month in which death occurred.

The law provides for the establishment of a general fund of the merchant marine, to which owners of boats engaged in commerce are obliged to pay an annual tax for each man embarked. The amount of the tax will be fixed by a special decree and will be subject to revision every five years. This fund is administered by the Minister of the Navy through a council composed of four delegates ap-

[1] Revue des Accidents du Travail, March-April, 1930, Brussels, pp. 97–112.

pointed by the shipowners, one delegate from the navigating personnel, and one from the navy administration, together with a clerk appointed by the minister. A similar fund is organized for the owners of fishing vessels and is administered by the governmental office having charge of maritime fishing.

Report of an accident must be made by the shipowner or his delegate within three days of the news of the accident in case of loss of the boat, and a declaration covering all the members of the crew must be filed within eight days. In Belgium this report must be made to the naval officer of the port to which the boat belonged; in the colonies, to the authorities designated by the Colonial Minister; and in foreign countries, to the consular agent. Failure to do so is punishable by a fine of 50 to 2,000 francs ($1.39 to $55.60).

LABOR LAWS AND COURT DECISIONS

Salesman Held not an Employee under Workmen's Compensation Act

THE Supreme Judicial Court of Massachusetts recently reversed the decision of the superior court of Suffolk County and held that a salesman injured while driving his automobile to attend a sales meeting of his company was not an employee within the meaning of the State workmen's compensation law. (Schofield's Case, 172 N. E. 346.)

On September 28, 1929, William Schofield was employed as a salesman in the business of selling machinery to oil filling stations. According to his contract of employment, he was required to use an automobile in the course of his business, for which he received a salary and commission. On the above date he was proceeding from New Haven, Conn., to Boston, Mass., preparatory to attending a meeting of company salesmen, to which he had been ordered. While en route his automobile was in a collision and he was severely injured.

The Massachusetts Industrial Accident Board allowed him compensation, and upon appeal the award was upheld by the State superior court. In the supreme judicial court, to which court the case was appealed by the insurer, Judge Pierce was of the opinion that the employee, as a matter of law, was an independent contractor relative to the operation and management of his own automobile, and therefore was not entitled to compensation under the act. In reaching this conclusion the court said:

> Other than that the claimant was required to "use his own car" while engaged in his employment within the territory allotted to him, there is nothing in the record to prove or to warrant an inference that the claimant, while actively engaged in his employment, was not master over the operation of his car, or that any right, by the terms of his employment, was granted to the employer to restrict the claimant in the control of his own car whenever it should elect to direct him as to the manner and mode by which at any time or at any place it should be operated.

The decree of the lower court was therefore reversed and a decree entered in favor of the employer and the insurance carrier.

Employer Held Entitled to Insurance Coverage Regardless of Hazard

ACCORDING to a recent decision of the Commission of Appeals of Texas, an insurance company desiring to issue policies under the Texas workmen's compensation act (Rev. Stats., 1925, arts. 8308, 8309) is compelled to cover any employer entitled to become a subscriber, regardless of the hazard of the individual business. (Texas Employers' Insurance Association *v.* United States Torpedo Co., 26 S. W. (2d) 1057.)

From the facts in the case it appears that the Texas Employers' Insurance Association declined to issue a policy of insurance covering the employees of the United States Torpedo Co. because of the very hazardous nature of the business. The company brought an action

to compel the association to issue the policy and received a favorable judgment in the trial court which was affirmed by the Court of Civil Appeals of the Third Supreme Judicial District.

On appeal to the Texas Commission of Appeals the insurance association contended that it had the same right as any other insurance company to select the risks which it will cover with its policies of insurance and in the process of selection it may properly consider whether the particular risk was desirable. The United States Torpedo Co. insisted, however, that as the association was created under the workmen's compensation act as an agency for the purpose of insuring those brought within the terms of the act it should not be permitted to reject the application of any employer to become a subscriber merely because it regarded the risk as an undesirable one.

The court pointed out that the compensation act deprives employers, covered by it, of their common law defenses in all actions against them by their employees for damages for personal injuries received in the course of their employment; all such employers are entitled to the benefits of insurance. In the course of the opinion the court said that—

> The legislative purpose is manifest that a risk, whether extrahazardous or not, must be assumed by the association. It has been held by our courts that this association was created for the sole purpose of carrying out the provisions of this law. (Middleton *v.* Texas Power & Light Co., 108 Tex. 96, 185 S. W. 556.) Nowhere in the act do we find any provision which may be construed as conferring a right on the association to refuse risks because of the hazards involved. In fact, no attempt whatever is made to classify the character of risks which the association is expected to insure. The failure to make some provision for such classification is very persuasive that it was intended the association should protect by its policies all employers who are by the mandatory terms of the law required to obtain insurance or suffer the abolishment of their common-law defenses in actions for damages brought against them by their employees.

The court also quoted sections from the compensation act providing for the segregation of the subscribers into groups, and pointed out that under such a scheme employers engaged in an extrahazardous business would be compelled to pay a premium commensurate with the hazard. In conclusion the court considered the argument, that if the compensation act be so construed that the Texas Employers' Insurance Association is required to accept all risks coming under its terms, the practical result would be that it would be forced to carry all extrahazardous risks, and private insurance companies would only accept less hazardous ones, while at the same time they would be permitted to charge the same rates of premiums as charged by the association and thus a legislative advantage would be given such companies. In regard to this the court said:

> We are unwilling to give assent to the assumption that a private insurance company has the privilege under the terms of the act to select the risks which it will cover by its policies. While it is true the legislature has no power to require private insurance companies to issue policies of insurance to employers under the workmen's compensation act, yet we have no doubt of its authority to require such companies, who may desire to avail themselves of the privilege of writing such policies, to comply with the terms of the act and give protection to all who are entitled to be covered by policies of insurance. * * *
>
> In conclusion, we agree with the observation made by Chief Justice McClendon, of the Third Court of Civil Appeals, in Southern Casualty Co. *v.* Freeman, 13 S. W. (2d) 148, 150, in commenting upon the decision of that court in this particular case, to the effect that "the same rule should apply to casualty and liability insurance companies who avail themselves of * * * the privilege of writ-

ing this character of insurance. There is nothing in the act that would compel them to engage in this particular business, but when they voluntarily so engage it would appear that they should be held to do so under the same terms and conditions as are applicable to the Texas Employers' Insurance Association."

The judgment of the court of civil appeals was therefore affirmed.

Austrian Law on Collective Agreements and Freedom of Assembly

THE relations between the workers and their employers and between the labor unions themselves resulted in the enactment, on April 5, 1930, of a Federal law (Bundesgesetz zum Schutz der Arbeits-und Versammlungsfreiheit). This unique law, popularly known as the "antiterror" law, relates first to collective agreements and, second, to assemblies or meetings.[1]

In regard to collective agreements the law prescribes that the provisions in trade and other general agreements between employers and employees are not effective if it is directly or indirectly intended thereby that in any industry only members of a certain professional association or other voluntary association may be employed or if it is intended thereby to prevent persons being employed in an industry who are not members of a professional association or some other voluntary association.

However, the above prescription does not directly apply to agreements regarding agricultural and forest workers, but is to be considered as a fundamental rule, the execution of which is the duty of the provincial authorities.

The law further prescribes that an employer is prohibited from deducting contributions for associations, trade-unions, or party purposes or from receiving such contributions when wages and salaries are paid. However, contributions for welfare institutions forming a part of a factory, which are destined primarily for assistance, for emergency help, for furloughs, and reimbursements of loss of earnings on days without work, and which are only intended for persons who belong to the said factory or industry or have belonged to it, or for their dependents, are not subject to this prohibition in so far as this assistance is granted without regard to their membership in a party or professional association. When it is not a question of welfare institutions regulated by by-laws, every member of the staff of a factory or industry has the right to inspect the administration and the accounts concerning such deductions and donations. The employee can, within three years, reclaim from the employer contributions which have been deducted or received contrary to this prohibition. Agreements which are in violation of the first provision of this law or which aim at part payment by the employer of the amounts mentioned therein are void.

After providing for the publication of trade agreements the law specifies that a person who uses intimidation or violence with the idea that in some factory or industry only members of a certain professional association or of a voluntary association should be employed, or that only persons who belong to no professional association be employed, or who with the intention of preventing persons who belong to no

[1] Bundesgesetzblatt, Vienna, Apr. 14, 1930, pp. 546–548.

professional or other volunatry association from being engaged in a business or industry, and uses his influence on employers or employees to prevent them from exercising their own free will in giving or taking up work, shall, unless more severely penalized by another provision, be punished by imprisonment of from one week to six months

A person who coerces an employee in order to make him join a professional or some other voluntary association is punishable in the same manner.

In regard to assemblies or meetings, the law prescribes that persons who hinder or disperse assemblies, parades, or similar manifestations by violence or threats of violence, when these have not been prohibited, shall be punished by imprisonment of from one month to one year.

The law of January 26, 1907, State Statute Book No. 18, concerning penal provisions for the protection of the freedom of assemblies and elections, is modified by the following provisions:

A person who intentionally, alone or in connection with others, hinders or disturbs a nonprohibited assembly, by preventing its being held, by making difficulties regarding the admittance of persons entitled to participate in the said assembly, by unwarranted interruption, by crowding out participants entitled to assist or of persons appointed to conduct the assembly and maintain order or by opposition to the formal regulations regarding the course of the said assembly, shall be punished by imprisonment of one week to three months. Under aggravating circumstances the punishment, especially of the instigator and the participants in an act of frustration undertaken by common consent, shall be extended to six months' imprisonment.

In the case of assemblies which are not to be judged according to the Association Law (*Vereinsgesetz*) the persons to be considered as conducting the assembly and maintaining order are, until the assembly has nominated others, those persons who convened the assembly.

A person who takes part, without being entitled to do so, in an assembly limited to members of an association or to some other particular group of persons, or to invited participants, and who does not withdraw when requested by the persons intrusted with the conduct of the assembly and the maintenance of order, may be fined up to 2,500 schillings ($350) or imprisoned up to one week.

Employment of Nationals Made Compulsory in Portugal [1]

AS A result of rather widespread unemployment in Portugal, the Government issued a decree (No. 18415) which became effective June 3, 1930, forbidding the employment of foreigners by industrial and commercial enterprises in continental Portugal with certain exceptions. Brazilians are not considered as foreigners and are entitled to the same treatment as Portuguese.

Foreigners now employed may be retained but they may be replaced only by nationals. After the date of the decree special authorization from the Ministry of the Interior must be obtained for the employment of any persons not of Portuguese or Brazilian nationality. Exception is also made to any privileges based upon prior treaties or conventions. This decree is to remain in force until December 31, 1933.

[1] Portugal. Diário do Govêrno, June 3, 1930.

INDUSTRIAL DISPUTES

Strikes and Lockouts in the United States in August, 1930

DATA regarding industrial disputes in the United States for August, 1930, 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, and 1929, number of workers involved, and man-days lost for these years, the number of industrial disputes for each of the months—January, 1928, to August, 1930, inclusive—the number of disputes which began in these months, the number in effect at the end of each month, and the number of workers involved. It also shows, in the last column, the economic loss (in man-days) involved. The number of workdays lost is computed by multiplying the number of workers affected in each dispute by the length of the dispute measured in working-days as normally worked by the industry or trade in question.

TABLE 1.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF EACH MONTH, JANUARY, 1928, TO AUGUST, 1930, AND TOTAL NUMBER OF DISPUTES, WORKERS, AND MAN-DAYS LOST IN THE YEARS 1927, 1928, AND 1929

Month and year	Number of disputes		Number of workers involved in disputes		Number of man-days lost during 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
1928					
January	48	63	18,850	81,880	2,128,028
February	52	58	33,441	103,496	2,145,342
March	41	47	7,459	76,069	2,291,337
April	71	48	143,700	129,708	4,806,232
May	80	56	15,640	133,546	3,455,499
June	44	46	31,381	143,137	3,670,878
July	54	42	18,012	132,187	3,337,386
August	59	42	8,887	105,760	3,553,750
September	52	34	8,897	62,862	2,571,982
October	61	42	27,866	41,474	1,304,913
November	44	38	37,840	38,745	1,300,362
December	23	29	5,172	35,842	991,238
1929					
January	48	36	14,783	39,569	951,914
February	54	35	22,858	40,306	926,679
March	77	37	14,031	40,516	1,074,468
April	117	53	32,989	52,445	1,429,437
May	115	73	13,668	64,853	1,727,694
June	73	57	19,989	58,152	1,627,565
July	80	53	36,152	15,589	1,062,428
August	78	43	25,616	6,714	358,148
September	98	49	20,233	8,132	244,864
October	69	31	16,315	6,135	272,018
November	61	32	10,443	6,067	204,457
December	33	21	3,386	2,343	95,541
1930					
January	42	21	8,879	5,316	182,202
February	44	33	37,301	6,562	436,788
March	49	34	15,017	5,847	289,470
April	60	41	5,814	5,711	180,445
May	64	30	9,281	4,640	192,201
June	54	34	13,791	8,499	150,627
July [1]	70	33	14,136	5,911	162,125
August [1]	38	32	18,118	8,634	173,245

[1] Preliminary figures, subject to change.

Occurrence of Industrial Disputes, by Industries

TABLE 2 gives by industry the number of strikes beginning in June, July, and August, 1930, and the number of workers directly involved.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN JUNE, JULY, AND AUGUST, 1930

Industry	Number of disputes beginning in—			Number of workers involved in disputes beginning in—		
	June	July	August	June	July	August
Auto, carriage, and wagon workers	1			950		
Bakers	1	1		6	18	
Barbers	1	1	1	14	2,000	650
Brick and tile workers		1			125	
Building trades	14	23	9	1,122	2,719	2,567
Chauffeurs and teamsters	3	1	2	298	65	103
Clerks and salesmen		1			800	
Clothing	7	12	9	378	2,756	7,754
Electric and gas supply workers		1	1		10	108
Fishermen		1			25	
Food workers		1			20	
Furniture			1			21
Hospital workers		1			24	
Hotel and restaurant workers		1			475	
Iron and steel	1		1	24		416
Leather			1			25
Longshoremen and freight handlers		2	1		450	252
Metal trades	4	2	1	176	570	200
Miners	10	9	4	10,145	3,316	4,425
Motion-picutre operators, actors, and theater employees	1	2		18	52	
Paper and paper-goods workers			1			35
Printing and publishing	4	1		88	8	
Railway workers			1			106
Stationary engineers and firemen		1			125	
Stone		1			37	
Street-railway workers	1			16		
Municipal workers		1	1		225	50
Textiles	5	6	3	542	316	989
Tobacco	1			14		
Other occupations			1			417
Total	54	70	38	13,791	14,136	18,118

Size and Duration of Industrial Disputes, by Industries

TABLE 3 gives the number of industrial disputes beginning in August, 1930, classified by number of workers and by industries.

TABLE 3.—NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN AUGUST, 1930, CLASSIFIED BY NUMBER OF WORKERS AND BY INDUSTRIES

Industry	Number of disputes beginning in August, 1930, involving—				
	6 and under 20 workers	20 and under 100 workers	100 and under 500 workers	500 and under 1,000 workers	1,000 and under 5,000 workers
Barbers				1	
Building trades	6	1	1		1
Chauffeurs and teamsters		2			
Clothing		1	4		4
Electric and gas supply workers			1		
Furniture		1			
Iron and steel			1		
Leather		1			
Longshoremen and freight handlers			1		
Metal trades			1		
Miners				2	2
Paper and paper-goods workers		1			
Railway workers			1		
Municipal workers		1			
Textiles	1		1	1	
Other occupations			1		
Total	7	8	12	4	7

In Table 4 are shown the number of industrial disputes ending in August, 1930, by industries and classified duration.

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN AUGUST, 1930, BY INDUSTRIES AND BY CLASSIFIED DURATION

Industry	Classified duration of strikes ending in August, 1930		
	One-half month or less	Over one-half and less than 1 month	1 month and less than 2 months
Barbers	1		
Building trades	8	2	
Clothing	8	3	
Electric and gas supply workers	1		
Fishermen		1	
Iron and steel	1		1
Leather	1		
Longshoremen and freight handlers	1		
Metal trades		1	
Miners	1	1	
Paper and paper-goods workers	1		
Municipal workers	1		
Textiles	4	1	
Other occupations	1		
Total	29	9	1

Principal Strikes and Lockouts Beginning in August, 1930

DISPUTES in the clothing industry of New York City gave rise to several strikes or stoppages, which are noted below in chronological order.

Knee pants makers.—A "stoppage" of work for three days, beginning August 4, to compel certain contract shops, not paying the wage scale, to resume the regular wage scale is reported to have

resulted favorably to the 1,500 workers involved, one-third of whom were females.

Children's clothing workers.—A "stoppage" of 3,000 workers from August 11 to August 16, because it was alleged that contractors were trying to force objectionable conditions upon the union (Amalgamated Clothing Workers of America), is reported to have resulted in settlements continuing conditions existing prior to the stoppage.

Children's dressmakers.—A strike was called, effective August 26, by the Children's Dress Makers' Union, Local 91, of the International Ladies' Garment Workers' Union, involving the Infants', Children's and Junior Dress Association, with 22 members and some 1,200 workers, to establish a 5-day, 42-hour week, $2 per week wage increase, 10 per cent increase on piecework, an impartial chairman to adjust disputes, etc.

A settlement was effected with the association on September 4, by which, it is said, the minimum wage scale was agreed to, but the question of wage increase is to be arbitrated. The settlement is understood to mean that the union obtains a renewal of the old agreement, which expired August 1, with the establishment of minimum wage scales to be determined by an impartial chairman when selected.

Raincoat makers.—The strike call of the children's dressmakers on the evening of August 25 was followed about an hour later by a vote of the executive board of Local 20, Waterproof Garment Workers' Union, also affiliated with the International Ladies' Garment Workers' Union, to call out its membership on August 26. The issues involved in the two strikes, however, were quite different. The raincoat makers, wishing to continue the provisions of the old agreement with the Raincoat Manufacturers' Association, voted to reject demands by their employers for a 20 per cent wage reduction and for the abolition of three and one-half legal holidays. This strike, which involved 1,300 workers, was settled on September 3, the manufacturers agreeing to withdraw their demands, and to restore the 5 per cent taken from wages last Spring.

Barbers, New York City.—A strike of some 650 Negro barbers in approximately 200 shops in Harlem is reported to have begun on August 11 and ended on August 15, having been called by Local 94 of the International Union of Journeymen Barbers of America. According to press reports they asked for a working-day from 8 a. m. to 8 p. m. and from 8 a. m. to 10 p. m. on Saturdays, with a straight salary of $30 per week and 50 per cent commission on receipts exceeding $45 (instead of working hours from 8 a. m. to 10 p. m. and 60-cent commissions on the dollar), with holidays on Christmas, New Year's, and Labor Day and half day off on other holidays. The settlement, it is understood, guarantees a minimum salary of $25 per week and 50 per cent of receipts exceeding $40. After January 1, 1931, the barbers are to receive a minimum of $30 per week and 50 per cent of receipts over $45. They are to work from 8 a. m. to 8 p. m., except on Saturdays, when they will work from 8 a. m. to 10 p. m., and on holidays, when the hours will be from 8 a. m. to 1 p. m. Each barber will receive a half day off each week or a full day off every two weeks and the shops are to be closed on three holidays a year.

Textile workers, North Carolina.—A strike of some 550 workers in two plants of the American Cotton Mills (Inc.) at Bessemer City began on August 18 against a proposed general wage reduction, ranging from 5 to 25 per cent (or averaging 20 per cent), according to the company, and from 20 to 30 per cent, according to the strikers. Subsequently the strikers demanded a reduction in the rent on houses owned by the mills from 50 cents per room a week to 25 cents and the dismissal of the superintendent. The strike was settled on August 23, the management agreeing to restore the wage scale to the level in force before the strike, while the strikers receded from their demand for a reduction in rent on company houses, and for the discharge of the mill superintendent. The mills resumed operations on August 25.

Anthracite coal miners, Pennsylvania.—The Glen Alden Coal Co. at Ashley was affected by a brief strike of 1,575 miners beginning August 18 because the company docked 50 boys a half hour's pay for not checking out. The amounts deducted were returned to the boys and the strike ended on August 19.

Mining operations of the Philadelphia & Reading Coal & Iron Co. in the Shamokin district are reported to have been affected by a strike of 900 miners from August 27 to September 4, because the "miners were made to cross shift" and six committeemen were discharged. The committeemen, it is said, were reinstated, and the miners will take the cross-shift case through proper channels.

Bituminous coal miners, West Virginia.—A strike of 850 miners employed by the Kelly's Creek Colliery Co. at Ward began on August 21 and is still in progess, because of a "clean-up" system which, it is said, increased the hours of employment from 8 hours to an indefinite workday, reaching on occasions over 11 hours a day.

Principal Strikes and Lockouts continuing into August, 1930

Cooks, waiters, waitresses, Ohio.—No report has been received of the ending of the strike-lockout of cooks, waiters, and waitresses in Cleveland, beginning July 15.

Conciliation Work of the Department of Labor in August, 1930

By Hugh L. Kerwin, Director of Conciliation

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 28 labor disputes during August, 1930. These disputes affected a known total of 8,471 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 September 1, 1930, there were 31 strikes before the department for settlement and in addition 20 controversies which had not reached the strike stage. The total number of cases pending was 51.

LABOR DISPUTES HANDLED DURING THE MONTH OF AUGUST, 1930

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
					1930	1930		
Park Plaza and Melbourne Hotels, St. Louis, Mo.	Strike	Plumbers	Working conditions; objection to pipe-threading devices.	Unclassified. Mediation not practicable at this time.	Aug. 1	Aug. 6	350	------
Building jobs, West Hampton Beach, Long Island, N. Y.	------do	Carpenters	Asked $1 per day increase—to $9.	Pending	July 21	----------	60	30
Electrical workers, East St. Louis, Ill.	------do	Electrical workers	Working conditions	Adjusted. Demands withdrawn	July 15	Aug. 9	5	------
Hellar & Hardt, Paterson, N. J.	------do	Silk-ribbon weavers	Wages cut on weaving	Unable to adjust. Looms being dismantled.	July 29	Aug. 18	80	------
L. Kujolie, Philadelphia, Pa.	------do	Bakers	Employer refused to collect union dues.	Unable to adjust	June 30	Aug. 15	6	2
Locke Pattern Works, Detroit, Mich.	------do	Pattern makers	Wages cut 10 to 35 cents per hour.	Adjusted. Satisfactorily arranged	Aug. 8	Aug. 20	25	500
Bellar Construction Co., Santa Barbara, Calif.	Controversy	Building	Wages and objection to non-union labor.	Pending	July 24	----------	30	50
Mill Owners' Association, Philadelphia, Pa.	Threatened strike.	Mill and cabinet workers.	Asked 90 cents per hour, 44-hour week, and double wages for overtime.	Adjusted. Five year agreement allowing 90 cents per hour, 44-hour week during June, July, and August; double time for overtime after 7 p. m.	Aug. 11	Aug. 14	800	400
Hess-Goldsmith Co., Kingston, Pa.	Strike	Silk-mill workers	Wages reduced	Adjusted. Accepted 10 per cent decrease.	Aug. 12	Aug. 18	280	------
Janson Iron & Steel Co., Columbia, Pa.	------do	Steel workers	Wages cut 10 per cent, being third cut.	Adjusted. Accepted 5 per cent cut; mill committee recognized.	Aug. 8	Aug. 12	416	------
Hocking Valley Coal Mining Co., Hocking Valley, Ohio.	Controversy	Miners	Discharges for union activity; company operating open-shop mines.	Unable to adjust. Men not reinstated.	Aug. 12	Aug. 20	11	------
Emerson Shoe Co., Derry, N. H.	Strike	Shoe workers	Wage cut of 10 per cent	Adjusted. Wages restored. All returned.	Aug. 11	Aug. 15	165	------
Campbell Hat Co., Yonkers, N. Y.	------do	Hat workers	Asked 10 to 20 per cent wage increases.	Pending	July 29	----------	65	------
Milk producers, Kansas City, Mo.	------do	Workers	Producers demanded increased price for milk.	Adjusted. Agreed to submit disputed points to arbitration.	Aug. 14	Aug. 27	1,500	------
Malleable Steel Range Co., South Bend, Ind.	Controversy	Steel workers	Proposed 12½ per cent wage cut.	Adjusted. No reduction	Aug. 15	Aug. 19	6	30
Girard Hosiery Co., Philadelphia, Pa.	------do	Hosiery workers	Asked signed union agreement	Adjusted. Union agreement concluded.	Aug. 14	Aug. 16	170	------
Shell Oil Co., Bakersfield, Calif.	------do	Truck driver	Appeal of driver under memorandum of terms.	Adjusted. Appeal dismissed; driver held to be in error.	July 26	Aug. 13	1	------

Miners, Ashley, Pa	Strike	Miners	Deduction of half-hour's pay from 50 workers for not "checking out."	Adjusted. No deduction; company reconsidered.	Aug 18	Aug. 19	1,575	5
Street cars, Scranton, Pa	Threatened strike.	Street-car workers	Employment of watchmen at railroad crossings.	Adjusted. Company agreed to place 3 men at crossings.	July 19	Sept. 3	440	------
Stanley-Warner Co. and Fox Co., Philadelphia, Pa.	Controversy	Musicians	Renewal of agreement	Pending	Aug. 24	----------	300	------
Ehne Pattern Co., Milwaukee, Wis.	Strike	Patternmakers	Asked 5 cents per hour increase	Unclassified. Deemed inadvisable to proffer good offices at this time.	Aug. 23	----------	------	------
Publix Corporation, Marshalltown, Iowa.	Controversy	Musicians	Asked increase of $10 per week—to $50.	Pending. Temporary settlement; conferences pending.	Aug. 26	----------	10	------
American Upholstering Co., Philadelphia, Pa.	Lockout	Upholsterers	Employer refused to renew contractual relations with union.	Pending. Plant being picketed	Aug. 19	----------	21	12
Indiana Gunite & Construction Co., Indianapolis, Ind.	Strike	Engineers	Nonunion operator on air compressor on building.	Adjusted. Union engineer placed on compressor.	Aug. 23	Aug. 25	1	10
Construction, Indianapolis, Ind	do	Shovel runners	Sympathy strike on account of nonunion engineer employed by Indiana Gunite Construction Co.	Adjusted. Returned when original strike was settled.	do	do	50	50
St. Johns Bridge, Portland, Oreg	Controversy	Steel workers	Dispute relative to union or nonunion labor used on bridge.	Adjusted. Nonunion workers to erect certain work; the remainder to be union work.	July 15	Aug. 1	165	------
Building, Wheaton, Ill	do	Carpenters and lathers	Jurisdiction	Pending. (Report not yet received)	Aug. 26	----------	------	------
Kelley's Creek Colliery Co., Ward, W. Va.	Strike	Miners	Conditions, hours	Pending	Aug. 21	----------	850	------
Total							7,382	1,089

LABOR TURNOVER

Labor Turnover in American Factories

IN THE following tables the Bureau of Labor Statistics presents the labor turnover indexes for the month of August for manufacturing as a whole and for eight separate manufacturing industries. The indexes for manufacturing as a whole are made up from reports received from representative manufacturing plants employing nearly 1,500,000 people in over 75 different industries. The number of firms reporting to the bureau in the eight industries for which separate indexes are shown employed at least 25 per cent of the wage earners in such industries, as shown by the Census of Manufactures of 1929.

The form of average used is the unweighted median of company rates. In determining a median rate the rates for the several establishments are arranged in order from lowest to highest. The rate falling in the center of this arrangement of rates is the median. In other words, it is a rate which has as many rates above it as below it. The number of employees used as a basis for computing these rates is the average number on the company pay rolls during the month of August.

The bureau presents, in addition to the separation rates and the accession rate, the net turnover rate. The net turnover rate means the rate of replacement. It is the number of positions that are vacated and filled per 100 employees. The net turnover rate is the same as the accession rate if a plant is reducing its force, and the same as the separation rate in a plant that is increasing its force. The net turnover rate has been the same as the accession rate since November, 1929.

Table 1 shows for all industries the total separation rate subdivided into the quit, discharge, and lay-off rates, together with the accession rate presented both on a monthly and an equivalent annual basis.

In comparing the August, 1930, rates with the rates for July, 1930, a reduction was shown for all classes of separations and for accessions. The quit rate for August was 0.95. This is the lowest quit rate shown since the bureau has been presenting turnover figures. In contrast, the lay-off rate is higher than for any month except July, 1930. The accession rate is lower than for any month since December, 1929.

Comparing the August, 1930, figures with the August, 1929, indexes, there are large reductions in the quit, discharge, and accession rates. The lay-off rate was over three times as high in August, 1930, as in August, 1929. The accession rate was less than one-third as much in August, 1930, as in August, 1929.

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

A.—Monthly Rates

Month	Separation rates								Accession rate		Net turnover rate	
	Quit		Lay-off		Discharge		Total [1]					
	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930	1929	1930
January	2.26	1.11	0.35	1.04	0.45	0.24	3.06	2.39	4.98	2.01	3.06	2.01
February	2.28	1.23	.36	1.06	.46	.25	3.20	2.53	4.36	2.06	3.20	2.06
March	3.12	1.38	.48	1.03	.57	.30	4.17	2.71	5.20	1.95	4.17	1.95
April	3.56	1.45	.45	1.16	.57	.27	4.58	2.88	5.77	2.00	4.58	2.00
May	3.46	1.50	.48	1.18	.48	.26	4.42	2.94	5.09	2.10	4.42	2.10
June	3.25	1.22	.44	1.12	.51	.20	4.20	2.54	5.01	1.62	4.20	1.62
July	3.03	1.00	.42	1.31	.49	.18	3.94	2.49	5.21	1.48	3.94	1.48
August	3.26	.95	.41	1.30	.45	.13	4.12	2.38	4.61	1.25	4.12	1.25
September	3.14	------	.52	------	.50	------	4.16	------	4.91	------	4.16	------
October	2.42	------	.80	------	.40	------	3.62	------	3.91	------	3.62	------
November	1.59	------	1.26	------	.30	------	3.15	------	1.95	------	1.95	------
December	1.08	------	1.21	------	.20	------	2.49	------	1.24	------	1.24	------
Average	**2.71**	------	**.60**	------	**.45**	------	**3.76**	------	**4.35**	------	**3.76**	------

B.—Equivalent Annual Rates

January	26.7	13.1	4.2	12.2	5.3	2.8	36.2	28.1	58.6	23.7	36.2	23.7
February	31.0	16.0	4.7	13.8	6.0	3.2	41.7	33.0	56.9	26.9	41.7	26.9
March	36.8	16.3	5.7	12.1	6.7	3.5	49.2	31.9	61.2	23.0	49.2	23.0
April	43.3	17.7	5.5	14.1	6.9	3.3	55.7	35.1	70.2	24.3	55.7	24.3
May	40.8	17.7	5.7	13.9	5.6	3.1	52.1	34.7	59.9	24.7	52.1	24.7
June	39.5	14.8	5.4	13.6	6.2	2.4	51.1	30.8	60.9	19.7	51.1	19.7
July	35.7	11.8	5.0	15.4	5.8	2.1	46.5	29.3	61.4	17.4	46.5	17.4
August	38.4	11.2	4.8	15.3	5.3	1.5	48.5	28.0	54.3	14.7	48.5	14.7
September	38.2	------	6.3	------	6.1	------	50.6	------	59.7	------	50.6	------
October	28.5	------	9.4	------	4.7	------	42.8	------	46.0	------	42.8	------
November	19.4	------	15.3	------	3.7	------	38.4	------	23.7	------	23.7	------
December	12.7	------	14.2	------	2.4	------	29.3	------	14.6	------	14.6	------
Average	**32.6**	------	**7.2**	------	**5.4**	------	**45.2**	------	**52.3**	------	**45.2**	------

[1] Arithmetic sum of quit, lay-off, and discharge rates.

Turnover Indexes by Industries

TABLE 2 shows the 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 months of January to August, inclusive; for foundries and machine shops for the months of February to August, inclusive; and for the furniture manufacturing industry for the months of April to August, inclusive, expressed both on a monthly and an equivalent annual basis.

TABLE 2.—AVERAGE LABOR TURNOVER RATES IN SPECIFIED INDUSTRIES

Industry, year and month, 1930	Separation rates								Accession rate		Net turnover rate	
	Quits		Discharges		Lay-offs		Total					
	Monthly	Equivalent annual	Monthly	Equivalent annual	Monthly	Equivalent annual	Monthly	Equivalent annual	Monthly	Equivalent annual	Monthly	Equivalent annual
Automobiles:												
January	1.27	15.0	0.59	7.0	2.22	26.2	4.08	48.2	8.20	96.9	4.08	48.2
February	1.10	14.3	.15	1.9	1.86	24.3	3.11	40.5	3.40	44.3	3.11	40.5
March	1.56	18.4	.42	4.9	1.95	23.0	3.93	46.3	5.31	62.6	3.93	46.3
April	1.84	22.4	.33	4.0	2.70	32.8	4.87	59.2	4.06	49.4	4.06	49.4
May	1.39	16.4	.27	3.2	3.68	43.3	5.34	62.9	2.74	32.3	2.74	32.3
June	1.17	14.2	.25	3.0	3.82	46.5	5.24	63.7	1.91	23.2	1.91	23.2
July	1.00	11.8	.10	1.2	4.53	53.4	5.63	66.4	1.39	16.4	1.39	16.4
August	1.02	12.0	.15	1.8	3.10	36.5	4.27	50.3	2.65	31.2	2.65	31.2
Boots and shoes:												
January	1.51	17.8	.46	5.4	.28	3.3	2.25	26.5	5.26	61.9	2.25	26.5
February	1.23	16.0	.39	5.1	.72	9.4	2.34	30.5	2.06	26.9	2.06	26.9
March	1.56	18.4	.36	4.2	.44	5.2	2.36	27.8	2.79	27.8	2.36	27.8
April	1.73	21.1	.32	3.9	1.01	12.3	3.06	37.3	2.11	25.7	2.11	25.7
May	1.45	17.1	.25	2.9	.71	8.4	2.41	28.4	2.16	25.4	2.16	25.4
June	1.25	15.2	.32	3.9	.87	10.6	2.44	29.7	2.17	26.4	2.17	26.4
July	.96	11.3	.28	3.3	.75	8.8	1.99	23.4	2.50	29.5	1.99	23.4
August	1.32	15.5	.36	4.2	1.33	15.7	3.01	35.4	2.53	29.8	2.53	29.8
Cotton manufacturing:												
January	1.20	14.2	.11	1.3	.29	3.4	1.60	18.9	2.40	28.3	1.60	18.9
February	1.20	15.6	.19	2.5	.14	1.8	1.53	19.9	1.62	21.1	1.53	19.9
March	1.59	18.7	.28	3.3	.25	2.9	2.12	24.9	2.53	29.8	2.12	24.9
April	1.34	16.3	.09	1.1	.14	5.4	1.87	22.8	2.34	28.5	1.87	22.8
May	1.40	16.5	.20	2.3	.59	6.9	2.19	25.7	2.25	26.5	2.19	25.7
June	1.04	12.6	.16	1.9	.90	11.0	2.10	25.5	1.75	21.3	1.75	21.3
July	.95	11.2	.11	1.3	.67	7.9	1.73	20.4	1.44	17.0	1.44	17.0
August	1.00	11.8	.14	1.6	.84	9.9	1.98	23.3	1.37	16.1	1.37	16.1
Foundries and machine shops:												
February	.77	10.1	.05	.7	.80	10.4	1.62	21.2	2.26	29.5	1.62	21.2
March	1.12	13.2	.16	1.9	1.21	14.2	2.49	29.3	2.33	27.4	2.33	27.4
April	1.26	15.3	.09	1.1	1.12	13.6	2.47	30.0	2.42	29.5	2.42	29.5
May	1.23	14.5	.25	2.9	1.88	22.1	3.36	39.5	1.83	21.6	1.83	21.6
June	.76	9.3	.15	1.8	1.99	24.2	2.90	35.3	1.30	15.8	1.30	15.8
July	.54	6.4	.16	1.9	1.79	21 1	2.49	29.4	1.23	14 5	1.23	14.5
August	.53	6.2	.13	1.5	2.00	23.6	2.66	31.3	1.04	12.2	1.04	12.2
Furniture:												
April	1.22	14.8	.10	1.2	1.29	15.7	2.61	31.7	1.33	16.2	1.33	16.2
May	.76	8.9	.23	2.7	2.01	23.7	3.00	35.3	1.15	13.5	1.15	13.5
June	.39	4.7	.13	1.6	2.38	28.9	2.90	35.2	1.07	13.0	1.07	13.0
July	.42	4.9	.20	2.4	1.32	15.5	1.94	22.8	1.59	18.7	1.59	18.7
August	.62	7.3	.22	2.6	.76	8.9	1.60	18.8	2.01	23.7	1.60	18.8
Iron and steel:												
January	1.37	16.1	.23	2.8	1.63	19.2	3.23	38.1	3.87	45.6	3.23	38.1
February	1.07	14.0	.18	2.4	.74	9.7	1.99	26.1	2.97	38.7	1.99	26.1
March	1.35	15.9	.20	2.3	.45	5.3	2.00	23.5	2.54	29.9	2.00	23.5
April	1.51	18.4	.19	2.3	.30	3.7	2.00	24.4	2.43	29.6	2.00	24.4
May	1.40	16.5	.17	2.0	.87	10.3	2.44	28.8	2.06	24.3	2.06	24.3
June	1.36	16.6	.23	2.8	.64	7.8	2.23	27.2	2.38	28.9	2.23	27.2
July	.90	10.6	.15	1.8	.73	8.6	1.78	21.0	1.37	16.1	1.37	16.1
August	.95	11.2	.11	1.3	1.13	13.3	2.19	25.8	1.15	13.6	1.15	13.6
Sawmills:												
January	1.57	18.5	.44	5.2	1.77	20.9	3.78	44.6	2.54	29.9	2.54	29.9
February	1.77	23.1	.18	2.4	1.81	23.6	3.76	49.1	4.38	57.1	3.76	49.1
March	1.90	22.4	.11	1.3	1.10	13.0	3.11	36.7	4.86	57.2	3.11	36.7
April	1.62	19.7	.19	2.3	1.21	14.7	3.02	36.7	4.46	54.3	3.02	36.7
May	1.33	15.7	.11	1.3	1.46	17.2	2.90	34.2	3.48	41.0	2.90	34.2
June	1.10	13.4	.23	2.8	2.16	26.3	3.49	42.5	2.78	33.8	2.78	33.8
July	.82	9.6	.24	2.8	2.28	26.9	3.34	39.3	3.65	43.0	3.34	39.3
August	.67	7.9	.26	3.1	2.34	27.6	3.27	38.6	2.04	24.1	2.04	24.1
Slaughtering and meat packing:												
January	1.60	18.9	.51	6.0	1.52	17.9	3.63	42.8	4.08	48.1	3.63	42.8
February	1.54	20.1	.45	5.9	4.33	56.5	6.32	82.5	2.92	38.2	2.92	38.1
March	1.89	22.3	.48	5.6	2.62	30.9	4.99	58.8	2.84	33.5	2.84	33.5
April	1.90	23.1	.46	5.6	1.91	23.3	4.27	52.0	4.28	52.1	4.27	52.0
May	2.38	28.0	.54	6.4	1.52	17.9	4.44	52.3	6.10	71.9	4.44	52.3
June	2.12	25.8	.44	5.3	1.13	13.7	3.69	44.8	6.12	74.4	3.69	44.8
July	1.52	17.9	.48	5.7	2.90	34.1	4.90	57.7	4.80	56.5	4.80	56.5
August	1.32	15.6	.36	4.2	1.35	15.9	3.03	35.7	3.66	43.1	3.03	35.7

The August accession rate for the automotive industry was 2.65, compared with the total separation rate of 4.27. The quit, discharge, and accession rates were higher for August than for July. The lay-off rate was lower in August than in July.

In the boot and shoe industry the August accession rate was lower than the separation rate, the former rate being 2.53 and the latter 3.01. Comparing August figures with July figures it was found that the latter month showed higher quit, discharge, lay-off, and accession rates than the previous month.

In cotton manufacturing the August accession rate was 1.37, and the total separation rate 1.98. Higher quit, discharge, and lay-off rates were shown in August than in July. The August accession rate, however, was lower than the July accession rate.

In the foundry and machine-shop industry the total separation rate of 2.66 was more than twice as high as the accession rate (1.04). The quit, discharge, and accession rates were all lower for August than for July in this industry. The lay-off rate, however, was higher in August than in July.

In furniture manufacturing the accession rate was 2.01, compared with the total separation rate of 1.60, showing that more men were being hired in this industry than were losing their jobs. Comparing August with July rates, there was a higher quit, discharge, and accession rate in August than in July. The lay-off rate was considerably lower in August than in July.

The total separation rate for the iron and steel industry was 2.19, and the accession rate was 1.15. August quit and lay-off rates were higher than the same rates in July, while the discharge and accession rates were lower in August than in July.

In the sawmill industry the total separation rate was 3.27 and the accession rate 2.04. The quit and accession rates were lower for August than for July, while the discharge and lay-off rates were higher.

In the slaughtering and meat packing industry the hiring rate was 3.66 and the total separation rate 3.03. In this industry the quit, discharge, lay-off, and accession rates were all lower for August than for July.

Automobiles, boots and shoes, cotton manufacturing, and slaughtering and meat packing each had a higher quit rate than the all-industry quit rate. Lower than average quit rates were shown in the foundry and machine shop, furniture manufacturing, and sawmill industries. The iron and steel quit rate was the same as the all-industry quit rate.

The iron and steel industry was the only one showing a lower discharge rate than that for all manufacturing industries. The foundry and machine-shop discharge rate was exactly the same as the all-industry rate. Each of the other industries for which separate indexes were shown had higher than average discharge rates. The lay-off rate was higher than the lay-off rate for all manufacturing industries in automobiles, boots and shoes, foundries and machine shops, sawmills, and slaughtering and meat packing. The lay-off rate was lower than the lay-off rate for all industries in cotton manufacturing, furniture, and iron and steel.

The accession rates for automobiles, boots and shoes, cotton manufacturing, furniture, sawmills, and slaughtering and meat packing

were all higher than the total manufacturing accession rate. Foundries and machine shops and iron and steel had lower accession rates than the all-industry accession rate.

The highest quit rate, 1.32, was shown by the boot and shoe and slaughtering and meat packing industries. The lowest quit rate, 0.53, was shown by foundries and machine shops. The highest discharge rate for any of the industries for which separate indexes are shown was in the boot and shoe and slaughtering and meat packing industries. Each of these industries had a discharge rate of 0.36. The lowest discharge rate, 0.11, was shown by the iron and steel industry. The automotive industry had the highest lay-off rate during the month of August, the lay-off rate for this industry being 3.10. The lowest lay-off rate, 0.76, was in the furniture manufacturing industry. The highest accession rate, 3.66, was shown by the slaughtering and meat packing industry and the lowest, 1.04, by the foundry and machine-shop industry.

HOUSING

Building Permits in Principal Cities, August, 1930

REPORTS of building permits issued were received by the Bureau of Labor Statistics of the United States Department of Labor from 291 comparable cities having a population of 25,000 or over for the months of July and August. These reports cover only the corporate limits of the cities enumerated. Hence, the cost figures in the tables, which cover erection costs only as no land costs are included, are for the building operations within the corporate limits of these cities. The States of Illinois, Massachusetts, New Jersey, New York, and Pennsylvania, through their departments of labor, are cooperating with the Bureau of Labor Statistics in the collection of these data.

Table 1 shows the estimated cost of new residential and of new nonresidential buildings, and of total building operations in the 291 cities of the United States, by geographic divisions.

TABLE 1.—ESTIMATED COST OF NEW RESIDENTIAL BUILDINGS, NEW NONRESIDENTIAL BUILDINGS, AND TOTAL BUILDING OPERATIONS IN 291 CITIES OF THE UNITED STATES HAVING A POPULATION OF 25,000 OR OVER, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings				New nonresidential buildings, estimated cost		Total construction (including alterations and repairs), estimated cost	
	Estimated cost		Families provided for in new dwellings					
	July, 1930	August, 1930	July, 1930	August, 1930	July, 1930	August, 1930	July, 1930	August, 1930
New England	$3,888,265	$3,439,870	658	519	$6,866,843	$10,022,665	$14,020,252	$15,555,661
Middle Atlantic	24,437,922	25,032,224	4,119	4,010	39,022,650	17,750,270	72,283,878	49,460,133
East North Central	7,436,887	8,727,988	1,549	1,471	15,732,943	15,637,979	29,343,008	27,828,858
West North Central	3,147,198	1,846,002	605	536	5,235,764	3,649,634	9,814,244	6,878,806
South Atlantic	2,693,705	3,196,320	544	662	5,615,454	4,610,610	10,221,307	9,656,872
South Central	3,871,623	3,290,521	1,025	983	7,561,325	7,813,028	12,901,171	12,482,194
Mountain and Pacific	7,046,778	6,140,883	1,880	1,938	6,286,565	7,378,241	15,890,329	16,062,268
Total	52,522,378	51,673,808	10,380	10,119	86,321,544	66,862,427	164,474,189	137,924,792
Per cent of change		−1.6		−2.5		−22.5		−16.2

According to permits issued during the month of August there was an indicated expenditure for total building operations in these 291 cities of $137,924,792. This is a decrease of 16.2 per cent as compared with the expenditures indicated by the July permits. Estimated costs of new residential buildings decreased only 1.6 per cent, comparing August with July, while those of new nonresidential buildings decreased 22.5 per cent. Family accommodations for 10,119 families were to be provided in the new residential buildings for which per-

mits were issued during August. This is 2.5 per cent less than the number of families provided for during the month of July.

Increases in total building operations were shown in the New England States and the Mountain and Pacific States. Other districts showed decreases in total building operations. Increases in residential building occurred in the Middle Atlantic States, the East North Central States, and the South Atlantic States. Decreases occurred in the New England States, West North Central States, South Central States, and the Mountain and Pacific States. Permits issued for nonresidential buildings indicated increases in the New England States, the South Central States, and the Mountain and Pacific States. Decreases were indicated in the Middle Atlantic States, the East North Central States, the West North Central States, and the South Atlantic States.

The number of families provided for increased in the South Atlantic States and the Mountain and Pacific States. Decreases were noted in all other districts.

Table 2 shows the estimated cost of additions, alterations, and repairs as shown by permits issued, together with the percentage of increase or decrease in August as compared with July, by geographic divisions.

TABLE 2.—ESTIMATED COST OF ADDITIONS, ALTERATIONS, AND REPAIRS IN 291 CITIES OF THE UNITED STATES HAVING A POPULATION OF 25,000 OR OVER, BY GEOGRAPHIC DIVISIONS

Geographic division	Estimated cost		Per cent of increase or decrease, August, compared with July
	July, 1930	August, 1930	
New England	$3,265,144	$2,093,126	−35.9
Middle Atlantic	8,823,306	6,677,639	−24.3
East North Central	6,173,178	3,462,891	−43.9
West North Central	1,431,282	1,383,170	−3.4
South Atlantic	1,912,148	1,849,942	−3.3
South Central	1,468,223	1,378,645	−6.1
Mountain and Pacific	2,556,986	2,543,144	−0.5
Total	25,630,267	19,388,557	−24.4

Permits were issued during the month of August for additions, alterations, and repairs in the 291 cities to cost $19,388,557, which is 24.4 per cent less than the cost of the repairs as indicated by the July permits. Decreases in alterations and repairs were indicated in all districts. These decreases ranged from five-tenths of 1 per cent in the Mountain and Pacific States to 43.9 per cent in the East North Central States.

Table 3 shows the index number of families provided for and the index numbers of indicated expenditures for residential buildings, for nonresidential buildings, for 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; ESTIMATED COSTS OF NEW RESIDENTIAL BUILDINGS; NEW NONRESIDENTIAL BUILDINGS; ALTERATIONS AND REPAIRS; AND TOTAL BUILDING OPERATIONS AS SHOWN BY PERMITS ISSUED IN CITIES OF THE UNITED STATES HAVING A POPULATION OF 25,000 OR OVER (MONTHLY AVERAGE, 1929=100)

Month	Families provided for	Estimated costs of—			
		New residential buildings	New nonresidential buildings	Additions, alterations, and repairs	Total building operations
1929					
September	70.2	63.7	81.3	95.0	73.7
October	64.4	61.6	107.9	115.2	85.7
November	51.7	44.8	89.6	95.2	68.1
December	35.9	30.2	74.3	66.1	51.7
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

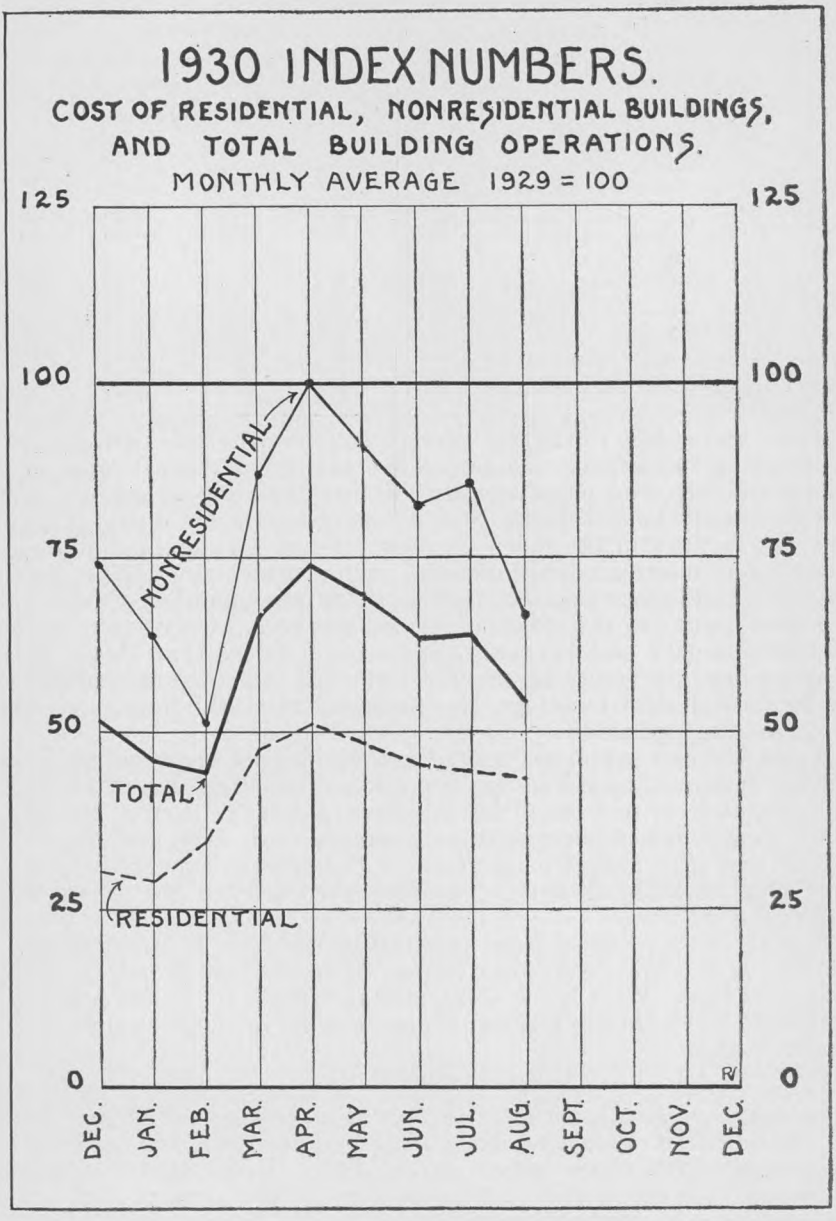
There was a drop of slightly over 10 points in the index number of all building operations, comparing the month of August with the month of July, the index number of total building operations for the month of August being 54.4 as against 64.8 for July. There was also a drop in the index number for new residential buildings and for new nonresidential buildings, each of which stood lower than for any month since February, 1930. The index number of families provided for during the month of August was 48.7. Only two months of 1930, January and February, had a lower figure than this. The chart on page 152 shows in graphic form the indicated expenditures for new residential buildings, new nonresidential buildings, and for total building operations.

Table 4 shows estimated cost of new residential and new nonresidential buildings, total building operations (including alterations and repairs), and the number of families provided for in each of the 291 cities from which reports were received for both July and August. Totals and percentages of increase or decrease in expenditures for each class of building and for families provided for are shown by geographic divisions.

Reports were received from 46 cities in the New England States, 65 cities in the Middle Atlantic States, 73 in the East North Central States, 24 in the West North Central States, 32 in the South Atlantic States, 25 in the South Central States, and 26 in the Mountain and Pacific States.

New England States

IN THE New England States there was an increase of 11 per cent in total building operations, comparing building permits issued during August with those issued during July. Residential buildings decreased 11.5 per cent in estimated cost in this district, but new nonresidential buildings increased 46 per cent. The number of families provided with dwelling places in new buildings decreased 21.1 per cent. Increases in total building operations were registered in the following New England cities: New Haven. Hartford, Stamford, Cambridge, Watertown, and Pawtucket.


1930 INDEX NUMBERS.
COST OF RESIDENTIAL, NONRESIDENTIAL BUILDINGS, AND TOTAL BUILDING OPERATIONS.
MONTHLY AVERAGE 1929 = 100
125
100
75
50
25
0
NONRESIDENTIAL
TOTAL
RESIDENTIAL
DEC.
JAN.
FEB.
MAR.
APR.
MAY
JUN.
JUL.
AUG.
SEPT.
OCT.
NOV.
DEC.

Decreases were shown in Boston, Brookline, Lowell, Manchester, Cranston, and Providence. No reports were received from New London, Conn., and Bangor and Lewiston, Me.

A permit was issued for an office building in Hartford, Conn., to cost $850,000. In New Haven a permit was issued to Yale University for a gymnasium to cost $4,350,000 and for an additional laboratory building to cost $700,000. In Cambridge a permit was issued for two buildings at Harvard University to cost $435,000.

Middle Atlantic States

COMPARING the permits issued during the month of August with those issued during the month of July in the Middle Atlantic States, there was an increase of 2.4 per cent in estimated costs of new residential buildings, but a decrease of 54.5 per cent in the estimated expenditures for new nonresidential buildings. A decrease of 31.6 per cent is shown in total building operations. Families provided for in the new dwelling houses for which permits were issued during the periods under discussion decreased 2.6 per cent. Increases in total building operations were shown in Bloomfield, Orange, Trenton, Albany, Brooklyn, Yonkers, Pittsburgh, and Scranton. Decreases in total building operations were shown in Jersey City, Newark, Borough of Manhattan, Erie, and Philadelphia. There was an especially large decrease in the Borough of Manhattan. Applications filed for new buildings in this borough during the month of July totaled over $36,000,000, while during the month of August the indicated expenditure was only slightly over $13,000,000.

A permit was issued in Albany for a public-school building to cost $750,000. In the Borough of the Bronx permits were issued for five apartment houses to cost over $1,600,000, and in the Borough of Manhattan for eight apartment houses to cost $8,500,000. In Pittsburgh a permit was issued for an office building to cost $4,000,000, and in Scranton for a public building to cost $1,000,000. No report was received from Reading, Pa.

East North Central States

RESIDENTIAL building in the East North Central States increased in estimated costs 17.4 per cent in August over July; nonresidential building, however, decreased six-tenths of 1 per cent. Total building operations in this geographic division showed a decrease of 5.2 per cent, comparing August figures with July figures. There was also a decrease of 5 per cent in the number of families provided with dwelling places in new buildings.

Sizable increases in total building operations occurred in Aurora, Joliet, East Chicago, Indianapolis, Detroit, Cleveland, and Toledo.

Decreases occurred in Chicago, Fort Wayne, Cincinnati, Milwaukee, and Racine. No reports were received from Anderson and South Bend, Ind., Battle Creek, Mich., Portsmouth and Zanesville, Ohio.

A permit was issued for a hospital in Aurora, Ill., to cost $235,000, and for a public-school building in Joliet to cost $450,000. Permits were issued for new factory buildings in Chicago to cost over $2,000,000, and for three public-school buildings to cost $1,450,000. Permits were issued for two factory buildings in Decatur to cost over

$600,000, in Cleveland for an office building to cost $1,400,000, and in Racine a contract was let for a public building to cost $240,000.

West North Central States

THERE was a decrease of 29.9 per cent in total building operations in the West North Central States, comparing the month of August with the month of July. Decreases were also registered in the estimated costs of new residential buildings and of new nonresidential buildings, being 41.3 per cent and 30.3 per cent, respectively. Comparing August permits with July permits, there was a decrease of 11.4 per cent in the number of families provided for in new residential buildings in this district. Decreases in total building operations were shown in Cedar Rapids, Dubuque, Duluth, St. Paul, and Kansas City, Mo. Increases in total building operations were registered in Des Moines, Wichita, Omaha, and Sioux Falls.

A contract was let by the Federal Government for a new post office and courthouse in Wichita, Kans., to cost over $1,000,000. A permit was issued for a public-school building in St. Louis to cost $125,000.

South Atlantic States

PERMITS issued for new residential buildings in the South Atlantic States showed an increase in estimated cost of 18.7 per cent, comparing August with July. New nonresidential buildings, however, decreased 17.9 per cent in estimated cost. There was a decrease of 5.5 per cent in the estimated cost of total building operations. The number of families provided with dwellings in new buildings increased 21.7 per cent in this district. There were increases in total building operations in the cities of Savannah, Newport News, Norfolk, and St. Petersburg. There were decreases in the cities of Jacksonville, Atlanta, Baltimore, Charlotte, and Richmond. No reports were received from Augusta, Ga., Spartanburg, S. C., and Lynchburg, Va.

A contract was let for a public-school building in Washington, D. C., to cost $463,000. A permit was issued for a factory building to cost $225,000 and a public school to cost $200,000 in the city of Baltimore. A contract was let for a Federal post office and courthouse in Savannah, Ga., to cost over $500,000 and for a similar building in Roanoke, Va., to cost over $450,000.

South Central States

IN THE South Central States there was an increase of 3.3 per cent in new nonresidential buildings, but a decrease of 15 per cent in new residential buildings, comparing August permits with those issued in July. Total building operations decreased 3.3 per cent. Families provided for in new dwelling houses decreased 4.1 per cent in this district.

Notable increases in building operations were shown in Little Rock, Memphis, Nashville, Fort Worth, and Port Arthur. Decreases were shown in Montgomery, Louisville, New Orleans, Oklahoma City, Chattanooga, Dallas, and Houston. No reports were received from Birmingham, Ala., Fort Smith, Ark., Covington, Ky., Baton Rouge, La., Muskogee, Okla., and El Paso, Galveston, and Laredo, Tex.

A permit was issued for an office building for the Oklahoma Gas & Electric Co. in Oklahoma City to cost nearly $1,300,000, and for an office building in Dallas, Tex., to cost over $600,000. In Fort Worth, Tex., permits were issued for two office buildings to cost over $1,300,000 and for store buildings to cost over $1,500,000.

Mountain and Pacific States

THERE were increases of 1.1 per cent in the estimated costs of total building operations and of 17.4 per cent in new nonresidential building in the Mountain and Pacific States. There was a decrease, however, of 12.9 per cent in the estimated cost of new residential building. August permits issued indicated that there would be an increase of 3.1 per cent in the families provided for in new residential buildings.

Large increases in total building operations were shown in Los Angeles, Long Beach, Oakland, Great Falls, Portland, and Seattle. Decreases were shown in Phoenix, Pasadena, Denver, Salt Lake City, and Spokane. No reports were received from Tucson, Ariz., and Tacoma, Wash.

In Los Angeles a permit was issued for a public building to cost $1,150,000. A contract was let for a public utilities building in Seattle to cost $500,000, and for a public building in Spokane to cost $100,000.

Hawaii

COMPARING permits issued during the month of August with those issued during the month of July in the city of Honolulu, there were increases of 2.6 per cent in new residential buildings, of 29.9 per cent in new nonresidential buildings, and of 24.1 per cent in total building operations. Families provided for in new residential buildings increased 20 per cent.

TABLE 4.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JULY AND AUGUST, 1930

New England States

State and city	New residential buildings				New nonresidential buildings		Total construction (including alterations and repairs)	
	Estimated cost		Families provided for in new dwellings		Estimated cost		Estimated cost	
	July	Aug.	July	Aug.	July	Aug.	July	Aug.
Connecticut:								
Bridgeport	$117,400	$112,800	26	23	$24,419	$31,710	$168,449	$180,140
Greenwich	244,000	305,500	19	16	38,240	115,800	365,100	487,600
Hartford	6,000	21,000	1	4	235,555	898,798	296,792	1,060,939
Meriden	13,000	18,500	3	4	6,763	19,240	37,187	59,445
New Britain	16,000	19,500	2	5	13,394	28,226	47,358	47,726
New Haven	93,000	91,000	11	11	162,250	5,087,020	359,588	5,250,810
Norwalk	207,000	82,500	15	12	32,950	18,875	259,300	123,625
Stamford	90,000	62,500	13	10	5,500	861,475	168,000	951,465
Waterbury	29,000	29,000	7	7	15,750	49,750	64,200	106,650
Maine:								
Portland	18,450	54,370	5	11	5,630	13,160	61,939	89,075

TABLE 4.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JULY AND AUGUST, 1930—Continued

New England States—Continued

State and city	New residential buildings				New nonresidential buildings		Total construction (including alterations and repairs)	
	Estimated cost		Families provided for in new dwellings		Estimated cost		Estimated cost	
	July	Aug.	July	Aug.	July	Aug.	July	Aug.
Massachusetts:								
Boston [1]	$507,300	$569,000	115	122	$1,524,810	$481,762	$2,907,902	$1,858,745
Brockton	41,000	22,500	9	4	153,964	85,741	232,474	131,681
Brookline	817,000	18,000	108	4	187,900	262,205	1,092,575	326,140
Cambridge	34,500	610,000	10	16	860,905	711,478	1,005,665	1,351,368
Chelsea	4,500	5,000	1	1	12,750	2,150	22,950	10,190
Chicopee	17,300	16,800	5	5	2,300	15,685	46,800	34,835
Everett	20,000	15,000	6	4	124,300	134,300	166,450	165,800
Fall River	16,140	9,200	5	1	4,630	15,745	26,175	32,090
Fitchburg	11,000	9,000	2	3	1,515	1,810	13,610	12,360
Haverhill	20,750	3,150	7	2	8,585	7,385	40,885	15,445
Holyoke	15,500	37,000	3	10	5,750	6,350	31,800	48,400
Lawrence	2,000	0	0	0	18,400	29,760	55,950	46,160
Lowell	17,000	4,800	2	2	368,610	55,550	400,635	67,365
Lynn	45,300	29,000	9	4	4,330	46,820	87,770	129,890
Malden	20,100	20,200	4	4	39,180	2,860	91,010	49,900
Medford	68,700	67,500	14	17	27,910	26,000	106,960	98,815
New Bedford	0	4,000	0	1	24,725	12,025	36,475	27,350
Newton	264,000	243,000	26	21	34,763	13,320	376,420	274,785
Pittsfield	110,900	55,500	17	11	43,450	10,325	154,350	85,560
Quincy	79,650	128,700	19	35	180,425	13,940	280,349	185,447
Revere	29,000	22,200	7	5	1,540	2,925	188,865	33,025
Salem	45,500	50,000	8	8	3,600	47,150	69,030	105,675
Somerville	8,000	58,500	2	16	14,960	11,235	45,660	89,330
Springfield	207,200	65,700	49	17	32,220	38,775	282,295	249,550
Taunton	6,700	6,000	2	2	2,755	4,305	21,325	27,815
Waltham	52,600	58,700	10	11	5,875	43,625	64,000	108,350
Watertown	9,500	11,000	2	1	13,550	154,150	27,250	170,100
Worcester	154,600	63,200	27	15	1,148,825	49,845	1,624,740	173,019
New Hampshire:								
Manchester	26,725	17,900	12	6	5,460	10,825	52,587	47,236
Rhode Island:								
Central Falls	0	0	0	0	0	1,050	240	4,930
Cranston	94,500	26,500	20	5	95,390	27,825	197,805	60,215
East Providence	78,100	39,300	14	8	24,145	46,275	180,414	100,892
Newport	9,000	31,350	1	6	11,450	3,650	151,510	39,820
Pawtucket	45,450	41,600	12	9	19,070	383,260	71,610	434,820
Providence	170,900	283,300	27	39	1,306,925	135,075	2,018,080	588,588
Woonsocket	4,000	600	1	1	11,425	3,430	19,723	12,495
Total	3,888,265	3,439,870	658	519	6,866,843	10,022,665	14,020,252	15,555,661
Per cent of change		−11.5		−21.1		+46.0		+11.0

Middle Atlantic States

New Jersey:								
Atlantic City	0	$19,200	0	5	$20,353	$14,600	$56,002	$47,488
Bayonne	0	14,000	0	3	3,650	21,500	33,800	40,400
Bloomfield	$85,000	120,000	15	29	13,000	122,000	102,000	252,000
Camden	43,200	15,600	17	6	37,085	38,335	106,810	151,395
Clifton	147,800	71,000	35	16	25,350	20,155	179,090	96,050
East Orange	133,000	12,500	7	2	21,346	10,950	175,236	127,644
Elizabeth	65,000	34,000	11	7	342,000	59,200	407,000	93,200
Hoboken	0	0	0	0	1,000	221,200	246,470	247,180
Irvington	6,000	20,600	1	4	56,690	37,700	64,715	61,350
Jersey City	12,000	73,500	2	23	1,289,305	34,050	1,389,955	162,850
Kearny	5,000	16,000	1	4	51,400	7,800	65,900	30,150
Montclair	121,250	9,000	10	1	91,957	171,760	224,474	269,462
Newark	118,000	123,490	22	21	1,199,201	174,025	1,424,316	450,060
New Brunswick	22,000	2,000	4	1	1,750	550	39,690	65,656
Orange	0	13,000	0	3	17,525	176,200	31,126	204,235
Passaic	16,000	19,500	2	4	110,100	177,650	156,050	226,325
Paterson	132,800	15,000	35	3	22,650	40,012	216,840	170,420
Perth Amboy	3,000	5,000	1	2	129,260	6,550	146,349	106,990

[1] Applications filed.

TABLE 4.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JULY AND AUGUST, 1930—Continued

Middle Atlantic States—Continued

State and city	New residential buildings				New nonresidential buildings		Total construction (including alterations and repairs)	
	Estimated cost		Families provided for in new dwellings		Estimated cost		Estimated cost	
	July	Aug.	July	Aug.	July	Aug.	July	Aug.
New Jersey—Con.								
Plainfield	$15,100	$25,500	3	3	$10,140	$235,160	$34,515	$283,720
Trenton	12,100	19,000	2	1	29,575	225,300	76,405	271,415
Union City	0	35,000	0	22	6,700	11,800	34,160	66,690
West New York	0	0	0	0	19,400	500	22,585	10,515
New York:								
Albany	207,900	141,000	18	10	272,225	924,650	716,463	1,125,415
Amsterdam	17,000	9,500	4	2	732,500	6,800	756,000	18,000
Auburn	23,000	12,500	4	3	7,040	93,025	33,340	120,745
Binghamton	10,450	20,000	3	7	7,685	42,943	47,186	95,007
Buffalo	168,000	161,900	58	52	782,297	794,975	1,164,400	1,058,605
Elmira	556,100	35,825	4	9	242,340	473,410	812,239	526,430
Jamestown	25,200	47,500	5	6	15,925	18,280	51,298	80,490
Kingston	0	11,500	0	3	170,115	5,240	204,500	28,180
Mount Vernon	649,000	96,500	169	8	28,625	42,710	728,965	178,365
Newburgh	28,000	13,000	5	2	54,700	50,915	89,200	70,465
New Rochelle	255,500	233,500	16	10	23,910	24,325	386,995	277,240
New York City—								
Bronx [1]	3,033,450	2,184,300	695	470	653,600	531,200	3,970,005	2,998,403
Brooklyn [1]	4,159,100	5,178,950	858	947	1,419,335	764,675	6,435,665	7,231,825
Manhattan [1]	9,313,000	9,250,000	1,217	1,020	23,517,700	2,233,500	36,134,175	13,150,125
Queens [1]	1,446,450	2,597,500	322	613	1,976,405	1,074,951	4,195,954	4,066,917
Richmond [1]	301,650	280,750	70	75	387,231	67,255	763,736	421,205
Niagara Falls	74,700	67,075	16	18	53,135	14,852	186,695	176,672
Poughkeepsie	17,000	27,700	2	4	5,625	6,500	28,225	57,125
Rochester	131,035	155,400	27	20	705,291	301,192	928,105	568,370
Schenectady	441,500	106,500	19	20	236,250	247,150	727,150	405,200
Syracuse	200,000	272,300	34	33	177,715	120,560	487,475	420,560
Troy	16,500	63,000	4	13	8,725	36,081	78,540	116,006
Utica	17,500	41,100	3	9	271,340	28,400	310,660	77,725
Watertown	0	0	0	0	103,140	1,380	111,847	8,710
White Plains	592,000	122,800	86	9	114,700	364,044	728,685	601,859
Yonkers	366,800	998,300	54	192	324,225	290,482	783,025	1,424,362
Pennsylvania:								
Allentown	30,000	30,000	2	6	86,230	13,350	146,830	63,210
Altoona	39,800	11,000	8	4	34,180	24,836	105,693	52,196
Bethlehem	0	29,725	0	8	176,250	19,700	188,200	54,800
Butler	7,600	5,000	3	1	3,250	3,150	13,650	8,750
Chester	5,500	0	1	0	8,625	147,525	24,425	186,925
Easton	0	16,500	0	3	8,950	6,594	12,875	42,984
Erie	55,500	154,800	11	18	277,425	11,455	385,030	196,730
Harrisburg	122,000	39,250	8	6	27,270	14,900	239,056	132,678
Hazleton	24,737	6,059	5	1	12,761	13,839	49,739	31,916
Johnstown	10,000	4,000	2	2	110,330	5,560	132,355	39,280
Lancaster	71,000	245,000	1	8	158,925	13,810	260,065	263,780
McKeesport	20,500	18,000	3	3	80,715	13,733	135,937	74,026
New Castle	47,700	32,100	5	5	8,010	15,235	56,370	58,290
Norristown	66,600	0	4	0	15,770	2,650	95,448	62,615
Philadelphia	358,400	867,800	93	86	1,483,350	1,037,690	2,532,370	2,325,080
Pittsburgh	520,100	713,200	97	131	280,850	4,727,135	1,080,497	5,585,389
Scranton	1,600	7,200	1	3	94,375	1,119,401	126,790	1,217,021
Wilkes-Barre	9,000	17,300	2	3	31,210	90,736	59,115	126,636
Wilkinsburg	25,800	21,000	5	4	64,790	16,810	110,890	62,655
Williamsport	2,200	17,500	3	2	108,218	5,379	125,578	33,839
York	31,300	5,500	4	1	159,950	80,290	308,949	102,132
Total	24,437,922	25,032,224	4,119	4,010	39,022,650	17,750,270	72,283,878	49,460,133
Per cent of change		+2.4		−2.6		−54.5		−31.6

[1] Applications filed.

TABLE 4.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JULY AND AUGUST, 1930—Continued

East North Central States

State and city	New residential buildings				New nonresidential buildings		Total construction (including alterations and repairs)	
	Estimated cost		Families provided for in new dwellings		Estimated cost		Estimated cost	
	July	Aug.	July	Aug.	July	Aug.	July	Aug.
Illinois:								
Alton	$28,900	$168,300	8	4	$2,012	$55,142	$54,438	$237,710
Aurora	33,120	61,295	8	10	15,885	243,315	66,707	329,195
Belleville	57,000	6,500	12	2	24,100	1,370	81,100	7,995
Bloomington	50,000	38,000	8	8	10,000	18,000	73,000	56,000
Chicago	1,329,950	1,701,700	237	141	6,788,050	6,032,950	8,644,070	8,135,785
Cicero	24,500	37,500	4	5	38,598	12,510	89,348	72,838
Danville	12,600	9,200	3	4	700	2,100	24,150	20,625
Decatur	32,500	18,000	2	4	25,700	685,900	65,850	708,470
East St. Louis	27,300	52,100	11	17	11,200	28,500	51,751	108,550
Elgin	22,100	52,600	4	11	31,400	10,906	68,180	72,096
Evanston	84,000	33,000	6	3	128,000	119,500	319,750	208,500
Joliet	38,500	13,000	6	2	226,000	451,100	305,380	490,100
Moline	103,200	22,000	14	4	9,005	25,680	122,115	57,419
Oak Park	129,000	10,000	24	1	32,235	16,600	171,865	33,700
Peoria	165,150	174,300	40	40	38,775	13,950	203,925	242,990
Quincy	8,000	7,500	2	3	1,395	1,800	16,360	12,250
Rockford	77,000	95,600	19	26	41,825	64,230	145,535	194,340
Rock Island	23,100	52,000	8	9	9,940	10,630	96,789	129,248
Springfield	85,250	81,100	20	14	38,685	45,480	144,815	144,525
Indiana:								
East Chicago	12,700	6,000	3	1	43,532	266,293	78,496	282,122
Elkhart	38,500	20,500	5	2	5,270	6,015	53,203	32,802
Evansville	60,100	42,000	19	12	15,637	35,750	94,679	103.133
Fort Wayne	85,850	158,410	18	21	74,135	14,645	234,215	224,830
Gary	24,300	85,600	7	19	40,785	20,660	114,935	118,185
Hammond	65,000	40,500	15	12	208,480	34,285	298,805	112,135
Indianapolis	165,650	177,250	40	44	245,101	355,310	517,584	664,744
Kokomo	0	3,500	0	2	3,215	6,635	10,073	57,015
Marion	0	1,000	0	1	700	8,200	13,430	12,025
Muncie	18,850	1,200	7	1	8,548	2,850	33,593	10,819
Richmond	19,650	8,400	7	4	2,190	4,500	24,698	18,310
Terre Haute	7,100	9,500	2	3	4,885	6,320	24,107	28,998
Michigan:								
Bay City	84,000	17,300	4	4	3,500	50,715	241,565	86,287
Detroit	1,518,062	1,538,295	340	284	1,509,909	1,744,141	3,625,963	3,770,956
Flint	97,846	119,788	22	21	404,250	467,714	543,341	623,229
Grand Rapids	42,850	69,300	15	13	230,130	29,205	319,165	141,220
Hamtramck	0	5,500	0	2	0	650	41,565	16,535
Highland Park	0	16,500	0	1	22,050	11,150	22,050	41,050
Jackson	47,000	25,000	8	6	5,355	6,785	62,680	44,556
Kalamazoo	53,975	22,500	12	4	52,165	77,810	121,691	125,662
Lansing	31,500	23,800	7	8	51,855	29,770	103,480	102,162
Muskegon	5,900	11,800	2	5	114,140	91,110	132,688	117,496
Pontiac	19,100	12,500	4	3	18,185	359,625	45,530	379,915
Port Huron	0	0	0	0	1,000	4,660	1,300	6,310
Saginaw	17,950	74,800	3	19	6,030	12,353	115,190	101,803
Ohio:								
Akron	102,200	128,900	23	27	592,428	566,205	767,308	797,620
Ashtabula	3,500	13,300	1	3	7,500	3,735	21,750	28,087
Canton	27,500	38,000	5	4	21,115	25,630	55,050	76,690
Cincinnati	632,250	1,226,350	99	220	1,122,215	493,925	1,921,700	1,842,890
Cleveland	373,000	698,500	79	90	399,200	1,475,300	1,120,425	2,883,250
Columbus	285,200	217,000	64	37	45,100	39,800	443,850	304,650
Dayton	67,412	180,400	16	42	245,476	59,974	443,248	279,331
East Cleveland	0	0	0	0	935	1,460	3,840	5,295
Hamilton	46,200	3,950	8	7	23,755	4,060	83,325	36,780
Lakewood	47,000	61,000	10	9	51,591	85,180	101,091	152,005
Lima	4,000	4,000	1	1	1,275	6,925	14,997	18,740
Lorain	19,200	29,300	5	8	4,977	6,830	29,402	37,520
Mansfield	49,600	8,500	12	2	25,604	26,800	80,594	39,595
Marion	3,000	2,000	1	1	365,505	91,935	371,305	98,795
Newark	2,800	12,700	1	3	81,650	550	86,950	14,020
Springfield	18,000	17,100	6	5	6,980	46,200	28,985	75,545
Steubenville	29,500	17,500	7	3	6,050	12,575	46,800	32,575
Toledo	104,300	130,250	29	27	121,582	382,895	373,402	584,172
Warren	42,680	54,450	12	17	36,690	3,825	93,060	69,830
Youngstown	36,100	78,850	9	12	30,830	59,280	128,575	151,825

TABLE 4.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JULY AND AUGUST, 1930—Continued

East North Central States—Continued

State and city	New residential buildings				New nonresidential buildings		Total construction (including alterations and repairs)	
	Estimated cost		Families provided for in new dwellings		Estimated cost		Estimated cost	
	July	Aug.	July	Aug.	July	Aug.	July	Aug.
Wisconsin:								
Fond du Lac	$8,500	$30,000	3	2	$1,070	$2,925	$12,145	$38,650
Green Bay	42,700	53,100	9	15	19,715	23,595	75,755	84,060
Kenosha	35,400	9,000	6	2	6,700	9,525	52,835	24,575
Madison	61,500	83,600	13	16	200,723	46,190	279,228	154,355
Milwaukee	553,992	423,400	134	98	1,300,940	378,536	4,458,757	1,043,434
Oshkosh	16,100	17,400	7	6	20,495	14,700	44,195	47,235
Racine	31,100	21,500	5	4	398,435	251,110	437,435	329,275
Sheboygan	26,000	24,300	6	5	26,460	13,220	92,782	48,109
Superior	21,100	19,000	2	5	23,395	18,280	55,065	45,315
Total	7,436,887	8,727,988	1,549	1,471	15,732,943	15,637,979	29,343,008	27,828,858
Per cent of change		+17.4		−5.0		−.6		−5.2

West North Central States

Iowa:								
Burlington	0	$4,300	0	1	$97,325	$13,060	$114,940	$110,660
Cedar Rapids	$42,100	11,000	10	2	280,446	52,813	422,069	107,710
Council Bluffs	13,000	21,000	6	3	5,200	8,400	64,700	39,900
Davenport	56,840	39,200	11	11	10,904	99,343	190,589	198,792
Des Moines	117,050	111,875	30	29	126,105	293,605	270,905	444,165
Dubuque	14,500	31,975	5	8	365,390	3,925	432,955	40,332
Ottumwa	17,200	47,200	4	12	500	32,200	23,450	82,960
Sioux City	46,600	99,600	13	23	17,070	73,675	77,470	177,205
Waterloo	90,400	31,400	14	9	93,530	4,235	193,205	42,760
Kansas:								
Hutchinson	49,900	31,950	8	8	4,772	4,160	58,537	45,045
Kansas City	49,750	12,000	12	6	36,420	1,500	97,795	20,493
Topeka	37,300	39,800	6	9	58,245	61,935	108,220	120,845
Wichita	124,485	155,150	37	58	219,605	1,072,347	404,722	1,250,175
Minnesota:								
Duluth	41,700	15,150	12	6	617,450	6,175	708,798	88,535
Minneapolis	456,675	395,840	114	101	482,060	492,190	1,072,430	1,122,985
St. Paul	858,498	91,800	35	19	125,208	252,336	1,167,581	442,930
Missouri:								
Joplin	15,000	5,000	1	3	76,218	14,650	95,218	42,300
Kansas City	196,000	117,000	44	60	1,886,000	133,500	2,294,650	299,850
Springfield	16,400	15,950	6	9	8,135	8,550	84,660	44,950
St. Joseph	41,300	6,000	8	2	13,473	4,425	91,123	20,625
St. Louis	674,000	380,050	185	112	515,155	413,815	1,408,999	1,287,001
Nebraska:								
Lincoln	39,800	23,950	6	5	10,815	100,335	54,565	159,147
Omaha	56,450	80,000	15	18	106,988	395,335	197,788	499,660
South Dakota:								
Sioux Falls	92,250	78,812	23	22	78,750	107,125	178,875	189,781
Total	3,147,198	1,846,002	605	536	5,235,764	3,649,634	9,814,244	6,878,806
Per cent of change		−41.3		−11.4		−30.3		−29.9

South Atlantic States

Delaware:								
Wilmington	$179,900	$202,380	26	47	$41,288	$127,534	$288,210	$394,712
District of Columbia:								
Washington	1,042,200	1,604,200	123	225	1,230,797	1,118,305	2,615,227	2,846,735
Florida:								
Jacksonville	21,325	52,050	10	12	274,250	43,845	380,555	187,265
Miami	19,650	16,500	10	9	16,915	48,525	99,279	150,008
Pensacola	69,670	37,406	24	24	6,300	6,150	90,903	57,406
St. Petersburg	10,200	20,300	2	7	150	16,800	31,350	49,500
Tampa	12,600	8,600	8	5	79,122	58,477	126,358	88,534
Georgia:								
Atlanta	111,985	178,554	68	88	581,022	199,171	766,333	470,313
Columbus	50,225	16,400	12	5	10,000	400	69,775	36,567
Macon	12,950	14,800	5	2	7,700	9,970	61,280	45,597
Savannah	27,200	33,600	9	11	325	529,200	64,745	570,850

TABLE 4.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JULY AND AUGUST, 1930—Continued

South Atlantic States—Continued

State and city	New residential buildings				New nonresidential buildings		Total construction (including alterations and repairs)	
	Estimated cost		Families provided for in new dwellings		Estimated cost		Estimated cost	
	July	Aug.	July	Aug.	July	Aug.	July	Aug.
Maryland:								
Baltimore	$527,000	$493,000	93	82	$892,000	$760,700	$2,132,300	$2,043,000
Cumberland	5,250	26,062	2	7	7,910	3,757	16,365	34,669
Hagerstown	28,900	6,300	8	3	96,130	1,320	129,121	11,070
North Carolina:								
Asheville	2,500	11,900	1	3	42,300	685	52,875	17,575
Charlotte	94,200	81,698	16	26	124,285	8,990	287,396	173,224
Durham	22,550	28,700	8	8	33,000	50,188	70,775	85,513
Greensboro	42,900	22,000	9	4	8,331	12,160	60,761	46,220
Wilmington	12,500	11,500	4	3	800	300	22,200	24,700
Winston-Salem	40,650	18,450	11	5	61,400	58,600	117,525	107,475
South Carolina:								
Charleston	7,300	14,350	3	6	13,775	45,200	36,961	67,430
Columbia	55,450	55,850	26	13	12,825	24,375	115,245	93,485
Greenville	23,500	14,860	5	4	14,900	1,075	51,585	20,058
Virginia:								
Newport News	8,500	13,200	5	9	57,757	88,923	74,470	128,731
Norfolk	94,834	82,700	21	24	115,220	306,100	243,304	419,135
Petersburg	3,700	3,900	2	4	3,350	11,760	17,895	21,471
Portsmouth	5,600	3,000	2	1	625	750	19,343	19,292
Richmond	53,066	51,250	14	9	1,008,042	585,716	1,137,445	802,268
Roanoke	68,700	21,310	7	4	836,375	452,644	913,965	529,469
West Virginia:								
Charleston	----------	[2] 64,633	-------	[2] 13	----------	[2] 2,915	----------	[2] 98,048
Clarksburg	0	8,500	0	4	6,755	4,640	13,765	21,780
Huntington	9,000	39,000	3	7	29,000	2,700	48,000	43,700
Wheeling	29,700	4,000	7	1	2,805	31,650	65,996	49,120
Total	2,693,705	3,196,320	544	662	5,615,454	4,610,610	10,221,307	9,656,872
Per cent of change	----------	+18.7	-------	+21.7	----------	−17.9	----------	−5.5

South Central States

Alabama:								
Mobile	$27,300	$35,400	38	15	$26,700	$27,350	$65,090	$90,822
Montgomery	54,700	73,750	23	35	124,950	52,650	208,970	160,910
Arkansas:								
Little Rock	99,410	163,500	19	50	7,915	88,110	139,251	333,514
Kentucky:								
Lexington	5,650	0	5	0	9,982	222,005	48,272	230,805
Louisville	215,000	185,000	35	26	137,670	150,075	418,020	397,275
Newport	7,500	0	1	0	2,150	1,250	11,150	4,750
Paducah	4,050	37,300	3	14	70,050	1,750	74,235	39,350
Louisiana:								
New Orleans	157,960	115,900	33	37	1,483,725	583,900	1,828,511	788,156
Shreveport	27,700	24,933	13	13	49,995	29,930	123,747	91,775
Oklahoma:								
Oklahoma City	1,105,700	383,500	181	121	2,277,197	1,455,160	3,439,262	2,003,500
Okmulgee	0	0	0	0	0	5,150	1,840	13,150
Tulsa	188,775	233,325	52	65	365,755	160,620	590,698	431,859
Tennessee:								
Chattanooga	58,939	76,846	21	25	349,634	8,600	458,408	119,040
Knoxville	48,032	30,480	8	9	186,660	36,766	239,005	76,300
Memphis	250,900	286,000	74	88	41,600	240,760	366,470	604,760
Nashville	157,175	78,375	52	31	17,900	329,200	222,498	491,732
Texas:								
Austin	104,087	128,443	47	39	59,458	18,773	295,393	160,722
Beaumont	25,713	91,803	16	29	53,489	58,801	148,762	181,614
Dallas	203,105	127,298	78	55	849,595	704,718	1,286,827	934,990
Fort Worth	87,465	100,680	39	34	68,644	3,055,819	227,197	3,205,436
Houston	783,580	893,000	161	186	1,035,788	188,450	1,841,004	1,301,903
Port Arthur	58,860	68,490	25	28	285,863	302,466	368,741	426,446
San Antonio	170,005	141,315	91	76	31,085	63,015	415,015	245,270
Waco	29,067	14,533	9	5	23,920	9,000	73,720	111,240
Wichita Falls	950	650	1	2	1,600	18,710	9,085	36,875
Total	3,871,623	3,290,521	1,025	983	7,561,325	7,813,028	12,901,171	12,482,194
Per cent of change	----------	−15.0	-------	−4.1	----------	+3.3	----------	−3.3

[2] Not included in total. No report received for July.

TABLE 4.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JULY AND AUGUST, 1930—Continued

Mountain and Pacific States

State and city	New residential buildings				New nonresidential buildings		Total construction (including alterations and repairs)	
	Estimated cost		Families provided for in new dwellings		Estimated cost		Estimated cost	
	July	Aug.	July	Aug.	July	Aug.	July	Aug.
Arizona:								
Phoenix	$109,950	$56,000	37	17	$321,320	$50,433	$449,215	$129,018
California:								
Alameda	4,000	80,800	1	24	44,766	1,325	64,940	102,515
Berkeley	86,500	106,400	31	23	26,371	25,481	171,411	161,347
Fresno	12,150	14,400	5	5	28,155	7,100	79,199	96,895
Long Beach	345,400	447,075	123	155	458,485	603,100	858,705	1,187,125
Los Angeles	2,804,729	2,341,218	936	811	2,154,316	3,357,227	5,841,626	6,512,567
Oakland	195,664	528,650	43	176	169,350	121,735	454,399	738,265
Pasadena	944,605	92,950	24	19	428,073	278,543	1,447,707	431,909
Sacramento	86,352	122,450	33	50	35,853	62,134	204,157	215,430
San Diego	268,150	203,375	73	66	131,362	232,980	452,541	501,646
San Francisco	518,500	800,100	127	210	255,014	150,155	1,057,907	1,215,207
San Jose	56,275	30,040	11	8	358,575	273,330	455,380	389,055
Stockton	7,700	20,000	2	4	7,965	74,370	48,440	105,855
Vallejo	22,275	0	7	0	5,750	20,225	31,577	34,021
Colorado:								
Colorado Springs	18,500	16,500	3	4	4,580	2,575	28,570	25,915
Denver	90,000	331,450	20	102	1,007,200	61,100	1,211,100	513,900
Pueblo	9,000	14,300	4	6	8,445	2,643	53,730	28,923
Montana:								
Butte	1,698	0	6	0	5,110	3,349	9,893	7,324
Great Falls	22,750	15,750	8	7	75,625	229,690	100,920	254,285
Oregon:								
Portland	257,630	283,150	44	56	123,290	502,655	584,995	1,039,010
Utah:								
Ogden	7,000	33,000	3	15	2,500	153,500	13,700	189,700
Salt Lake City	285,200	164,600	88	45	7,135	65,725	320,275	251,770
Washington:								
Bellingham	11,200	22,900	6	10	8,495	2,795	28,692	43,310
Everett	15,350	9,200	7	4	1,465	14,255	28,370	33,140
Seattle	790,000	358,900	219	106	264,525	890,700	1,315,530	1,566,875
Spokane	76,200	47,675	19	15	352,840	191,116	577,350	287,261
Total	7,046,778	6,140,883	1,880	1,938	6,286,565	7,378,241	15,890,329	16,062,268
Per cent of change		−12.9		+3.1		+17.4		+1.1

Hawaii

Hawaii:								
Honolulu	$122,629	$125,797	50	60	$73,590	$95,573	$218,554	$271,265
Per cent of change		+2.6		+20.0		+29.9		+24.1

Recent English Housing Laws

AT ITS recent session the English Parliament passed two housing acts, the first applying especially to conditions in England and Wales, and the second to Scotland. The first, according to its terms as given in the Ministry of Labor Gazette for August, 1930 (p. 280), defines two classes of unhealthful areas with which local authorities are empowered to deal: "Clearance areas," in which conditions are so bad that they can be met only by clearing off all buildings, and "improvement areas," in which the situation can be met by demolishing or repairing some of the buildings, opening up the area, and abolishing overcrowding. Moreover, local authorities may enforce the repair or demolition of individual insanitary houses outside of areas of either class. The conditions of the aid given by the general Government toward the carrying out of such schemes have been materially changed.

Under the previously existing law grants were made to a local authority toward the cost of a clearance scheme not exceeding one-half of the estimated average annual loss likely to be incurred by the authority in carrying out the scheme. The new act abolishes this grant, except in certain cases, and replaces it by a fixed annual grant on a unit basis. The new grant will be paid in aid of the expenses incurred by local authorities in dealing under the act with a clearance or improvement area, and in the demolition of individual insanitary houses outside either class of unhealthy area.

The most radical change in regard to the grant, however, is that instead of being related to the number of houses built, it is based on the number of persons displaced and rehoused. Ordinarily it is to be 45s. ($10.95) per person per year, but in the case of especially expensive schemes, such as those in the center of large cities, it may be more. That is to be used in letting a proportion of the houses at a definitely lower rent than that normally charged for houses let under the former housing act, and it is expected that it will be effective in providing for rehousing large families, who, under the earlier law, might not be able to pay the rent of a house large enough for their needs.

Other sections of the law deal with rural housing, and permit the erection for the use of aged persons of houses below the minimum size for which the Government aid could hitherto be claimed.

The Scottish housing act is very similar to the English law, just described, but the grant will normally be 5s. ($1.22) higher per displaced and rehoused person than in England and Wales. An extra grant is also permitted to meet the situation arising out of the tenement system which prevails in some areas of Scotland where clearance is especially desirable.

The single tenement or building consists of separate houses—often separately owned, and sometimes contains a shop on the ground floor. Frequently a tenement contains both insanitary and sanitary premises, and if the demolition of such a tenement is required because of the insanitary houses therein, the local authority have to pay compensation at market value for the sanitary premises. To meet this expenditure of the local authority the act increases the unit grant to an extent not exceeding 15s. [$3.65].

An interesting provision of the act is that the grant thereunder may be available toward the cost of hostels provided by local authorities for the accommodation of single persons.

WAGES AND HOURS OF LABOR

Hours and Earnings in the Cigarette Manufacturing Industry, 1930

THIS report presents the results of a study in 1930 by the Bureau of Labor Statistics of wages and hours of labor of wage earners in the cigarette manufacturing industry in the United States. The data cover all employees—6,187 males and 8,079 females—engaged in the preparation of the tobacco and the manufacture, packing, and shipping of cigarettes in the establishments covered in the study. The figures were obtained directly from the pay rolls and other records of the 13 establishments studied, and are for representative pay-roll periods in March, April and May, of this year.

Average full-time hours per week, average earnings per hour, and average full-time earnings per week are presented in Table 1 for each of the principal occupations in the industry, for a group of miscellaneous workers listed as "other employees," and for the industry as a whole. The group designated as "other employees" includes wage earners in occupations whose number was too small to warrant tabulation as an occupation.

Average full-time hours per week for males in all occupations, for females, and for both sexes, that is, for the industry, were 49.9. Average earnings per hour for males in all occupations were 37.8 cents, for females 26.8 cents, and for both sexes combined 31.8 cents. Average full-time earnings per week for males in all occupations were $18.86, for females $13.37, and for both males and females together $15.87.

The range in average full-time hours per week for males as between the several occupations was from 49.8 to 50, or only two-tenths of an hour between the lowest and the highest, and for females from 49.7 to 50.7, making 1 hour difference between the lowest and the highest occupation.

Average earnings per hour for males ranged from 22.1 cents for hand stemmers to 69 cents for mechanics, and for females from 19 cents for laborers to 41.8 cents for glassine wrapping-machine operators.

Average full-time earnings per week for males ranged from $11.05 for hand stemmers to $34.36 for mechanics, and for females from $9.48 for laborers to $20.90 for glassine wrapping-machine operators. Because of the narrow range in full-time hours, the lowest and the highest average full-time earnings per week for both males and females occurred in the same occupations as average earnings per hour.

TABLE 1.—AVERAGE FULL-TIME HOURS AND EARNINGS, BY OCCUPATION AND SEX

Occupation	Sex	Number of establishments	Number of wage earners	Average full-time hours per week	Average earnings per hour	Average full-time weekly earning
Stemming-machine feeders	Female	8	658	49.7	$0.202	$10.04
Stemmers, hand	Male	9	328	50.0	.221	11.05
	Female	9	1,913	49.8	.192	9.56
Strip searchers	Male	5	39	50.0	.286	14.30
	Female	10	1,075	49.7	.198	9.84
Turkish pickers	Female	6	87	49.7	.195	9.69
Wetters, casers, and dryers	Male	12	44	49.9	.484	24.15
Cutter feeders	Male	11	206	49.8	.326	16.23
Knife changers	Male	13	54	50.0	.374	18.70
Knife grinders	Male	13	19	49.9	.398	19.86
Making-machine operators	Male	13	1,143	49.9	.429	21.41
	Female	7	126	49.8	.372	18.53
Hopper feeders	Male	9	130	49.9	.311	15.52
	Female	3	24	50.7	.245	12.42
Catchers	Female	8	608	50.1	.298	14.93
Machine fixers	Male	13	230	49.9	.573	28.59
Inspectors	Male	3	10	50.0	.423	21.15
	Female	13	379	49.9	.367	18.31
Packing-machine operators	Male	10	240	49.9	.415	20.71
	Female	10	377	49.9	.381	19.01
Packers, hand	Female	5	476	49.8	.363	18.08
Glassine wrapping-machine operators	Female	8	314	50.0	.418	20.90
Carton packers	Female	13	543	49.8	.390	19.42
Carton banders or wrappers	Male	7	32	49.8	.354	17.63
	Female	10	100	49.9	.322	16.07
Case packers	Male	12	113	49.9	.344	17.17
Carton making machine operators	Male	12	70	49.9	.415	20.71
Mechanics	Male	11	224	49.8	.690	34.36
Laborers	Male	13	2,303	49.9	.301	15.02
	Female	13	504	49.9	.190	9.48
Other employees	Male	13	1,002	50.0	.427	21.35
	Female	13	895	50.1	.290	14.53
All employees	Male	13	6,187	49.9	.378	18.86
	Female	13	8,079	49.9	.268	13.37
All employees, male and female		13	14,266	49.9	.318	15.87

Average Hours and Earnings by States

AVERAGE full-time hours per week, earnings per hour, and full-time earnings per week are presented in Table 2 for wage earners of each sex and for both sexes combined in each of the three States covered, and for all States.

Average full-time hours by States for males were 49.9, 50.0, and 51.7; for females, 49.8, 49.9, and 51.6; and for both sexes, 49.8, 49.9, and 51.7.

Average full-time earnings per week by States for males were $17.86, $21.25, and $23.89; for females, $12.95, $14.09, and $14.67; and for both sexes, $15.09, $17.91, and $18.41.

TABLE 2.—AVERAGE HOURS AND EARNINGS, 1930, BY SEX AND STATE

Sex and State	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Males					
North Carolina	7	4,390	49.9	$0.358	$17.86
Kentucky	2	103	51.7	.462	23.89
Virginia	4	1,694	50.0	.425	21.25
Total	13	6,187	49.9	.378	18.86
Females					
North Carolina	7	5,965	49.8	.260	12.95
Kentucky	2	148	51.6	.273	14.09
Virginia	4	1,966	49.9	.294	14.67
Total	13	8,079	49.9	.268	13.37
Males and females					
North Carolina	7	10,355	49.8	.303	15.09
Kentucky	2	251	51.7	.356	18.41
Virginia	4	3,660	49.9	.359	17.91
Total	13	14,266	49.9	.318	15.87

Average and Classified Earnings Per Hour

TABLE 3 presents a percentage distribution of average earnings per hour of the employees by occupations. The percentage is the nearest whole per cent in each group. For example, if 6.6 per cent of the employees fall in a group, it is shown as 7 per cent.

Approximately 18 per cent of the employees earned under 20 cents per hour and approximately 6 per cent earned 50 cents or more per hour. The majority of the employees, therefore, earned between 20 cents and 50 cents per hour.

TABLE 3.—AVERAGE HOURLY EARNINGS AND PER CENT EARNING EACH CLASSIFIED AMOUNT PER HOUR, 1930, BY OCCUPATION AND SEX

Occupation	Stemming machine feeders	Stemmers, hand		Strip searchers		Turkish pickers	Wetters casers, and dryers	Cutter feeders	Knife changers
Sex	F.	M.	F.	M.	F.	F.	M.	M.	M.
Establishments	8	9	9	5	10	6	12	11	13
Employees	658	328	1,913	39	1,075	87	44	206	54
Average earnings per hour	$0.202	$0.221	$0.192	$0.286	$0.198	$0.195	$0.484	$0.326	$0.374
Classification	Per cent earning each classified amount per hour								
4 and under 5 cents			(1)						
5 and under 6 cents			(1)						
6 and under 7 cents			(1)						
7 and under 8 cents		1	1						
8 and under 9 cents		1	3						
9 and under 10 cents		2	3						
10 and under 11 cents		5	4						
11 and under 12 cents		5	5						
12 and under 13 cents		5	6						
13 and under 14 cents		5	5		(1)				
14 and under 15 cents		6	6						
15 and under 16 cents		6	6		1				
16 and under 17 cents	1	3	4		(1)				
17 and under 18 cents	3	5	5		1	18			
18 and under 19 cents	27	2	4		27	36			
19 and under 20 cents	8	5	4		7	3			
20 and under 21 cents	35	4	5		45	30		1	
21 and under 22 cents	12	3	5	3	13				
22 and under 23 cents	3	2	5		(1)	1			
23 and under 24 cents	1	5	4		2				6
24 and under 25 cents	4	2	3		(1)				
25 and under 27½ cents	7	9	8	31	3	12		2	9
27½ and under 30 cents	(1)	6	6	3	(1)			4	
30 and under 32½ cents		5	3	59	(1)		11	43	6
32½ and under 35 cents		5	2	5				37	15
35 and under 37½ cents		2	1				7	10	19
37½ and under 40 cents		2	1				7	2	7
40 and under 42½ cents		1	(1)				21	1	20
42½ and under 45 cents		(1)							6
45 and under 47½ cents			(1)				21		11
47½ and under 50 cents		1					2		2
50 and under 55 cents		1					9		
55 and under 60 cents		1					5		
60 and under 65 cents							5		
65 and under 70 cents							2		
70 and under 75 cents							7		
85 and under 90 cents							2		
100 and under 110 cents							2		

[1] Less than 1 per cent.

TABLE 3.—AVERAGE HOURLY EARNINGS AND PER CENT EARNING EACH CLASSIFIED AMOUNT PER HOUR, 1930, BY OCCUPATION AND SEX—Continued

Occupation	Knife grinders	Making machine operators		Hopper feeders		Catchers	Machine fixers	Inspectors	
Sex	M.	M.	F.	M.	F.	F.	M.	M.	F.
Establishments	13	13	7	9	3	8	13	3	13
Employees	19	1143	126	130	24	608	230	10	379
Average earnings per hour	$0.398	$0.429	$0.372	$0.311	$0.245	$0.298	$0.573	$0.423	$0.367
Classification	Per cent earning each classified amount per hour								
20 and under 21 cents						1			
21 and under 22 cents					13	(1)			
22 and under 23 cents					13	(1)			(1)
23 and under 24 cents				1	17	3			(1)
24 and under 25 cents					8	2			(1)
25 and under 27½ cents	5	(1)	1	12	42	10			2
27½ and under 30 cents		(1)		30	8	13			4
30 and under 32½ cents	5	2	1	25		57		10	6
32½ and under 35 cents	11	2	2	15		13			11
35 and under 37½ cents	11	8	48	16		(1)	1	30	32
37½ and under 40 cents	26	11	35	2		1			17
40 and under 42½ cents	16	32	11				2	40	24
42½ and under 45 cents	11	19	2				1		2
45 and under 47½ cents	5	8					8		1
47½ and under 50 cents		7					10		(1)
50 and under 55 cents	11	9					30		(1)
55 and under 60 cents		2					15	20	
60 and under 65 cents		1					8		
65 and under 70 cents		(1)					7		
70 and under 75 cents							12		
75 and under 80 cents		(1)					4		
80 and under 85 cents							2		
90 and under 95 cents							(1)		
100 and under 110 cents							1		

Occupation	Packing machine operators		Packers, hand	Glassine wrapping machine operators	Carton packers	Carton banders or wrappers		Case packers	Carton making machine operators
Sex	M.	F.	F.	F.	F.	M.	F.	M.	M.
Establishments	10	10	5	8	13	7	10	12	12
Employees	240	377	476	314	543	32	100	113	70
Average earnings per hour	$0.415	$0.381	$0.363	$0.418	$0.390	$0.354	$0.322	$0.344	$0.415
Classification	Per cent earning each classified amount per hour								
15 and under 16 cents							4		
16 and under 17 cents			(1)						
18 and under 19 cents			(1)						
19 and under 20 cents			(1)						
20 and under 21 cents			1						
21 and under 22 cents			(1)						
22 and under 23 cents			2						
23 and under 24 cents			1						
24 and under 25 cents			5	(1)	(1)		1		
25 and under 27½ cents			12	2	2		12	4	
27½ and under 30 cents	1	3	7	1	5	9	6	6	
30 and under 32½ cents	5	2	6	3	4	25	39	39	10
32½ and under 35 cents	5	5	6	3	3	16	3	11	6
35 and under 37½ cents	13	19	13	13	37	9	27	13	9
37½ and under 40 cents	12	50	11	19	13	13	2	6	11
40 and under 42½ cents	20	19	11	18	11	25	1	12	40
42½ and under 45 cents	16	2	10	2	3		2	4	4
45 and under 47½ cents	12	1	6	16	9		2	3	6
47½ and under 50 cents	10		4	21	13			2	4
50 and under 55 cents	5		3	2	1		1		3
55 and under 60 cents	(1)		2						1
60 and under 65 cents	1		1			3			4
65 and under 70 cents									1

[1] Less than 1 per cent.

TABLE 3.—AVERAGE HOURLY EARNINGS AND PER CENT EARNING EACH CLASSIFIED AMOUNT PER HOUR, 1930, BY OCCUPATION AND SEX—Continued

Occupation	Mechanics	Laborers		Other employees		All employees		
Sex	M.	M.	F.	M.	F.	M.	F.	Total
Establishments	11	13	13	13	13	13	13	13
Employees	224	2,303	504	1,002	895	6,187	8,079	14,266
Average earnings per hour	$0.690	$0.301	$0.190	$0.427	$0.290	$0.378	$0.268	$0.318
Classification	Per cent earning eaoh classified amount per hour							
4 and under 5 cents					(1)		(1)	(1)
5 and under 6 cents					1		(1)	(1)
6 and under 7 cents				(1)	2	(1)	(1)	(1)
7 and under 8 cents				(1)	2	(1)	(1)	(1)
8 and under 9 cents				(1)	(1)	(1)	1	(1)
9 and under 10 cents					(1)	(1)	1	1
10 and under 11 cents				(1)	(1)	(1)	1	1
11 and under 12 cents				(1)		(1)	1	1
12 and under 13 cents			(1)	(1)	(1)	(1)	2	1
13 and under 14 cents				(1)	1	(1)	1	1
14 and under 15 cents			(1)	(1)	(1)	(1)	1	1
15 and under 16 cents			9	1	2	1	2	2
16 and under 17 cents			7		1	(1)	2	1
17 and under 18 cents			8	1	2	(1)	2	2
18 and under 19 cents			28	(1)	1	(1)	9	5
19 and under 20 cents			3		1	(1)	3	2
20 and under 21 cents		1	35	2	16	1	15	9
21 and under 22 cents		(1)	4	(1)	(1)	(1)	4	3
22 and under 23 cents		1	1	(1)	2	1	2	1
23 and under 24 cents		1	3	2	1	1	2	2
24 and under 25 cents		1	(1)	(1)	2	1	2	1
25 and under 27½ cents		23	2	6	7	11	6	8
27½ and under 30 cents		10		3	12	6	5	5
30 and under 32½ cents		44	(1)	16	12	23	8	15
32½ and under 35 cents		8		5	7	7	4	5
35 and under 37½ cents		7		10	8	8	8	8
37½ and under 40 cents		3		4	6	5	7	6
40 and under 42½ cents	(1)	1		11	13	10	6	8
42½ and under 45 cents		(1)		3	1	5	1	3
45 and under 47½ cents	3	(1)		5	(1)	4	2	3
47½ and under 50 cents		(1)		2	(1)	3	2	2
50 and under 55 cents	6	(1)		8		5	(1)	2
55 and under 60 cents	7			3		2	(1)	1
60 and under 65 cents	13			5		2	(1)	1
65 and under 70 cents	8			2		1		(1)
70 and under 75 cents	27			4		2		1
75 and under 80 cents	27			2		2		1
80 and under 85 cents	4			1		(1)		(1)
85 and under 90 cents	3			1		(1)		(1)
90 and under 95 cents	1			(1)		(1)		(1)
95 and under 100 cents	(1)			(1)		(1)		(1)
100 and under 110 cents						(1)		(1)
110 and under 120 cents				(1)		(1)		(1)

[1] Less than 1 per cent.

A very wide range of hourly earnings is seen in Table 3 especially among hand stemmers. This is mostly a piecework occupation. Some employees in this occupation are physically unable to do as much work as others, or are content with small earnings and do not exert themselves. Others are naturally either slow or rapid in turning out work and the slow pieceworker naturally earns less than the rapid worker. A similar condition of less extent is found in other occupations.

Hours

THE full-time hours herein presented are the regular customary working hours of the factory with lunch time excluded and with no overtime and no loss of time.

Table 4 shows the regular full-time hours per week and per day of each of the 13 establishments covered in 1930. While all the factories were on a 6-day basis each had a short Saturday. These figures represent the factories as units. In a few instances the hours of individual workers were more or less than the usual hours of the establishment. Two per cent of all employees had a full-time week of 48 hours, 25 per cent had 49½ hours, 71 per cent had 50 hours, and 1 per cent 55 hours per week. The remaining 1 per cent of employees had full-time hours ranging from 53½ to 73½ per week.

TABLE 4.—CLASSIFICATION OF ESTABLISHMENTS IN EACH STATE, 1930, BY FULL-TIME HOURS PER WEEK AND PER DAY

Full-time hours per week	Full-time hours per day		Number of establishments having specified hours		
	Monday to Friday	Saturday	Kentucky	North Carolina	Virginia
48 hours	9	3	1		
48 hours	8¾	4¼			1
49½ hours	9	4½		3	
50 hours	9	5		4	3
55 hours	10	5	1		
Total			2	7	4

Bonus Systems

ONLY 3 of the 13 establishments had bonus systems in effect at the time of the 1930 study.

In one establishment an attendance bonus of $1 per week was paid to each employee who was on hand every day and was not tardy during the week. The amount was increased to $1.25 per week for full-time attendance for four consecutive weeks. This bonus applied to all employees except those who were paid weekly or monthly rates.

Two establishments paid a bonus to employees in certain occupations in the cutting department for throwing out more than a set standard of stems.

Changes in Wage Rates since March 1, 1929

ONLY one establishment reported changes in wage rates between March 1, 1929, and the period of the 1930 study. In this establishment the piece rates of hand packers were decreased nearly 19 per cent.

No changes in regular hours were reported.

Pay for Overtime and for work on Sunday and Holidays

OVERTIME is generally considered as time worked in excess of the regular full-time hours per day and per week and is sometimes paid for at a higher rate. Only 7 of the 13 establishments covered reported extra pay for overtime and for work on Sunday and holidays. Of these, 5 paid time and a half, 1 paid time and a quarter, and 1 paid time and a half after 6 p. m. from Monday to Friday and after 1 p. m. Saturday. Five establishments paid time and a half and one paid

time and a quarter for work on Sunday and holidays, while one paid time and a half for work on holidays and double time for all Sunday work.

Growth of the Industry

TABLE 5 shows the number of cigarettes manufactured in each of the specified calendar years, 1900 to 1925 and the fiscal year 1930. These figures were taken from the reports of the Commissioner of Internal Revenue.

The production of cigarettes increased very little between the years 1900 and 1905, but doubled from 1905 to 1910. It more than doubled again from 1910 to 1915 and also between 1915 and 1920. The production steadily increased to 82 billions in 1925 and to approximately 120 billions in 1930.

TABLE 5.—PRODUCTION OF CIGARETTES, BY WEIGHT, IN SPECIFIED YEARS, 1900 TO 1930

[From reports of Commissioner of Internal Revenue]

Calendar year	Weighing more than 3 pounds per 1,000	Weighing not more than 3 pounds per 1,000	Total
	Cigarettes	*Cigarettes*	*Cigarettes*
1900	4,585,675	3,254,130,630	3,258,716,305
1905	6,913,138	3,666,814,273	3,673,727,411
1910	19,374,077	8,644,335,407	8,663,709,484
1915	15,816,210	17,964,348,272	17,980,164,482
1920	28,038,552	47,430,105,055	47,458,143,607
1925	17,428,807	82,247,100,347	82,264,529,154
1930[1]	9,041,735	119,935,433,267	119,944,475,002

[1] For fiscal year ending June 30, 1930.

Method of Computation

THIS report includes wage workers only and does not include any data for executives, supervisors, nor clerical and office force.

Average earnings per hour of wage earners in each occupation, as presented in the various tables in this report, were computed by dividing the combined earnings of all wage earners in the occupation by the total hours worked by them.

Average full-time hours per week of wage earners in each occupation were obtained by dividing the aggregate full-time hours of all wage earners in the occupation by the number of wage earners. The full-time hours per week of each wage earner were used in arriving at this average, even though some employees may have worked more or less than full time on account of overtime, sickness, disability, or other cause.

Average full-time earnings per week of wage earners in each occupation were computed by multiplying the average earnings per hour by the average full-time hours per week. This shows what the earnings would have been had all wage earners in the occupation worked full time, no more nor less, at the same average earnings per hour as in the one week covered in the 1930 study of the industry.

Wages and Hours in the Manufacture of Woolen and Worsted Goods, 1930

THE 1930 figures in this article are the results of the regular study made in even years by the Bureau of Labor Statistics of wages and hours of labor of wage earners in the woolen and worsted goods industry in the United States.

The figures show average full-time hours per week, earnings per hour, and full-time earnings per week, and cover 41,400 employees of 105 representative woolen and worsted mills in 15 States in which the industry is of material importance in production and in number of wage earners, according to the reports of the United States Census of Manufactures. The wage earners included in the 1930 study represent 27 per cent of the total number in the industry in the United States according to the census of 1927.

This industry, like others in the South, especially those engaged in the manufacture of textiles, has grown in recent years to such an extent that it seemed advisable to include southern mills in this report. Wage figures were, therefore, obtained this year from 12 mills in Georgia, Kentucky, Maryland, South Carolina, Tennessee, and Virginia. Data were obtained for only one mill in each of two States. The wage figures for the 12 mills were combined and shown in Table 3 as the "Southern district," as it is the policy of the bureau not to publish figures for any one mill separately.

The 1930 averages in Table 1 are summaries for all employees included in the study in comparison with summaries for each of the years from 1910 to 1914 and for each of the even years from 1914 to 1930. Index numbers of these averages with the 1913 averages as the base or 100 per cent are also given in the table. Two sets of averages are shown for 1930; one for 93 mills, not including 12 southern mills that were *not* included in any of the years prior to 1930, and the other for the 105 mills, including the 12 southern mills. In 1930 the full-time hours per week of the 38,417 employees of the 93 mills were 49.3 as in 1928. They earned an average of 47.3 cents per hour or 4.1 cents per hour less than in 1928, and their average full-time earnings per week were $23.32 or $2.02 per week less than in 1928. The average full-time hours per week for the 12 southern mills and the 93 mills combined were 49.6; the employees earned an average of 46 cents per hour, and their average full-time earnings per week were $22.82.

The averages for the years 1910 to 1914 are for employees in *selected* occupations only and are therefore comparable one year with another. Those for the even years from 1914 to 1930 are for employees in *all occupations* in the industry and are also comparable one year with another for each of these years. Averages for *selected* occupations should not be compared with those for *all occupations*.

The index numbers are for the purpose of furnishing comparable figures one year with another over the entire period from 1910 to 1930. The index for any year from 1910 to 1914 for selected occupations is the per cent that the average for the year is of the 1913 average. The index for any year from 1914 to 1930 for all occupations was computed by increasing or decreasing the 1914 index for selected occupa-

tions in proportion to the increase or decrease in the average for each year as compared with the 1914 averages for all occupations.

The 1930 average hours and earnings in this report were computed from individual hours and earnings in a representative pay-roll period, except for a very few mills, in January, February or March, and therefore are representative of conditions in those months. The individual hours and earnings of employees were taken directly from the pay rolls and other records of the 105 mills by agents of the bureau.

TABLE 1.—AVERAGE HOURS AND EARNINGS, AND INDEX NUMBERS THEREOF, 1910 TO 1930

	Year	Number of establishments	Number of employees	Average			Index numbers of—		
				Full-time hours per week	Earnings per hour	Full-time earnings per week	Full-time hours per week	Earnings per hour	Full-time earnings per week
Selected occupations	1910	19	11,912	56.6	$0.178	$10.05	101.3	90.4	91.2
	1911	27	16,342	56.8	.179	10.18	101.6	90.9	92.4
	1912	46	17,517	55.9	.201	11.23	100.0	102.0	101.9
	1913	47	15,653	55.9	.197	11.02	100.0	100.0	100.0
	[1] 1914	48	18,333	54.9	.202	11.06	98.2	102.5	100.4
All occupations	[1] 1914	48	40,061	55.0	.182	10.03			
	1916	61	49,954	54.8	.225	12.34	97.8	126.7	123.5
	1918	63	51,928	54.3	.342	18.57	97.0	192.6	185.9
	1920	67	38,164	48.3	.628	30.33	86.2	353.7	303.6
	1922	67	39,430	48.8	.474	23.13	87.1	267.0	231.5
	1924	72	41,622	49.1	.533	26.17	87.7	300.2	262.0
	1926	112	39,970	49.3	.491	24.21	88.0	276.5	242.3
	1928	92	38,850	49.3	.514	25.34	88.0	289.5	253.7
	[2] 1930	93	38,417	49.3	.473	23.32	88.0	266.4	233.4
	[3] 1930	105	41,400	49.6	.460	22.82			

[1] Two sets of averages are shown for 1914 for the industry; one for selected occupations and the other for all occupations in the industry. The 1910 to 1914 averages for selected occupations only are comparable one year with another, as are those for all occupations one year with another from 1914 to 1930.
[2] Not including southern mills.
[3] Including southern mills.

Average Hours and Earnings, 1930, by Occupation and Sex

TABLE 2 shows for 1930, average full-time hours per week, average earnings per hour, and average full-time hours per week. The averages are for males and females separately in each of the specified occupations and also for a group designated in the table as "other employees." The group includes employees in all other occupations combined, each too few in number of employees to warrant tabulation as a specified occupation.

Average full-time hours of males ranged by occupations from 48.5 per week for frame spinners to 53.9 for hand drawers-in, while those of females ranged from 48 for card tenders to 53 for dresser tenders. Average earnings per hour of males ranged from 23.7 cents for doffers to 78.7 cents for hand drawers-in, and those of females ranged from 26.9 cents for doffers to 54.4 cents for weavers. Average full-time earnings per week of males ranged by occupations from $12.25 for doffers to $42.42 for hand drawers-in, and those of females ranged from $13.37 for doffers to $26.98 for weavers.

TABLE 2.—AVERAGE HOURS AND EARNINGS, 1930, BY OCCUPATION AND SEX

Occupation	Sex	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Wool sorters	Male	29	503	49.3	$0.742	$36.58
	Female	3	63	49.3	.507	25.00
Wool-washer tenders	Male	30	151	50.6	.462	23.38
Picker tenders	do	64	368	49.9	.409	20.41
Card tenders	do	76	652	50.8	.409	20.78
	Female	9	105	48.0	.374	17.95
Card strippers	Male	74	352	49.5	.452	22.37
Card grinders	do	13	34	48.7	.489	23.81
Gill-box tenders	do	10	451	50.8	.391	19.86
	Female	26	525	50.2	.326	16.37
Comber tenders	Male	14	284	50.4	.469	23.64
	Female	18	139	49.9	.375	18.71
Drawing-frame tenders	Male	9	209	50.5	.390	19.70
	Female	29	1,983	49.4	.358	17.69
Spinners, mule	Male	71	1,223	50.0	.620	31.00
	Female	3	9	52.6	.359	18.88
Spinners, frame	Male	4	73	48.5	.365	17.70
	Female	34	1,301	49.4	.380	18.77
Doffers	Male	4	21	51.7	.237	12.25
	Female	24	698	49.7	.269	13.37
Winders	Male	13	28	52.3	.322	16.84
	Female	63	2,115	49.0	.379	18.57
Twister tenders	Male	12	37	53.0	.426	22.58
	Female	69	1,487	49.8	.365	18.18
Spooler tenders	Male	2	13	51.5	.265	13.65
	Female	87	1,147	48.9	.383	18.73
Creelers	Male	5	77	48.6	.346	16.82
	Female	7	46	49.5	.331	16.38
Dresser tenders	Male	90	621	49.3	.650	32.05
	Female	3	10	53.0	.355	18.82
Tiers-in, machine	Male	6	8	49.5	.581	28.76
Tiers-in, hand	do	8	23	48.9	.597	29.19
	Female	4	18	48.6	.295	14.34
Drawers-in, hand	Male	5	17	53.9	.787	42.42
	Female	89	666	49.5	.489	24.21
Loom fixers	Male	91	701	49.8	.775	38.60
Weavers	do	93	4,187	49.8	.611	30.43
	Female	81	2,012	49.6	.544	26.98
Cloth inspectors	Male	27	241	49.0	.538	26.36
	Female	18	144	49.0	.364	17.84
Burlers	do	92	2,258	49.4	.339	16.75
Menders	do	89	2,511	49.3	.459	22.63
Perchers	Male	86	570	49.0	.539	26.41
	Female	19	138	49.3	.394	19.42
Fullers	Male	81	270	49.6	.451	22.37
Washer tenders, cloth	do	82	405	49.6	.455	22.57
Dryer tenders, cloth	do	83	237	50.2	.433	21.74
Truckers	do	103	1,655	48.9	.396	19.36
	Female	11	113	49.9	.292	14.57
Dye-house laborers	Male	82	944	49.8	.436	21.71
Other employees	do	105	7,236	49.7	.479	23.81
	Female	93	2,319	49.8	.337	16.78
All employees	Male	105	21,591	49.7	.516	25.65
	Female	105	19,809	49.5	.392	19.40
All employees, males and females		105	41,400	49.6	.460	22.82

Average Hours and Earnings, 1930, by Sex and State

TABLE 3 shows for 1928 and 1930, average full-time hours per week, earnings per hour, and full-time earnings per week. The averages are for all males and all females separately, and for both sexes combined. The most significant feature of this table is that each State shows a reduction in earnings per hour as between 1928 and 1930.

In 1930 average full-time hours per week of males ranged by States from 48.4 to 53.5, of females from 48 to 53.8, and of both sexes combined from 48.3 to 53.6.

Average earnings per hour of males in 1930 ranged by States from 34.8 to 63 cents, of females from 25 to 50.3 cents, and of males and females combined from 30.8 to 56.7 cents per hour.

In 1930 average full-time earnings per week of males ranged by States from $18.62 to $30.49, of females from $13.45 to $24.35, and of males and females combined from $16.51 to $27.44.

TABLE 3.—AVERAGE HOURS AND EARNINGS, 1928 AND 1930, BY SEX AND STATE

Sex and State	Number of establishments		Number of employees		Average full-time hours per week		Average earnings per hour		Average full-time weekly earnings	
	1928	1930	1928	1930	1928	1930	1928	1930	1928	1930
Males										
Connecticut	10	12	1,504	1,385	49.1	48.9	$0.600	$0.554	$29.46	$27.09
Maine	16	12	2,173	1,664	50.6	51.1	.561	.526	28.39	26.88
Massachusetts	13	16	7,808	8,096	48.8	48.5	.552	.515	26.94	24.98
New Hampshire	5	4	1,097	976	51.0	51.3	.501	.490	25.55	25.14
New Jersey	6	4	2,124	1,411	48.5	48.4	.619	.630	30.02	30.49
New York	4	6	1,024	1,035	50.8	50.8	.549	.523	27.89	26.57
Pennsylvania	23	22	1,687	1,417	52.2	53.5	.594	.543	31.01	29.05
Rhode Island	12	14	3,013	3,313	48.4	48.7	.576	.531	27.88	25.86
Vermont	3	3	619	571	48.0	48.9	.547	.545	26.26	26.65
Southern district	-----	12	-----	1,723	-----	53.5	-----	.348	-----	18.62
Total [1]	92	93	21,049	19,868	49.4	49.4	.568	.532	28.06	26.28
Total [2]	-----	105	-----	21,591	-----	49.7	-----	.516	-----	25.65
Females										
Connecticut	10	12	718	664	49.2	48.9	.474	.397	23.32	19.41
Maine	16	12	1,220	933	50.2	50.9	.483	.415	24.25	21.12
Massachusetts	13	16	6,387	6,734	48.0	48.0	.450	.409	21.60	19.63
New Hampshire	5	4	817	971	52.5	50.0	.372	.348	19.53	17.40
New Jersey	6	4	1,673	1,578	48.3	48.4	.509	.503	24.58	24.35
New York	4	6	731	1,097	48.4	49.1	.465	.393	22.51	19.30
Pennsylvania	23	22	2,997	2,583	52.5	53.2	.383	.363	20.11	19.31
Rhode Island	12	14	2,822	3,531	48.1	48.2	.423	.402	20.35	19.38
Vermont	3	3	436	458	48.0	48.6	.391	.364	18.77	17.69
Southern district	-----	12	-----	1,260	-----	53.8	-----	.250	-----	13.45
Total [1]	92	93	17,801	18,549	49.2	49.2	.438	.403	21.55	19.83
Total [2]	-----	105	-----	19,809	-----	49.5	-----	.392	-----	19.40
Males and females										
Connecticut	10	12	2,222	2,049	49.1	48.9	.562	.507	27.59	24.79
Maine	16	12	3,393	2,597	50.4	51.0	.534	.491	26.91	25.04
Massachusetts	13	16	14,195	14,830	48.4	48.3	.511	.470	24.73	22.70
New Hampshire	5	4	1,914	1,947	51.7	50.7	.449	.424	23.21	21.50
New Jersey	6	4	3,797	2,989	48.4	48.4	.575	.567	27.83	27.44
New York	4	6	1,755	2,132	49.8	50.0	.519	.463	25.85	23.15
Pennsylvania	23	22	4,684	4,000	52.4	53.3	.469	.432	24.58	23.03
Rhode Island	12	14	5,835	6,844	48.2	48.5	.511	.467	24.63	22.65
Vermont	3	3	1,055	1,029	48.0	48.8	.485	.466	23.28	22.74
Southern district	-----	12	-----	2,983	-----	53.6	-----	.308	-----	16.51
Total [1]	92	93	38,850	38,417	49.3	49.3	.514	.473	25.34	23.32
Total [2]	-----	105	-----	41,400	-----	49.6	-----	.460	-----	22.82

[1] Not including Southern district. [2] Including Southern district.

Table 4 shows for each State and the Southern district 1930 average full-time hours per week, earnings per hour, and full-time earnings per week for the employees in 9 of the representative occupations of the industry.

TABLE 4.—AVERAGE HOURS AND EARNINGS FOR NINE REPRESENTATIVE OCCUPATIONS, 1930, BY SEX AND STATE

Occupation, sex, and State	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Card tenders, male:					
Connecticut	10	57	48.5	$0.403	$19.55
Maine	11	48	51.6	.409	21.10
Massachusetts	13	177	49.2	.401	19.73
New Hampshire	3	29	52.2	.422	22.03
New Jersey	3	49	48.0	.572	27.46
New York	5	64	53.6	.443	23.74
Pennsylvania	12	69	53.8	.423	22.76
Rhode Island	6	54	49.6	.383	19.00
Vermont	3	31	50.3	.447	22.48
Southern district	10	74	53.2	.291	15.48
Total	76	652	50 8	.409	20.78
Card tenders, female:					
Maine	3	11	48.0	.367	17.62
Massachusetts	2	66	48.0	.379	18.19
New Hampshire	1	(1)	(1)	(1)	(1)
New Jersey	1	(1)	(1)	(1)	(1)
Rhode Island	1	(1)	(1)	(1)	(1)
Vermont	1	(1)	(1)	(1)	(1)
Total	9	105	48.0	.374	17.95
Drawing-frame tenders, male:					
Massachusetts	4	185	50.4	.386	19.45
New Hampshire	1	(1)	(1)	(1)	(1)
New York	1	(1)	(1)	(1)	(1)
Rhode Island	2	14	48.6	.493	23.96
Southern district	1	(1)	(1)	(1)	(1)
Total	9	209	50.5	.390	19.70
Drawing-frame tenders, female:					
Maine	1	(1)	(1)	(1)	(1)
Massachusetts	6	901	48.0	.376	18.05
New Hampshire	1	(1)	(1)	(1)	(1)
New Jersey	3	145	48.0	.442	21.22
New York	3	101	49.5	.298	14.75
Pennsylvania	8	333	53.5	.315	16.85
Rhode Island	5	322	48.2	.349	16.82
Vermont	1	(1)	(1)	(1)	(1)
Southern district	1	(1)	(1)	(1)	(1)
Total	29	1,983	49.4	.358	17.69
Spinners, mule, male:					
Connecticut	11	146	48.9	.669	32.71
Maine	11	152	50.0	.672	33.60
Massachusetts	11	308	48.1	.666	32.03
New Hampshire	4	62	49.4	.742	36.65
New Jersey	3	58	48 0	.758	36 38
New York	4	71	52.5	.577	30.29
Pennsylvania	11	115	54.1	.561	30.35
Rhode Island	4	108	48.0	.688	33 02
Vermont	3	58	49.7	.646	32.11
Southern district	9	145	53.2	.355	18.89
Total	71	1,223	50.0	.620	31.00
Spinners, mule, female, Southern district	3	9	52.6	.359	18.88
Spinners, frame, male:					
Massachusetts	3	53	48.0	.403	19.34
Southern district	1	(1)	(1)	(1)	(1)
Total	4	73	48.5	.365	17.70
Spinners, frame, female:					
Maine	1	(1)	(1)	(1)	(1)
Massachusetts	7	473	48.0	.418	20.06
New Hampshire	1	(1)	(1)	(1)	(1)
New Jersey	3	139	48.0	.464	22.27
New York	2	52	48.8	.298	14.54
Pennsylvania	7	186	53.5	.337	18.03
Rhode Island	6	234	48.3	.370	17.87
Vermont	2	30	48.0	.378	18.14
Southern district	5	74	54.0	.266	14.36
Total	34	1,301	49.4	.380	18.77
Spooler tenders, male, Southern district	2	13	51.5	.265	13 65

[1] Data included in total.

TABLE 4.—AVERAGE HOURS AND EARNINGS FOR NINE REPRESENTATIVE OCCUPATIONS, 1930, BY SEX AND STATE—Continued

Occupation, sex, and State	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Spooler tenders, female:					
Connecticut	12	105	48.6	$0.381	$18.52
Maine	12	80	49.7	.413	20.53
Massachusetts	15	466	48.0	.385	18.48
New Hampshire	3	30	48.0	.546	26.21
New Jersey	4	65	48.3	.464	22.41
New York	6	52	49.2	.355	17.47
Pennsylvania	11	70	52.8	.367	19.38
Rhode Island	12	171	48.3	.385	18.60
Vermont	3	38	48.8	.341	16.57
Southern district	9	70	53.2	.277	14.74
Total	87	1,147	48.9	.383	18.73
Loom fixers, male:					
Connecticut	12	43	49.4	.718	35.25
Maine	10	57	52.1	.734	38.24
Massachusetts	15	191	48.2	.829	39.96
New Hampshire	4	28	51.5	.700	36.05
New Jersey	4	58	48.4	.939	45.45
New York	6	52	49.9	.690	34.43
Pennsylvania	13	51	52.4	.877	45.95
Rhode Island	13	135	49.1	.819	40.21
Vermont	3	24	48.7	.802	39.06
Southern district	11	62	53.2	.456	24.26
Total	91	701	49.8	.775	38.60
Weavers, male:					
Connecticut	12	441	48.8	.668	32.60
Maine	12	429	50.6	.607	30.71
Massachusetts	15	1,004	47.8	.615	29.40
New Hampshire	4	228	50.8	.601	30.53
New Jersey	4	246	48.9	.686	33.55
New York	6	155	50.8	.651	33.07
Pennsylvania	13	298	53.3	.613	32.67
Rhode Island	13	789	49.0	.656	32.14
Vermont	3	134	48.2	.656	31.62
Southern district	11	463	53.5	.421	22.52
Total	93	4,187	49.8	.611	30.43
Weavers, female:					
Connecticut	11	77	49.1	.591	29.02
Maine	11	200	50.9	.528	26.88
Massachusetts	13	453	48.0	.567	27.22
New Hampshire	4	74	50.8	.504	25.60
New Jersey	4	278	48.3	.693	33.47
New York	6	202	49.6	.576	28.57
Pennsylvania	12	170	51.8	.564	29.22
Rhode Island	8	233	48.2	.570	27.47
Vermont	2	64	51.0	.575	29.33
Southern district	10	261	52.4	.304	15.93
Total	81	2,012	49.6	.544	26.98
Burlers, female:					
Connecticut	12	173	48.8	.328	16.01
Maine	12	112	49.8	.352	17.53
Massachusetts	15	724	48.0	.390	18.72
New Hampshire	4	152	51.3	.309	15.85
New Jersey	4	109	49.4	.433	21.39
New York	6	168	48.8	.336	16.40
Pennsylvania	13	181	52.5	.347	18.22
Rhode Island	12	370	48.5	.338	16.39
Vermont	3	86	48.1	.249	11.98
Southern district	11	183	53.9	.196	10.56
Total	92	2,258	49.4	.339	16.75
Menders, female:					
Connecticut	12	143	49.2	.421	20.71
Maine	12	182	50.9	.421	21.43
Massachusetts	15	743	48.0	.503	24.14
New Hampshire	4	150	52.0	.374	19.45
New Jersey	4	124	48.8	.605	29.52
New York	6	153	49.0	.425	20.83
Pennsylvania	13	177	52.2	.474	24.74
Rhode Island	13	645	48.2	.484	23.33
Vermont	3	65	48.4	.357	17.28
Southern district	7	129	55.0	.249	13.70
Total	89	2,511	49.3	.459	22.63

Recent Changes in Wages and Hours of Labor

INFORMATION received by the bureau regarding recent wage changes is presented below in two distinct groups: Part 1 relates to manufacturing establishments that report monthly figures regarding volume of employment; while part 2 presents data obtained from trade-union agreements and other miscellaneous sources. Although the effort is made, it is not always possible to avoid duplication of data as between parts 1 and 2.

Part 1. Wage Changes in Manufacturing Industries, August, 1930

ONE HUNDRED AND THIRTY-THREE establishments in 33 industries reported wage-rate decreases during the month ending August 15. These decreases averaged 10.5 per cent and affected 24,729 employees, or 86 per cent of all employees in the establishments concerned.

TABLE 1.—WAGE CHANGES OCCURRING BETWEEN JULY 15, 1930, AND AUGUST 15, 1930

Industry	Establishments		Per cent of increase or decrease in wage rate		Employees affected		
						Per cent of employees	
	Total number reporting	Number reporting increase or decrease in wage rates	Range	Average	Total number	In establishments reporting increase or decrease in wage rates	In all establishments reporting
			Decreases				
Slaughtering and meat packing	203	3	10.0	10.0	177	99	(1)
Flour	348	4	10.0–20.0	13.7	93	91	1
Baking	719	2	5.0–10.0	6.1	22	67	(1)
Cotton goods	459	8	4.0–10.0	8.6	623	74	(1)
Hosiery and knit goods	353	9	10.0–20.0	13.7	2,522	95	3
Silk goods	281	8	5.0–10.0	9.9	2,660	92	5
Carpet and rugs	29	1	7.5	7.5	250	80	1
Clothing, men's	359	2	10.0	10.0	597	100	1
Shirts and collars	115	1	7.5	7.5	193	100	1
Clothing, women's	387	2	10.0	10.0	387	84	1
Millinery and lace goods	122	1	10.0	10.0	11	21	(1)
Iron and steel	200	3	5.0– 7.5	6.6	452	98	(1)
Structural ironwork	173	2	10.0–15.0	12.4	38	63	(1)
Foundry and machine-shop products	1,090	5	5.0–16.7	9.9	6,008	92	3
Hardware	71	1	10.0	10.0	35	17	(1)
Machine tools	154	2	5.0–10.0	6.6	240	100	1
Steam fittings and steam and hot-water heating apparatus	109	3	10.0	10.0	171	33	1
Stoves	141	3	10.0	10.0	432	99	2
Lumber, sawmills	609	18	10.0–20.0	10.6	4,637	98	4
Lumber, millwork	335	6	10.0–20.0	18.4	734	100	3
Furniture	420	8	7.5–15.0	9.7	837	72	2
Boots and shoes	322	6	10.0–12.5	10.4	762	68	1
Paper and pulp	206	2	10.0	10.0	377	35	1
Printing, newspapers	413	1	10.0	10.0	170	100	(1)
Chemicals	157	2	9.0–10.0	9.0	282	95	1
Petroleum refining	76	1	10.0	10.0	202	100	(1)
Brick, tile, and terra cotta	659	17	2.5–20.0	10.5	635	94	2
Stamped and enameled ware	78	1	10.0	10.0	133	100	1
Brass, bronze, and copper products	165	4	5.0–17.0	9.5	612	96	2
Cigars and cigarettes	200	1	10.0	10.0	29	100	(1)
Automobiles	209	3	10.0	10.0	340	37	(1)
Carriages and wagons	49	2	3.0–15.0	5.8	13	27	1
Automobile tires	46	1	10.0	10.0	55	100	(1)

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

Part 2. Wage Changes Reported By Trade-unions Since June, 1930

THE Bureau of Labor Statistics has received reports from trade-unions, municipalities, etc., in the United States in which wage or hour changes have become effective for 14,222 workers.

Building trades increases ranged from 2½ to 25 cents per hour, 5 of the 14 increases being 6¼ cents per hour. One decrease of 12½ cents per hour was reported for plumbers.

Printing trades reported increases of from $1 to $5 per week, the majority being $3 or under.

Police and firemen, Washington, D. C., received increases ranging from $100 to $300 for privates to $2,800 per year for superintendents.

Besides the one building-trade decrease reported above, teachers in Cartersville, Ill., were reduced from $10 to $15 per month and silk workers in Stroudsburg, Pa., suffered a reduction of 10 per cent.

TABLE 2.—RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION AND LOCALITY, JUNE TO SEPTEMBER, 1930

Industry, occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Building trades:		*Per hour*	*Per hour*		
Carpenters, Merced, Calif	June 14	$1.00	$1.00	44	40
Electrical workers—					
Rockland Co., N. Y.—					
Journeymen	June 5	1.50	1.50	44	40
Helpers	do	.75	.75		
Journeymen	Sept. 1	1.50	1.56¼	40	40
Helpers	do	.75	.81¼		
Rochester, N. Y	July 1	1.31¼	1.37½	44	40
Laborers (marble setters' helpers), Providence, R. I	June 15	.85	.93½	44	44
Painters, Philadelphia, Pa	Sept. 1	1.05	1.07½	44	44
Plasterers—					
Buffalo, N. Y	do	1.56¼	1.62½	40	40
Cincinnati, Ohio, Newport and Covington, Ky	July 2	1.50	1.62½	44½	40
Springfield, Ohio	Sept. 1	1.25	1.50	[1] 8	[1] 8
Plumbers and steamfitters—					
Allentown, Bethlehem, Easton, Pa	July 1	1.20	1.20	44	40
Brockton, Mass., and vicinity	Sept. 1	1.25	1.37½	40	40
Chicago, Ill., and vicinity	July 1	1.62½	1.70	44	44
Columbus, Ohio	July 21	1.37½	1.25	44	44
Duluth, Minn	Aug 1	1.12½	1.12½	44	40
Rochester, N. Y	do	1.37½	1.43¾	44	40
Structural iron workers—					
Camden, N. J., and vicinity	June 1	1.50	1.65	44	40
Philadelphia, Pa	do	1.50	1.65	44	40
Chauffeurs and teamsters:		*Per day*	*Per day*		
Butte, Mont	July 21	[2]	$6.00–6.50	[1] 8	[1] 8
Newark, N. J	June 30	[2]	[3]	[4]	[1] 9
Clothing:					
Lawrence, Mass	Aug 12	[2]	[5]	44	44
Louisville, Ky., tailors and cutters	[2]	[2]	[3]	44	44
Metal trades:		*Per hour*	*Per hour*		
Detroit, Mich., pattern makers	July 26	$1.20–1.40	$0.90–1.00	[1] 8	[1] 8
Printing and publishing:					
Compositors—					
Baltimore, Md.—		*Per week*	*Per week*		
Newspaper, day	June 16	$40.00	$44.00	44	44
Newspaper, night	do	43.00	47.00	45	44
Boone, Iowa, news	July 1	38.40	40.00	48	48
Devils Lake, N. Dak	[2]	30.00	35.00	48	44–48
Lewistown, Mont.—					
Newspaper	Sept. 1	[7] 48.00	[7] 51.00	45	45
Job work	do	[7] 42.00	[7] 45.00	44	44
Milwaukee, Wis	July 1	48.00	[2]	48	45
New Haven, Conn., and vicinity—					
Newspaper, day	Sept. 1	45.00	46.00	48	48
Newspaper, night	do	48.00	49.00	48	48

[1] Per day.
[2] Not reported.
[3] Increase, 10 per cent.
[4] Varied.
[5] Increase, 5 per cent.
[6] Increase, 20 per cent.
[7] And $3 bonus.

TABLE 2.—RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION AND LOCALITY, JUNE TO SEPTEMBER, 1930—Continued

Industry, occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Printing and publishing—Continued.					
Compositors—Continued.					
San Jose, Calif.—		*Per week*	*Per week*		
Job work, day	July 1	$48.00	$52.00	44	44
Job work, night	do	51.00	55.50	44	44
Waukegan, Ill.—					
Newspaper	Sept. 1	48.00	49.00	48	48
Job work	do	44.50	45.50	44	44
Electrotypers—					
Boston, Mass.—					
Branch men	July 1	44.00	46.50	48	48
Finishers and molders	do	47.50	50.00	48	48
Norwood, Mass.—					
Branch men	do	44.00	46.50	48	48
Finishers and molders	do	47.50	50.00	48	48
Providence, R. I.—					
Branch men	do	44.00	46.50	48	48
Finishers and molders	do	47.50	50.00	48	48
Waterloo, Iowa—					
Branch men	June 1	42.00	44.00	44	44
Finishers and molders	do	45.00	47.00	44	44
Stereotypers—					
Dunellen, N. J.—					
Job work, day	do	(2)	64.00	44	44
Job work, night	do	(2)	67.00	44	44
Fort Worth, Tex.—					
Day work	Sept. 8	44.00	45.82	44	44
Night work	do	44.00	47.14		
Patterson and Passaic, N. J.	July 17	(2)	[1] 9.00	[1] 8	[1] 8
Municipal workers:		*Per month*	*Per month*		
Carterville, Ill., teachers	(2)	$80.00–115.00	$70.00–100.00	40	40
		Per hour	*Per hour*		
Indianapolis, Ind., laborers	Aug. 6	$0.20–.50	$0.35	(2)	(2)
Minneapolis, Minn., building trades on city work	Sept. 1	(2)	(2)	44	40
Toledo, Ohio—		*Per month*	*Per month*		
Garbage teamsters	Aug. 25	$37.98	$37.98	48	44
Garbage collectors	do	34.50	34.50	48	44
Washington, D. C.—					
Fire Department—		*Per year*	*Per year*		
Privates	July 1	(2)	$1,900–2,400	(2)	(2)
Marine firemen	do	(2)	2,100	(2)	(2)
Assistant marine engineer	do	(2)	2,460	(2)	(2)
Marine engineer	do	(2)	2,600	(2)	(2)
Pilots	do	(2)	2,600	(2)	(2)
Assistant superintendent of machinery	do	(2)	3,000	(2)	(2)
Superintendent of machinery	do	(2)	5,000	(2)	(2)
Sergeants	do	(2)	2,600	(2)	(2)
Lieutenants	do	(2)	2,840	(2)	(2)
Captains	do	(2)	3,000	(2)	(2)
Inspectors	do	(2)	2,460	(2)	(2)
Deputy fire marshal	do	(2)	3,000	(2)	(2)
Fire marshal	do	(2)	5,000	(2)	(2)
Battalion chief engineer	do	(2)	4,500	(2)	(2)
Deputy chief engineer	do	(2)	5,000	(2)	(2)
Chief engineer	do	(2)	8,000	(2)	(2)
Police Department—					
Privates	do	$1,800–2,100	1,900–2,400	(2)	(2)
Sergeants	do	2,400	2,750	(2)	(2)
Lieutenants	do	2,700	3,050	(2)	(2)
Captains	do	3,000	3,600	(2)	(2)
Inspectors	do	3,200	4,500	(2)	(2)
Assistant superintendent	do	3,500	5,000	(2)	(2)
Superintendent	do	5,200	8,000	(2)	(2)
Textiles:					
East Stroudsburg, Pa., silk workers	June 10	(4)	(5)	50	50

[1] Per day. [2] Not reported. [4] Varied. [5] Decrease, 10 per cent.

There were 2,332 workers who adopted the 5-day week in various groups, and all building trades employed on municipal work in Minneapolis, Minn., will hereafter enjoy the short week.

Wages and Hours of Labor in the Iron and Steel Industry of Certain European Countries

THE following summary of the report [1] of a British delegation on industrial conditions in the iron and steel industry of certain European countries is taken from the Ministry of Labor Gazette for July, 1930, the only change being the addition of United States currency equivalents to the wage table as there given.

The Economic Advisory Council have issued the report of a delegation which recently visited France, Belgium, Luxemburg, Germany, and Czechoslovakia in order to obtain information as to conditions in the iron and steel industries in those countries. The delegation consisted of Mr. J. A. Gregorson, general secretary of the Iron and Steel Trades Employers' Association, Mr. R. Dennison, assistant secretary of the Iron and Steel Trades Confederation, and two officers of the Ministry of Labor. The report contains information with regard to the war and postwar position of the iron and steel industry in each country, production, exports, employment and unemployment, organization among the workers, the extent of collective bargaining, systems of wage payment, wages and allowances, hours of work, overtime rates, and social services, based on particulars collected from Government departments, employers' organizations, individual employers' organizations, individual employers, and trade-unions.

On the basis of the information obtained by the delegation, estimates are given of the average normal weekly earnings of skilled, semiskilled, and unskilled workmen at blast furnaces, steel-melting plants, and rolling mills, and of all classes of workers in the industry, at January–February, 1930, as shown below:

AVERAGE NORMAL WEEKLY EARNINGS OF SKILLED, SEMISKILLED, AND UNSKILLED MEN AT BLAST FURNACES, STEEL-MELTING PLANTS, AND ROLLING MILLS, AND OF ALL CLASSES OF WORKERS IN THE INDUSTRY, JANUARY-FEBRUARY, 1930

Country	Skilled		Semiskilled		Unskilled		All classes	
	English currency	U. S. currency	English currency	U. S. currency	English currency	U. S. currency	English currency	U. S. currency
	s. d.		s. d.		s. d.		s. d.	
France	51 6	$12.53	40 3	$9.79	32 2	$7.83	37 0	$9.00
Belgium	53 9	13.08	38 10	9.45	30 10	7.50	35 5	8.62
Luxemburg	49 2	11.96	38 10	9.45	32 0	7.79	36 7	8.90
Germany	68 6	16.67	52 10	12.86	47 0	11.44	50 11	12.39
Czechoslovakia	58 5	14.21	32 11	8.01	23 2	5.64	30 5	7.40

The figures represent total earnings, inclusive of family allowances, where paid, and all other cash allowances.

The normal weekly hours of work at the blast furnaces, computed on the basis of the period between the normal time of starting and finishing the week's work, were generally 56; at steel-melting plants they mostly ranged from 48 in Czechoslovakia to 52 in Belgium and Germany, with somewhat longer hours, in some cases, on certain classes of work; and at rolling mills they were usually 48. The report

[1] Great Britain. Economic Advisory Council. Report of delegation on the industrial conditions in the iron and steel industries in France, Belgium, Luxemburg, Germany, and Czechoslovakia. London, 1930, (Cmd. 3601.)

gives particulars of the statutory provisions regulating hours of labor in the five countries.

The particulars given in regard to some of the other points dealt with are briefly summarized below:

France.—Since the war, the industry has considerably increased its capacity and output and has been equipped with the most modern plant. In addition, the valuable ore fields of Alsace-Lorraine are now at the disposal of the industry. There is no unemployment. On the contrary, the postwar development has been so great that there has been a serious shortage of labor, which has been met by the importation of foreign labor on a large scale. There is no effective organization among the workers and no system of collective agreements such as exists in Great Britain, wage contracts being made between the employer and the individual workman. State schemes of social services have not been developed to the same extent as in Great Britain. Systems of family and other allowances and various social services, however, were in operation at most of the works.

Belgium.—The industry has considerably increased its capacity and output since the war, and has become equipped with the most modern plant. Some foreign labor is employed, but the large majority of workers are Belgians. There is little or no unemployment. While there is a representative trade-union, basic wage rates are fixed by negotiation between the employer and the individual workmen, and there is only a very limited system of collective bargaining. State schemes of social services have not been developed to the same extent as in Great Britain. Social allowances, however, are provided in the form of company houses at nominal rents, cheap food supplies, etc., and there are family allowance systems at many works.

Luxemburg.—Productive capacity and output have been greatly increased since the war and the equipment has been modernized and improved. There has been a large importation of foreign workers. No unemployment was found. Although there is a trade-union, there is no such system of collective agreements as in Great Britain, wage contracts being made between the employers and the individual workers. A State system of social services covers sickness, accident, invalidity and old-age insurance, and some provision for unemployment. Various social allowances and services are also provided by the employers.

Germany.—Notwithstanding a large amount of reconstruction and improvement in equipment, the German iron and steel industry is seriously affected by competition from France, Belgium, and Luxemburg, and there is much unemployment. The workers are comparatively well organized in trade-unions and there is an extensive system of collective agreements, supplemented by conciliation and arbitration machinery. There is a highly developed State system of social insurances and of poor relief.

Czechoslovakia.—The iron and steel industry has shown marked development in recent years and there is little unemployment. The majority of the workers are organized in trade-unions, and wages are regulated by collective agreements. There are compulsory systems of sickness, maternity, invalidity, old-age, and widows' and orphans' insurance, to which employers and workers contribute, and accident insurance is compulsory on the employers. There is no system of

compulsory unemployment insurance, but the Government grants subsidies to the unemployment insurance funds of trade-unions.

Hours of Labor in Germany in 1930

THE German General Confederation of Labor Unions has been obtaining data on the hours of labor of its members since 1924, covering the following seven industry groups: Building trades, printing, chemical, woodworking, metal, shoe, and textile industries.[1]

The latest investigation undertaken, from February 10 to February 15, 1930, covers over 63,500 establishments with 2,700,033 union members, whose actual hours, including overtime, were reported by 746 local union committees to headquarters of the confederation.

The figures given relate to a large proportion of the union membership, the smallest proportion investigated amounting to 54 per cent and the highest to 68 per cent of the membership. This permits a rather reliable judgment on the average hours of labor in the seven branches of industry quoted above.

Exact comparison of the latest investigation with those undertaken in previous years can not be made as the investigations in previous years were not made regularly in the same months or seasons and not always the same method of counting was applied. Nevertheless, the comparison is of interest, showing certain trends in the movement of hours of labor in Germany.

It should be understood that hours of labor during the severe and increasing industrial depression and unemployment with which Germany is beset necessarily tend to decrease rather than increase, as the results of the investigations in various years show.

NUMBER OF WORKERS EMPLOYED AND PER CENT EMPLOYED PART TIME AND FULL TIME

Time of investigation	Number of local union committees reporting	Number covered		Per cent of workers employed					
		Establishments	Workers	Part time	Full time				
					Under 48 hours	48 hours	Over 48 to 51 hours	Over 51 to 54 hours	Over 54 hours
May 12 to 17, 1924	533	46,122	2,453,523	.....	5.8	39.5	8.3	33.4	13.0
Nov. 3 to 8, 1924	419	51,166	2,362,820	9.3	4.1	41.2	6.7	28.0	10.7
April 25 to 30, 1927	562	57,895	2,533,147	4.6	6.3	41.1	10.5	25.2	12.3
Oct. 24 to 29, 1927	535	67,099	2,904,849	1.7	6.0	49.6	14.4	22.1	6.2
Oct. 1 to 6, 1928	556	73,288	3,101,078	11.3	6.5	55.6	11.3	11.9	3.4
Feb. 10 to 15, 1930	746	63,502	2,700,033	22.9	6.4	53.5	8.1	7.1	2.0

While in October, 1927, the part-time workers were only 1.7 per cent of all workers, in February, 1930, they formed 22.9 per cent of the total. This shift from full time to part time is to be explained among other causes, by the continued industrial depression and the unemployment situation. In this connection it should be noted that 17.2 per cent of the workers under investigation still work more than 48 hours a week.

[1] Gewerkschafts Zeitung, Berlin, Mar. 15, 1930, pp. 166–170.

The following table shows the per cent of workers employed over 48 hours a week, in the seven industry groups investigated, during February 10 to 15, 1930:

PER CENT OF WORKERS EMPLOYED OVER 48 HOURS PER WEEK AS NORMAL TIME AND AS OVERTIME

Industry group	Over 48 to 51 hours		Over 51 to 54 hours		Over 54 hours	
	As normal time	As overtime	As normal time	As overtime	As normal time	As overtime
Building trades	1.3	1.7	0.5	0.8	0.5	0.0
Printing	.5	1.3	.3	.4	.0	.3
Chemicals	1.8	1.3	1.8	.7	1.7	.1
Wood working	1.1	.4	.4	.4	.2	.2
Metals	7.6	1.5	9.0	1.1	2.7	.3
Shoes	1.4	.3	.7	.9	.1	.0
Textiles	6.1	8.9	2.6	4.4	.2	.7

The above table shows that metal and textile industries had for February, 1930, the highest percentage of workers whose hours of labor were over 48 a week.

Earnings and Hours of Labor in Printing Trades in Germany, June, 1929

THE Federal Statistical Office of Germany made an investigation of actual earnings and hours of labor of workers engaged in the printing trades in Germany in June, 1929, covering 400 localities, 982 establishments, and 46,212 workers. The results of the investigation are shown in the following tables:[1]

TABLE 1.—ACTUAL HOURLY EARNINGS AND UNION RATES OF WAGES IN PRINTING TRADES IN JUNE, 1929

[Conversions on basis of 1 pfennig=0.238 cent]

Occupation and age group	Actual hourly earnings		Union rate per hour		Per cent actual earnings form of union rate
	Pfennigs	U. S. currency (cents)	Pfennigs	U. S. currency (cents)	
Hand compositors:					
21 years and under	101.8	24.2	99.0	23.6	102.8
Over 21 to 24 years	116.0	27.6	100.5	25.8	106.9
Over 24 years	133.7	31.8	118.3	28.2	113.0
Machine compositors:					
21 years and under	124.6	29.7	117.1	27.9	106.4
Over 21 to 24 years	150.5	35.8	128.9	30.7	116.7
Over 24 years	170.4	40.6	141.1	33.6	120.8
Pressmen:					
21 years and under	106.4	25.3	100.4	23.9	106.0
Over 21 to 24 years	121.3	28.9	109.5	26.1	100.7
Over 24 years	139.2	33.1	119.0	28.3	117.0
Newspaper pressmen, over 24 years	155.8	37.1	119.9	28.5	129.9
Stereotypers, over 24 years	164.0	39.0	119.5	28.4	137.2
Helpers:					
21 years and under	82.8	19.7	78.3	18.6	105.7
Over 21 to 24 years	92.4	22.0	87.2	20.8	105.9
Over 24 years	114.5	27.3	103.7	24.7	110.4
Helpers, female:					
Over 17 to 19 years	47.4	11.3	45.6	10.9	104.0
Over 19 to 21 years	54.2	12.9	51.1	12.2	106.0
Over 21 years	63.4	15.1	57.5	13.7	110.3
Feeders, female:					
Over 17 to 19 years	59.3	14.1	58.7	14.0	101.0
Over 19 to 21 years	64.0	15.2	63.2	15.0	101.3
Over 21 years	73.4	17.5	69.7	16.6	105.4

[1] Germany. Statistisches Reichsamt. Wirtschaft und Statistik, Apr. 2 (pp. 337-348) and July 1 (pp. 542-544), 1930.

TABLE 2.—HOURS OF LABOR PER WEEK IN JUNE, 1929

Occupation and age group	Per cent working—		
	Under 48 hours	48 hours	Over 48 hours
Hand compositors, time work:			
21 years and under	24.6	52.9	22.5
Over 21 to 24 years	28.4	46.3	25.3
Over 24 years	10.0	63.1	26.9
Hand compositors, piecework, over 24 years	29.1	59.5	11.4
Machine compositors, time work:			
21 years and under	14.0	55.8	30.2
Over 21 to 24 years	27.0	45.1	27.9
Over 24 years	13.1	53.6	33.3
Machine compositors, piecework: Over 24 years	27.9	40.2	31.9
Various helpers, time work:			
Pressmen—			
21 years and under	25.9	51.1	23.0
Over 21 to 24 years	28.0	43.9	28.1
Over 24 years	11.1	64.9	24.0
Newspaper pressmen, over 24 years	9.8	47.5	42.7
Stereotypers, over 24 years	24.1	41.1	34.8
All helpers	13.4	58.3	28.3

The investigation of actual earnings and hours of labor of workers engaged in lithographic work in Germany in June, 1929, covering 108 localities, 353 establishments, and 14,251 workers gave the following results:

TABLE 3.—ACTUAL WEEKLY EARNINGS AND HOURS OF LABOR IN LITHOGRAPHIC WORK IN JUNE, 1929

[Conversions on basis of mark=23.8 cents]

Occupation and age group	Weekly earnings		Weekly hours of labor	Occupation and age group	Weekly earnings		Weekly hours of labor
	Marks	United States currency			Marks	United States currency	
On flat-bed press:				Others, male:			
First year	38.38	$9.13	46.7	Over 17 to 19 years	27.02	$6.43	48.5
After first year—24 years of age and under	48.89	11.64	46.6	Over 19 to 21 years	35.93	8.55	48.5
Over 24 years of age	63.03	15.00	47.4	Over 21 to 24 years	42.47	10.11	49.2
On offset press:				Over 24 years	51.28	12.20	49.2
First year	42.48	10.11	47.4	Feeders, female:			
After first year—24 years of age and under	62.05	14.77	47.5	Over 17 to 19 years	23.65	5.62	47.8
Over 24 years of age	76.86	18.29	47.9	Over 19 to 21 years	28.02	6.67	47.6
Lithographers:				Over 21 years	31.06	7.39	46.5
First year	37.73	8.98	45.8	Delivery tenders, female:			
After first year—24 years of age and under	49.47	11.78	46.4	Over 17 to 19 years	23.00	5.47	46.7
Over 24 years of age	65.56	15.60	47.0	Over 19 to 21 years	25.76	6.13	47.4
Stone polishers:				Over 21 years	28.03	6.67	46.7
Over 21 to 24 years	43.32	10.31	48.9	Others, female:			
Over 24 years	51.03	12.15	48.1	Over 17 to 19 years	20.74	4.94	47.7
				Over 19 to 21 years	23.21	5.52	47.1
				Over 21 years	26.07	6.20	46.7

Wages and Output in English Coal-Mining Industry in March, 1930

IN ITS issue for August, 1930, the English Ministry of Labor Gazette gives data as to the output, costs, and proceeds of the coal-mining industry for the quarter ending March 31, 1930, based on a statement prepared by the mines department. The statement covers mines which produced about 97 per cent of the total quantity of coal mined during the quarter. The total quantity of saleable coal produced was 64,749,447 tons, of which 59,957,599 tons were disposable commerically.

After deducting the proceeds of the miners' coal, the net costs amounted to £39,985,536 ($194,729,560), or 13s. 4.06d. ($3.25) a ton, while the proceeds from commercial sales came to £43,327,072 ($211,002,840), equivalent to 14s. 5.43d. ($3.52) per ton, thus giving a credit balance of 1s. 1.37d. (27 cents) per ton. Every district showed a credit balance, ranging from 7.19d. (15 cents) per ton in Scotland to 1s. 11.4d. (47 cents) in South Derbyshire, Leicestershire, Cannock Chase, and Warwickshire.

The average output per man-shift worked was 21.94 hundredweights, the district averages ranging from 18.03 hundredweights in Lancashire, Cheshire, and North Staffordshire to 24.60 hundredweights in North Derbyshire and Nottinghamshire. Average earnings per man-shift worked ranged from 7s. 7.48d. ($1.86) in Northumberland to 10s. 3.64d. ($2.51) in North Derbyshire and Nottinghamshire.

Information as to the value of allowances in kind is also given in the return, based, so far as Northumberland and Durham are concerned, on returns furnished for the purpose of the wages ascertainments, and, for other districts, on information supplied by the mining association of Great Britain. For Great Britain as a whole the average value of such allowances was 4.85d. [10 cents] per shift, the amounts ranging from 0.62d. [1.3 cents] in Lancashire, Cheshire, and North Staffordshire to 1s. 0.96d. [26.3 cents] in Northumberland and 1s. 1.14d. [26.6 cents] in Durham.

The following table gives comparative data for the first quarter of each year, beginning with 1924. The credit and debit balances are calculated on the quantity of coal disposable commercially, and in calculating the earnings per man-shift worked, the value of allowances in kind has been excluded.

RETURNS OF ENGLISH COAL INDUSTRY AT SPECIFIED PERIODS

Quarter ending Mar. 31—	Tons of saleable coal produced	Credit or debit balance per ton		Workers employed	Output per man-shift worked	Earnings per man-shift worked	
		English currency	United States currency			English currency	United States currency
		s. d.			*cwts.*	*s. d.*	
1924	67,047,657	+2 9.63	+$0.68	1,111,280	17.79	10 2.82	$2.49
1925	62,458,898	+0 6.13	+.12	1,074,079	17.98	10 7.58	2.59
1926	66,071,166	+1 4.99	+.34	1,074,395	18.46	10 4.79	2.53
1927	63,329,641	+1 2.41	+.29	969,943	20.66	10 7.12	2.58
1928	61,833,281	−0 9.34	−.19	921,448	21.24	9 5.02	2.29
1929	63,851,058	+0 9.15	+.19	880,941	22.13	9 2.69	2.24
1930	64,749,447	+1 1.37	+.27	911,218	21.94	9 3.25	2.26

Wages Established by Collective Agreement in Italy

Wages of Marble, Granite, and Stone Workers in Province of Turin

A REPORT from William W. Heard, American consul at Turin, contains a copy of an agreement made May 22, 1930, between the workers and employers in the marble, granite, and stone industries of the Province of Turin. The parts of the agreement relating to wages and hours of labor are here given:

The normal number of hours is 8 per day and 48 per week. Employees in the Province away from the quarry work 7 hours from December to February, 8 hours from March to May, 9 hours from June to August, and 8 hours from September to November.

Rates for overtime are 20 per cent extra for the first two hours and 30 per cent thereafter, and 50 per cent extra for holidays; double rates are paid for night work between 10 p. m. and 6 a. m. Those cutting marble and stone receive 10 per cent extra for overtime work done between the regular turns. No work is to be done on holidays and Sundays, but 48 hours' pay is to be given for a week's work. Piecework is to be arranged in such a way as to give the pieceworker 15 per cent more than the ordinary day worker.

The agreement is effective from May 22, 1930, for one year, and may be continued for another year if neither party objects. The wages set by agreement are as follows:

DAILY WAGES OF MARBLE AND STONE WORKERS IN PROVINCE OF TURIN

[Conversions into United States currency on basis of lira=5.3 cents]

Occupation	At the quarry		Away from the quarry	
	Lire	United States currency	Lire	United States currency
Ornamenters	4.11	$0.22	3.60	$0.19
Marble and stone cutters, first class	3.51	.19	3.00	.16
Marble and stone cutters, second class	3.10	.16	2.60	.14
Marble and stone designers, first class	3.51	19	3.00	.16
Marble and stone designers, second class	3.00	.16	2.50	.13
Apprentices [1]	1.55	.08	1.40	.07
Laborers	2.30	.12	1.90	.10
Boys, under 16 years of age	.85	.05	.75	.04

[1] Apprentices are those who have worked at least three consecutive years at cutting or designing.

A worker who has to travel more than 3 kilometers (2 miles) from his shop or residence receives travel expense. If he has to stay overnight where at work he receives 20 lire ($1.06) for lodging and two meals and 6 lire (32 cents) for lunch daily.

Wages of Building Workers in Province of Rome

ACCORDING to Il Lavoro Fascista of August 5, 1930, the following provisions are contained in the agreement of August 1, 1930, between the National Fascist Building Constructors Federation of Rome and the National Fascist Building Industry Union of the Province of Rome.

The hours are ordinarily eight per day except during June to October, when certain provisions are observed that are not mentioned in the printed report. Work in Rome begins not earlier than 7.30 a. m. from October to March and not before 7 a. m. from April to September, and in the Province outside the city not before 7 a. m. from October to March and not before 6 a. m. from April to September. The lunch period is to be not more than one hour.

Overtime rates are: For week days, 20 per cent extra for first two hours, and 30 per cent thereafter; for holidays 30 per cent extra; and for night work 50 per cent extra.

For special work—working in ditches, tunnels, dark places, or open wells more than three meters (10 feet) deep, towers and on elevations, restoring or demolishing dangerous parts of buildings, and working in water—25 per cent extra must be paid; for work in dark wells, 30 per cent extra; for work in caissons with compressed air, 30 per cent when working less than 10 meters (33 feet) below the surface, 50 per cent when 10 to 14 meters (33 to 46 feet), 75 per cent when 14 to 17½ meters (46 to 57 feet), and 100 per cent when over 17½ meters. When working in water, rubber boots, caps, and coats are to be furnished as needed.

The Province is divided into four zones. Any one directed to work outside the zone where he ordinarily works receives 30 per cent extra with lodging and travel expenses. Tools are to be furnished assistants according to the local custom, and must be returned in good condition. Piece rates are to be fixed in such a way that the pieceworker will receive 10 per cent more than that received by day labor. For work in malarial zones 5 per cent additional must be paid.

The more important occupations are paid at the following scale:

HOURLY WAGES OF BUILDING TRADES IN PROVINCE OF ROME

[Conversions into United States currency on basis of lira=5.3 cents]

Occupation	First zone		Second zone		Third zone		Fourth zone	
	Lire	U. S. currency	Lire	U. S. currency	Lire	U. S. currency	Lire	U. S. currency
Chief bricklayers	3.35	$0.18	3.25	$0.17	3.00	$0.16	2.90	$0.15
Apprentices and helpers	2.90	.15	2.65	.14	2.35	.12	2.25	.12
Laborers, terracers, wheelbarrowmen, mortar mixers	2.75	.15	2.20	.12	2.10	.11	1.70	.09
Boys	1.45	.08	1.35	.07	1.10	.06	1.10	.06
Women			1.15	.06	1.00	.05	1.00	.05
Cement workers	3.65	.19	3.50	.19	3.30	.17	3.10	.16
Cement workers' helpers	3.15	.17	2.90	.15	2.60	.14	2.50	.13
Qualified ironworkers	3.70	.20	3.55	.19	3.35	.18	3.15	.17
Ironworkers' helpers	3.15	.17	2.90	.15	2.60	.14	2.50	.13
Miners, first class	3.35	.18	3.25	.17	3.00	.16	2.90	.15
Miners, second class	2.90	.15	2.65	.14	2.35	.12	2.25	.12
Carpenters, first class	3.35	.18	3.25	.17	3.00	.16	2.90	.15
Carpenters, second class	2.90	.15	2.65	.14	2.35	.12	2.25	.12
Blacksmiths, first class	3.35	.18	3.25	.17	3.00	.16	2.90	.15
Blacksmiths, second class	2.90	.15	2.65	.14	2.35	.12	2.25	.12
Electricans, first class	3.35	.18	3.25	.17	3.00	.16	2.90	.15
Electricians, second class	2.90	.15	2.65	.14	2.35	.12	2.25	.12

Other classes of workers not mentioned in the table are to be paid at proportionate rates. Work done in the communes not mentioned in the agreement is to be performed at 10 per cent less than in the fourth zone. The contract is effective for a year from August 18, 1930, and may be renewed for another year if agreed to two months before termination.

Wages in Barcelona, 1925 and 1929

THE following table, showing wage rates prevailing in Barcelona in 1925 and 1929, is taken from a report of the United States consul at Barcelona, Frank A. Henry, dated July 19, 1930:

AVERAGE HOURLY WAGES IN BARCELONA FOR THE SPECIFIED OCCUPATIONS, 1925 AND 1929

[Exchange value of peseta=14.3 cents in 1925; 14.7 cents in 1929]

Occupation	1925		1929	
	Pesetas	U. S. currency	Pesetas	U. S. currency
Masons	1.27	$0.18	1.50	$0.22
Carpenters	1.56	.22	1.19	.17
Plumbers	1.25	.18	1.50	.22
Painters	1.26	.18	1.50	.22
Construction laborers	1.06	.15	.96	.14
Molders			1.63	.24
Foundry laborers			.99	.15
Cabinetmakers	1.50	.21	1.25	.18
Upholsterers	1.60	.23	1.38	.20
Varnishers	1.30	.19	1.10	.16
Printers	1.37	.20	1.63	.24
Linotypists	1.62	.23	2.29	.34
Machinists	1.87	.27	1.62	.24
Bookbinders	1.50	.21	1.25	.18
Printing-house laborers			.93	.14
Electricians, fitters	1.35	.19	1.28	.19
Electrician, laborers	1.00	.14	.69	.10
Railway, laborers			1.02	.15
Railway, laborers (track and building)			1.05	.15
Bakers	1.37	.20	1.25	.18

Wages in Switzerland, 1929

A REPORT of the wages of workers injured in industrial accidents in various industries in Switzerland during 1929 is given in the July, 1930, issue of La Vie Économique, published by the Federal Department of Public Economy.

The wages are reported for five classes of workers—foremen and master workmen, skilled and partly skilled workers, unskilled workers, women, and young persons under 18 years of age. In general, the wages in 1929 showed a slight advance over those paid in 1928.

The daily wages of the four classes of adult workers mentioned above, who were injured in accidents in 1929, ranged from 86 to 148 per cent higher than in 1913 but the range in "real" wages, (i. e., measured by the cost of living) was from 16 to 54 per cent.

The following table shows the average daily wages of Swiss workers in 1913 and 1929 and index numbers of actual wages and real wages in 1929, by industry groups:

AVERAGE DAILY WAGES OF WORKERS INJURED IN ACCIDENTS IN SWITZERLAND IN 1913 AND 1929 AND INDEX NUMBERS OF ACTUAL WAGES AND REAL WAGES

[Conversions into United States currency on basis of franc=19.3 cents]

Industry group	Average wages paid				Index numbers (1913=100)	
	1913		1929		Actual wages	Real wages
	Francs	*U. S. currency*	*Francs*	*U. S. currency*		
Foremen:						
Metal industry	8.85	$1.71	16.65	$3.21	188	117
Building	7.60	1.47	16.03	3.09	211	131
Wood industry	7.61	1.47	15.63	3.02	205	127
Textiles	7.41	1.43	14.96	2.89	202	125
Food products and tobacco	7.89	1.52	17.16	3.31	217	135
Skilled and semiskilled workers:						
Metal and machine industries	6.36	1.23	12.08	2.33	190	118
Building	6.20	1.20	13.19	2.55	213	132
Wood industry	5.58	1.08	11.69	2.26	209	130
Clocks and watches	6.78	1.31	12.65	2.44	187	116
Food products and tobacco	5.86	1.13	13.89	2.68	237	147
Manufacture of vehicles	4.78	.92	11.27	2.18	236	147
Electricity	6.19	1.19	14.13	2.73	228	142
Gas and water stations	6.35	1.23	15.75	3.04	248	154
Unskilled workers:						
Metal and machine industries	4.88	.94	9.50	1.83	195	121
Building	4.75	.92	10.23	1.97	215	134
Wood industry	4.29	.83	8.85	1.71	206	128
Stone and earth products	4.41	.85	9.53	1.84	216	134
Chemicals	4.59	.89	10.31	1.99	225	140
Food products and tobacco	5.30	1.02	11.27	2.18	213	132
Commercial establishments	5.28	1.02	10.94	2.11	207	129
Mines and quarries	5.09	.98	9.48	1.83	186	116
Forestry	4.57	.88	8.61	1.66	188	117
Women:						
Textiles	3.18	.61	6.53	1.26	205	127
Clocks	3.83	.74	7.28	1.41	190	118
Food products and tobacco	2.63	.51	5.63	1.09	214	133
Young persons (under 18 years of age):						
Metal and machine industries	2.78	.54	4.65	.90	167	104
Building	3.88	.75	7.64	1.47	197	122
Textiles	2.60	.50	4.52	.87	174	108
Stone and earth products	3.26	.63	5.69	1.10	175	109

TREND OF EMPLOYMENT

Summary for August, 1930

EMPLOYMENT decreased 1.4 per cent in August, 1930, as compared with July, and pay-roll totals decreased 2.6 per cent, according to reports made to the Bureau of Labor Statistics.

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 July and August, together with the per cent of change in August, are shown in the following summary:

SUMMARY OF EMPLOYMENT AND PAY-ROLL TOTALS, JULY AND AUGUST, 1930

Industrial group	Establishments	Employment		Per cent of change	Pay roll in 1 week		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
1. Manufacturing	**13,520**	**3,103,114**	**3,034,259**	[1] **−2.1**	**$76,837,119**	**$74,168,247**	[1] **−2.6**
2. Coal mining	**1,368**	**289,447**	**280,273**	**−3.2**	**6,613,621**	**6,574,071**	**−0.6**
Anthracite	153	94,521	82,693	−12.5	2,699,424	2,532,797	−6.2
Bituminous	1,215	194,926	197,580	+1.4	3,914,197	4,041,274	+3.2
3. Metalliferous mining	**335**	**51,616**	**50,619**	**−1.9**	**1,387,620**	**1,370,686**	**−1.2**
4. Quarrying and nonmetallic mining	**731**	**36,865**	**36,589**	**−0.7**	**932,434**	**936,626**	**+0.4**
5. Crude petroleum production	**540**	**26,217**	**25,600**	**−2.4**	**920,829**	**895,304**	**−2.8**
6. Public utilities	**11,277**	**757,502**	**750,691**	**−0.9**	**22,974,452**	**22,390,197**	**−2.5**
Telephone and telegraph	7,864	353,169	348,938	−1.2	10,232,176	9,838,986	−3.8
Power, light, and water	2,956	249,107	250,474	+0.5	7,831,462	7,820,815	−0.1
Electric railroad operation and maintenance, exclusive of car shops	457	155,226	151,279	−2.5	4,910,814	4,730,396	−3.7
7. Trade	**9,010**	**295,109**	**285,684**	**−3.2**	**7,619,169**	**7,316,580**	**−4.0**
Wholesale	1,967	61,877	61,273	−1.0	1,949,335	1,900,150	−2.5
Retail	7,043	233,232	224,411	−3.8	5,669,834	5,416,430	−4.5
8. Hotels	**2,132**	**162,755**	**163,122**	**+0.2**	[2] **2,741,334**	[2] **2,709,469**	**−1.2**
9. Canning and preserving	**915**	**64,731**	**95,131**	**+47.0**	**1,060,575**	**1,618,032**	**+52.6**
Total	**39,828**	**4,787,356**	**4,721,968**	**−1.4**	**121,087,153**	**117,979,212**	**−2.6**

Recapitulation by Geographic Divisions

Geographic division							
New England [3]	3,128	445,210	443,156	−0.5	$10,783,301	$10,613,097	−1.6
Middle Atlantic [4]	7,074	1,421,050	1,392,222	−2.0	38,488,450	37,850,691	−1.7
East North Central [5]	9,242	1,397,497	1,354,953	−3.0	36,975,514	34,635,178	−6.3
West North Central [6]	4,341	309,773	308,233	−0.5	7,728,898	7,587,694	−1.8
South Atlantic [7]	4,409	471,167	464,633	−1.4	9,426,131	9,254,062	−1.8
East South Central [8]	2,206	191,170	191,445	+0.1	3,548,335	3,542,033	−0.2
West South Central [9]	3,206	184,512	182,221	−1.2	4,529,603	4,399,631	−2.9
Mountain [10]	1,521	95,768	94,324	−1.5	2,511,461	2,435,831	−3.0
Pacific [11]	4,701	271,209	290,781	+7.2	7,095,460	7,660,995	+8.0
All divisions	**39,828**	**4,787,356**	**4,721,968**	**−1.4**	**121,087,153**	**117,979,212**	**−2.6**

[1] Weighted per cent of change for the combined 54 manufacturing industries repeated from Table 2, p. 194; the remaining per cents of change, including total, are unweighted.
[2] Cash payments only; see text, p. 208.
[3] Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.
[4] New Jersey, New York, Pennsylvania.
[5] Illinois, Indiana, Michigan, Ohio, Wisconsin.
[6] Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.
[7] Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia.
[8] Alabama, Kentucky, Mississippi, Tennessee.
[9] Arkansas, Louisiana, Oklahoma, Texas.
[10] Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming.
[11] California, Oregon, Washington.

The combined total of these 13 industrial groups shows a decrease of 1.4 per cent in employment from July to August and a decrease of 2.6 per cent in employees' earnings. Excluding manufacturing the remaining 12 industrial groups show a gain in employment of 0.2 per cent, with a decrease of 1 per cent in pay-roll totals. Manufacturing industries alone showed a decrease of 2.1 per cent in employment and a decrease of 2.6 per cent in pay-roll totals.

Increased employment in August was shown in 4 of the 13 industrial groups: Canning and preserving showed a seasonal increase of 47 per cent; bituminous coal mining began its autumn season with an increase of 1.4 per cent; the continued summer resort hotel season increased hotel employment 0.2 per cent; and power, light, and water plants reported an increase of 0.5 per cent. Decreased employment was shown in each of the remaining 9 industrial groups, as follows: Anthracite mining, 12.5 per cent; metalliferous mining, 1.9 per cent; quarrying, 0.7 per cent; crude petroleum production, 2.4 per cent; telephone and telegraph, 1.2 per cent; electric railroads, 2.5 per cent; wholesale trade, 1 per cent; retail trade, 3.8 per cent; and manufacturing, 2.1 per cent.

The figures of the several industrial groups are not weighted according to the relative importance of each industry, as shown by the United States census, and therefore the per cents of change shown for the total figures represent only the changes in the establishments reporting. (Compare note 1, manufacturing industries, summary table, p. 189.)

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 June and July, instead of for July and August, consequently the figures can not be combined with those presented in the foregoing table.

EMPLOYMENT AND PAY-ROLL TOTALS, CLASS I RAILROADS

Industry	Employment		Per cent of change	Amount of pay roll in entire month		Per cent of change
	June 15, 1930	July 15, 1930		June, 1930	July, 1930	
Class I railroads	1,547,557	1,515,142	−2.1	$210,060,545	$209,929,143	−0.1

The total number of employees included in this summary is approximately 6,240,000, whose combined earnings in one week amounted to nearly $166,500,000.

1. Employment in Selected Manufacturing Industries in August, 1930

Comparison of Employment and Pay-Roll Totals in Manufacturing Industries, July and August, 1930

EMPLOYMENT in manufacturing industries decreased 2.1 per cent in August as compared with July, and pay-roll totals decreased 2.6 per cent. These changes are based upon returns made by 13,055 establishments in 54 of the principal manufacturing industries of the United States. These establishments in August had 2,935,550 employees whose combined earnings in one week were $71,741,492.

The bureau's weighted index of employment for August, 1930, is 79.9, as compared with 81.6 for July, 1930, and 98.6 for August, 1929; the index for pay-roll totals for August, 1930, is 73.9, as compared with 75.9 for July, 1930, and 102.1 for August, 1929. The monthly average for 1926 equals 100.

The leather group of industries showed increased employment of 0.9 per cent in August, and there were smaller increases in the textile and chemical groups. Among the decreases in the remaining 9 groups the largest were 4.5 per cent in the tobacco group, 4.2 per cent in the iron and steel group, and 4 per cent in the vehicle group; the smallest decreases were 0.7 per cent each in the paper and stone-clay-glass groups.

Twenty of the 54 separate industries reported increased employment in August, these being largely such seasonal industries as millinery and lace goods, women's clothing, carpets, boots and shoes, furniture, steam fittings, stoves, paper boxes, rubber boots and shoes, and fertilizers. Woolen and worsted goods increased 1.3 per cent, shipbuilding increased 0.9 per cent, and pottery 4.8 per cent.

The outstanding decreases in employment from July to August were 13.6 per cent in machine tools, 13 per cent in agricultural implements, 7.2 per cent in cane sugar refining, 5.9 per cent in automobiles, 5.3 per cent in cigars and cigarettes, 5.2 per cent in foundry and machine-shop products, and about 4 per cent each in cotton goods, hardware, sawmills, and structural ironwork; the iron and steel industry reported a decrease of 3.6 per cent; and automobile tires a decrease of 3.4 per cent.

Each of the 9 geographic divisions reported fewer employees in August than in July, although the East South Central and Pacific divisions each reported increased pay-roll totals of more than 1 per cent for the same period. The outstanding decrease in both items was in the East North Central division—most affected by changes in the automobile industry.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS INIDENTICAL MANUFACTURING ESTABLISHMENTS IN JULY AND AUGUST, 1930, BY INDUSTRIES

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
Food and kindred products	**1,948**	**231,937**	**226,613**	(1)	**$6,092,634**	**$5,924,675**	(1)
Slaughtering and meat packing	203	87,423	85,143	−2.6	2,338,837	2,248,362	−3.9
Confectionery	322	31,578	31,080	−1.6	572,471	584,429	+2.1
Ice cream	340	16,128	15,850	−1.7	532,362	521,495	−2.0
Flour	348	15,710	15,677	−0.2	416,716	423,081	+1.5
Baking	719	69,429	68,029	−2.0	1,881,297	1,826,268	−2.9
Sugar refining, cane	16	11,669	10,834	−7.2	350,951	321,040	−8.5
Textiles and their products	**2,411**	**528,722**	**526,658**	(1)	**9,231,851**	**9,432,054**	(1)
Cotton goods	459	167,913	161,211	−4.0	2,305,390	2,188,815	−5.1
Hosiery and knit goods	353	85,622	84,215	−1.6	1,391,474	1,392,906	+0.1
Silk goods	281	54,085	53,698	−0.7	959,097	1,021,826	+6.5
Woolen and worsted goods	185	53,723	54,406	+1.3	1,128,249	1,131,728	+0.3
Carpets and rugs	29	16,554	17,735	+7.1	322,880	348,571	+8.0
Dyeing and finishing textiles	121	33,090	34,017	+2.8	736,961	773,340	+4.9
Clothing, men's	359	61,739	61,737	−(2)	1,282,473	1,314,019	+2.5
Shirts and collars	115	18,059	17,628	−2.4	254,983	252,417	−1.0
Clothing, women's	387	25,991	28,347	+9.1	622,667	716,224	+15.0
Millinery and lace goods	122	11,946	13,664	+14.4	227,677	292,208	+28.3
Iron and steel and their products	**1,978**	**637,913**	**610,196**	(1)	**16,819,474**	**16,187,715**	(1)
Iron and steel	200	253,875	244,614	−3.6	6,857,597	6,689,536	−2.5
Cast-iron pipe	40	11,008	10,734	−2.5	246,945	241,373	−2.3
Structural ironwork	173	29,860	28,727	−3.8	821,988	837,989	+1.9
Foundry and machine-shop products	1,090	239,182	226,630	−5.2	6,371,868	6,003,714	−5.8
Hardware	71	26,421	25,362	−4.0	541,835	528,762	−2.4
Machine tools	154	30,555	26,393	−13.6	828,511	688,545	−16.9
Steam fittings and steam and hot-water heating apparatus	109	27,060	27,797	+2.7	698,898	712,362	+1.9
Stoves	141	19,052	19,939	+4.7	451,832	485,434	+7.4
Lumber and its products	**1,364**	**188,642**	**184,150**	(1)	**3,825,800**	**3,737,822**	(1)
Lumber, sawmills	609	109,796	105,547	−3.9	2,180,921	2,026,399	−7.1
Lumber, millwork	335	28,299	27,447	−3.0	630,163	626,318	−0.6
Furniture	420	50,547	51,156	+1.2	1,014,716	1,085,105	+6.9
Leather and its products	**458**	**136,330**	**137,708**	(1)	**2,823,763**	**2,871,093**	(1)
Leather	136	25,790	25,845	+0.2	627,437	637,358	+1.6
Boots and shoes	322	110,540	111,863	+1.2	2,196,326	2,233,735	+1.7
Paper and printing	**1,239**	**204,272**	**202,657**	(1)	**6,649,718**	**6,627,517**	(1)
Paper and pulp	206	56,151	56,212	+0.1	1,391,701	1,429,200	+2.7
Paper boxes	189	18,182	18,502	+1.8	409,847	411,117	+0.2
Printing, book and job	431	53,870	52,814	−2.0	1,813,096	1,777,353	−2.0
Printing, newspapers	413	76,069	75,129	−1.2	3,035,074	3,009,847	−0.8
Chemicals and allied products	**400**	**98,792**	**98,960**	(1)	**2,930,716**	**2,920,696**	(1)
Chemicals	157	38,066	38,412	+0.9	1,029,231	1,035,462	+0.6
Fertilizers	167	7,640	8,160	+6.8	156,022	155,384	−0.4
Petroleum refining	76	53,086	52,388	−1.3	1,745,463	1,729,850	−0.9
Stone, clay, and glass products	**1,052**	**114,892**	**114,063**	(1)	**2,704,042**	**2,720,366**	(1)
Cement	124	24,482	24,520	+0.2	689,929	695,589	+0.8
Brick, tile, and terra cotta	659	34,898	34,206	−2.0	761,248	763,347	+0.3
Pottery	123	16,464	17,259	+4.8	345,652	362,007	+4.7
Glass	146	39,048	38,078	−2.5	907,213	899,423	−0.9
Metal products, other than iron and steel	**243**	**47,508**	**46,211**	(1)	**1,072,015**	**1,055,129**	(1)
Stamped and enameled ware	78	17,294	16,786	−2.9	345,732	357,552	+3.4
Brass, bronze, and copper products	165	30,214	29,425	−2.6	726,283	697,577	−4.0
Tobacco products	**226**	**59,533**	**56,906**	(1)	**962,480**	**911,231**	(1)
Chewing and smoking tobacco and snuff	26	8,521	8,604	+1.0	137,924	141,846	+2.8
Cigars and cigarettes	200	51,012	48,302	−5.3	824,556	769,385	−6.7

See footnotes at end of table.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **MANUFACTURING** ESTABLISHMENTS IN JULY AND AUGUST, 1930, BY INDUSTRIES—Continued

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
Vehicles for land transportation	**1,232**	**458,857**	**437,340**	(1)	**$12,834,261**	**$11,157,227**	(1)
Automobiles	209	315,112	296,538	−5.9	8,738,124	7,008,565	−19.8
Carriages and wagons	49	1,097	1,059	−3.5	24,760	23,608	−4.7
Car building and repairing, electric-railroad	414	26,366	26,206	−0.6	810,252	802,553	−1.0
Car building and repairing, steam-railroad	560	116,282	113,537	−2.4	3,261,125	3,322,501	+1.9
Miscellaneous industries	**969**	**396,616**	**392,797**	(1)	**10,890,365**	**10,622,722**	(1)
Agricultural implements	81	20,309	17,671	−13.0	463,312	412,740	−10.9
Electrical machinery, apparatus, and supplies	209	178,977	174,015	−2.8	5,227,815	4,945,978	−5.4
Pianos and organs	70	5,685	5,695	+0.2	148,912	152,179	+2.2
Rubber boots and shoes	8	13,988	14,394	+2.9	298,427	295,202	−1.1
Automobile tires	46	43,255	41,800	−3.4	1,245,350	1,190,302	−4.4
Shipbuilding	90	40,133	40,513	+0.9	1,184,518	1,199,566	+1.3
Rayon [3]	17	23,202	22,542	−2.8	490,177	432,937	−11.7
Radio [3]	44	25,516	32,103	+25.8	662,045	868,765	+31.2
Aircraft [3]	44	7,025	6,817	−3.0	215,776	225,500	+4.5
Jewelry [3]	116	12,401	12,460	+0.5	303,150	275,578	−9.1
Paint and varnish [3]	177	12,215	11,293	−7.5	327,684	304,699	−7.0
Rubber goods, other than rubber boots, shoes, tires, and tubes [3]	67	13,910	13,494	−3.0	323,199	319,276	−1.2
All industries	**13,520**	**3,103,114**	**3,034,259**	(1)	**76,837,119**	**74,168,247**	(1)

RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION [4]							
New England	1,522	340,816	337,178	−1.1	$7,763,860	$7,635,795	−1.6
Middle Atlantic	3,519	914,966	903,575	−1.2	24,494,037	24,301,280	−0.8
East North Central	3,322	1,022,757	983,928	−3.8	26,851,554	24,775,777	−7.7
West North Central	1,194	169,186	165,980	−1.9	4,126,885	4,044,901	−2.0
South Atlantic	1,595	317,971	311,438	−2.1	5,905,387	5,778,178	−2.2
East South Central	619	107,344	106,898	−0.4	1,895,720	1,916,749	+1.1
West South Central	703	87,438	85,285	−2.5	2,024,541	1,940,967	−4.1
Mountain	242	28,787	27,716	−3.7	790,326	747,556	−5.4
Pacific	804	113,849	112,261	−1.4	2,984,809	3,027,044	+1.4
All divisions	**13,520**	**3,103,114**	**3,034,259**	(1)	**76,837,119**	**74,168,247**	(1)

[1] The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting, for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishments of the country in the industries here represented, see Table 2.

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

[3] The rayon industry was surveyed for the first time for the January–February, 1929, comparison, the radio industry for the March–April, 1929, comparison, the aircraft, jewelry, and paint and varnish industries for the February–March, 1930, comparison, and the rubber goods industry for the March–April, 1930, comparison, and, since the data for computing relative numbers are not yet available, these industries are not included in the bureau's indexes of employment and pay-roll totals. The total figures for all manufacturing industries given in the text, p. 191, do not include rayon, radio, aircraft, jewelry, paint and varnish, or rubber goods.

[4] See footnotes 3 to 11, p. 189.

TABLE 2.—PER CENT OF CHANGE, JULY TO AUGUST, 1930—12 GROUPS OF **MANUFACTURING** INDUSTRIES AND TOTAL OF ALL INDUSTRIES

[Computed from the index numbers of each group, which are obtained by weighting the index numbers of the several industries of the group by the number of employees, or wages paid, in the industries]

Group	Per cent of change July to August, 1930		Group	Per cent of change July to August, 1930	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
Food and kindred products	−2.2	−2.6	Stone, clay, and glass products	−0.7	+0.8
Textiles and their products	+0.3	+3.1	Metal products, other than iron and steel	−2.7	−2.0
Iron and steel and their products	−4.2	−3.8	Tobacco products	−4.5	−5.7
Lumber and its products	−2.6	−2.4	Vehicles for land transportation	−4.0	−8.8
Leather and its products	+0.9	+1.7	Miscellaneous industries	−2.6	−4.1
Paper and printing	−0.7	−0.4			
Chemicals and allied products	+0.4	−0.2	**All industries**	**−2.1**	**−2.6**

Comparison of Employment and Pay-Roll Totals in Manufacturing Industries, August, 1930, and August, 1929

THE LEVEL of employment in manufacturing industries in August, 1930, was 19 per cent lower than in August, 1929, and pay-roll totals were 27.6 per cent lower.

Two industries only—shipbuilding and chewing and smoking tobacco—had more employees at the end of the 12-month period than at the beginning.

The outstanding decreases in August, 1930, as compared with August, 1929, were in the following industries: Agricultural implements (40.5 per cent), carriages, machine tools (37 per cent), automobiles (33.7 per cent), carpets, millwork, sawmills, furniture, automobile tires, pianos, rubber boots and shoes, brick, electrical machinery (25 per cent), brass, glass, foundry and machine-shop products (21.5 per cent), silk goods, cotton goods (20.4 per cent), stoves, steam-railroad car building and repairing, steam fittings, and woolen and worsted goods (19 per cent).

Each of the nine geographic divisions showed a much smaller number of employees in August, 1930, than in August, 1929, with correspondingly decreased pay-roll totals.

The notable decrease in each item appeared in the East North Central division, while the smallest decreases were in the South Atlantic division.

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN **MANUFACTURING** INDUSTRIES, AUGUST, 1930, WITH AUGUST, 1929

[The per cents of change for each of the 12 groups of industries and for the total of all industries are weighted in the same manner as are the per cents of change in Table 2]

Industry	Per cent of change, August, 1930, compared with August, 1929	
	Number on pay roll	Amount of pay roll
Food and kindred products	**−6.8**	**−6.9**
Slaughtering and meat packing	−5.6	−4.3
Confectionery	−12.0	−15.1
Ice cream	−6.4	−6.5
Flour	−7.1	−8.6
Baking	−6.1	−6.7
Sugar refining, cane	−6.7	−9.5
Textiles and their products	**−18.2**	**−26.9**
Cotton goods	−20.4	−30.4
Hosiery and knit goods	−18.1	−29.8
Silk goods	−20.7	−28.8
Woolen and worsted goods	−19.0	−24.8
Carpets and rugs	−30.0	−44.5
Dyeing and finishing textiles	−11.6	−21.6
Clothing, men's	−16.7	−24.4
Shirts and collars	−18.4	−28.0
Clothing, women's	−12.6	−22.7
Millinery and lace goods	−11.3	−18.8
Iron and steel and their products	**−19.8**	**−31.4**
Iron and steel	−17.1	−29.9
Cast-iron pipe	−16.2	−20.8
Structural ironwork	−13.9	−18.4
Foundry and machine-shop products	−21.5	−33.0
Hardware	−18.2	−34.2
Machine tools	−37.0	−49.3
Steam fittings and steam and hot-water heating apparatus	−19.1	−29.1
Stoves	−20.2	−30.1
Lumber and its products	**−27.9**	**−34.9**
Lumber, sawmills	−28.0	−34.1
Lumber, millwork	−29.0	−32.9
Furniture	−27.1	−37.4
Leather and its products	**−10.9**	**−23.7**
Leather	−10.2	−14.4
Boots and shoes	−11.0	−26.3
Paper and printing	**−4.2**	**−5.2**
Paper and pulp	−6.2	−12.6
Paper boxes	−6.4	−9.9
Printing, book and job	−4.7	−3.0
Printing, newspapers	−0.6	−1.3
Chemicals and allied products	**−8.6**	**−10.2**
Chemicals	−9.6	−14.4
Fertilizers	−5.0	−9.6
Petroleum refining	−8.0	−6.3
Stone, clay, and glass products	**−20.2**	**−27.3**
Cement	−6.2	−11.4
Brick, tile, and terra cotta	−25.4	−31.8
Pottery	−12.9	−26.6
Glass	−23.7	−30.8
Metal products, other than iron and steel	**−21.4**	**−33.9**
Stamped and enameled ware	−16.9	−27.8
Brass, bronze, and copper products	−23.3	−36.0
Tobacco products	**−9.3**	**−14.5**
Chewing and smoking tobacco and snuff	−3.6	−0.5
Cigars and cigarettes	−10.8	−16.1
Vehicles for land transportation	**−26.7**	**−41.2**
Automobiles	−33.7	−54.7
Carriages and wagons	−37.7	−35.8
Car building and repairing, electric-railroad	−7.4	−8.9
Car building and repairing, steam-railroad	−19.6	−25.3
Miscellaneous industries	**−23.2**	**−25.7**
Agricultural implements	−40.5	−52.5
Electrical machinery, apparatus, and supplies	−25.0	−27.7
Pianos and organs	−26.1	−32.2
Rubber boots and shoes	−25.5	−37.0
Automobile tires	−27.8	−28.2
Shipbuilding	+8.3	+9.9
All industries	**−19.0**	**−27.6**

RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION [1]		
New England	−18.4	−26.3
Middle Atlantic	−16.2	−22.5
East North Central	−25.2	−38.8
West North Central	−14.8	−20.5
South Atlantic	−13.2	−18.9
East South Central	−19.9	−26.4
West South Central	−19.9	−21.2
Mountain	−19.4	−19.2
Pacific	−20.5	−21.8
All industries	**−19.0**	**−27.6**

[1] See footnotes 3 to 11, p. 189.

Per Capita Earnings in Manufacturing Industries

PER CAPITA earnings in manufacturing industries in August, 1930, were 0.5 per cent lower than in July, 1930, and 10.6 per cent lower than in August, 1929. The per cents of change in per capita earnings in August, 1930, as compared with July, 1930, and August, 1929, for each industry are shown in Table 4.

TABLE 4.—COMPARISON OF PER CAPITA EARNINGS IN **MANUFACTURING** INDUSTRIES AUGUST, 1930, WITH JULY, 1930, AND AUGUST, 1929

Industry	Per cent of change, August, 1930, compared with—		Industry	Per cent of change, August, 1930, compared with—	
	July, 1930	August, 1929		July, 1930	August, 1929
Millinery and lace goods	+12.2	−8.4	Shipbuilding	+0.3	+1.5
Silk goods	+7.3	−10.4	Printing, book and job	−(1)	+1.8
Stamped and enameled ware	+6.6	−12.8	Pottery	−0.1	−15.6
Structural ironwork	+6.0	−5.4	Chemicals	−0.3	−5.2
Furniture	+5.7	−13.9	Ice cream	−0.3	−0.2
Clothing, women's	+5.5	−11.5	Car building and repairing, electric-railroad	−0.4	−1.5
Car building and repairing, steam-railroad	+4.4	−6.9	Foundry and machine-shop products	−0.6	−14.7
Confectionery	+3.7	−3.7	Steam fittings and steam and hot-water heating apparatus	−0.8	−12.4
Stoves	+2.7	−12.0	Baking	−0.9	−0.5
Paper and pulp	+2.6	−7.0	Woolen and worsted goods	−1.0	−7.0
Clothing, men's	+2.5	−9.1	Automobile tires	−1.1	−0.8
Lumber, millwork	+2.5	−5.6	Cotton goods	−1.1	−12.4
Agricultural implements	+2.4	−20.3	Carriages and wagons	−1.2	+3.2
Brick, tile, and terra cotta	+2.3	−8.5	Slaughtering and meat packing	−1.3	+1.6
Dyeing and finishing textiles	+2.1	−11.3	Brass, bronze, and copper products	−1.4	−16.8
Pianos and organs	+2.0	−8.4	Cigars and cigarettes	−1.4	−6.1
Chewing and smoking tobacco and snuff	+1.9	−3.5	Paper boxes	−1.4	−3.4
Hosiery and knit goods	+1.8	−14.1	Sugar refining, cane	−1.5	−3.2
Flour	+1.7	−1.8	Electrical machinery, apparatus, and supplies	−2.7	−3.5
Glass	+1.7	−9.3	Lumber, sawmills	−3.3	−8.3
Hardware	+1.7	−19.6	Machine tools	−3.8	−19.5
Leather	+1.4	−5.0	Rubber boots and shoes	−3.8	−15.4
Shirts and collars	+1.4	−11.5	Fertilizers	−6.8	−4.7
Iron and steel	+1.3	−15.2	Automobiles	−14.8	−31.5
Carpets and rugs	+0.8	−20.9	**All industries**	**−0.5**	**−10.6**
Cement	+0.7	−5.5			
Boots and shoes	+0.5	−17.3			
Petroleum	+0.4	+1.8			
Printing, newspapers	+0.4	−0.5			
Cast-iron pipe	+0.3	−5.4			

(1) Less than one-tenth of 1 per cent.

Index Numbers of Employment and Pay-Roll Totals in Manufacturing Industries

TABLE 5 shows the general index of employment in manufacturing industries and the general index of pay-roll totals, by months, from January, 1923, to August, 1930, together with average indexes for each of the years 1923 to 1929, inclusive.

TABLE 5.—GENERAL INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN **MANUFACTURING** INDUSTRIES, JANUARY, 1923, TO AUGUST, 1930

[Monthly average, 1926=100]

Month	Employment								Pay-roll totals							
	1923	1924	1925	1926	1927	1928	1929	1930	1923	1924	1925	1926	1927	1928	1929	1930
January	106.6	103.8	97.9	100.4	97.3	91.6	95.2	90.2	95.8	98.6	93.9	98.0	94.9	89.6	94.5	87.6
February	108.4	105.1	99.7	101.5	99.0	93.0	97.4	90.3	99.4	103.8	99.3	102.2	100.6	93.9	101.8	90.7
March	110.8	104.9	100.4	102.0	99.5	93.7	98.6	89.8	104.7	103.3	100.8	103.4	102.0	95.2	103.9	90.8
April	100.8	102.8	100.2	101.0	98.6	93.3	99.1	89.1	105.7	101.1	98.3	101.5	100.8	93.8	104.6	89.8
May	110.8	98.8	98.9	99.8	97.6	93.0	99.2	87.7	109.4	96.5	98.5	99.8	99.8	94.1	104.8	87.6
June	110.9	95.6	98.0	99.3	97.0	93.1	98.8	85.5	109.3	90.8	95.7	99.7	97.4	94.2	102.8	84.1
July	109.2	92.3	97.2	97.7	95.0	92.2	98.2	81.6	104.3	84.3	93.5	95.2	93.0	91.2	98.2	75.9
August	108.5	92.5	97.8	98.7	95.1	93.6	98.6	79.9	103.7	87.2	95.4	98.7	95.0	94.2	102.1	73.9
September	108.6	94.3	98.9	100.3	95.8	95.0	99.3	------	104.4	89.8	94.4	99.3	94.1	95.4	102.6	------
October	108.1	95.6	100.4	100.7	95.3	95.9	98.3	------	106.8	92.4	100.4	102.9	95.2	99.0	102.3	------
November	107.4	95.5	100.7	99.5	93.5	95.4	94.8	------	105.4	91.4	100.4	99.6	91.6	96.1	95.1	------
December	105.4	97.3	100.8	98.9	92.6	95.5	91.9	------	103.2	95.7	101.6	99.8	93.2	97.7	92.0	------
Average	**108.8**	**98.2**	**99.2**	**100.0**	**96.4**	**93.8**	**97.5**	[1] **86.8**	**104.3**	**94.6**	**97.7**	**100.0**	**96.5**	**94.5**	**100.4**	[1] **85.1**

[1] Average for 8 months.

Index numbers showing relatively the variation in number of persons employed and in pay-toll totals in each of the 54 manufacturing industries surveyed by the Bureau of Labor Statistics and in each of the 12 groups of industries, and also general indexes for the combined 12 groups of industries, are shown in Table 6 for August, 1929, and for June, July, and August, 1930.

In computing the general indexes and the group indexes the index numbers of separate industries are weighted according to the importance of the industries.

Following Table 6 are two charts which represent the 54 separate industries combined and show the course of pay-roll totals as well as the course of employment for each month of the years 1926 to 1929, inclusive, and for January, February, March, April, May, June, July, and August, 1930.

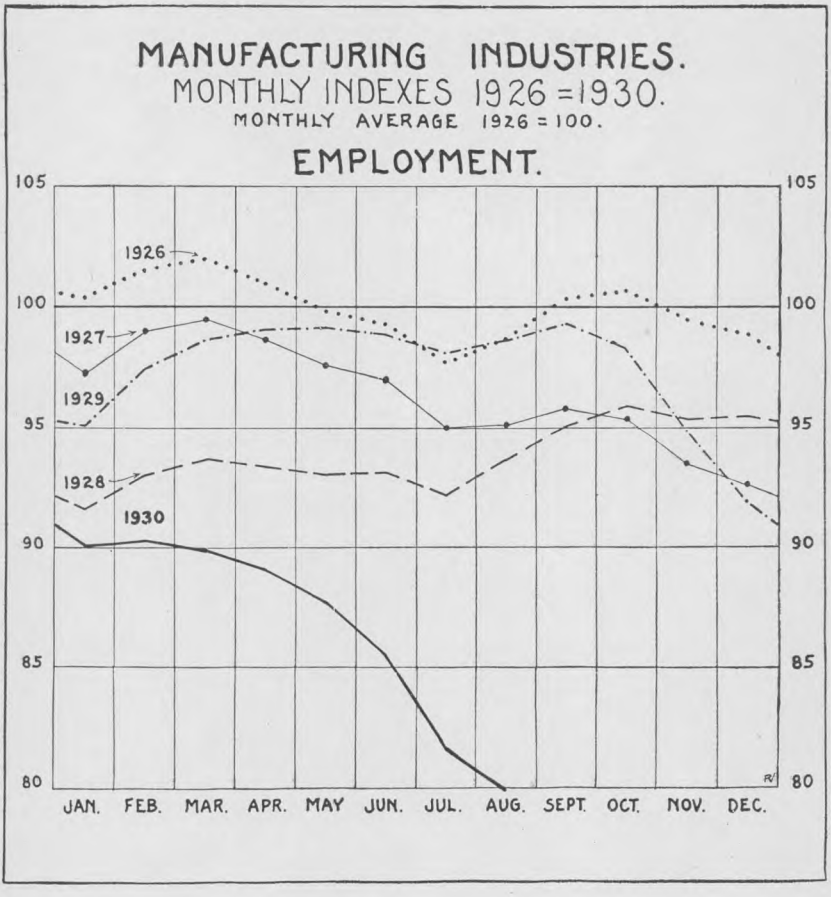
TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN **MANUFACTURING** INDUSTRIES, AUGUST, 1929, AND JUNE, JULY, AND AUGUST, 1930

[Monthly average, 1926=100]

Industry	Employment				Pay-roll totals			
	1929	1930			1929	1930		
	August	June	July	August	August	June	July	August
General index	**98.6**	**85.5**	**81.6**	**79.9**	**102.1**	**84.1**	**75.9**	**73.9**
Food and kindred products	**99.4**	**95.3**	**94.7**	**92.6**	**102.2**	**99.6**	**97.6**	**95.1**
Slaughtering and meat packing	99.9	98.6	96.8	94.3	101.1	102.4	100.7	96.8
Confectionery	85.7	79.2	76.6	75.4	88.6	82.6	73.7	75.2
Ice cream	108.0	99.2	102.8	101.1	107.4	100.2	102.4	100.4
Flour	104.9	95.5	97.7	97.5	110.5	100.9	99.5	101.0
Baking	102.3	98.9	98.1	96.1	103.9	101.6	99.8	96.9
Sugar refining, cane	99.2	93.5	99.8	92.6	104.8	99.4	103.6	94.8

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, AUGUST, 1929, AND JUNE, JULY, AND AUGUST, 1930—Continued

Industry	Employment				Pay-roll totals			
	1929	1930			1929	1930		
	August	June	July	August	August	June	July	August
Textiles and their products	**95.1**	**83.7**	**77.6**	**77.8**	**95.0**	**75.1**	**67.3**	**69.4**
Cotton goods	91.6	81.3	75.9	72.9	88.4	73.5	64.8	61.5
Hosiery and knit goods	97.2	88.9	80.9	79.6	101.0	85.1	70.8	70.9
Silk goods	98.3	86.2	78.6	78.0	101.3	79.9	67.7	72.1
Woolen and worsted goods	96.8	79.9	77.4	78.4	96.9	77.0	72.7	72.9
Carpets and rugs	105.0	78.8	68.7	73.5	98.5	56.6	50.6	54.7
Dyeing and finishing textiles	98.0	90.4	84.2	86.6	97.4	80.0	72.8	76.4
Clothing, men's	95.7	81.6	79.7	79.7	95.1	69.3	70.2	71.9
Shirts and collars	91.1	79.9	76.1	74.3	89.6	67.7	65.2	64.5
Clothing, women's	97.2	90.5	77.9	85.0	97.6	75.5	65.6	75.4
Millinery and lace goods	90.4	80.3	70.1	80.2	87.4	70.0	55.3	71.0
Iron and steel and their products	**100.4**	**88.0**	**84.0**	**80.5**	**104.5**	**85.2**	**74.5**	**71.7**
Iron and steel	97.5	87.7	83.9	80.8	103.4	87.0	74.4	72.5
Cast-iron pipe	81.7	72.8	70.3	68.5	83.3	72.6	67.6	66.0
Structural ironwork	106.8	96.0	95.6	92.0	110.5	95.9	88.5	90.2
Foundry and machine-shop products	105.3	91.3	87.2	82.7	109.0	87.5	77.5	73.0
Hardware	89.4	79.7	76.1	73.1	90.9	68.3	61.3	59.8
Machine tools	131.2	104.1	95.6	82.6	137.6	98.2	84.0	69.8
Steam fittings and steam and hot-water heating apparatus	76.6	62.7	60.4	62.0	76.2	56.4	53.0	54.0
Stoves	91.5	77.6	69.7	73.0	85.8	70.3	55.9	60.0
Lumber and its products	**92.0**	**71.6**	**68.1**	**66.3**	**93.1**	**70.0**	**62.1**	**60.6**
Lumber, sawmills	90.8	71.7	68.1	65.4	91.2	73.1	64.7	60.1
Lumber, millwork	86.9	66.5	63.6	61.7	88.2	67.0	59.5	59.2
Furniture	98.2	74.4	70.7	71.6	100.1	65.6	58.7	62.7
Leather and its products	**97.1**	**83.6**	**85.7**	**86.5**	**101.3**	**71.4**	**76.0**	**77.3**
Leather	94.2	85.0	84.4	84.6	97.6	83.9	82.2	83.5
Boots and shoes	97.8	83.3	86.0	87.0	102.4	67.8	74.2	75.5
Paper and printing	**101.1**	**98.6**	**97.6**	**96.9**	**104.4**	**103.6**	**99.4**	**99.0**
Paper and pulp	96.0	93.8	89.9	90.0	98.7	94.1	84.0	86.3
Paper boxes	95.1	88.0	87.4	89.0	100.7	92.1	90.4	90.7
Printing, book and job	103.1	99.2	100.3	98.3	103.6	104.3	102.6	100.5
Printing, newspapers	107.1	108.2	107.8	106.5	110.4	113.0	109.8	109.0
Chemicals and allied products	**98.1**	**89.8**	**89.3**	**89.7**	**102.0**	**95.5**	**91.8**	**91.6**
Chemicals	102.2	93.1	91.6	92.4	105.2	94.9	89.6	90.1
Fertilizers	73.8	62.8	65.6	70.1	78.2	70.7	71.0	70.7
Petroleum refining	101.0	94.4	94.1	92.9	103.1	100.3	97.4	96.6
Stone, clay, and glass products	**90.6**	**77.9**	**72.8**	**72.3**	**89.4**	**74.7**	**64.5**	**65.0**
Cement	85.8	83.4	80.3	80.5	87.8	87.1	77.2	77.8
Brick, tile, and terra cotta	88.6	69.4	67.4	66.1	84.6	64.1	57.5	57.7
Pottery	91.9	83.1	76.3	80.0	88.6	71.4	62.1	65.0
Glass	95.6	84.6	74.8	72.9	97.9	84.1	68.3	67.7
Metal products, other than iron and steel	**97.1**	**80.8**	**78.4**	**76.3**	**102.1**	**78.7**	**68.9**	**67.5**
Stamped and enameled ware	90.4	79.4	77.3	75.1	92.9	76.0	64.9	67.1
Brass, bronze, and copper products	100.3	81.4	78.9	76.9	105.8	79.7	70.5	67.7
Tobacco products	**94.9**	**91.2**	**90.2**	**86.1**	**95.7**	**89.3**	**86.7**	**81.8**
Chewing and smoking tobacco and snuff	84.4	87.9	86.6	87.4	87.6	88.5	84.8	87.2
Cigars and cigarettes	96.3	91.6	90.7	85.9	96.7	89.4	86.9	81.1
Vehicles for land transportation	**100.8**	**82.7**	**77.0**	**73.9**	**109.1**	**83.1**	**70.3**	**64.1**
Automobiles	117.6	90.9	82.9	78.0	124.6	86.8	70.4	56.5
Carriages and wagons	87.9	59.5	56.8	54.8	94.5	67.0	63.7	60.7
Car building and repairing, electric-railroad	92.9	87.6	86.5	86.0	93.9	91.3	86.3	85.5
Car building and repairing, steam-railroad	86.3	75.2	71.1	69.4	94.3	78.8	69.1	70.4
Miscellaneous industries	**115.2**	**95.9**	**90.9**	**88.5**	**113.4**	**97.2**	**87.9**	**84.3**
Agricultural implements	116.2	91.5	79.4	69.1	119.7	81.3	63.8	56.8
Electrical machinery, apparatus, and supplies	126.9	102.3	97.9	95.2	126.3	107.4	96.5	91.3
Pianos and organs	57.9	45.5	42.7	42.8	53.1	38.8	35.2	36.0
Rubber boots and shoes	100.2	74.5	72.4	74.6	102.6	70.3	65.3	64.6
Automobile tires	107.2	86.1	80.1	77.4	100.9	83.1	75.8	72.4
Shipbuilding	105.0	117.3	112.7	113.7	104.5	119.0	113.3	114.8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MONTHLY AVERAGE 1926 = 100.
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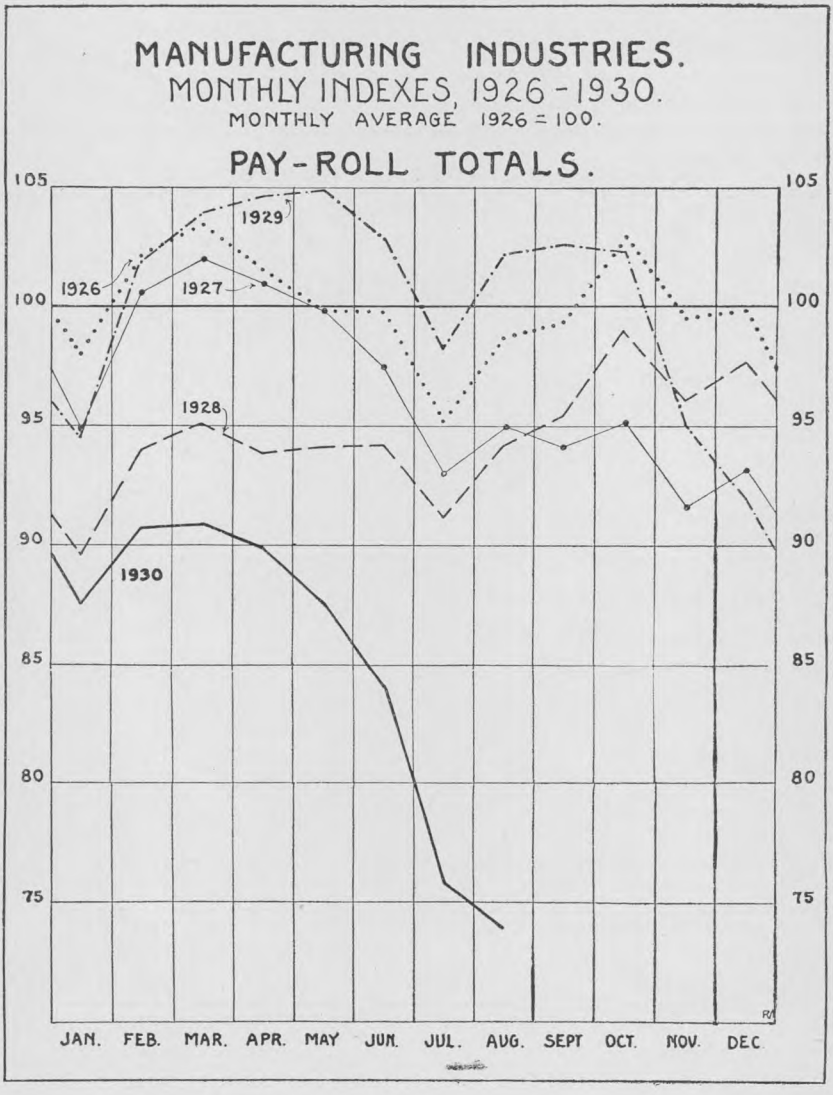
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MONTHLY INDEXES, 1926-1930.
MONTHLY AVERAGE 1926 = 100.
PAY-ROLL TOTALS.
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Force Employed and Time Worked in Manufacturing Industries in August, 1930

REPORTS as to force employed and working time of employees in August were received from 10,552 establishments in 54 manufacturing industries. Twenty-four per cent of the establishments had a full normal force of employees, 75 per cent were working with reduced forces, and 2 per cent were idle; employees in 60 per cent of the establishments were working full time and employees in 38 per cent were working part time.

The establishments in operation had an average of 78 per cent of a full normal force of employees, who were working an average of 91 per cent of full time.

TABLE 7.—PROPORTION OF FULL NORMAL FORCE EMPLOYED IN **MANUFACTURING** INDUSTRIES IN AUGUST, 1930, AND PROPORTION OF FULL TIME WORKED BY EMPLOYEES

Industry	Establishments reporting		Operating establishments only					
			Per cent of establishments in which employees worked—		Average per cent of full time worked by employees in establishments operating	Per cent of establishments operating with—		Average per cent of full normal force employed in establishments operating
	Total number	Per cent idle	Full time	Part time		Full normal force	Part normal force	
Food and kindred products	**1,607**	(1)	**84**	**16**	**97**	**38**	**62**	**85**
Slaughtering and meat packing	170	------	82	18	98	38	62	87
Confectionery	245	1	53	46	89	4	95	63
Ice cream	213	------	91	9	99	34	66	86
Flour	306	1	86	13	97	41	58	88
Baking	660	------	93	7	99	50	50	93
Sugar refining, cane	13	------	62	38	94	38	8	94
Textiles and their products	**1,810**	**4**	**53**	**43**	**89**	**18**	**77**	**75**
Cotton goods	429	7	37	57	81	13	80	72
Hosiery and knit goods	299	3	51	46	86	14	82	77
Silk goods	242	3	70	26	95	24	73	77
Woolen and worsted goods	168	3	45	52	89	9	88	75
Carpets and rugs	22	------	18	82	79	5	95	68
Dyeing and finishing	108	2	46	52	84	17	81	79
Clothing, men's	219	3	62	35	94	28	69	81
Shirts and collars	80	11	56	33	93	29	60	86
Clothing, women's	166	5	72	22	97	21	73	78
Millinery and lace goods	77	5	58	36	94	23	71	79
Iron and steel, and their products	**1,746**	**1**	**42**	**57**	**85**	**18**	**81**	**79**
Iron and steel	143	8	50	41	86	8	83	84
Cast-iron pipe	39	3	41	56	76	5	92	69
Structural ironwork	159	1	63	36	94	33	66	90
Foundry and machine-shop products	998	1	43	56	85	16	83	75
Hardware	58	------	17	83	81	5	95	67
Machine tools	144	------	23	77	80	22	78	83
Steam fittings and steam and hot-water heating apparatus	97	1	28	71	81	26	73	73
Stoves	108	------	32	68	83	25	75	84
Lumber and its products	**1,056**	**2**	**48**	**51**	**88**	**15**	**83**	**71**
Lumber, sawmills	457	3	54	43	90	16	81	71
Lumber, millwork	266	(1)	49	50	90	14	86	69
Furniture	333	1	38	61	85	14	85	70
Leather and its products	**385**	**1**	**63**	**36**	**93**	**32**	**66**	**90**
Leather	118	------	75	25	95	25	75	85
Boots and shoes	267	1	57	41	92	36	63	92
Paper and printing	**969**	**1**	**74**	**26**	**96**	**41**	**59**	**94**
Paper and pulp	143	3	64	32	93	29	68	92
Paper boxes	153	------	46	54	90	25	75	87
Printing, book and job	338	------	72	28	96	40	60	96
Printing, newspapers	335	------	93	7	100	54	46	98

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

TABLE 7.—PROPORTION OF FULL NORMAL FORCE EMPLOYED IN MANUFACTURING INDUSTRIES IN AUGUST, 1930, AND PROPORTION OF FULL TIME WORKED BY EMPLOYEES—Continued

Industry	Establishments reporting		Operating establishments only					
			Per cent of establishments in which employees worked—		Average per cent of full time worked by employees in establishments operating	Per cent of establishments operating with—		Average per cent of full normal force employed in establishments operating
	Total number	Per cent idle	Full time	Part time		Full normal force	Part normal force	
Chemicals and allied products	**278**	(1)	**72**	**28**	**96**	**14**	**85**	**77**
Chemicals	117	1	68	32	95	26	73	90
Fertilizers	129	------	69	31	95	2	98	39
Petroleum refining	32	------	100	------	100	22	78	86
Stone, clay, and glass products	**816**	**4**	**67**	**29**	**92**	**19**	**77**	**77**
Cement	86	2	90	8	98	17	80	78
Brick, tile and terra cotta	520	4	64	32	91	17	79	68
Pottery	97	2	51	47	88	30	68	89
Glass	113	6	81	13	97	24	70	81
Metal products, other than iron and steel	**205**	------	**47**	**53**	**89**	**15**	**85**	**77**
Stamped and enameled ware	63	------	46	54	89	21	79	85
Brass, bronze, and copper products	142	------	48	52	88	13	87	73
Tobacco products	**200**	**4**	**53**	**44**	**92**	**38**	**59**	**97**
Chewing and smoking tobacco and snuff	24	4	50	46	93	33	63	95
Cigars and cigarettes	176	3	53	44	91	39	58	97
Vehicles for land transportation	**1,091**	(1)	**66**	**34**	**93**	**17**	**83**	**72**
Automobiles	176	1	49	50	86	26	73	70
Carriages and wagons	45	------	64	36	92	11	89	62
Car building and repairing, electric-railroad	364	------	87	13	99	28	72	88
Car building and repairing, steam-railroad	506	------	56	44	93	6	94	71
Miscellaneous industries	**389**	**1**	**53**	**46**	**90**	**22**	**77**	**80**
Agricultural implements	65	3	35	62	84	6	91	60
Electrical machinery, apparatus, and supplies	160	------	56	44	90	24	76	81
Pianos and organs	49	4	33	63	83	4	92	64
Rubber boots and shoes	7	------	29	71	88	57	43	78
Automobile tires	35	3	31	66	89	11	86	78
Shipbuilding	73	------	88	12	99	42	58	93
All industries	**10,552**	**2**	**60**	**38**	**91**	**24**	**75**	**78**

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

2. Employment in Coal Mining in August, 1930

EMPLOYMENT in coal mining—anthracite and bituminous coal combined—decreased 3.2 per cent in August as compared with July, and pay-roll totals decreased 0.6 per cent.

The 1,368 mines reported had in August 280,273 employees whose earnings in one week were $6,574,071.

Anthracite

IN ANTHRACITE mining in August there was a decrease in employment of 12.5 per cent, as compared with July, and a decrease of 6.2 per cent in pay-roll totals.

Employment in August, 1930, was 12 per cent lower than in August, 1929, and pay-roll totals were 0.5 per cent higher.[a]

[a] For indexes of employment and pay-roll totals, see p. 210.

All anthracite mines reported are in Pennsylvania—the Middle Atlantic geographic division. The details for July and August are shown in Table 1.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **ANTHRACITE MINES** IN JULY AND AUGUST, 1930

Geographic division	Mines	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
Middle Atlantic [1]	**153**	**94,521**	**82,693**	**−12.5**	**$2,699,424**	**$2,532,797**	**−6.2**

[1] See footnote 4, p. 189.

Bituminous Coal

EMPLOYMENT in bituminous coal mining increased 1.4 per cent in August as compared with July, and pay-roll totals increased 3.2 per cent, as shown by reports from 1,215 mines, in which there were, in August, 197,580 employees whose combined earnings in one week were $4,041,274.

Employment in August, 1930, was 6.8 per cent lower than in August, 1929, and pay-roll totals were 23.4 per cent smaller.[a]

Details for each geographic division, except the New England division, for which no coal mining is reported, are shown in Table 2.

TABLE 2.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **BITUMINOUS COAL MINES** IN JULY AND AUGUST, 1930

Geographic division [1]	Mines	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
Middle Atlantic	372	59,124	59,454	+0.6	$1,236,106	$1,259,847	+1.9
East North Central	152	25,612	26,045	+1.7	480,303	533,284	+11.0
West North Central	49	4,115	4,182	+1.6	76,398	78,183	+2.3
South Atlantic	315	52,773	53,089	+0.6	1,055,008	1,080,360	+2.4
East South Central	190	38,113	38,984	+2.3	685,689	696,947	+1.6
West South Central	28	2,096	2,163	+3.2	42,286	43,245	+2.3
Mountain	102	11,746	12,319	+4.9	299,420	315,736	+5.4
Pacific	7	1,347	1,344	−0.2	38,987	33,672	−13.6
All divisions	**1,215**	**194,926**	**197,580**	**+1.4**	**3,914,197**	**4,041,274**	**+3.2**

[1] See footnotes 4 to 11, p. 189.

3. Employment in Metalliferous Mining in August, 1930

METALLIFEROUS mines in August showed a decrease in employment of 1.9 per cent as compared with July, and pay-roll totals decreased 1.2 per cent. The 335 mines covered had in August 50,619 employees whose combined earnings in one week were $1,370,686.

Employment in August, 1930, was 23.4 per cent lower than in August, 1929, and pay-roll totals were 29.1 per cent lower.[a]

[a] For indexes of employment and pay-roll totals, see p. 210.

Details for each geographic division from which metalliferous mining is reported are shown in the following table.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **METALLIFEROUS MINES** IN JULY AND AUGUST, 1930

Geographic division [1]	Mines	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
Middle Atlantic	7	1,454	1,428	−1.8	$37,638	$37,980	+0.9
East North Central	48	12,835	12,421	−3.2	293,332	292,790	−0.2
West North Central	53	7,828	7,878	+0.6	247,362	233,655	−5.5
East South Central	14	3,410	3,464	+1.6	71,002	67,792	−4.5
West South Central	64	2,310	2,480	+7.4	58,214	60,241	+3.5
Mountain	116	21,234	20,549	−3.2	606,658	607,209	+0.1
Pacific	33	2,545	2,399	−5.7	73,414	71,019	−3.3
All divisions	**335**	**51,616**	**50,619**	**−1.9**	**1,387,620**	**1,370,686**	**−1.2**

[1] See footnotes 4 to 11, p. 189.

4. Employment in Quarrying and Nonmetallic Mining in August, 1930

A DECREASE of 0.7 per cent in employment and an increase of 0.4 per cent in earnings from July to August were shown by reports received from 731 establishments in this industrial group. The reporting establishments had in August, 36,589 employees whose combined pay roll in one week in August was $936,626.

Employment in August, 1930, was 16.3 per cent lower than in August, 1929, and pay-roll totals were 22.2 per cent less.[a]

Details for each geographic division are shown in the following table.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **QUARRIES AND NONMETALLIC MINES** IN JULY AND AUGUST, 1930

Geographic division [1]	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
New England	104	5,006	5,001	−0.1	$151,029	$146,406	−3.1
Middle Atlantic	117	7,200	7,196	−0.1	198,440	195,469	−1.5
East North Central	219	9,984	9,962	−0.2	286,258	295,988	+3.4
West North Central	78	2,627	2,695	+2.6	61,744	64,453	+4.4
South Atlantic	90	5,530	5,428	−1.8	103,607	103,136	−0.5
East South Central	54	3,012	2,842	−5.6	45,756	43,707	−4.5
West South Central	35	2,206	2,131	−3.4	51,179	49,839	−2.6
Mountain	5	163	158	−3.1	3,931	4,599	+17.0
Pacific	29	1,137	1,176	+3.4	30,490	33,029	+8.3
All divisions	**731**	**36,865**	**36,589**	**−0.7**	**932,434**	**936,626**	**+0.4**

[1] See footnotes 3 to 11, p. 189.

[a] For indexes of employment and pay-roll totals, see p. 210.

5. Employment in Crude Petroleum Production in August, 1930

REPORTS received from 540 crude petroleum producing establishments in August showed a decrease of 2.4 per cent in employment with a decrease of 2.8 per cent in pay-roll totals. The establishments reporting had in August 25,600 employees whose combined earnings in one week were $895,304.

As data for this industry were not collected for the months prior to January, 1930, no comparison with August, 1929, can be made at this time.

Details for each geographic division, except New England, are shown in the following table:

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **CRUDE PETROLEUM PRODUCTION** COMPANIES IN JULY AND AUGUST, 1930

Geographic division [1]	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
Middle Atlantic	40	778	733	−5.8	$22,956	$20,404	−11.1
East North Central	2	14	19	+35.7	335	386	+15.2
West North Central	18	105	122	+16.2	3,041	2,992	−1.6
South Atlantic	10	613	593	−3.3	17,448	16,343	−6.3
East South Central	4	278	277	−0.4	6,785	6,585	−2.9
West South Central	379	21,940	21,392	−2.5	772,242	751,268	−2.7
Mountain	17	342	339	−0.9	12,377	12,174	−1.6
Pacific	70	2,147	2,125	−1.0	85,645	85,152	−0.6
All divisions	**540**	**26,217**	**25,600**	**−2.4**	**920,829**	**895,304**	**−2.8**

[1] See footnotes 4 to 11, p. 189.

6. Employment in Public Utilities in August, 1930

EMPLOYMENT in 11,277 establishments—telephone and telegraph companies, power, light, and water companies, and electric railroads, combined—decreased 0.9 per cent in August as compared with July, and pay-roll totals decreased 2.5 per cent. These establishments had in August 750,691 employees whose combined earnings in one week were $22,390,197.

Employment in public utilities was 3.7 per cent lower in August, 1930, than in August, 1929, while pay-roll totals were 1.3 per cent lower.

Data for the three groups into which public utilities have been separated follow.

Telephone and Telegraph

EMPLOYMENT in telephone and telegraph companies was 1.2 per cent lower in August than in July and earnings decreased 3.8 per cent. The 7,864 establishments reporting had in August 348,938 employees whose combined earnings in one week were $9,838,986.

Employment in August, 1930, was 4.7 per cent below the level of August, 1929, but pay-roll totals were 0.7 per cent higher in August, 1930, than in August, 1929.[a]

Details for each geographic division are shown in Table 1.

[a] For indexes of employment and pay-roll totals, see p. 210.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **TELEPHONE AND TELEGRAPH** ESTABLISHMENTS IN JULY AND AUGUST, 1930

Geographic division [1]	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
New England	711	31,450	31,048	−1.3	$954,394	$930,530	−2.5
Middle Atlantic	1,222	112,827	111,675	−1.0	3,615,772	3,520,220	−2.6
East North Central	1,468	80,665	79,452	−1.5	2,258,387	2,143,756	−5.1
West North Central	1,253	32,967	32,250	−2.2	823,964	787,227	−4.5
South Atlantic	559	22,417	22,228	−0.8	614,789	582,864	−5.2
East South Central	564	11,383	11,091	−2.6	257,461	244,063	−5.2
West South Central	689	19,984	19,742	−1.2	460,193	438,333	−4.8
Mountain	482	8,468	8,536	+0.8	209,983	200,744	−4.4
Pacific	916	33,008	32,916	−0.3	1,037,233	991,249	−4.4
All divisions	**7,864**	**353,169**	**348,938**	**−1.2**	**10,232,176**	**9,838,986**	**−3.8**

[1] See footnotes 3 to 11, p. 189.

Power, Light, and Water

EMPLOYMENT in power, light, and water plants was 0.5 per cent greater in August than in July, and pay-roll totals were 0.1 per cent lower. The 2,956 establishments reporting had in August 250,474 employees whose combined earnings in one week were $7,820,815.

Employment in August, 1930, was 0.9 per cent higher than in August, 1929, and pay-roll totals were 2.7 per cent greater.[a]

Details for each geographic division are shown in Table 2.

TABLE 2.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **POWER, LIGHT, AND WATER** COMPANIES IN JULY AND AUGUST, 1930

Geographic division [1]	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
New England	251	22,373	22,400	+0.1	$732,073	$729,772	−0.3
Middle Atlantic	349	68,705	68,455	−0.4	2,247,153	2,186,569	−2.7
East North Central	503	59,784	59,308	−0.8	1,950,240	1,981,022	+1.6
West North Central	399	28,788	29,858	+3.7	857,643	871,407	+1.6
South Atlantic	255	23,893	24,526	+2.6	728,954	730,129	+0.2
East South Central	162	8,353	8,335	−0.2	204,588	200,460	−2.0
West South Central	574	16,599	17,067	+2.8	454,908	468,976	+3.1
Mountain	131	6,405	6,469	+1.0	195,692	198,153	+1.3
Pacific	332	14,207	14,056	−1.1	460,211	454,327	−1.3
All divisions	**2,956**	**249,107**	**250,474**	**+0.5**	**7,831,462**	**7,820,815**	**−0.1**

[1] See footnotes 3 to 11, p. 189.

Electric Railroads

EMPLOYMENT in the operation and maintenance of electric railroads, exclusive of car shops, decreased 2.5 per cent from July to August, and pay-roll totals decreased 3.7 per cent. The 457 establishments reporting had in August 151,279 employees whose combined earnings in one week were $4,730,396.

A comparison of employment and earnings in this group over the year period shows a drop of 9.1 and 9.7 per cent, respectively, in the two items.[a]

Details for each geographic division are shown in Table 3.

[a] For indexes of employment and pay-roll totals, see p. 210.

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN THE OPERATION AND MAINTENANCE OF IDENTICAL **ELECTRIC RAILROADS** IN JULY AND AUGUST, 1930

Geographic division [1]	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
New England	38	14,892	13,908	−6.6	$546,799	$506,096	−7.4
Middle Atlantic	112	43,113	41,063	−4.8	1,296,035	1,257,516	−3.0
East North Central	110	47,432	47,369	−0.1	1,606,270	1,538,317	−4.2
West North Central	64	15,114	14,733	−2.5	448,987	443,184	−1.3
South Atlantic	44	8,160	7,999	−2.0	225,241	221,739	−1.6
East South Central	10	3,872	3,875	+0.1	107,086	101,310	−5.4
West South Central	31	5,331	5,246	−1.6	137,480	135,760	−1.3
Mountain	15	2,386	2,296	−3.8	66,381	63,282	−4.7
Pacific	33	14,926	14,790	−0.9	476,535	463,192	−2.8
All divisions	**457**	**155,226**	**151,279**	**−2.5**	**4,910,814**	**4,730,396**	**−3.7**

[1] See footnotes 3 to 11, p. 189.

7. Employment in Wholesale and Retail Trade in August, 1930

EMPLOYMENT in 9,010 establishments—wholesale and retail trade combined—showed a decrease of 3.2 per cent in August as compared with July, and pay-roll totals showed a decrease of 4 per cent. These establishments had in August 285,684 employees whose combined earnings in one week were $7,316,580.

Wholesale Trade

EMPLOYMENT in wholesale trade alone decreased 1 per cent in August as compared with July, and pay-roll totals decreased 2.5 per cent. The 1,967 establishments reporting had in August 61,273 employees and pay-roll totals of $1,900,150.

Employment in August, 1930, was 6.2 per cent lower than in August, 1929, and pay-roll totals were 6.4 per cent lower.[a]

Details for each geographic division are shown in Table 1.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **WHOLESALE TRADE** ESTABLISHMENTS IN JULY AND AUGUST, 1930

Geographic division [1]	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
New England	167	3,573	3,479	−2.6	$101,439	$98,691	−2.7
Middle Atlantic	300	8,672	8,560	−1.3	278,313	274,946	−1.2
East North Central	283	12,336	12,160	−1.4	396,628	388,142	−2.1
West North Central	249	13,820	13,738	−0.6	417,426	403,624	−3.3
South Atlantic	285	4,036	3,963	−1.8	120,024	115,889	−3.4
East South Central	57	1,612	1,593	−1.2	48,229	46,412	−3.8
West South Central	229	5,516	5,478	−0.7	171,322	166,128	−3.0
Mountain	70	1,705	1,697	−0.5	58,894	57,133	−3.0
Pacific	327	10,607	10,605	−(2)	357,060	349,185	−2.2
All divisions	**1,967**	**61,877**	**61,273**	**−1.0**	**1,949,335**	**1,900,150**	**−2.5**

[1] See footnotes 3 to 11, p. 189.
[2] Less than one-tenth of 1 per cent.

[a] For indexes of employment and pay-roll totals, see p. 210.

Retail Trade

EMPLOYMENT in retail trade decreased 3.8 per cent in August and pay-roll totals decreased 4.5 per cent.

The 7,043 establishments from which reports were received had in August 224,411 employees whose earnings in one week were $5,416,430.

Employment in August, 1930, was 8.5 per cent lower than in August, 1929, and pay-roll totals decreased 8 per cent.[a]

Details by geographic divisions are shown in Table 2.

TABLE 2.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **RETAIL TRADE** ESTABLISHMENTS IN JULY AND AUGUST, 1930

Geographic division [1]	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
New England	90	12,810	12,387	−3.3	$308,804	$303,004	−1.9
Middle Atlantic	360	43,469	40,621	−6.6	1,154,146	1,089,615	−5.6
East North Central	2,464	76,903	74,533	−3.1	1,990,655	1,890,918	−5.0
West North Central	687	19,161	18,680	−2.5	426,906	413,425	−3.2
South Atlantic	973	19,753	18,942	−4.1	432,732	411,247	−5.0
East South Central	418	7,102	6,758	−4.8	141,836	133,034	−6.2
West South Central	294	11,178	10,704	−4.2	232,891	218,987	−6.0
Mountain	166	3,276	3,265	−0.3	73,359	71,504	−2.5
Pacific	1,591	39,580	38,521	−2.7	908,505	884,696	−2.6
All divisions	**7,043**	**233,232**	**224,411**	**−3.8**	**5,669,834**	**5,416,430**	**−4.5**

[1] See footnotes 3 to 11, p. 189.

8. Employment in Hotels in August, 1930

EMPLOYMENT in hotels increased 0.2 per cent in August as compared with July, and pay-roll totals decreased 1.2 per cent. The 2,132 hotels reporting had in August 163,122 employees whose earnings in one week were $2,709,469.

The New England, Middle Atlantic, and Mountain divisions again showed increased employment, owing to the operation of summer-resort hotels, although the increases were much smaller than in July. The remaining 6 divisions had fewer employees in August than in July.

Employment in August, 1930, was 1.1 per cent lower than in August, 1929, and pay-roll totals were 0.8 per cent lower.[a]

Per capita earnings, obtained by dividing the total number of employees into the total amount of pay roll, should not be interpreted as being the entire earnings of hotel employees. The pay-roll totals here reported are cash payments only, with no regard to the value of board or room furnished employees, and, of course, no satisfactory estimate can be made of additional recompense in the way of tips. The additions to the money wages granted vary greatly, not only among localities but among hotels in one locality and among employees in one hotel. Some employees are furnished board and room, others are given board only for 1, 2, or 3 meals, while the division of tips is made in many ways.

Per capita earnings are further reduced by the considerable amount of part-time employment in hotels caused by conventions and banquets or other functions.

The details for each geographic division are shown in the table following.

[a] For indexes of employment and pay-roll totals, see p. 210.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **HOTELS** IN JULY AND AUGUST, 1930

Geographic division [1]	Hotels	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
New England	157	12,729	13,018	+2.3	$194,285	$198,441	+2.1
Middle Atlantic	437	52,428	53,809	+2.6	938,547	943,451	+0.5
East North Central	416	34,059	33,536	−1.5	596,352	581,453	−2.5
West North Central	229	13,383	13,243	−1.0	197,032	193,125	−2.0
South Atlantic	183	12,206	11,848	−2.9	181,532	172,521	−5.0
East South Central	74	5,473	5,415	−1.1	69,619	67,447	−3.1
West South Central	141	8,503	8,475	−0.3	113,153	114,551	+1.2
Mountain	124	5,207	5,334	+2.4	93,337	87,452	−6.3
Pacific	371	18,767	18,444	−1.7	357,477	351,028	−1.8
All divisions	**2,132**	**162,755**	**163,122**	**+0.2**	**2,741,334**	**2,709,469**	**−1.2**

[1] See footnotes 3 to 11, p. 189.

9. Employment in Canning and Preserving in August, 1930

CANNING and preserving establishments reported a seasonal increase of 47 per cent in employment in August as compared with July and an increase of 52.6 per cent in pay-roll totals. Substantial increases in employment were shown in seven of the nine geographic divisions.

Reports were received from 915 establishments having in August 95,131 employees and pay-roll totals in one week of $1,618,032.

Employment in August, 1930, was 0.5 per cent higher than in August, 1929, and pay-roll totals decreased 4.5 per cent over the 12-month period.[a]

Details by geographic divisions are shown in the following table:

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **CANNING AND PRESERVING** ESTABLISHMENTS IN JULY AND AUGUST, 1930

Geographic division [1]	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		July, 1930	August, 1930		July, 1930	August, 1930	
New England	88	1,561	4,737	+203.5	$30,618	$64,362	+110.2
Middle Atlantic	86	13,793	12,960	−6.0	269,883	230,597	−14.6
East North Central	255	15,116	16,220	+7.3	265,200	213,345	−19.6
West North Central	68	2,679	4,874	+81.9	41,510	51,518	+24.1
South Atlantic	100	3,815	4,579	+20.0	41,409	41,656	+0.6
East South Central	40	1,218	1,913	+57.1	14,564	17,527	+20.3
West South Central	39	1,411	2,058	+45.9	11,194	11,336	+1.3
Mountain	51	6,049	5,646	−6.7	101,103	70,289	−30.5
Pacific	188	19,089	42,144	+120.8	285,094	917,402	+221.8
All divisions	**915**	**64,731**	**95,131**	**+47.0**	**1,060,575**	**1,618,032**	**+52.6**

[a] See footnotes 3 to 11, p. 189.

Indexes of Employment and Pay-Roll Totals—Mining, Quarrying, Public Utilities, Trade, Hotels, and Canning

THE following table shows the index numbers of employment and pay-roll totals for anthracite, bituminous coal, and metalliferous mining, quarrying, public utilities, wholesale and retail trade, hotels, and canning and preserving, from January, 1929, to August, 1930, with the monthly average for 1929 as 100.

[a] For indexes of employment and pay-roll totals, see p. 210.

INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS JANUARY, 1929, TO AUGUST, 1930—MINING, QUARRYING, PUBLIC UTILITIES, TRADE, HOTELS, AND CANNING

[Monthly average, 1929=100]

Year and month	Anthracite mining		Bituminous coal mining		Metalliferous mining		Quarrying and non-metallic mining		Telephone and telegraph		Power, light and water		Operation and maintenance of electric railroads [1]		Wholesale trade		Retail trade		Hotels		Canning and preserving	
	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals
1929																						
January	105.7	100.7	106.4	106.1	93.1	88.0	91.6	85.9	94.3	94.5	92.9	91.7	99.7	98.7	97.7	96.7	99.2	99.0	97.1	98.5	50.8	57.3
February	106.0	122.1	107.7	116.6	94.6	91.8	91.9	88.9	95.3	93.0	92.6	91.8	99.1	97.6	96.9	96.4	94.6	94.5	99.8	102.0	48.9	59.2
March	98.0	90.8	106.8	108.6	97.0	99.1	96.0	95.0	96.5	98.7	92.8	94.5	97.0	98.0	97.3	98.5	96.2	96.1	100.9	103.4	49.4	54.9
April	100.7	88.3	100.2	89.2	100.6	104.6	99.6	100.5	97.8	98.3	95.9	95.5	98.5	99.5	97.9	97.8	95.5	96.0	99.7	100.6	90.6	98.9
May	103.7	99.0	96.6	91.9	100.8	104.6	104.1	107.1	100.4	99.4	98.4	98.1	100.4	101.0	99.0	99.0	97.3	97.1	98.1	98.9	62.0	71.2
June	92.9	80.7	94.7	90.0	103.8	105.6	106.6	110.5	101.5	100.0	100.7	100.4	101.2	101.7	99.2	98.6	97.4	98.6	99.3	98.7	76.6	71.9
July	83.2	64.7	94.1	85.6	101.5	99.0	104.7	104.7	102.6	104.1	103.2	102.3	102.2	101.9	100.4	100.5	93.6	95.9	101.1	99.8	126.8	109.2
August	91.1	78.4	95.7	92.8	103.2	100.1	106.7	110.3	103.7	101.8	105.4	103.8	102.2	102.0	101.3	100.0	93.6	95.2	102.6	99.4	184.8	180.1
September	101.9	103.8	97.2	98.6	102.1	102.0	106.6	109.8	102.5	100.4	105.5	106.6	101.4	101.5	101.9	103.3	97.6	99.2	102.8	100.2	210.1	207.9
October	106.1	133.9	98.8	106.8	101.9	103.1	103.6	105.8	101.9	105.1	105.7	106.0	100.5	100.0	102.9	102.7	101.7	102.6	100.6	100.2	143.3	134.5
November	104.0	100.5	101.0	106.0	103.0	102.2	98.6	96.0	101.9	101.2	104.7	104.1	99.4	98.4	102.9	101.9	106.7	105.2	100.0	99.8	95.1	91.6
December	107.1	137.2	101.3	108.2	98.5	99.7	90.1	85.4	101.8	103.9	102.5	105.8	98.3	99.8	102.6	104.7	126.2	120.6	97.7	98.9	61.3	63.4
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**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
1930																						
January	102.1	105.8	102.5	101.4	95.7	92.7	79.6	71.9	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	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	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	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	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	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	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	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

[1] Not including car building and repairing, electric railroads; see vehicles group, manufacturing industries, p. 193.

Employment on Class I Steam Railroads in the United States

THE monthly trend of employment from January, 1923, to July, 1930, 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, using the monthly average for 1926 as 100.

TABLE 1.—INDEX OF EMPLOYMENT ON **CLASS I STEAM RAILROADS** IN THE UNITED STATES, JANUARY, 1923, TO JULY, 1930

[Monthly average, 1926=100]

Month	1923	1924	1925	1926	1927	1928	1929	1930
January	98.3	96.9	95.6	95.8	95.5	89.3	88.2	86.3
February	98.6	97.0	95.4	96.0	95.3	89.0	88.9	85.4
March	100.5	97.4	95.2	96.7	95.8	89.9	90.1	85.5
April	102.0	98.9	96.6	98.9	97.4	91.7	92.2	87.0
May	105.0	99.2	97.8	100.2	99.4	94.5	94.9	88.6
June	107.1	98.0	98.6	101.6	100.9	95.9	96.1	86.5
July	108.2	98.1	99.4	102.9	101.0	95.6	96.6	84.7
August	109.4	99.0	99.7	102.7	99.5	95.7	97.4	
September	107.8	99.7	99.9	102.8	99.1	95.3	96.8	
October	107.3	100.8	100.7	103.4	98.9	95.3	96.9	
November	105.2	99.0	99.1	101.2	95.7	92.9	93.0	
December	99.4	96.0	97.1	98.2	91.9	89.7	88.8	
Average	**104.1**	**98.3**	**97.9**	**100.0**	**97.5**	**92.9**	**93.3**	[1] 86.3

[1] Average for 7 months.

Table 2 shows the total number of employees on the 15th day each of July, 1929, and June and July, 1930, and pay-roll totals for the entire months.

TABLE 2.—EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES, JULY, 1929, AND JUNE AND JULY, 1930

[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		
	July, 1929	June, 1930	July, 1930	July, 1929	June, 1930	July, 1930
Professional, clerical, and general	**272,400**	**256,686**	**252,527**	**$40,165,266**	**$37,421,105**	**$37,434,769**
Clerks	154,310	142,980	140,357	21,686,417	19,614,331	19,702,239
Stenographers and typists	24,807	23,811	23,363	3,253,464	3,099,865	3,071,511
Maintenance of way and structures	**467,184**	**394,934**	**383,985**	**45,107,585**	**36,706,745**	**36,081,045**
Laborers, extra gang and work train	89,357	65,464	59,930	7,525,853	4,965,985	4,524,676
Laborers, track and roadway section	237,305	201,585	198,084	18,098,685	14,422,788	14,356,168
Maintenance of equipment and stores	**454,638**	**410,674**	**397,588**	**64,589,654**	**53,606,881**	**52,067,759**
Carmen	99,165	87,465	83,768	16,321,332	12,883,925	12,445,325
Machinists	54,365	51,380	50,129	9,284,381	7,928,924	7,681,863
Skilled trades helpers	101,618	90,382	87,168	12,457,280	9,963,655	9,651,256
Laborers (shops, engine houses, power plants, and stores)	37,000	33,703	33,120	3,628,327	3,163,351	3,187,491
Common laborers (shops, engine houses, power plants, and stores)	52,500	45,709	44,072	4,416,620	3,490,479	3,375,465

TABLE 2.—EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES, JULY, 1929, AND JUNE AND JULY, 1930—Continued

Occupation	Number of employees at middle of month			Total earnings		
	July, 1929	June, 1930	July, 1930	July, 1929	June, 1930	July, 1930
Transportation, other than train, engine and yard	**198,238**	**183,210**	**180,585**	**$25,591,330**	**$22,804,754**	**$23,165,773**
Station agents	29,376	28,797	28,758	4,807,455	4,521,767	4,684,152
Telegraphers, telephoners, and towermen	23,291	21,904	21,654	3,705,233	3,361,993	3,439,638
Truckers, (stations, warehouses, and platforms)	33,541	28,660	27,273	3,294,846	2,638,651	2,556,581
Crossing and bridge flagmen and gatemen	20,750	19,996	19,887	1,605,795	1,562,279	1,562,882
Transportation (yardmasters, switch tenders, and hostlers)	**21,782**	**20,370**	**20,148**	**4,424,814**	**3,967,522**	**4,027,984**
Transportation, train and engine	**313,615**	**281,683**	**280,309**	**67,024,557**	**55,553,538**	**57,151,833**
Road conductors	35,749	32,140	32,180	9,055,829	7,596,539	7,873,170
Road brakemen and flagmen	69,430	62,346	61,929	12,932,569	10,564,100	10,939,097
Yard brakemen, and yard helpers	52,761	47,165	46,613	9,719,308	7,976,858	8,102,791
Road engineers and motormen	41,975	38,146	38,018	12,069,782	10,049,274	10,398,275
Road firemen and helpers	42,425	38,694	38,598	8,877,940	7,356,153	7,607,948
All employees	**1,727,857**	**1,547,557**	**1,515,142**	**246,903,206**	**210,060,545**	**209,929,143**

Changes in Employment and Pay Rolls in Various States

THE following data as to changes in employment and pay rolls have been compiled from reports received from the various State labor offices:

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES

Monthly period

State, and industry group	Per cent of change, June to July, 1930		State, and industry group	Per cent of change, July to August, 1930	
	Employment	Pay roll		Employment	Pay roll
Illinois			**Iowa**		
Stone, clay, and glass products	−10.1	−10.8	Food and kindred products	−0.9	
Metals, machinery, and conveyances	−10.2	−15.5	Textiles	0	
Wood products	−4.7	−9.0	Iron and steel works	−2.2	
Furs and leather goods	−2.4	−8.6	Lumber products	−3.7	
Chemicals, oils, paints, etc.	−3.1	−3.6	Leather products	+3.4	
Printing and paper goods	+6.0	+1.6	Paper products, printing and publishing	+.1	
Textiles	−1.4	−14.8	Patent medicines, chemicals, and compounds	−12.1	
Clothing and millinery	−3.9	+9.1	Stone and clay products	−5.5	
Food, beverages, and tobacco	−1.5	−3.8	Tobacco and cigars	−3.3	
Miscellaneous	−16.3	−10.6	Railway-car shops	+4.5	
All manufacturing	−6.0	−9.3	Various industries	−1.4	
Trade, wholesale and retail	−.7	+.8	All industries	−.7	
Services	−1.7	−2.2	**Maryland**		
Public utilities	−.9	−5.1			
Coal mining	+18.0	−1.4	Food products	−5.3	−9.2
Building and contracting	−4.1	−6.4	Textiles	−3.0	−.2
All nonmanufacturing	+.1	−3.9	Iron and steel, and their products	−2.9	−6.6
			Lumber and its products	−.2	+9.0
All industries	−3.7	−7.2	Leather and its products	+18.8	+25.8
			Rubber tires	+14.7	+16.0
			Paper and printing	+.5	+1.1

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—Continued

Monthly period—Continued

State, and industry group	Per cent of change, July to August, 1930	
	Employment	Pay roll
Maryland—Continued		
Chemicals and allied products	+1.8	+3.0
Stone, clay, and glass products	+3.1	+3.1
Metal products other than iron and steel	−6.5	−7.3
Tobacco products	+4.6	+39.5
Transportation equipment	−1.1	+1.1
Car building and repairing	+28.2	+28.7
Miscellaneous	−23.0	−8.2
All manufacturing	−1.5	−1.8
Retail department stores	−2.9	−6.1
Wholesale establishments	−.9	−.9
Public utilities	+1.1	+5.6
Coal mines	+2.2	+2.3
Hotels	−1.4	−5.7
Quarries	−10.6	−8.1

State, and industry group	Employment—index numbers (1925–1927 =100)	
	June, 1930	July, 1930
Massachusetts		
Boot and shoe cut stock and findings	93.4	99.7
Boots and shoes	69.8	76.3
Bread and other bakery products	109.1	109.5
Clothing, men's	83.7	85.5
Clothing, women's	106.5	90.4
Confectionery	78.5	84.5
Cotton goods	57.7	49.8
Dyeing and finishing textiles	91.0	76.6
Electrical machinery, apparatus, and supplies	72.7	68.6
Foundry and machine-shop products	104.2	99.4
Furniture	80.9	76.0
Hosiery and knit goods	72.4	69.3
Leather, tanned, curried, and finished	91.5	92.2
Paper and wood pulp	93.1	85.2
Printing and publishing	103.9	102.3
Rubber footwear	74.1	73.2
Rubber goods, tires, and tubes	67.6	60.7
Silk goods	76.6	68.1
Textile machinery and parts	63.0	59.3
Woolen and worsted goods	71.4	69.2
All industries	75.6	71.5

State, and industry group	Per cent of change, May to June, 1930	
	Employment	Pay roll
New Jersey		
Foo and kindred products	−3.8	−1.7
Textiles and their products	−1.3	−6.7
Iron and steel and their products	−3.9	−4.9

State, and industry group	Per cent of change, May to June, 1930	
	Employment	Pay roll
New Jersey—Continued		
Lumber and its products	(1)	+2.9
Leather and its products	−2.4	−3.5
Tobacco products	−.2	+6.4
Paper and printing	+1.1	−.2
Chemicals and allied products	−.7	−2.7
Stone, clay, and glass products	−.8	−2.1
Metal products other than iron and steel	−2.7	−4.1
Vehicles for land transportation	−.9	−2.7
Miscellaneous	−.2	−.6
All industries	−1.8	−3.4

State, and industry group	July to August, 1930	
	Employment	Pay roll
New York		
Stone, clay, and glass	−0.8	−0.9
Miscellaneous stone and minerals	−2.1	−2.9
Lime, cement, and plaster	−1.2	−1.0
Brick, tile, and pottery	−9.2	−8.4
Glass	+11.3	+9.1
Metals and machinery	−1.6	−1.7
Silver and jewelry	−3.1	−8.2
Brass, copper, and aluminum	−2.4	−.9
Iron and steel	−2.7	−5.7
Structural and architectural iron	−3.5	−4.9
Sheet metal and hardware	−7.0	−9.0
Firearms, tools, and cutlery	−.3	−.7
Cooking, heating, and ventilating apparatus	+2.5	−1.0
Machinery, including electrical apparatus	−2.1	−2.3
Automobiles, carriages, and airplanes	+7.4	+9.6
Railroad equipment and repair	−6.3	−4.2
Boat and ship building	+12.2	+19.4
Instruments and appliances	−.8	−2.7
Wood manufactures	+.4	+1.1
Saw and planing mills	−6.3	−9.9
Furniture and cabinetwork	+4.6	+7.8
Pianos and other musical instruments	+.5	+2.2
Miscellaneous wood	+.7	+3.2
Furs, leather, and rubber goods	+2.4	+2.7
Leather	+.2	+3.3
Furs and fur goods	−3.0	−1.7
Shoes	(2)	−.7
Other leather and canvas goods	+24.9	+35.1
Rubber and gutta percha	+3.2	−.8
Pearl, horn, bone, etc	−4.0	−10.3
Chemicals, oils, paints, etc	+.2	−3.8
Drugs and chemicals	+2.0	+.7
Paints and colors	−6.7	−9.0
Oil products	+1.4	−1.7
Miscellaneous chemicals	−.4	−7.2

[1] No change.

[2] Change of less than one-tenth of 1 per cent.

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—Continued

Monthly period—Continued

State, and industry group	Per cent of change, July to August, 1930	
	Employment	Pay roll
New York—Continued		
Paper	+0.3	−1.0
Printing and paper goods	−2.9	−2.1
Paper boxes and tubes	+.8	−2.2
Miscellaneous paper goods	−4.9	−8.5
Printing and bookmaking	−3.0	−1.4
Textiles	−1.9	−.7
Silk and silk goods	+.9	+3.5
Wool manufactures	+1.4	+3.2
Cotton goods	−47.7	−31.6
Knit goods (excluding silk)	+5.3	+4.5
Other textiles	−3.2	−4.6
Clothing and millinery	+6.5	+11.5
Men's clothing	+2.7	+2.1
Men's furnishings	−.2	+4.7
Women's clothing	+21.4	+26.4
Women's underwear	+.6	+3.1
Women's headwear	+29.6	+50.7
Miscellaneous sewing	−4.8	−8.2
Laundering and cleaning	−2.7	−3.9
Food and tobacco	−9.6	−10.9
Flour, feed, and cereals	+2.2	−4.3
Canning and preserving	−37.0	−48.2
Other groceries	−2.4	−8.4
Meat and dairy products	−4.8	−5.2
Bakery products	−4.6	−5.6
Candy	−4.5	−7.4
Beverages	+.8	+3.4
Tobacco	−5.3	−4.3
Water, light, and power	−2.2	−2.4
All industries	−.9	−.8
Oklahoma		
Cottonseed-oil mills	+8.3	−1.5
Food production:		
Bakeries	−4.8	−5.9
Confections	−10.6	−9.7
Creameries and dairies	−6.7	−.8
Flour mills	−7.8	−26.9
Ice and ice cream	−1.2	−3.8
Meat and poultry	+.5	−1.9
Lead and zinc:		
Mines and mills	+18.8	−7.9
Smelters	+7.6	+9.1
Metals and machinery:		
Auto repairs, etc	−13.7	−24.9
Machine shops and foundries	−3.6	−1.2
Tank construction and erection	+11.4	−.4
Oil industry:		
Producing and gasoline manufacture	−7.5	−10.0
Refineries	+7.7	+7.3
Printing: Job work	−1.9	+2.9
Public utilities:		
Steam-railway shops	−18.2	−15.8
Street railways	−2.8	+26.6
Water, light, and power	+10.9	+11.6
Stone, clay, and glass:		
Brick and tile	+4.6	−3.2
Cement and plaster	+.2	+5.5
Crushed stone	−.9	+.6
Glass manufacture	−18.1	−13.9
Oklahoma—Continued		
Textiles and cleaning:		
Textile manufacture	+32.0	−7.9
Laundries, etc	+5.4	+5.1
Woodworking:		
Sawmills	−4.7	−13.5
Millwork, etc	−4.8	−9.6
All industries	+.8	−1.2

State, and industry group	Index numbers (1923–1925=100) — employment	
	July, 1930	August, 1930
Pennsylvania		
Metal products	87.3	86.4
Transportation equipment	75.6	[3] 67.7
Textile products	85.9	86.7
Foods and tobacco	109.8	107.9
Stone, clay, and glass products	69.0	66.1
Lumber products	73.3	76.5
Chemical products	94.4	94.6
Leather and rubber products	97.2	98.7
Paper and printing	97.0	97.4
All manufacturing	88.8	87.6
	Pay roll	
Metal products	80.9	82.9
Transportation equipment	65.0	[3] 59.4
Textile products	69.6	76.0
Foods and tobacco	104.4	100.7
Stone, clay, and glass products	52.7	57.8
Lumber products	67.9	71.4
Chemical products	98.6	98.9
Leather and rubber products	95.9	102.9
Paper and printing	99.5	101.3
All manufacturing	81.3	82.8

State, and industry group	Per cent of change, June to July 1930	
	Employment	Pay roll
Wisconsin		
Manual		
Logging	+16.5	−9.6
Mining:		
Lead and zinc	+2.5	−5.7
Iron	+1.6	−11.7
Stone crushing and quarrying	−3.8	−8.7

[3] Preliminary figures.

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—Continued

Monthly period—Continued

State, and industry group	Per cent of change, June to July, 1930	
	Employment	Pay roll
Wisconsin—Continued		
Manual—Continued		
Manufacturing:		
Stone and allied industries	+1.8	−2.5
Metal	−6.6	−19.2
Wood	−3.2	−14.4
Rubber	−36.9	−33.6
Leather	−.9	−10.1
Paper	−.3	−9.3
Textiles	−5.0	−12.2
Foods	+87.9	+80.3
Printing and publishing	−.5	−6.7
Chemicals (including soap, glue, and explosives)	−3.4	−9.4
All manufacturing	+5.0	−5.2
Construction:		
Building	+7.7	+0.9
Highway	+10.6	+11.0
Railroad	−1.6	−7.0
Marine, dredging, sewer digging	+6.4	+1.5
Wisconsin—Continued		
Manual—Continued		
Communication:		
Steam railways	−4.0	−5.5
Electric railways	−3.2	+.7
Express, telephone, and telegraph	+3.4	−1.7
Light and power	+5.0	−.7
Wholesale trade	−1.4	+.7
Hotels and restaurants	−1.5	
Laundering and dyeing	−.6	−6.8
Nonmanual		
Manufacturing, mines, and quarries	−.6	−4.3
Construction	+.5	−2.9
Communication	−2.3	−.3
Wholesale trade	−.9	−1.4
Retail trade, sales force only	−7.5	−4.9
Miscellaneous professional services	−2.1	+7.1

Yearly period

State, and industry group	Per cent of change, July, 1929, to July, 1930	
	Employment	Pay roll
California		
Stone, clay, and glass products	−21.2	−22.7
Metals, machinery, and conveyances	−18.7	−21.4
Wood manufactures	−24.8	−29.2
Leather and rubber goods	−22.2	−15.9
Chemicals, oils, paints, etc.	−27.3	−31.0
Printing and paper goods	−2.0	−6.1
Textiles	−17.9	−23.4
Clothing, millinery, and laundering	−15.0	−20.3
Foods, beverages, and tobacco	−3.4	−3.7
Miscellaneous	−37.2	−30.7
All industries	−17.6	−21.3
Public utilities	−6.7	−3.6

State, and industry group	Employment—index numbers (1925–1927=100)	
	July, 1929	July, 1930
Massachusetts		
Boot and shoe cut stock and findings	106.4	99.7
Boots and shoes	84.3	76.3
Bread and other bakery products	113.9	109.5
Clothing, men's	96.5	85.5
Clothing, women's	119.2	90.4
Confectionery	85.8	84.5
Cotton goods	76.4	49.8
Dyeing and finishing textiles	95.9	76.6
Electrical machinery, apparatus, and supplies	96.9	68.6
Foundry and machine-shop products	108.4	99.4
Furniture	91.5	76.0
Hosiery and knit goods	59.3	69.3
Leather, tanned, curried, and finished	107.4	92.2

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—Continued

Yearly period—Continued

State, and industry group	Employment—index numbers (1925–1927=100)		Per cent of change, August, 1929, to August, 1930	
	July, 1929	July, 1930	Employment	Pay roll
Massachusetts—Contd.				
Paper and wood pulp	95.2	85.2		
Printing and publishing	104.0	102.3		
Rubber footwear	93.4	73.2		
Rubber goods, tires, and tubes	82.2	60.7		
Silk goods	84.5	68.1		
Textile machinery and parts	86.3	59.3		
Woolen and worsted goods	78.8	69.2		
All industries	87.9	71.5		
New York				
Stone, clay, and glass			−19.5	−24.1
Miscellaneous stone and minerals			−24.8	−32.6
Lime, cement, and plaster			−19.4	−23.5
Brick, tile, and pottery			−18.6	−21.1
Glass			−15.1	−16.3
Metals and machinery			−22.7	−27.1
Silver and jewelry			−13.8	−27.3
Brass, copper, and aluminum			−15.4	−23.6
Iron and steel			−34.7	−39.8
Structural and architectural iron			−4.4	−7.7
Sheet metal and hardware			−21.3	−34.9
Firearms, tools, and cutlery			−8.8	−10.4
Cooking, heating, and ventilating apparatus			−12.4	−26.2
Machinery, including electrical apparatus			−23.5	−27.2
Automobiles, carriages, and airplanes			−44.2	−48.5
Railroad equipment and repair			−18.6	−21.8
Boat and ship building			+15.8	+17.8
Instruments and appliances			−14.2	−17.9
Wood manufactures			−13.4	−19.8
Saw and planing mills			−9.3	−14.1
Furniture and cabinetwork			−19.2	−26.7
Pianos and other musical instruments			−16.0	−22.7
Miscellaneous wood			−6.2	−10.6
New York—Continued				
Furs, leather, and rubber goods			−7.4	−20.0
Leather			+.9	+2.8
Furs and fur goods			+4.5	−2.2
Shoes			−2.3	−20.3
Other leather and canvas goods			−13.4	−18.6
Rubber and gutta percha			−29.6	−38.1
Pearl, horn, bone, etc			−31.9	−32.3
Chemicals, oils, paints, etc			−2.6	−6.6
Drugs and chemicals			−7.5	−7.8
Paints and colors			−19.8	−19.1
Oil products			−9.0	−12.1
Miscellaneous chemicals			+10.9	+1.8
Paper			−10.1	−16.6
Printing and paper goods			−4.7	−4.8
Paper boxes and tubes			−5.4	−9.2
Miscellaneous paper goods			−9.3	−7.4
Printing and bookmaking			−3.8	−4.2
Textiles			−23.6	−30.9
Silk and silk goods			−19.8	−21.8
Wool manufactures			−24.8	−37.9
Cotton goods			−71.5	−70.1
Knit goods (excluding silk)			−13.2	−20.8
Other textiles			−15.3	−19.4
Clothing and millinery			−13.1	−18.9
Men's clothing			−12.8	−22.8
Men's furnishings			−22.0	−33.0
Women's clothing			−4.0	−9.6
Women's underwear			−19.0	−20.6
Women's headwear			−9.9	−14.1
Miscellenous sewing			−20.6	−24.3
Laundering and cleaning			−1.9	−2.9
Food and tobacco			−10.1	−11.0
Flour, feed, and cereals			−10.7	−9.9
Canning and preserving			+12.6	+21.6
Other groceries			−7.7	−9.1
Meat and dairy products			−10.1	−10.9
Bakery products			−10.4	−10.2
Candy			−21.1	−25.9
Beverages			+1.3	+11.4
Tobacco			−39.4	−41.2
Water, light, and power			+.3	+1.7
All industries			−15.7	−20.3
Oklahoma				
Cottonseed-oil mills			−16.1	−28.2
Food production:				
Bakeries			+62.4	+13.4
Confections			−4.5	+2.3
Creameries and dairies			+14.8	+55.7
Flour mills			−14.3	−24.1

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—Continued

Yearly period—Continued

State, and industry group	Per cent of change, August, 1929, to August, 1930	
	Employment	Pay roll
Oklahoma—Continued		
Food production—Con.		
Ice and ice cream	−18.3	−16.0
Meat and poultry	−6.0	−6.8
Lead and zinc:		
Mines and mills	−51.0	−52.6
Smelters	−26.8	−38.7
Metals and machinery:		
Auto repairs, etc	−15.2	−24.6
Machine shops and foundries	−6.9	−11.1
Tank construction and erection	+45.7	+52.8
Oil industry:		
Producing and gasoline manufacture	−16.1	−21.0
Refineries	+8.3	+14.2
Printing: Job work	+37.0	+9.8
Public utilities:		
Steam-railway shops	−16.5	−17.7
Street railways	−7.0	+2.2
Water, light, and power	+4.7	+4.0
Stone, clay, and glass:		
Brick and tile	−43.0	−44.8
Cement and plaster	−20.8	−18.9
Crushed stone	−1.4	−6.7
Glass manufacture	−10.2	+.2
Textiles and cleaning:		
Textile manufacture	+41.5	−6.5
Laundries, etc	+3.1	+5.7
Woodworking:		
Sawmills	−22.6	−26.9
Millwork, etc	−17.2	−22.2
All industries	−9.8	−10.7

State, and industry group	Index numbers (1923–1925=100)—employment	
	August, 1929	August, 1930
Pennsylvania		
Metal products	105.0	86.4
Transportation equipment	78.4	[3] 67.7
Textile products	105.4	86.7
Foods and tobacco	105.1	107.9
Stone, clay, and glass products	86.4	66.1
Lumber products	100.5	76.5
Chemical products	100.1	94.6
Leather and rubber products	101.3	98.7
Paper and printing	99.7	97.4
All manufacturing	101.2	87.6
	Pay roll	
Metal products	110.1	82.9
Transportation equipment	83.9	[3] 59.4
Textile products	108.6	76.0
Foods and tobacco	102.6	100.7
Stone, clay, and glass products	87.4	57.8
Lumber products	102.0	71.4
Chemical products	107.3	98.9
Leather and rubber products	106.5	102.9
Paper and printing	108.6	101.3
All manufacturing	106.2	82.8

[3] Preliminary figures.

WHOLESALE AND RETAIL PRICES

Retail Prices of Food in the United States

THE following tables are compiled from simple averages of the actual selling prices received monthly by the Bureau of Labor Statistics from retail dealers. [1]

Table 1 shows for the United States retail prices of food August 15, 1929, and July 15 and August 15, 1930, as well as the percentage changes in the year and in the month. For example, the retail price per pound of bread was 9 cents on August 15, 1929; 8.8 cents on July 15, 1930; and 8.7 cents on August 15, 1930. These figures show decreases of 3 per cent in the year, and 1 per cent in the month.

The cost of various articles of food combined shows a decrease of 10.3 per cent August 15, 1930, as compared with August 15, 1929, and a decrease of 0.3 per cent August 15, 1930, as compared with July 15, 1930.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE AUGUST 15, 1930, COMPARED WITH AUGUST 15, 1929, AND JULY 15, 1930

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

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (−) Aug. 15, 1930, compared with—	
		Aug. 15, 1929	July 15, 1930	Aug. 15, 1930	Aug. 15, 1929	July 15, 1930
		Cents	*Cents*	*Cents*		
Sirloin steak	Pound	52.4	46.3	44.6	−15	−4
Round steak	do	47.0	41.1	39.4	−16	−4
Rib roast	do	38.0	34.0	32.3	−15	−5
Chuck roast	do	31.1	26.6	24.9	−20	−6
Plate beef	do	21.3	18.1	16.8	−21	−7
Pork chops	do	40.4	36.5	46.7	−9	+1
Bacon, sliced	do	44.7	42.3	42.0	−6	−1
Ham, sliced	do	56.8	53.8	53.3	−6	−1
Lamb, leg of	do	40.3	35.7	33.7	−16	−6
Hens	do	39.4	34.4	33.8	−14	−2
Salmon, red, canned	do	31.7	31.9	32.6	+3	+2
Milk, fresh	Quart	14.3	14.0	14.0	−2	0
Milk, evaporated	16-oz. can	10.8	10.0	10.0	−7	0
Butter	Pound	53.8	43.7	47.4	−12	+8
Oleomargarine (all butter substitutes)	do	27.1	25.7	25.3	−7	−2
Cheese	do	37.8	34.3	33.9	−10	−1
Lard	do	18.4	16.3	16.5	−10	+1
Vegetable lard substitute	do	24.8	24.3	24.3	−2	0
Eggs, strictly fresh	Dozen	48.3	35.1	38.8	−20	+11
Bread	Pound	9.0	8.8	8.7	−3	−1

[1] In addition to monthly retail prices of food and coal, the bureau publishes periodically the prices of gas and electricity for household use in each of 51 cities. At present this information is being collected in June and December of each year.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE AUGUST 15, 1930, COMPARED WITH AUGUST 15, 1929, AND JULY 15, 1930—Continued

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

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (−) Aug. 15, 1930, compared with—	
		Aug. 15, 1929	July 15, 1930	Aug. 15, 1930	Aug. 15, 1929	July 15, 1930
		Cents	*Cents*	*Cents*		
Flour	Pound	5.2	4.6	4.5	−13	−2
Corn meal	do	5.3	5.3	5.3	0	0
Rolled oats	do	8.9	8.7	8.7	−2	0
Corn flakes	8-oz. package	9.5	9.4	9.4	−1	0
Wheat cereal	28-oz. package	25.5	25.4	25.4	−0.4	0
Macaroni	Pound	19.7	19.3	19.2	−3	−1
Rice	do	9.8	9.5	9.5	−3	0
Beans, navy	do	14.4	11.5	11.5	−20	0
Potatoes	do	4.0	3.3	3.1	−23	−6
Onions	do	6.4	5.8	5.2	−19	−10
Cabbage	do	5.6	4.4	4.3	−23	−2
Pork and beans	No. 2 can	11.9	11.0	10.9	−8	−1
Corn, canned	do	15.8	15.3	15.3	−3	0
Peas, canned	do	16.6	16.2	16.1	−3	−1
Tomatoes, canned	do	13.8	12.4	12.4	−10	0
Sugar	Pound	6.6	6.1	6.1	−8	0
Tea	do	77.5	77.6	77.4	−0.1	−0.3
Coffee	do	49.3	40.4	40.1	−19	−1
Prunes	do	15.0	16.5	16.1	+7	−2
Raisins	do	11.8	11.9	11.9	+1	0
Bananas	Dozen	31.9	30.6	29.9	−6	−2
Oranges	do	45.6	64.0	63.7	+40	−0.4
Weighted food index					−10.3	−0.3

Table 2 shows for the United States average retail prices of specified food articles on August 15, 1913, and on August 15 of each year from 1924 to 1930, together with percentage changes in August of each of these specified years, compared with August, 1913. For example, the retail price per pound of sugar was 8.2 cents in August, 1924; 7 cents in August, 1925 and 1926; 7.3 cents in August, 1927; 7.1 cents in August, 1928; 6.6 cents in August, 1929; and 6.1 cents in August, 1930.

As compared with August, 1913, these figures show increases of 46 per cent in August, 1924; 25 per cent in August, 1925 and 1926; 30 per cent in August, 1927; 27 per cent in August, 1928; 18 per cent in August, 1929; and 9 per cent in August, 1930.

The cost of the various articles of food combined showed an increase of 42.4 per cent in August, 1930, as compared with August, 1913.

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

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

Article	Average retail prices on August 15—								Per cent of increase Aug. 15 of each specified year compared with Aug. 15, 1913						
	1913	1924	1925	1926	1927	1928	1929	1930	1924	1925	1926	1927	1928	1929	1930
	Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*							
Sirloin steak--pound--	26.4	40.7	42.0	41.8	43.7	51.0	52.4	44.6	54	59	58	66	93	98	69
Round steak----do----	23.2	34.8	36.2	36.2	38.1	45.1	47.0	39.4	50	56	56	64	94	103	70
Rib roast-------do----	20.2	29.1	30.3	30.4	31.7	36.6	38.0	32.3	44	50	50	57	81	88	60
Chuck roast-----do----	16.5	21.0	22.1	22.5	23.9	29.6	31.1	24.9	27	34	36	45	79	88	51
Plate beef------do----	12.2	13.1	13.9	14.3	15.3	19.6	21.3	16.8	7	14	17	25	61	75	38
Pork chops-----do----	21.9	34.8	40.0	40.5	37.7	39.9	40.4	36.7	59	83	85	72	82	84	68
Bacon, sliced----do----	28.3	38.3	49.3	52.0	46.5	44.8	44.7	42.0	35	74	84	64	58	58	48
Ham, sliced-----do----	28.4	46.6	54.9	60.7	54.3	55.0	56.8	53.3	64	93	114	91	94	100	88
Lamb, leg of----do----	18.9	37.3	38.7	39.2	39.2	40.2	40.3	33.7	97	105	107	107	113	113	78
Hens------------do----	21.5	34.8	36.2	37.9	35.4	36.8	39.4	33.8	62	68	76	65	71	83	57
Salmon, red, canned ----------do----	-----	31.2	32.3	38.2	32.9	34.2	31.7	32.6	-----	-----	-----	-----	-----	-----	-----
Milk, fresh-----quart--	8.8	13.7	13.9	13.9	14.1	14.1	14.3	14.0	56	58	58	60	60	63	59
Milk, evaporated -------16-ounce can--	-----	11.1	11.5	11.4	11.6	11.2	10.8	10.0	-----	-----	-----	-----	-----	-----	-----
Butter--------pound--	35.4	48.3	54.1	50.6	51.4	55.4	53.8	47.4	36	53	43	45	56	52	34
Oleomargarine (a l l butter substitutes) ----------pound--	-----	29.6	30.3	30.2	28.0	27.3	27.1	25.3	-----	-----	-----	-----	-----	-----	-----
Cheese----------do----	22.0	34.4	36.8	35.7	37.0	38.4	37.8	33.9	56	67	62	68	75	72	54
Lard------------do----	16.1	19.3	24.3	22.7	18.9	18.7	18.4	16.5	20	51	41	17	16	14	2
Vegetable lard substitute---------pound--	-----	25.2	25.9	25.9	25.0	24.8	24.8	24.3	-----	-----	-----	-----	-----	-----	-----
Eggs, strictly fresh ----------dozen--	33.0	44.6	48.9	44.9	42.0	45.0	48.3	38.8	35	48	36	27	36	46	18
Bread---------pound--	5.6	8.8	9.4	9.4	9.3	9.2	9.0	8.7	57	68	68	66	64	61	55
Flour----------do----	3.3	5.1	6.1	6.0	5.6	5.4	5.2	4.5	55	85	82	70	64	58	36
Corn meal------do----	3.0	4.7	5.4	5.1	5.2	5.3	5.3	5.3	57	80	70	73	77	77	77
Rolled oats------do----	-----	8.8	9.2	9.0	9.0	8.9	8.9	8.7	-----	-----	-----	-----	-----	-----	-----
Corn flakes ---8-ounce package--	-----	9.6	10.9	10.9	9.7	9.5	9.5	9.4	-----	-----	-----	-----	-----	-----	-----
Wheat cereal --28-ounce package--	-----	24.3	24.6	25.4	25.5	25.6	25.5	25.4	-----	-----	-----	-----	-----	-----	-----
Macaroni-----pound--	-----	19.6	20.4	20.2	20.1	19.8	19.7	19.2	-----	-----	-----	-----	-----	-----	-----
Rice------------do----	8.7	10.2	11.3	11.6	10.7	9.9	9.8	9.5	17	30	33	23	14	13	9
Beans, navy----do----	-----	9.7	10.3	9.2	9.5	12.6	14.4	11.5	-----	-----	-----	-----	-----	-----	-----
Potatoes--------do----	1.9	2.6	4.4	3.6	3.4	2.2	4.0	3.1	37	132	89	79	16	111	63
Onions----------do----	-----	6.5	8.0	5.9	6.4	5.4	6.4	5.2	-----	-----	-----	-----	-----	-----	-----
Cabbage--------do----	-----	4.3	5.5	4.3	4.4	4.1	5.6	4.3	-----	-----	-----	-----	-----	-----	-----
Pork and beans ----------No. 2 can--	-----	12.6	12.4	11.8	11.5	11.6	11.9	10.9	-----	-----	-----	-----	-----	-----	-----
Corn, canned---do----	-----	15.9	18.4	16.4	15.6	15.9	15.8	15.3	-----	-----	-----	-----	-----	-----	-----
Peas, canned----do----	-----	18.2	18.4	17.5	16.7	16.7	16.6	16.1	-----	-----	-----	-----	-----	-----	-----
Tomatoes, canned ----------No. 2 can--	-----	13.3	13.7	11.8	12.0	11.6	13.8	12.4	-----	-----	-----	-----	-----	-----	-----
Sugar, granulated ----------pound--	5.6	8.2	7.0	7.0	7.3	7.1	6.6	6.1	46	25	25	30	27	18	9
Tea------------do----	54.4	70.9	75.9	77.1	77.6	77.4	77.5	77.4	30	40	42	43	42	42	42
Coffee----------do----	29.8	43.4	50.9	51.0	47.4	49.4	49.3	40.1	46	71	71	59	66	65	35
Prunes----------do----	-----	17.3	17.3	17.2	15.5	13.8	15.0	16.1	-----	-----	-----	-----	-----	-----	-----
Raisins---------do----	-----	15.4	14.4	14.8	14.3	13.5	11.8	11.9	-----	-----	-----	-----	-----	-----	-----
Bananas-------dozen--	-----	35.4	34.5	34.5	33.7	31.6	31.9	29.9	-----	-----	-----	-----	-----	-----	-----
Oranges---------do----	-----	46.1	59.8	50.7	53.8	64.2	45.6	63.7	-----	-----	-----	-----	-----	-----	-----
All articles combined [1]	-----	-----	-----	-----	-----	-----	-----	-----	42.9	59.0	54.3	51.1	52.9	58.8	42.4

[1] Beginning with January, 1921, index numbers showing the trend in the retail cost of food have been composed of the articles shown in Tables 1 and 2, weighted according to the consumption of the average family. From January, 1913, to December, 1920, the index numbers included the following articles: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea.

Table 3 shows the trend in the retail cost of three important groups of food commodities, viz, cereals, meats, and dairy products, by years, from 1913 to 1929, and by months for 1928, 1929, and 1930. 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 3.—INDEX NUMBERS OF RETAIL COST OF CEREALS, MEATS, AND DAIRY PRODUCTS FOR THE UNITED STATES, 1913 TO AUGUST, 1930

[Average cost in 1913=100.0]

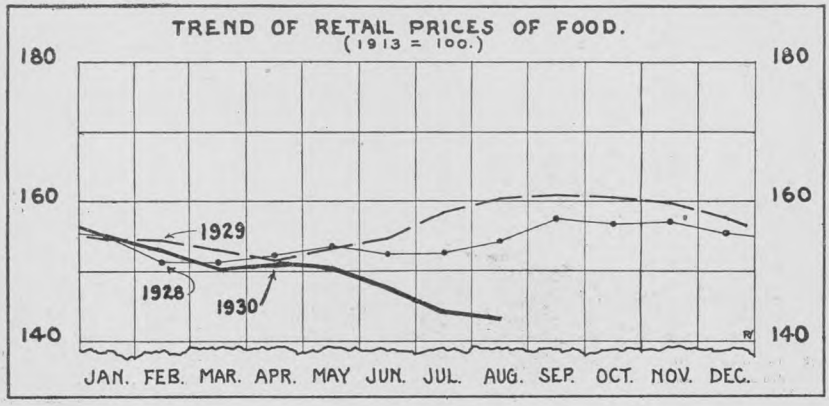
Year and month	Cereals	Meats	Dairy products	Year and month	Cereals	Meats	Dairy products
1913: Average for year	100.0	100.0	100.0	1928—			
1914: Average for year	106.7	103.4	97.1	Continued.			
1915: Average for year	121.6	99.6	96.1	November	165.3	184.9	152.5
1916: Average for year	126.8	108.2	103.2	December	164.2	179.1	153.5
1917: Average for year	186.5	137.0	127.6	1929: Average for year	164.1	188.4	148.6
1918: Average for year	194.3	172.8	153.4	January	164.1	180.9	151.9
1919: Average for year	198.0	184.2	176.6	February	164.1	180.3	152.6
1920: Average for year	232.1	185.7	185.1	March	164.1	182.8	152.4
1921: Average for year	179.8	158.1	149.5	April	164.1	187.5	148.9
1922: Average for year	159.3	150.3	135.9	May	163.5	191.2	147.5
1923: Average for year	156.9	149.0	147.6	June	163.0	192.4	146.8
1924: Average for year	160.4	150.2	142.8	July	163.5	195.9	146.8
1925: Average for year	176.2	163.0	147.1	August	164.7	196.0	147.1
1926: Average for year	175.5	171.3	145.5	September	165.2	194.2	148.1
1927: Average for year	170.7	169.9	148.7	October	163.5	189.2	149.3
1928: Average for year	167.2	179.2	150.0	November	163.6	184.1	147.0
January	168.0	168.3	152.2	December	162.9	181.8	144.9
February	168.0	167.8	150.7	1930:			
March	166.8	167.1	150.7	January	162.9	183.6	138.9
April	167.2	170.3	147.8	February	161.6	183.1	138.5
May	168.3	175.4	147.3	March	160.9	183.0	137.6
June	169.8	177.7	146.1	April	160.3	183.3	138.9
July	169.3	184.4	147.1	May	159.8	181.5	137.0
August	168.2	189.5	148.3	June	160.1	179.9	133.7
September	166.7	195.8	151.2	July	158.6	175.2	133.9
October	165.9	188.9	151.1	August	159.6	169.9	137.4

Index Numbers of Retail Prices of Food in the United States

IN TABLE 4 index numbers are given which show the changes in the retail prices of specified food articles, by years, for 1913 and 1920 to 1929,[2] by months for 1929 and for January through August, 1930. These index numbers, or relative prices, are based on the year 1913 as 100, and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of sirloin steak for the year 1929 was 196.9, which means that the average money price for the year 1929 was 96.9 per cent higher than the average money price for the year 1913. As compared with the relative price, 188.2 in 1928, the figures for 1929 show an increase of 8.7 points, but an increase of 4.6 per cent in the year.

[2] For index numbers of each month, January, 1913, to December, 1928, see Bulletin No. 396, pp. 44 to 61; and Bulletin No. 495, pp. 32 to 45.

In the last column of Table 4 are given index numbers showing changes in the retail cost of all articles of food combined. Since January, 1921, these index numbers have been computed from the average prices of the articles of food shown in Tables 1 and 2, weighted according to the average family consumption in 1918. (See March, 1921, issue, p. 25.) Although previous to January, 1921, the number



of food articles varied, these index numbers have been so computed as to be strictly comparable for the entire period. The index numbers based on the average for the year 1913 as 100 are 144.0 for July, 1930, and 143.7 for August, 1930.

The curve shown in the chart on this page pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table.

TABLE 4.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD BY YEARS, 1913, 1920 TO 1929, AND BY MONTHS FOR 1929 AND 1930

[Average for year 1913=100.0]

Year and month	Sirloin steak	Round steak	Rib roast	Chuck roast	Plate beef	Pork chops	Bacon	Ham	Hens	Milk	Butter	Cheese
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920	172.1	177.1	167.7	163.8	151.2	201.4	193.7	206.3	209.9	187.6	183.0	188.2
1921	152.8	154.3	147.0	132.5	118.2	166.2	158.2	181.4	186.4	164.0	135.0	153.9
1922	147.2	144.8	139.4	123.1	105.8	157.1	147.4	181.4	169.0	147.2	125.1	148.9
1923	153.9	150.2	143.4	126.3	106.6	144.8	144.8	169.1	164.3	155.1	144.7	167.0
1924	155.9	151.6	145.5	130.0	109.1	146.7	139.6	168.4	165.7	155.1	135.0	159.7
1925	159.8	155.6	149.5	135.0	114.1	174.3	173.0	195.5	171.8	157.3	143.1	166.1
1926	162.6	159.6	153.0	140.6	120.7	188.1	186.3	213.4	182.2	157.3	138.6	165.6
1927	167.7	166.4	158.1	148.1	127.3	175.2	174.8	204.5	173.2	158.4	145.2	170.1
1928	188.2	188.3	176.8	174.4	157.0	165.7	163.0	196.7	175.6	159.6	147.5	174.2
1929	196.9	199.1	185.4	186.9	172.7	175.7	161.1	204.1	186.4	160.7	143.9	171.9
1929: January	190.6	191.0	180.8	181.3	170.2	153.8	159.3	200.0	184.0	160.7	150.7	173.8
February	188.2	188.8	178.8	179.4	167.8	157.1	158.2	199.6	186.4	160.7	152.7	172.9
March	188.6	189.2	179.3	180.0	167.8	167.6	158.9	201.9	190.1	160.7	152.5	172.9
April	192.9	194.6	183.8	184.4	170.2	176.7	160.4	203.3	196.2	159.6	145.7	172.4
May	198.4	201.3	187.9	190.0	174.4	179.5	160.7	204.8	198.1	159.6	142.3	171.9
June	201.6	205.4	189.9	191.9	176.0	179.0	162.2	205.6	193.9	159.6	140.5	171.9
July	206.7	210.8	192.9	195.6	177.7	188.1	164.1	209.7	187.3	160.7	139.4	171.5
August	206.3	210.8	191.9	194.4	176.0	192.4	165.6	211.2	185.0	160.7	140.5	171.0
September	202.8	206.7	189.4	191.9	175.2	193.8	164.4	209.7	184.0	160.7	143.1	171.9
October	198.0	199.6	186.9	187.5	173.6	185.2	161.9	204.8	180.3	161.8	145.4	171.5
November	194.1	196.4	183.3	183.8	171.1	170.5	159.3	200.4	177.0	161.8	139.7	171.0
December	192.5	194.6	181.8	183.1	170.2	163.3	157.4	198.5	174.2	161.8	134.7	170.6
1930: January	192.9	195.5	183.3	184.4	172.7	168.1	157.0	199.3	178.4	159.6	121.9	169.2
February	191.3	194.2	181.8	184.4	171.9	167.6	157.8	200.7	179.3	158.4	122.7	167.0
March	190.6	192.8	181.3	182.5	170.2	171.9	157.8	201.1	179.8	157.3	121.9	164.7
April	190.2	193.3	181.3	182.5	168.6	176.7	157.4	200.4	179.3	157.3	125.6	162.9
May	190.2	192.8	179.8	179.4	164.5	171.9	156.7	200.7	175.6	157.3	120.9	162.0
June	188.6	191.5	177.3	175.6	160.3	174.3	156.7	200.7	167.6	157.3	113.1	157.9
July	182.3	184.3	171.7	166.3	149.6	173.8	156.7	200.0	161.5	157.3	114.1	155.2
August	175.6	176.7	163.1	155.6	138.8	174.8	155.6	193.1	158.7	157.3	123.8	153.4

Year and month	Lard	Eggs	Bread	Flour	Corn meal	Rice	Potatoes	Sugar	Tea	Coffee	All articles [1]
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920	186.7	197.4	205.4	245.5	216.7	200.0	370.6	352.7	134.7	157.7	203.4
1921	113.9	147.5	176.8	175.8	150.0	109.2	182.4	145.5	128.1	121.8	153.3
1922	107.6	128.7	155.4	154.5	130.0	109.2	164.7	132.7	125.2	121.1	141.6
1923	112.0	134.8	155.4	142.4	136.7	109.2	170.6	183.6	127.8	126.5	146.2
1924	120.3	138.6	157.1	148.5	156.7	116.1	158.8	167.3	131.4	145.3	145.9
1925	147.5	151.0	167.9	184.8	180.0	127.6	211.8	130.9	138.8	172.8	157.4
1926	138.6	140.6	167.9	181.8	170.0	133.3	288.2	125.5	141.0	171.1	160.6
1927	122.2	131.0	166.1	166.7	173.3	123.0	223.5	132.7	142.5	162.1	155.4
1928	117.7	134.5	162.5	163.6	176.7	114.9	158.8	129.1	142.3	165.1	154.3
1929	115.8	142.0	160.7	154.5	176.7	111.5	188.2	120.0	142.6	164.8	156.7
1929: January	117.1	146.7	160.7	154.5	176.7	112.6	135.3	121.8	142.5	166.1	154.6
February	116.5	142.3	160.7	154.5	176.7	112.6	135.3	120.0	142.6	166.1	154.4
March	116.5	122.0	160.7	154.5	176.7	112.6	135.3	118.2	142.6	166.4	153.0
April	117.1	106.4	160.7	154.5	176.7	112.6	135.3	116.4	142.6	166.4	151.6
May	116.5	112.2	160.7	151.5	176.7	111.5	158.8	116.4	142.6	166.1	153.3
June	115.8	120.0	160.7	148.5	176.7	111.5	182.4	116.4	142.5	165.8	154.8
July	115.8	127.8	160.7	151.5	176.7	111.5	229.4	116.4	142.3	165.8	158.5
August	116.5	140.0	160.7	157.6	176.7	112.6	235.3	120.0	142.5	165.4	160.2
September	117.1	153.6	160.7	160.6	176.7	111.5	229.4	121.8	142.6	165.1	160.8
October	115.8	168.1	158.9	157.6	176.7	111.5	223.5	121.8	142.6	164.8	160.5
November	113.9	183.5	158.9	157.6	176.7	111.5	223.5	121.8	142.3	162.1	159.7
December	111.4	182.0	158.9	154.5	180.0	110.3	223.5	120.0	142.8	155.4	158.0
1930: January	108.9	160.6	158.9	154.5	180.0	110.3	229.4	120.0	143.4	147.0	155.4
February	108.2	136.8	157.1	154.5	176.7	110.3	229.4	118.2	143.2	143.3	153.0
March	107.0	102.3	157.1	151.5	176.7	109.2	229.4	116.4	142.8	140.6	150.1
April	106.3	100.0	157.1	148.5	176.7	110.3	241.2	114.5	142.5	138.9	151.2
May	105.7	97.7	157.1	145.5	176.7	109.2	252.9	114.5	142.5	137.2	150.1
June	105.1	97.4	157.1	145.5	176.7	109.2	247.1	110.9	143.0	136.2	147.9
July	103.2	101.7	157.1	139.4	176.7	109.2	194.1	110.9	142.6	135.6	144.0
August	104.4	112.5	155.4	136.4	176.7	109.2	182.4	110.9	142.3	134.6	143.7

[1] 22 articles in 1913–1920; 42 articles in 1921–1930.

Retail Prices of Coal in the United States [1]

THE following table shows the average retail prices of coal on August 15, 1929, and July 15 and August 15, 1930, for the United States and for each of the cities from which retail food prices have been obtained. The prices quoted are for coal delivered to consumers, but do not include charges for storing the coal in cellar or coal bin where an extra handling is necessary.

In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The prices shown for bituminous coal are averages of prices of the several kinds sold for household use.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON AUGUST 15, 1929, AND JULY 15 AND AUGUST 15, 1930

City, and kind of coal	1929	1930	
	Aug. 15	July 15	Aug. 15
United States:			
Pennsylvania anthracite—			
Stove—			
Average price	$15.01	$14.84	$14.84
Index (1913=100)	194.3	192.1	192.6
Chestnut—			
Average price	$14.67	$14.53	$14.57
Index (1913=100)	185.4	183.6	184.1
Bituminous—			
Average price	$8.69	$8.65	$8.70
Index (1913=100)	159.9	159.1	160.1
Atlanta, Ga.:			
Bituminous, prepared sizes	$7.76	$7.14	$7.27
Baltimore, Md.:			
Pennsylvania anthracite—			
Stove	14.00	14.00	14.00
Chestnut	13.50	13.50	13.50
Bituminous, run of mine—			
High volatile	7.88	7.61	7.71
Birmingham, Ala.:			
Bituminous, prepared sizes	7.15	6.96	7.00
Boston, Mass.:			
Pennsylvania anthracite—			
Stove	15.85	15.50	15.75
Chestnut	15.35	15.00	15.25
Bridgeport, Conn.:			
Pennsylvania anthracite—			
Stove	14.50	14.50	14.50
Chestnut	14.50	14.50	14.50
Buffalo, N. Y.:			
Pennsylvania anthracite—			
Stove	13.36	13.42	13.42
Chestnut	12.86	12.92	12.92
Butte, Mont.:			
Bituminous, prepared sizes	11.18	11.09	10.94
Charleston, S. C.:			
Bituminous, prepared sizes	9.67	9.67	9.67
Chicago, Ill.:			
Pennsylvania anthracite—			
Stove	16.65	16.38	16.38
Chestnut	16.20	15.93	15.93
Bituminous—			
Prepared sizes—			
High volatile	7.88	7.78	8.06
Low volatile	10.60	10.29	10.64
Run of mine—			
Low volatile	7.75	7.75	7.75
Cincinnati, Ohio:			
Bituminous—			
Prepared sizes—			
High volatile	$5.70	$5.80	$6.05
Low volatile	7.88	7.75	8.03
Cleveland, Ohio:			
Pennsylvania anthracite—			
Stove	15.14	14.56	14.56
Chestnut	14.70	41.31	14.25
Bituminous—			
Prepared sizes—			
High volatile	7.16	6.75	6.83
Low volatile	9.21	9.25	9.43
Columbus, Ohio:			
Bituminous—			
Prepared sizes—			
High volatile	5.88	5.79	5.82
Low volatile	7.31	7.19	7.19
Dallas, Tex.:			
Arkansas anthracite—Egg	14.75	14.25	14.75
Bituminous, prepared sizes	12.58	12.17	12.17
Denver, Colo.:			
Colorado anthracite—			
Furnace, 1 and 2 mixed	14.80	14.94	15.13
Stove, 3 and 5 mixed	14.30	14.94	15.13
Bituminous, prepared sizes	9.88	9.89	10.18
Detroit, Mich.:			
Pennsylvania anthracite—			
Stove	15.50	14.25	14.44
Chestnut	15.00	14.25	14.31
Bituminous—			
Prepared sizes—			
High volatile	8.31	8.09	8.18
Low volatile	9.50	9.46	9.46
Run of mine—			
Low volatile	7.67	7.67	7.67
Fall River, Mass.:			
Pennsylvania anthracite—			
Stove	16.00	16.00	16.00
Chestnut	15.75	15.75	15.75
Houston, Tex.:			
Bituminous, prepared sizes	11.60	11.60	11.60
Indianapolis, Ind.:			
Bituminous—			
Prepared sizes—			
High volatile	6.07	5.80	5.92
Low volatile	8.11	8.21	8.38
Run of mine—			
Low volatile	6.83	6.90	7.05

[1] Prices of coal were formerly secured semiannually and published in the March and September issues of the Labor Review. Since June, 1920, these prices have been secured and published monthly.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON AUGUST 15, 1929, AND JULY 15 AND AUGUST 15, 1930—Continued

City, and kind of coal	1929	1930	
	Aug. 15	July 15	Aug. 15
Jacksonville, Fla.:			
Bituminous, prepared sizes	$11.00	$12.00	$11.00
Kansas City, Mo.:			
Arkansas anthracite—			
Furnace	12.35	12.00	12.17
Stove No. 4	13.33	12.75	12.88
Bituminous, prepared sizes	7.10	7.04	7.00
Little Rock, Ark.:			
Arkansas anthracite—Egg	12.50	12.50	13.00
Bituminous, prepared sizes	9.40	9.20	9.10
Los Angeles, Calif.:			
Bituminous, prepared sizes	16.00	16.25	16.00
Louisville, Ky.:			
Bituminous—			
Prepared sizes—			
High volatile	6.16	6.18	6.21
Low volatile	8.75	8.50	8.50
Manchester, N. H.:			
Pennsylvania anthracite—			
Stove	16.75	16.50	16.42
Chestnut	16.75	16.50	16.42
Memphis, Tenn.:			
Bituminous, prepared sizes	7.39	7.85	7.82
Milwaukee, Wis.:			
Pennsylvania anthracite—			
Stove	16.10	15.75	15.75
Chestnut	15.65	15.30	15.30
Bituminous—			
Prepared sizes—			
High volatile	7.68	7.68	7.75
Low volatile	10.68	10.43	10.53
Minneapolis, Minn.:			
Pennsylvania anthracite—			
Stove	18.10	17.75	17.15
Chestnut	17.65	17.30	16.70
Bituminous—			
Prepared sizes—			
High volatile	10.42	10.26	9.99
Low volatile	13.40	13.14	12.89
Mobile, Ala.:			
Bituminous, prepared sizes	9.02	8.90	8.82
Newark, N. J.:			
Pennsylvania anthracite—			
Stove	13.65	13.63	13.77
Chestnut	13.15	13.13	13.27
New Haven, Conn.:			
Pennsylvania anthracite—			
Stove	14.66	14.65	14.65
Chestnut	14.66	14.65	14.65
New Orleans, La.:			
Bituminous, prepared sizes	9.21	9.11	9.11
New York, N. Y.:			
Pennsylvania anthracite—			
Stove	14.25	13.58	13.63
Chestnut	13.75	13.08	13.13
Norfolk, Va.:			
Pennsylvania anthracite—			
Stove	14.00	14.00	14.50
Chestnut	14.00	14.00	14.50
Bituminous—			
Prepared sizes—			
High volatile	7.81	7.38	7.38
Low volatile	9.00	8.50	9.00
Run of mine—			
Low volatile	7.00	7.00	7.00
Omaha, Nebr.:			
Bituminous, prepared sizes	9.71	9.62	9.62
Peoria, Ill.:			
Bituminous, prepared sizes	6.52	6.27	6.28
Philadelphia, Pa.:			
Pennsylvania anthracite—			
Stove	[1] 14.50	13.25	13.42
Chestnut	[1] 14.00	12.75	13.00
Pittsburgh, Pa.:			
Pennsylvania anthracite—			
Chestnut	$15.00	$14.75	$14.75
Bituminous, prepared sizes	5.11	5.11	5.05
Portland, Me.:			
Pennsylvania anthracite—			
Stove	16.32	16.56	16.56
Chestnut	16.32	16.56	16.56
Portland, Oreg.:			
Bituminous, prepared sizes	12.54	13.09	13.12
Providence, R. I.:			
Pennsylvania anthracite—			
Stove	[2] 15.50	[2] 15.75	[2] 15.75
Chestnut	[2] 15.50	[2] 15.75	[2] 15.75
Richmond, Va.:			
Pennsylvania anthracite—			
Stove	14.00	14.50	14.50
Chestnut	14.00	14.50	14.50
Bituminous—			
Prepared sizes—			
High volatile	7.88	8.25	8.25
Low volatile	8.53	8.37	8.37
Run of mine—			
Low volatile	6.75	6.75	6.75
Rochester, N. Y.:			
Pennsylvania anthracite—			
Stove	14.50	14.45	14.60
Chestnut	14.00	13.95	14.10
St. Louis, Mo.:			
Pennsylvania anthracite—			
Stove	16.45	16.25	16.25
Chestnut	16.20	16.00	16.00
Bituminous, prepared sizes	6.53	6.00	6.14
St. Paul, Minn.:			
Pennsylvania anthracite—			
Stove	18.10	17.75	17.60
Chestnut	17.65	17.30	17.15
Bituminous—			
Prepared sizes—			
High volatile	10.21	10.08	10.23
Low volatile	13.40	13.15	13.25
Salt Lake City, Utah:			
Colorado anthracite—			
Furnace, 1 and 2 mixed	18.00	-------	------
Stove, 3 and 5 mixed	18.00	-------	------
Bituminous, prepared sizes	7.96	8.40	8.40
San Francisco, Calif.:			
New Mexico anthracite—			
Cerillos egg	25.00	25.00	25.00
Colorado anthracite—			
Egg	24.50	24.50	24.50
Bituminous, prepared sizes	16.13	15.75	15.75
Savannah, Ga.:			
Bituminous, prepared sizes	[3] 9.54	[3] 9.62	[3] 9.62
Scranton, Pa.:			
Pennsylvania anthracite—			
Stove	10.23	9.87	10.07
Chestnut	9.87	9.50	9.70
Seattle, Wash.:			
Bituminous, prepared sizes	10.63	10.68	10.55
Springfield, Ill.:			
Bituminous, prepared sizes	4.34	4.37	4.37
Washington, D. C.:			
Pennsylvania anthracite—			
Stove	[1] 15.41	[1] 15.23	[1] 15.48
Chestnut	[1] 14.91	[1] 14.73	[1] 14.98
Bituminous—			
Prepared sizes—			
High volatile	[1] 8.63	[1] 8.38	[1] 8.42
Low volatile	[1] 11.00	[1] 10.93	[1] 11.18
Run of mine—			
Mixed	[1] 7.63	[1] 7.81	[1] 7.81

[1] Per ton of 2,240 pounds.

[2] The average price of coal delivered in bin is 50 cents higher than here shown. Practically all coal is delivered in bin.

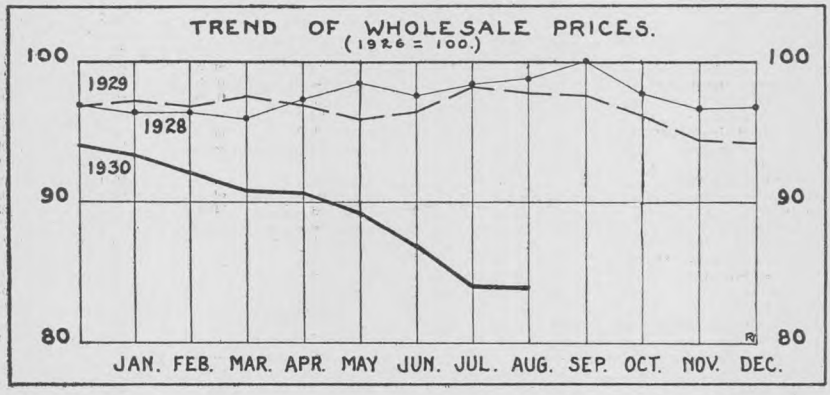
[3] All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above price.

Index Numbers of Wholesale Prices in August, 1930

ARREST of the recent downward trend of wholesale prices is shown for August by the index number computed by the Bureau of Labor Statistics of the United States Department of Labor. The bureau's general index, based on 550 commodities or price series in 1926, stands at 84 for August compared with the same figure for July. The purchasing power of the 1926 dollar remained at $1.19.

Prices of farm products on an average increased over 2 per cent from July to August, with advances shown for barley, corn, oats, rye, winter wheat, hogs, eggs, and alfalfa and clover hay. Beef steers, lambs, sheep, and cotton on the other hand, averaged lower than in July.

Foods as a whole were slightly higher than in the month before, due mainly to increases for butter, cheese, fresh pork, hominy grits, corn meal, and canned corn. Fresh beef, lamb, wheat flour, coffee, and sugar were cheaper than in July.



Hides and skins were downward, with leather, boots and shoes, and other leather products also showing minor decreases.

Textile products averaged lower, with cotton goods, silk and rayon, woolen and worsted goods, and other textiles all participating in the decline.

In the group of fuel and lighting materials a slight advance in anthracite coal was offset by small declines in bituminous coal and coke, leaving the group level unchanged from the month before.

Metals and metal products again averaged lower, with small declines in most iron and steel products, also copper and zinc in the group of nonferrous metals.

Building materials continued to decline, lumber, brick, and paint materials averaging lower than in July.

Prices of chemicals, drugs and pharmaceuticals, fertilizer materials, and mixed fertilizers all were somewhat below those of the month before.

House-furnishing goods showed a slight drop in the price level, while in the group designated as miscellaneous there was a considerable increase in prices of cattle feed, and a further decrease in prices of rubber and lubricating and cylinder oils.

An increase from the July level is shown for the group of raw materials, while decreases are shown for the groups of semimanufactured articles, finished products, nonagricultural commodities, and the group of all commodities other than farm products and foods.

Of the 550 commodities or price series for which comparable information for July and August was collected, increases were shown in 109 instances and decreases in 184 instances. In 257 instances no change in price was reported.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES

[1926=100.0]

Groups and subgroups	August, 1929	July, 1930	August, 1930	Purchasing power of the dollar, August, 1930
All commodities	97.7	84.0	84.0	$1.190
Farm products	107.1	83.1	84.9	1.178
Grains	99.3	74.1	80.4	1.244
Livestock and poultry	112.8	81.8	84.6	1.182
Other farm products	105.8	86.9	86.7	1.153
Foods	103.1	86.3	87.1	1.148
Butter, cheese, and milk	104.4	92.0	97.9	1.021
Meats	116.0	91.8	93.1	1.074
Other foods	94.8	80.7	79.4	1.259
Hides and leather products	109.7	100.7	98.9	1.011
Hides and skins	117.2	94.0	91.2	1.096
Leather	111.5	100.1	99.9	1.001
Boots and shoes	106.1	102.9	100.6	.994
Other leather products	106.0	105.2	104.9	.953
Textile products	93.1	80.0	77.7	1.287
Cotton goods	98.7	87.4	85.0	1.176
Silk and rayon	79.9	60.4	57.6	1.736
Woolen and worsted goods	96.5	88.0	86.6	1.155
Other textile products	84.5	65.5	63.5	1.575
Fuel and lighting materials	80.9	75.4	75.4	1.326
Anthracite coal	90.0	86.5	87.8	1.139
Bituminous coal	90.5	88.8	88.6	1.129
Coke	84.6	84.0	83.8	1.193
Gas	94.3	99.4	(1)	
Petroleum products	70.3	61.0	60.9	1.642
Metals and metal products	104.3	94.3	92.7	1.079
Iron and steel	97.6	90.7	90.1	1.110
Nonferrous metals	105.1	73.5	72.7	1.376
Agricultural implements	98.3	94.9	94.9	1.054
Automobiles	110.7	105.5	102.5	.976
Other metal products	98.5	98.4	98.4	1.016
Building materials	96.7	88.9	87.4	1.144
Lumber	94.2	83.3	81.1	1.233
Brick	89.6	82.9	82.5	1.212
Cement	92.0	91.7	91.7	1.091
Structural steel	99.6	84.3	84.3	1.186
Paint materials	92.8	87.1	83.7	1.195
Other building materials	105.4	99.4	98.7	1.013
Chemicals and drugs	93.7	87.8	87.3	1.145
Chemicals	99.3	92.5	92.1	1.086
Drugs and pharmaceuticals	70.1	67.3	66.8	1.497
Fertilizer materials	90.5	84.3	83.3	1.200
Mixed fertilizers	98.2	93.1	92.7	1.079
House-furnishing goods	97.1	96.2	95.9	1.043
Furniture	96.7	96.5	96.5	1.036
Furnishings	97.3	95.8	95.3	1.049
Miscellaneous	81.3	71.7	71.2	1.404
Cattle feed	124.7	94.8	104.8	.954
Paper and pulp	88.2	83.8	83.8	1.193
Rubber	42.6	23.6	20.3	4.926
Automobile tires	55.3	52.0	52.0	1.923
Other miscellaneous	108.6	97.2	94.5	1.058
Raw materials	98.9	81.1	81.8	1.222
Semimanufactured articles	96.2	79.7	78.1	1.280
Finished products	97.3	86.7	86.4	1.157
Nonagricultural commodities	94.3	84.4	83.8	1.193
All commodities, less farm products and foods	92.5	84.3	83.3	1.200

[1] Data not yet available.

Increased Cost of Living in Germany

AN OFFICIAL publication of Germany [1] shows that the cost of living [2] in that country in July, 1930, was 49.3 per cent higher than for the year 1913–14.

Index numbers of cost of living for April to July, 1930, are given by items in the following table:

INDEX NUMBERS OF COST OF LIVING IN GERMANY, APRIL TO JULY, 1930

[1913–14=100]

Month	Index numbers of cost of specified items of family budget					
	Food	Housing	Heat and light	Clothing	Other items	Total
April, 1930	142.8	127.5	152.2	167.6	193.4	147.4
May, 1930	141.7	127.7	149.9	167.2	193.5	146.7
June, 1930	142.7	129.8	149.4	166.8	193.6	147.6
July, 1930	145.9	130.0	150.1	165.5	193.6	149.3

[1] Germany. Statistisches Reichsamt. Wirtschaft und Statistik, Aug. 1, 1930, p. 626.

[2] Excluding taxes and payments for social purposes, such as insurance contributions, union membership fees, etc.

IMMIGRATION AND EMIGRATION

Statistics of Immigration for July, 1930

By J. J. Kunna, Chief Statistician United States Bureau of Immigration

DURING the month of July, 1930, there were 29,789 aliens admitted to the United States and 27,406 departed, causing an increase to the alien population of only 2,383, as compared with 7,647 for July a year ago and 8,605 for the corresponding month of 1928. Of the aliens admitted in July last, 13,323 were classified as immigrants or newcomers coming here for permanent residence, while 16,466 were visitors or persons passing through the country on their way elsewhere. Of those departing, 4,818 had been living here a year or more and were leaving for intended future permanent residence abroad, and the remainder, 22,588, were either here on a visit or intend to return after a short absence in a foreign country.

Of the 13,323 immigrant aliens admitted during July last, 7,772, or 58.3 per cent, came from Europe, and nearly four-fifths of the European immigration came from six countries, ranking in order as follows: Great Britain and Northern Ireland, 1,899; Italy, 1,632; Irish Free State, 824; Czechoslovakia, 347, and Poland, 344. Canada contributed 3,501 immigrants during the same period; Mexico, 398; the West Indies, 443; and Central and South America, 433. The other countries contributed 776 immigrants in July, 1930.

During the same month 881 aliens were denied admission to the United States for various causes under the immigration laws, mainly because they failed to secure visas from American consuls. Most of these were debarred at the international land boundaries, 575 at the Canadian border, and 160 at the Mexican border stations. The other 146 aliens debarred in July were turned back at the seaports of entry, 80 at New York, and 66 at the other ports. During the month 1,440 aliens were deported from the United States under warrant proceedings.

Aliens of all classes admitted in July, 1930, under the immigration act of 1924 as amended, numbered 29,789. Over four-fifths, or 18,760, of this number entered at New York and 4,739 at the other seaports. Of the New York arrivals, 15,228 were born in European countries, principally Great Britain and Northern Ireland, Italy, Germany, and the Irish Free State. Aliens admitted during the same month via Canadian border land ports numbered 5,453, of whom 2,474, or 45.4 per cent, were natives of Canada and 2,618, or 48 per cent, of European countries, mainly Great Britain and Ireland, while 165 were born in China and other Asiatic countries, 105 in Africa, Australia, New Zealand, and the Pacific Islands, and 91 in Newfoundland and other countries. During the same month only 837 aliens were recorded as coming in over the southern land border, and of this number 568, or 67.9 per cent, gave Mexico as their country

of birth, the remaining 269 being natives chiefly of Asiatic and European countries.

Of the total admissions during July last, 7,729 came in under the immigration act of 1924, as immigrants charged to the quota; 6,371 as returning residents; 7,081 as temporary visitors for business or pleasure; and 3,185 as natives of nonquota countries, mainly Canada; while 2,562 were persons passing through the country on their way elsewhere. Of the remainder, 2,066 were admitted under the act as husbands, wives, and unmarried children under 21 years of age, of American citizens; 460 as Government officials, their families, attendants, servants, and employees; and 335 as of the miscellaneous classes, including students, ministers, professors, etc.

INWARD AND OUTWARD PASSENGER MOVEMENT FROM JULY 1, 1929, TO JUNE 30, 1930 AND JULY, 1930

Period	Inward					Aliens debarred from entering [1]	Outward					Aliens deported after landing [2]
	Aliens admitted			United States citizens arrived	Total		Aliens departed			United States citizens departed	Total	
	Immigrant	Non-immigrant	Total				Emigrant	Non-emigrant	Total			
Fiscal year ended June 30, 1930	241,700	204,514	446,214	477,260	923,474	8,233	50,661	221,764	272,425	462,023	734,448	16,631
1930												
July	13,323	16,466	29,789	38,822	68,611	881	4,818	22,588	27,406	55,366	82,772	1,440

[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.

PUBLICATIONS RELATING TO LABOR

Official—United States

NEW JERSEY.—Department of Banking and Insurance. *Annual report, relative to savings banks, trust companies and State banks of discount and deposit, private bankers, credit unions, provident loan associations, and small loan brokers, for the year ending December 31, 1929. Trenton, 1930. 171 pp.*

UNITED STATES.—Department of Agriculture. Bureau of Home Economics. *Bibliography on studies of costs and standards of living in the United States, by Faith M. Williams and Helen Connolly. A preliminary report. Washington, 1930. 104 pp. (Mimeographed.)*

—— Department of Labor. Bureau of Labor Statistics. *Bulletin No. 515: Union scales of wages and hours of labor, May 15, 1929. Washington, 1930. 338 pp.*

—— Federal Board for Vocational Education. *Bulletin No. 146: Report of study of possibilities of employment of handicapped persons in Minneapolis, Minn. A report of methods followed in making the investigation and of the essential general findings of the survey. Washington, 1930. 79 pp.*

The two outstanding conclusions of this report are: (1) Each of the 2,515 jobs studied can be efficiently performed on a competitive and economic basis by a worker with one or more of 28 listed handicaps; and (2) a placement bureau for the handicapped should be established in Minneapolis, the inefficiencies of doing such work, as at present, by scattered agencies being obvious.

Official—Foreign Countries

ALBERTA (CANADA).—Mines Branch. *Annual report, 1929. Edmonton, 1930. 94 pp.*

During the calendar year covered, 7,147,250 tons of coal were produced in the Province, with a value of $22,491,061. The average number of men employed was 9,572, while the number of tons of coal mined per man employed was 747 and the number of tons per man employed underground was 1,004.

BULGARIA.—Direction Générale de la Statistique. *Statistique des coopératives dans le Royaume de Bulgarie en 1926. Sofia, 1930. 73 pp.*

Data on the cooperative movement in Bulgaria, for 1926. Entirely statistical, the tables being in Bulgarian and French.

CANADA.—Bureau of Statistics. Demography Branch. *Children in gainful occupations. Ottawa, 1929. 87 pp.*

Statistics of child wage earners, compiled from the Dominion census of 1921.

GREAT BRITAIN.—Department of Overseas Trade. *Economic conditions in Canada, to May, 1930, by W. A. Field. London, 1930. 126 pp.*

Includes sections on social questions, production, and industrial developments.

—— Economic Advisory Council. *Report of committee on the cotton industry. London, 1930. 31 pp. (Cmd. 3615.)*

A summary of this report was given in the Labor Review for September, 1930, page 47.

—— —— *Report of delegation on the industrial conditions in the iron and steel industries in France, Belgium, Luxemburg, Germany, and Czechoslovakia. London, 1930. 46 pp. (Cmd. 3601.)*

A summary of the findings of this delegation, taken from the Ministry of Labor Gazette (London) for July, 1930, is given in this issue of the Labor Review.

NETHERLANDS.—Rijksverzekeringsbank. *Ongevallenstatistiek. A.—Ongevallenwet, 1921: Statistiek der verplichte ongevallenverzekering betreffende het kalenderjaar 1925. B.—Land- en tuinbouwongevallenwet 1922: Statistiek der verplichte ongervallenverzekering betreffende het boekjaar 1 November 1924–31 October 1925. Amsterdam, 1930. 130 pp.*

Contains statistical information in regard to industrial accidents in the Netherlands in 1924–25, including the following industries and occupations: Earthenware, glass, lime, and other related works; building trades, chemical industry, woodworking, clothing, and cleaning; leather and rubber works; transportation, shipbuilding, paper making, commerce, etc.

NEW SOUTH WALES (AUSTRALIA).—Registrar of Friendly Societies. *Friendly societies and trade-unions: Report for the 12 months ended June 30, 1929. Sydney, 1930. 25 pp.*

NEW ZEALAND.—National Provident Fund. *Nineteenth annual report, for the year ended December 31, 1929. Wellington, 1930. 4 pp.*

Summarized in this issue of the Labor Review.

—— Pensions Department. *Thirty-second annual report, for the year ended March 31, 1930. Wellington, 1930. 8 pp.*

Certain data from this report are given in this issue of the Review.

SWEDEN.—[Socialdepartementet.] Statistiska Centralbyrån. *Statistisk Årsbok för Sverige, sjuttonde årgången 1930. Stockholm, 1930. 402 pp.*

Statistical yearbook for Sweden for 1930, the subjects covered including public health, cost of living, cooperation, housing, employment, unemployment, strikes and lockouts, trade agreements, hours of labor, wages, social insurance, occupations, etc.

SWITZERLAND.—Statistisches Amt. *Statistisches Jahrbuch der Schweiz, 1929. Berne, 1930. 362 pp.; charts.*

The yearbook contains statistical information in regard to Switzerland for 1929, including public instruction, wages and salaries, cost of living, unemployment, labor unions, social insurance, and other conditions pertaining to labor.

Unofficial

AMERICAN IRON AND STEEL INSTITUTE. *Annual statistical report for 1929. New York, 75 West Street, 1930. 119 pp.*

Gives data on production, imports and exports, and prices in the iron and steel and allied industries in the United States, with certain figures for foreign countries.

COMITÈ CENTRAL DES HOUILLÉRES DE FRANCE ET CHAMBRE SYNDICALE FRANÇAISE DES MINES MÉTALLIQUES. *Annuaire: Houillères—mines de fer—mines métalliques. Trente et unième année (1930). Paris, 35 Rue Saint Dominique, 1930.* [*Various paging.*]

This annual report of the central committee of coal operators contains information regarding the various organizations in the coal, iron, and metal mining industries and on the governmental bureaus and commissions concerned in their operation, together with statistics of production, number of workers, and wages.

COOLEY, ROBERT L., RODGERS, ROBERT H., AND BELMAN, HARRY S. *My life work. 4 vols., illus. Building and metal trades. 218 pp. Printing and servicing trades. 167 pp. Office and store occupations. 153 pp. Representative industries. 241 pp. New York, McGraw-Hill Book Co. (Inc.), 1930.*

Describes the tools and material used and operations performed in various occupations, the physical and personal requirements and training necessary for such occupations, and the possibilities for securing promotion in them or through them.

DEUTSCHE GESELLSCHAFT FÜR GEWERBEHYGIENE. *Beihefte zum Zentralblatt für Gewerbehygiene und Unfallverhütung, Nr. 19: Vorrichtungen zum staubfreien Umfüllen und Verpacken staubförmiger Stoffe. Berlin, 1930. 48 pp.*

Deals with safety measures against dust in packing and repacking dusty materials.

ENGLAND, ROBERT. *The Central European immigrant in Canada. Toronto, Macmillan Co. of Canada (Ltd.), 1929. 238 pp.*

Discusses social and economic conditions in certain backward and remote non-English speaking districts of Saskatchewan.

GIDE, CHARLES. *Communist and cooperative colonies. (Translated by Ernest F. Row.) London, George G. Harrap & Co., 1930. 223 pp.*

The English translation of Professor Gide's book Le Colonies Communistes et Coopératives, published in 1928. Deals with the various cooperative colonies, beginning with those of Owen and Fourier. Two chapters deal with the experiments in the United States in this type of cooperation.

HECHT, JOHN S. *Unsolved problems, national and international. London, Jarrolds, 1930. 288 pp.*

The fundamental problem which the author wishes to solve is that of wages, for on it, he considers, depend innumerable other problems, national and international. The basic principle of wages, he holds, is that the worker is entitled to a minimum wage sufficient to support himself and his dependents, and that to this should be added increments depending on the skill required, the difficult, exhausting or repulsive conditions of work, and the like. Also, that each man may have an incentive to do his best, some practical form of profit sharing should be introduced, perhaps in the form of piece rates with safeguards against the features to which the workers now object, or by a bonus on wages and salaries proportioned to the growth of the total turnover, or by some other device.

The minimum wage, which is the basis of the plan, must vary as the number of dependents varies, and to prevent this from leading to discrimination against men with heavy responsibilities, what amounts to a system of family allowances is proposed. A decision should be made as to what is the normal number of dependents, and the average minimum wage fixed for this number. Each worker should then receive that proportion of this average, whether under or over 100 per cent, which the number of dependents justifies; if they are few, the difference between the average wage and what he draws is to be paid into a fund from which the excess needed for those whose responsibilities exceed the normal is drawn. The author works out his theory at length, showing how it meets the criticisms usually brought against the family-allowance plans, and how it would affect a number of social and economic problems.

JETER, HELEN R., AND MCMILLEN, A. W. *Registration of social statistics for the year 1928. A report submitted to the joint committee of the Association of Community Chests and Councils and the local community research committee of the University of Chicago, October 1, 1929. Chicago, 1930. 956 pp.; charts.*

The compilation of social statistics, such as those included in the present volume, formerly done by the University of Chicago, has been taken over by the Children's Bureau of the U. S. Department of Labor. A discussion of the work that will be done by the Children's Bureau, as well as certain data as to amounts spent for relief by the local agencies, is given in this issue of the Labor Review.

JOHNSON, CHARLES S. *The Negro in American civilization. A study of Negro life and race relations in the light of social research. New York, Henry Holt & Co., 1930. 538 pp.*

This book is based upon the work of the National Interracial Conference held in Washington, December 16–19, 1928, which was called and carried through by 16 national organizations, engaged as part of their normal program in tasks of

social work for the Negro and of improvement of relationships between white and colored in this country. These formed a central executive committee in the fall of 1926, divided the field, and carried on a study of the current state of knowledge of Negro problems, analyzing investigations made in different parts of the country, considering those in progress, bringing together such results as these had secured, showing on what points there was most need of further and more careful study, and indicating the lines along which programs of improvement may be most effectively planned.

The results of these prolonged and careful studies were presented at the conference, which was regarded as the most significant and important gathering yet held upon the subject. The conference ceased to exist after its four-day session, but provision was made for gathering together the material used, and the result is this volume, which is described as neither the proceedings of the conference nor the report of an investigation, but rather a "synthesis of many studies put through the process of a conference which hammered it into coherence and reality."

MULLER, HELEN M. *Government fund for unemployment. New York, H. W. Wilson Co., 1929. 169 pp. (The reference shelf, Vol. VI, No. 5.)*

TAYLOR, PAUL S. *Mexican labor in the United States—Dimmit County, Winter Garden District, South Texas. Berkeley, University of California Press, 1930. 171 pp., map. (University of California publications in economics, Vol. 6, No. 5, pp. 293–464.)*

Among the major subjects discussed in this report are the labor market, the labor supply, cheap labor, labor relations, the socio-economic ladder, Mexican clerks and business men, education and domiciliary, political, and social isolation.

WILKINSON, H. L. *The world's population problems and a white Australia. London, P. S. King & Son (Ltd.), 1930. 339 pp.; maps, charts, illus.*

The author, an Australian, points out that at the present rate of increase the world's population will have doubled within less than a century. This will inevitably mean overpopulation with unemployment and shortage of food in certain countries, and that this can not be relieved by peaceful migration, since already the more advanced nations are putting up the bars against immigrants. Provision of food for the vastly increased population will call for more intensive cultivation, for the development of unused land, and for the conservation of rainfall. Such measures depend upon the investment of capital and the maintenance of sound credit, and while these, in turn, demand peace and progress in international trade, war as a means of relieving overpopulation in some parts of the world seems almost inevitable.

Australia, he holds, is fitted in all respects for the occupancy of the European races, and this justifies her "white Australia" policy; but she will be unable to maintain this policy in the face of increasing population pressure in the neighboring continents unless she is far more densely populated than at present. On every account it behooves her to make an effort to secure immigrants from Great Britain and western Europe while these still have a surplus population which desires to migrate.