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## This Issue in Brief

*About 120,000 persons are engaged in the fishing industry, it is estimated.* Because of the seasonal character of the industry, a large proportion of these are only part-time workers. This fact influences greatly the average annual earnings. A study made by the National Recovery Administration showed that average annual earnings per man in 1933 ranged from \$184 to \$1,389. Page 551.

*More than three-fifths of the money loaned by the Rural Electrification Administration has been granted to cooperative societies.* Of 104 projects approved up to the middle of July, for which the sum of \$14,699,412 was set aside, 66 have been those of cooperative organizations. These cooperative projects were designed to serve 33,187 customers, using 8,282 miles of line. Page 593.

*There is considerable uniformity in labor conditions throughout the union shops in the hosiery industry,* due to the influence of the agreement with one large employers' association and to the functioning of the impartial chairman. The provisions of the union agreements and the administration of these agreements by the impartial chairman, in the various branches of the hosiery industry, are described on page 558.

*Labor at the site received 43 percent of the loan obtained from the Public Works Administration and used by the Pennsylvania Railroad* in the electrification of its lines between New York City and Washington. Slightly over 38 percent was spent for materials, 3.3 percent was used to retire bonds and pay interest, and 15.6 percent was used for insurance, engineering, and other miscellaneous items. The work furnished 22,673,000 man-hours' employment. Page 586.

*By the middle of August 1936, the old-age assistance plans of 36 States, 1 Territory, and the District of Columbia had been approved by the Federal Social Security Board* and all but 3 of these had received Federal grants. Of the States not yet operating under the national act, 4 were making payments under State-wide acts and 2 under county systems, 3 had passed legislation which was not yet in effect, and 7 had no old-age pension laws. One State which had no law had submitted a plan which had met the approval of the Federal Board and was operating under that plan. Page 584.

*The International Federation of Trade Unions, formed in 1901, now has in membership the recognized national federations of 29 countries, including some 13,500,000 trade-unionists. The purposes of the organization are (1) to serve as an agency through which to formulate a common statement of policies, (2) to serve as labor spokesman on an international scale, and (3) to collect and disseminate information as to the trade-union movement and labor conditions in the various countries. A description of this organization and of its 1936 congress is given on page 573.*

*A striking correlation between sickness and economic status and sickness and unemployment was found in a recent study by the U. S. Public Health Service (p. 600). It showed a consistently higher rate of sickness among low-income families than among those on the higher-income levels. The families of the unemployed had about 50 percent more cases of disabling illness than was found in families having a full-time worker. These results also corresponded with the situation found in regard to food supply; at income levels of less than \$3 or \$4 per person per week there was a marked tendency toward poorly balanced diets having less than the "safe" requirements of protective foods.*

*Legislative action in regard to minimum wages has been taken in 13 Latin American republics. In several countries this antedates 1920 and in one country action was taken as far back as 1916. The situation in each of these 13 countries is described briefly on page 606.*

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## Earnings and Methods of Wage Payment in the Fishing Industry

FISHING is one of the pioneer American industries, and it is still a means of livelihood for a substantial segment of the population. In 1930, according to the Bureau of the Census, 73,280 workers were employed in the industry. The census figures, however, tend to understate the importance of the fishing industry, as they do not include the Alaskan fishermen; the members of fishing crews who reported their occupations as engineers, cooks, radio operators, seamen, sailors, and deckhands; and many of the persons with whom fishing is an auxiliary occupation. With these workers included, the Bureau of Fisheries estimates that in recent years the total working force of the industry has been in the neighborhood of 120,000.

Despite the importance of the industry in the economic framework of the country, comparatively little has been known about the earnings of fishermen. This deficiency is supplied in part by an analysis<sup>1</sup> of the earnings of fishermen recently completed by the National Recovery Administration. The study was originally undertaken in connection with the minimum-wage provisions of the N. R. A. fishery code. The main body of the data was obtained by means of a questionnaire which, in August 1934, was sent to recorded owners of fishing vessels of 5 net tons and over. Replies to this questionnaire were received for 894 vessels in active use for commercial fishing in 1933, but 392 of the schedules were defective and could not be used in the analysis. Subsequently, through the medium of supplementary studies, comparable information was obtained for 65 additional vessels. The final analysis is, therefore, based on the reports of 567 vessels. It is believed that this sample is reasonably representative of the industry as a whole.

<sup>1</sup> National Recovery Administration. Division of Review. Industry Studies Section. Earnings of Fishermen and of Fishing Craft—Appendix to the Fishery Industry and the Fishery Codes, by John R. Arnold. Washington, 1936.

## Extent of Part-Time Employment

BEFORE summarizing the principal results of the survey it is necessary to consider briefly the extent to which the seasonal character of the industry influences the earnings of the fishermen. This is an extremely important factor in some branches of the industry. As a result fishing is simply a supplemental means of livelihood for a substantial fraction of the total working force. Statistics compiled by the Bureau of Fisheries show that approximately a third of the workers engaged in the boat and shore fisheries of the Atlantic and Gulf coasts and the Great Lakes are "casual" fishermen; i. e., those with whom fishing is a secondary occupation.

The part-time fishermen of the Eastern United States tend to be found in larger proportions on the Great Lakes, in the Chesapeake Bay area, and on the South Atlantic and Gulf coasts. They are chiefly small farmers or farm laborers. The combination of fishing and farming in these areas is facilitated by the fact that some of the important fisheries of the South and the oyster fishery of the Chesapeake Bay are most active during the winter months.

The principal fisheries in the Northeastern States, when not affording more or less year-round employment, tend to be concentrated in the summer and early fall. Consequently, the New England fishermen are unable to transfer to farming during the slack season as readily as those in the Middle and South Atlantic coast regions. Likewise, there are comparatively few industrial establishments in the area that can offer employment to the fishermen during the off season. To some extent fishing is combined with the resort trades in both New England and on the Middle Atlantic coast, but here again there is an occupational conflict.

No reliable statistics are available on the number of fishermen on the Pacific coast who obtain a major share of their income from other sources. The evidence indicates, however, that the number is not large. The Pacific fisheries are for the most part carried on in deep water and for the large-scale supply of canneries and reduction plants. This type of enterprise is not easily undertaken by the casual worker. Along the Pacific coast, moreover, the agricultural population—the class from which casual fishermen are usually recruited in other parts of the country—is not generally settled in close proximity to the seacoast; but even in this area there are exceptions. Fishing is not as a rule the sole occupation of either the salmon fishermen of the Columbia River or the Alaskan fishermen.

Although it is clear that a significant proportion of the total working force is employed only part time, no information was obtained by the National Recovery Administration as to the extent the earnings of fishermen were supplemented by income from other sources.



## Methods of Remuneration

A DISTINGUISHING feature of the fishing industry is the wide variety in the methods of wage payment. Compensation both by straight wages on a time basis and by piece rates exists. In the marine fisheries, however, by far the most common plan is to pay each member of the crew by a share in the value of the catch. Under this plan the compensation received by individual fishermen is primarily dependent on the quantity of fish caught and the unit price received for them, and secondarily on the items deducted from the gross revenue before arriving at the crew's share.

The arrangement whereby the value of the catch of a fishing craft working on shares is distributed among the persons and interests concerned is known as a "lay." A share fisherman may receive a wage or a bonus on a time or percentage basis in addition to or in lieu of a share in a lay. This arrangement, however, ordinarily applies only to persons with exceptional responsibility, such as the captain, mate, or pilot, or to members of the crew engaged in specialized work, such as the engineer, fireman, radio operator, or cook.

Straight wages on a time basis are usually restricted to the following classes of vessel fisheries:

- (1) The crews of most oyster dredges.
- (2) The crews of the craft operating pound nets on the coast of New Jersey.
- (3) The crews of the menhaden fishing vessels operating out of Reedville, Va. This was the home port of approximately a third of the vessels actively engaged in this branch of the fishing industry in 1933. Some of the menhaden vessels working out of the Middle Atlantic ports north of Virginia operate on a share basis, and a modified share system is used by those operating on the Atlantic coast south of Virginia.
- (4) The crews of the paranzella net vessels working out of San Francisco.
- (5) On the Great Lakes, and especially on the upper lakes (Huron, Michigan, and Superior), a straight time wage appears to be the prevailing system. Of the vessels on the Lakes for which reports were obtained, approximately two-thirds paid their crews straight wages in 1933.

(6) The crews of one important trawling fleet working out of Norfolk, Va., are paid on a time basis. The method is also used on some shrimp vessels on the Gulf and in Alaska and occasionally elsewhere.

Piece rates are general among the fishermen employed by the salmon canneries of Alaska. The piece rates may be accompanied, however, by the payment of fixed sums, often referred to as "run money." The only other vessels whose crews are compensated on a straight piece-

rate basis are those in the Alaskan cod fishery, working out of Puget Sound and San Francisco.

The compensation of fishing crews by means of piece rates, however, frequently shades off into intermediate systems. Hybrid methods of this kind are common on the menhaden vessels working off the South Atlantic coast, in the shrimp fisheries of the Gulf coast, and in the herring fisheries of Alaska. In these branches of the fishing industry the catch is used by processing establishments which own or charter the vessels, but buy the catch from the crews at prices fixed in advance. The proceeds of a sale of this kind may be shared among the members of the crew as an independent transaction, and the terms of the distribution may not be affected by the unit price. Frequently, however, the processing establishments pay the fishermen individually, but on a sliding scale of so much per 1,000 fish caught by the whole crew, according to the rank or occupation of each man.

The relative importance of the different methods of wage payment in the fishing industry in 1933 is indicated in table 1. The proportions shown are not fixed, as there is a tendency to shift from one method to another in the hope that the altered arrangement will be more satisfactory to the owners or the crews. Changes have been especially common on the Great Lakes during the depression, but they have occurred elsewhere as well.

Table 1.—Relative Importance of Different Methods of Wage Payment in Fishing Industry, 1933<sup>1</sup>

Method of remuneration	Percent of total		
	Number of vessels	Number of men	Value of catch
All methods.....	100	100	100
Share basis.....	79	72	74
Time rates.....	19	25	24
Piece rates <sup>2</sup> .....	2	3	2

<sup>1</sup> Estimated from returns to N. R. A. questionnaire.

<sup>2</sup> Includes piece-rate vessels owned or operated by salmon canneries in Alaska, which were not covered by the original questionnaire.

The predominance of the share system in the fishing industry is customarily explained by the need of providing a means of rewarding the fishing crews adequately for the dangers and hardships to which they are exposed. In the earlier days of large-scale fishing operations it is claimed that attempts were made to substitute straight time wages for lays, but the old method was revived when it was found that the men were unwilling to make the exertion or to run the risks necessary to recover fishing gear in bad weather. There is, no doubt, some truth in this explanation; but the continuance of the share system is probably due, at least in part, to the influence of habit and

tradition on a very conservative class of workers. At all events fishing is one of the few remaining industries in the country in which the share system of remuneration is still dominant. The variations in earnings which result and the extent to which the earnings of the mass of the workers depend directly on fluctuations of commodity prices have important effects on the status and mental attitude of the fishermen.

#### Average Earnings in 1933

IN 1933 the value of the catch of the 567 fishing vessels for which reports were received totaled \$7,649,842. Of the total, 38.6 percent (\$2,951,695) went for wage disbursements. The earnings of the 5,051 workers employed by these vessels during the year varied widely, but for the industry as a whole averaged \$591. Earnings of the California fishermen were highest, averaging \$979. By contrast, an average of only \$242 was reported for the South.

On the Great Lakes and West coast, the earnings of the share fishermen exceed those of workers employed on a straight-wage basis by a substantial margin. As against an average of \$1,005 for the share fishermen of California, for example, those employed on a wage basis averaged \$874 in 1933. On the East coast and Gulf, however, the annual earnings of fishing crews that were paid on a wage basis had an advantage over the share fishermen. Thus, in the Middle Atlantic region the wage earners averaged \$717, as compared with \$630 for the share fishermen.

A better indication of the wide variation of earnings in the fishing industry is given by table 2 which shows, by regions, the average earnings in 1933 of the fishermen engaged in each of the major branches of the industry for which information is available. In comparing these averages, it should be noted that as a general rule the members of the crew of a lay vessel are allotted one share each, and that any whose duties or responsibilities entitle them to additional or higher compensation receive it in the form of a wage or bonus. For this reason the averages given in the table closely approximate the actual average of the ordinary fishermen and of other members of the crews who did not receive special compensation.

A comparison of the ratios borne by the total crew share to the value of the catch in the various fisheries with the average share per man indicates a certain rough correlation. Both the New England ground fishery and the red-snapper fishery of the South, but particularly the latter, show low average earnings as well as low proportions of crew shares. There are, however, exceptions to this relationship. The crews of the New England mackerel vessels in 1933 received a normal share of the gross, but because of low prices for their product, the average earnings per man were comparatively low. Their total

earnings for the year, however, were approximately 75 percent higher than the average indicated in the table, as the realization, from winter trawling operations in the South, of 10 of the 14 vessels covered, were not included. As the prices received for the trawl catch were relatively much better in 1933 than were those received for mackerel, the excluded shares are believed to have represented about half the earnings for the year of the crews of the 10 vessels.

Table 2.—Earnings of Fishermen in Important Branches of the Fishing Industry in 1933

Method of remuneration, region, and branch of industry	Number of vessels	Number of men	Value of catch	Total crews' earnings <sup>1</sup>	Average earnings per man <sup>1</sup>
<b>Share vessels:</b>					
New England.....	105	1,355	\$2,530,332	\$769,930	\$568
Groundfish.....	67	1,067	2,191,543	638,533	598
Mackerel.....	14	169	121,047	50,669	<sup>2</sup> 300
Miscellaneous.....	24	119	217,742	80,728	678
Middle Atlantic.....	29	185	262,601	116,186	635
Scallop.....	6	42	106,108	47,073	1,121
Miscellaneous.....	23	143	156,493	69,113	490
South.....	57	407	299,793	97,378	239
Red snapper.....	37	296	195,368	54,455	184
Shrimp.....	11	24	26,838	13,798	575
Miscellaneous.....	9	87	77,587	29,125	331
Great Lakes.....	21	102	126,444	67,254	679
Lake Erie.....	5	29	39,385	19,746	681
Lakes Huron and Michigan.....	16	73	87,059	47,508	679
California.....	58	613	1,475,656	615,676	1,006
Tuna.....	24	289	1,058,529	<sup>3</sup> 384,500	<sup>3</sup> 1,330
Tuna and sardine.....	12	124	233,867	<sup>3</sup> 121,970	<sup>3</sup> 984
Sardine, Monterey.....	10	110	92,380	55,311	503
Sardine, southern California.....	6	57	72,114	40,996	732
Miscellaneous.....	6	33	18,766	12,899	391
Northwest and Alaska.....	160	985	1,233,384	637,305	657
Halibut.....	69	465	808,558	398,371	857
Salmon.....	65	339	225,637	111,820	345
Alaska herring.....	19	132	144,600	100,772	763
Miscellaneous.....	7	49	54,589	26,342	538
<b>Time-rate vessels:</b>					
New England, oyster.....	16	125	417,518	88,127	711
Middle Atlantic.....	30	154	378,632	107,612	717
Oyster.....	21	100	316,780	70,773	737
Pound net.....	9	54	61,852	36,839	682
South.....	27	674	279,966	163,056	243
Menhaden.....	18	636	224,519	143,255	225
Oyster and shrimp.....	9	38	55,447	19,801	582
Great Lakes (Lakes Huron and Michigan).....	42	173	205,000	94,901	668
California, paranzella net.....	14	75	302,679	104,166	1,389
Northwest and Alaska, miscellaneous.....	3	7	9,450	3,675	525
<b>Piece-rate vessels:</b>					
California: Alaska cod.....	2	77	41,229	28,313	368
Northwest and Alaska: Alaska cod.....	3	119	87,158	58,116	488

<sup>1</sup> Excluding percentage bonuses charged to gross stock or vessel share.

<sup>2</sup> The data for 10 of the 14 vessels in the mackerel fishery covered only the mackerel season proper, and not winter participation in the southern trawl fishery. Since the southern trawl was the more profitable part of the operation of these vessels in 1933, and because of the omission the average earnings per man should be raised about 75 percent for comparison with the other fisheries.

<sup>3</sup> Including extra shares or half shares allotted to 4 captains in lieu of bonuses charged to the vessel share or the operating expense.

In the Monterey sardine fishery in California and in the salmon fishery of the Pacific Northwest also, normal ratios of the crew share to gross stock were combined with low earnings per man, though the discrepancy was less extreme than in the New England mackerel fishery.

Another factor that should be considered in comparing earnings in the different branches of the industry is that allowance has to be made for the fact that the cost of food for the crews of some of the vessels has been deducted from the gross stock before arriving at the crew share. On the Great Lakes, in the shrimp industry of the South, and in the salmon troll fishery of Washington and Oregon, the vessels reporting were not ordinarily out of port for more than a day at a time and the men as a rule supplied their own food. In the Monterey sardine and the Alaska herring fisheries, and in a few other branches of the industry, the crew's share was determined before deducting the cost of the food. The individual shares for all of these fishermen are somewhat higher than they should be for strict comparison with the corresponding figures for the share vessel of the New England and Middle Atlantic areas, for the California tuna fishery, for the Pacific halibut fishery, and for some others. No data are at present available for adjusting the individual share figures accurately to offset this difference.\*

## Collective Bargaining in the Hosiery Industry, 1936

**I**NDUSTRIAL development as rapid as that in the manufacture of hosiery is outstanding even in the swift pace of the present century. From one particular class of consumers—women—came the impetus for this change. Twenty years ago, almost all hosiery was of the cotton, seamless variety. At the present time the full-fashioned silk stockings worn by women form more than one-third of the total produced.

Since full-fashioned hosiery is largely manufactured in the North where the American Federation of Hosiery Workers has its stronghold, conditions within this branch of the industry are important in an analysis of the provisions in the collective agreements now in force throughout the industry.

### Condition of the Industry<sup>1</sup>

PRODUCTION figures tell the story of an industry striving to meet the extremely rapid growth in the demand for a formerly minor product. Between 1914 and 1931, production of full-fashioned hosiery quadrupled twice. This increase in output has continued since 1931, from nearly 29 million dozen pairs in that year to an estimated 35 million for 1936. During the early years of this phenomenal rise, there was a shortage of mechanical equipment as well as trained operators. As early as 1927, however, the steadily mounting productive capacity began to outdistance demand. By 1930 full-fashioned manufacture was estimated to be 30 percent overdeveloped. The years of general depression since 1929 have merely accentuated ills whose genesis lay in the youth of the industry, when an over-response to the shift in consumer preference resulted in an investment proportionately excessive to realizable demand.

As consumer purchases failed to keep pace with expanding capacity to produce, a secondary problem became formidable. Regional cost differentials, unimportant as long as intra-industry competition was at a minimum, have produced within recent years a geographic shift in the growth of the industry. Philadelphia was and is the center of the hosiery industry; but while this city had 33 percent of the total productive equipment in March 1929, an estimate for April 15, 1935, showed a decline to 27 percent. Over the same period, productive equipment in the South increased from 7 to 17 percent. Since southern machines, on the whole, are newer and more productive than those in the North, the growth in capacity in the South is even greater than the increase in equipment.

<sup>1</sup> Figures appearing in this section are from the Census of Manufactures and from published and unpublished estimates by Dr. George W. Taylor of the Wharton School of Finance and Commerce, University of Pennsylvania, who is also impartial chairman for the organized section of the industry.

In addition to the obsolescence problem northern manufacturers are confronted with higher direct labor costs. These two factors apparently outweigh the northern advantage in indirect labor costs such as supervision and employee training. Although the difference in the wage-rate structures of the North and South seems to be diminishing in recent years, the tendency of the last several years for new capital to flow chiefly into the South has not been checked.

#### Union Organization

ORGANIZATION of workers in the industry began in the full-fashioned branch of the industry. Sporadic efforts at unionization had occurred from the early nineties, but a lost strike in 1899 effectively halted the organizing for 10 years. By 1913 various local unions of knitters formed the American Federation of Full-Fashioned Hosiery Workers, affiliated with the American Federation of Labor as an autonomous branch of the United Textile Workers. In 1915 all of the federation except the Philadelphia local, the largest, withdrew from the Textile Workers. The seceding federation was not reaffiliated until 1922. A few years ago when the union began to extend its organization to seamless hosiery workers and employees of separate dyeing and finishing plants, the name was changed to the American Federation of Hosiery Workers. Another change has been the inclusion of auxiliary workers—those in occupations other than that of operating knitting machines. The union constitution now provides that "Any worker, productive or nonproductive, engaged in the manufacture of hosiery, excepting those in a supervisory capacity, shall be eligible as an applicant for membership."

The extension of union control lagged behind the rapid expansion of the industry during the twenties. Although formal collective agreements were not common, the union standards were effective in a considerably larger proportion of the industry during the early post-war period than at the height of the hosiery boom. In the last few years, however, union influence has apparently increased.

The so-called national labor agreement for full-fashioned hosiery is negotiated with a manufacturers' association whose members have a little more than a third of the productive equipment in the North. The only other mills dealing with the union on a group basis are seven dyeing and finishing plants operating in Philadelphia. Although the remaining union mills negotiate independently, there is a great deal of uniformity in labor conditions among the union shops. This is due to the influence which the agreement with the full-fashioned manufacturers' association has throughout the industry and to the functioning of the impartial chairman.

Part I of this article covers the union agreements and Part II describes the administration of the agreements by the impartial chair-

man. Provisions of the agreements are discussed as they were agreed upon during negotiations, although in some cases they have been modified by rulings of the impartial chairman or in subsequent negotiations between the parties concerned. Agreements in the various branches of the industry—full-fashioned hosiery, seamless hosiery, dyeing and finishing—are considered separately.

#### Part I.—Collective Agreements in the Hosiery Industry

##### Full-Fashioned Hosiery Manufacture

IN 1929 when the American Federation of Hosiery Workers signed its first agreement with the Full-Fashioned Hosiery Manufacturers of America, Inc., 53 mills were members of the association. The current agreement covers 38 mills. A majority of these mills are located in Philadelphia; the others are scattered throughout the North. In 1929 association members had 28 percent of the equipment in this branch of the industry; now they have about 25 percent. The impartial chairman estimates that another 10 percent of full-fashioned equipment is covered by individual agreements signed with 20 companies operating in six northern States. He also estimates that a number of northern manufacturers, representing about 35 percent of the full-fashioned equipment, are maintaining union standards, although there are no formally signed union agreements.

All but six of the full-fashioned-hosiery agreements expire on August 31, 1936. Four of these exceptions are special strike-settlement agreements and two are of indefinite period, terminable at any time upon 30 days' notice. Three independent agreements and the association agreement provide for automatic renewal unless 60 days' notice in writing is given of intent to change or terminate. Four other agreements with renewal provisions shorten the notification period to 30 days. The remainder make no provision for automatic renewal. Only one independent agreement has been in effect as long as the current association agreement; that is, since 1933. Three were signed in 1934, fourteen in 1935, and two early in 1936.

*Wages and hours provisions.*—From the inception of collective bargaining in the industry the union has been concerned with eliminating any cost disadvantage to the union mills. It is significant that the first association agreement, effective September 1, 1929, provided for the first cut in union rates since 1924. These wage reductions were coupled with a further attempt to lower unit labor costs through a partial change from single-machine to double-machine operation. Under the former system a legger operates only one machine, with the result that he is idle part of the time. A legger operating two machines is unable to keep the equipment in continuous operation, but with a helper on the double job idle time for both men and machines is reduced. Since this type of operation at once decreases the number of skilled knitters needed and increases the number of



potentially skilled knitters through the apprentice training, the change represented a major concession on the part of the union.

Although the 1929 rate reductions were made in an attempt to eliminate the wage spread between union and nonunion mills, the old differentials were soon reestablished because of wage cuts which immediately followed in nonunion mills. In view of this situation, the 1930 agreement provided for further decreases in wage rates. Doubling-machine operation was extended to all but a few machines in union mills, though this practice was to be discontinued if styles became more difficult to knit. Under this agreement intraunion differentials in wage rates were eliminated for the first time.

The next year's agreement, effective September 21, 1931, provided for further wage reductions, bringing union rates to about 50 percent of the 1929 level. Because of the unusually low piece rates, weekly minima were established: \$20 for knitters, \$16 for boarders, \$12 for other piece-work operators, and \$14 for time workers. To compensate for the severe wage reductions and to reduce the labor surplus, the agreement continued single-machine operation, the return to which was made by special negotiations during the previous February. Hourly rates were also specified in this agreement for "dead" time; that is, time lost while waiting for work, making samples, or changing styles. The 1931 agreement was renewed without change and related to expire August 31, 1933.

On July 26, 1933, the labor provisions of the code of fair competition for the hosiery industry went into effect. Minimum rates under the code were somewhat higher than the minima provided in the 1931 agreement. The code also reduced the workweek to 40 hours. All overtime work was prohibited.

When the 1933 agreement was signed on November 15 no decision had been reached on the union scale of rates. The union had asked for a 15 percent rate increase but was unsuccessful. It appealed to the National Labor Board, which on December 16 granted a 5 percent increase retroactive to the effective date of the agreement, November 15. The 1933 agreement provided for time and a half for overtime if the code should be amended to permit such work. Later provisions provided for a 40-hour, 5-day week except for footers on a double-shift basis who were put on a 36-hour week. (Operators on the 2-shift footing jobs received a bonus of 11.11 percent to make their earnings equivalent to the earnings of single-shift operators on a 40-hour basis.) This 1933 agreement is still in effect, having been renewed without change in 1934 and 1935.

Of the independent agreements three are identical with the association agreement and six provide the same wage rates (in two of these, lower than union rates were continued for 4 and 6 months after the agreements went into effect). One agreement provides the

same rates as those announced by manufacturers in the Reading area in July 1933, which were virtually the union rates. Another provides a special set of rates somewhat lower than regular union rates, but specifies that minima shall be not lower than those under the N. R. A. code. Seven agreements set no wage rates.

The prevailing workweek in the independent agreements is also the 40-hour week except for a 36-hour week for footers working on a two-shift basis, and a 44-hour week for dye-house and shipping-room employees. The time-and-a-half overtime rate is specified in eight agreements, but in one of these overtime is prohibited for all but dye-house and shipping-room employees, who may work 4 extra hours a week.

In four independent agreements and the association agreement, either party may demand a change in rates if there is a significant change in cost of production, competitive conditions, cost of living, etc. If agreement is not reached in 15 days the matter is referred to a wage-rate tribunal composed of one representative of each party and a third member selected by these two. This tribunal may change rates by a majority vote. In three of the independent agreements the questions are referred directly to the impartial chairman if agreement is not reached in 15 days. In two others national inflation or changes in hosiery prices are sufficient to warrant reopening the wage question. Another provides that wage rates must be discussed every 3 months.

*Employment, discharge, and union dues.*—Since 1930, when the union secured a provision in the agreement requiring auxiliary workers as well as knitters to be union members, a closed union shop has prevailed in association mills. Of the independent agreements about half have a similar provision. In three a preferential union shop is established, with the exception that provision is made in one agreement that the shop status of less well organized departments shall be settled on expiration of the current agreement. Three provide that there shall be no discrimination for union membership and in one the employer reiterates his adherence to the open shop.

Four independent agreements and the association agreement require that the union shall supply new workers to the company within 48 hours of request, while one stipulates that a "reasonable" time shall be permitted to fulfill such a request. If these requirements are not met, employers may secure help from any source, but persons so employed must join the union within 15 days or be replaced by union members. In one case temporary help is exempted from this provision. Nonunion apprentices must become members within 4 months of employment.

Available work must be divided equally insofar as practical, according to six agreements. Four provide for the recognition of seniority as the guide for lay-offs and reemployment.

In seven agreements, including the association agreement, discharge must be made in good faith and must not involve union discrimination. Under 9 agreements appeals may be taken to the shop committee, the executive board of the local union, and finally to the impartial chairman. The matter must be brought to the chairman within 1 week of discharge and no more than 17 days' back pay may be granted on reinstatement.

In the association agreement and six others (one of these 6 months after effective date), the check-off system of union dues is established, the employer deducting from all wages the amount due the union and making payment each pay day to the designated representative of the union. This system was established in the association agreement of 1931 and at that time the union was also granted access to the pay-roll records of any association member at any time. In four agreements not providing for the check-off, dues must not be collected during working hours, in three only company employees may collect dues, and in one only the shop committee. Another agreement provides that dues may be collected on the premises, without specifying further the mode of collection.

*Disputes and grievances.*—The association agreement prohibits strikes, lock-outs, and “demonstrations, displays or advertisements tending to excite sympathy or protests concerning the relations or matters in dispute between the contracting parties.” The right is reserved to either party, however, to use such devices if decisions of the impartial chairman are not followed within 20 days. If an employer finds it necessary to resort to a lock-out to enforce the chairman's decisions, the jobs affected remain union jobs and the union may fill them with other members. Five independent agreements have this provision, and seven others merely prohibit strikes and lock-outs.

In cases of disputes or grievances which cannot be settled within the shop, recourse to the impartial chairman or arbitration is granted in all but two agreements. Dr. Taylor, the impartial chairman under the association agreement, is also named in 14 of the independent agreements.

*Other provisions.*—Precautions are taken in the association agreement and in some independent agreements to insure that the union does not sign agreements with other mills containing terms more favorable to employers. Each independent agreement must be filed by the union with the secretary of the Full-Fashioned Hosiery Manufacturers of America. Upon the association's complaint the impartial chairman is empowered to review such an agreement and order adjustments.

If an association member acquires a nonunion mill, that mill must abide by the terms of the agreement as soon as a majority of its em-

ployees have joined the union or have expressed their desire to have the union represent them. If there is a strike in such a mill before it is covered by the agreement, the owner is prohibited from finishing goods partially processed in a mill already under an agreement.

In cases of failure on the part of a local branch of the union to fulfill the obligations assumed in the association agreement, a company so affected by such action may secure merchandise from other mills, whether union or nonunion. The union, however, may have 5 days in which to remedy the situation and in case of failure to remedy must be furnished with a statement of the amount of goods so purchased.

#### Seamless Hosiery Manufacture

AGREEMENTS with seamless mills are relatively few. On May 19, 1936, the National Association of Hosiery Manufacturers, Inc., announced its second failure to put into effect a voluntary agreement to maintain N. R. A. code labor standards in seamless mills. The first attempt resulted in acquiescence by only 22 percent of the seamless branch of the industry; the second drive signed up only 33 mills, representing 66 percent of capacity. (These mills were therefore released from any obligation to adhere to code standards.) None of these 33 mills has signed a union agreement.

Agreements covering approximately 3,000 workers are in effect with 7 seamless hosiery companies operating in Massachusetts, Pennsylvania, Ohio, Wisconsin, and Tennessee. These agreements were all signed within the past 2 years and, with two exceptions, expire on August 31 of this year. One exception is a special strike settlement without provision for termination and the other is renewable every 6 months. Renewal is automatic in three agreements, one requiring 60 days' notice of intent to change and two 30 days' notice. Under two agreements an annual option is given the employer for renewal upon 60 days' notice, the option expiring September 1, 1937.

*Wages and hours.*—Because of differences in process, rates are not identical with those in full-fashioned manufacture, though they are comparable. Minimum weekly wages are set in two cases and the code minima specified in a third. In the latter case payment is on the basis of a point system but a shift to piece and time rates was to be made within 6 months or appeal taken to the State board of conciliation and arbitration.

In two agreements rate changes are made by decision of a tribunal, as in the association agreement for full-fashioned hosiery. In two others the rate question may be reopened in case of national inflation or changes in hosiery prices. Two agreements referred rate changes to arbitration, without specifying the nature of the arbitration, and another granted the union the right to employ a certified public accountant to report on the financial justification for increased rates.

The 40-hour 5-day week prevails in the agreements, but in one there may be 8 hours of overtime work a week for one occupation (fixers) only. In this case the time-and-a-half rate is not applicable until after 48 hours of work. Two agreements specify the time-and-a-half rate as payable after 40 hours, and in one of these union permission for overtime work must be secured. Hourly rates for dead time were specified in two agreements. In two cases six holidays were named on which work may be done only in cases of emergency.

*Employment, discharge, and union dues.*—Four of the agreements have a closed union shop, one makes no provision, and two others merely provide for no discrimination against union members. One agreement specifies that it is not effective in any department until two-thirds of the employees are union members and signify in writing their desire to have the union represent them. New employees are to be secured only from the union in the closed-shop agreements, the union to furnish them within 24 hours in one case and 48 hours in two. In two agreements apprentices or learners need not be union members but must join within 15 days after securing employment.

In three of the agreements apprentices work at a lower rate for 3 months before being granted full wages and in these three it is specified that no more than 5 percent of the total force shall be employed as substandard workers. (These same provisions were in the hosiery code.)

The check-off method of dues collection is in force under two agreements. In one the employer, while not agreeing to the check-off, agrees to consider each case with a view to using his influence to avoid future delinquencies. The other agreements do not specify the manner of dues collection.

Four agreements provide for equal division of work when practical or during the dull season. In one agreement seniority is to be considered in case of lay-off and reemployment, provided efficiency and the number of dependents are equal.

*Disputes and grievances.*—One agreement prohibits strikes until the management has been consulted. Three permit strikes or lock-outs to enforce decisions of the impartial chairman. In one agreement the arbitration machinery is not described; most of the others name Dr. Taylor as impartial chairman.

One agreement provides that disputes over rate changes shall be referred to the impartial chairman during the first 6 months of the term of the agreement and to the United States Conciliation Service thereafter.

The special strike agreement specified in detail the procedure to be followed in grievance cases. The shop committee is to meet the mill superintendent each week to discuss complaints and grievances. These must be submitted in writing to the committee by the com-

plainant not more than 24 hours after the complaint arises and after the complainant has first registered the matter with the foreman of his department. If the shop committee and the superintendent cannot adjust the matter, the company officials are to be consulted. In case of continued failure to adjust, the matter is referred to the impartial chairman.

*Other provisions.*—Two of these agreements provide that the impartial chairman shall review competitors' agreements, that nonunion mills acquired by union mills shall be brought under the agreement, and that the purchase of merchandise from outside mills is permissible in cases of local union violation.

#### Hosiery Dyeing and Finishing

A NEW development in the industry is the purchase of hosiery "in the gray" from knitting mills, to be dyed and finished in separate plants. To cover this branch of hosiery manufacture, agreements are signed with companies which do only the finishing of hosiery knitted elsewhere. Eighteen such companies are covered by agreements with the union, all effective since October or November of last year, and expiring August 31, 1936. Seven of these companies, however, are covered by an agreement signed February 15, 1936, with a newly formed association, the American Dyeing and Finishing Association. Eight other companies have signed agreements independently which are almost identical with the association agreement. Although two agreements make no provision for renewal, the others provide for automatic renewal unless written notice is given at least 60 days before expiration.

*Wages and hours.*—The rate structure in the 18 plants is fairly uniform, but somewhat lower than that prevailing for dyeing and finishing done in the knitting mills. Rates are to be reconsidered every 3 months except in one case where the first reopening of the rate question is eliminated. In case of disagreement all but two agreements refer the matter to the impartial chairman. These two provide that the rates are to be brought up to the level of the full-fashioned association agreement, but no higher. In the identical agreements signed independently by the eight companies the rate structure is to depend upon that in a specified Philadelphia company.

The prevailing workweek is the 40-hour 5-day week, except for dye-house workers. The amount of overtime at straight pay for such workers was to be determined under the association agreement by the impartial chairman. The agreements with the eight independent companies permit 120 hours of overtime within a 90-day period at straight time for the dyeing of hosiery accumulated "in the gray" during the slack season. In two agreements, 2 hours a day and 4 a week of overtime at straight pay are permitted for dye-house em-

ployees. In another, 4 hours a week may be worked to complete merchandise in process. For all other workers overtime must be paid for at time and a half.

*Employment, discharge, and union dues.*—All of these agreements provide for the closed union shop and new help is to be furnished by the union within 48 hours of request. If the union is unable to furnish workers, the employer may secure help from any source. Such new employees must join the union in 15 days or be replaced by union members. Apprentices need not be union members upon employment, but must join within 4 months, under all but two agreements, which shorten this period to 8 weeks.

Reasons for discharge and appeal on discharge are the same as in the association agreement, except in two cases which do not consider this question. The check-off is in force in all but two of these mills, where the dues collection method is not specified.

*Disputes and grievances.*—All of the union dyeing and finishing mills are subject under their agreements to the decisions of Dr. Taylor as impartial chairman. Two agreements contain no further provision for the settling of disputes, but the others specifically prohibit strikes and lock-outs. These agreements also refer to the chairman all cases which cannot be settled locally, with the stipulation that the chairman must render decisions within 10 days of request.

#### Part II.—Administration of Agreements by the Impartial Chairman

SINCE September 1, 1929, the unionized section of the hosiery industry has largely discarded the pressure devices of strikes and lock-outs as techniques for maintaining mutually satisfactory industrial relations. Except when necessary to enforce decisions of the chairman, the right to strike and the right to lock-out are waived under the agreements. The basis of this method of settling disputes lies in the obligation of both parties, in the words of the agreements, "not to exercise their rights and functions oppressively in dealing with each other." In this manner a principle of equity is established to control both the application of the basic industrial law established in the agreements, and the extension of the spirit of the agreements to matters not covered by specific provisions. The impartial chairman, in his function of administrator, must maintain a just balance between the rights of one party and the corresponding duties of the other.

The functions of the chairman were described in a 1930 decision as follows:

[His authority] is obviously limited to the interpretation of the agreement, to situations arising during the life of the agreement and not covered by the terms of the agreement; to the finding of facts in a dispute covered by the terms of the agreement; and lastly, it is his duty to enforce by decision the provision by which the parties agree not to exercise their rights and functions oppressively in dealing with each other.

Expenses of his office are borne jointly by the parties. In case of vacancy, three representatives each of the union and the association must meet within 15 days to choose a successor. Dr. Paul Abelson, of New York City, was impartial chairman from September 1, 1929, to September 1, 1931. Since that time Dr. George W. Taylor, of the University of Pennsylvania, has been chairman, his jurisdiction covering the newly organized branches of the industry as well as the manufacture of full-fashioned hosiery.

Only when the prescribed procedure for local adjustment of differences has failed may an application be made for a hearing. In the application the charges are specified, on the basis of which the impartial chairman sets a hearing date and invites all parties to attend with their organization representatives. The hearings are open, testimony being offered in the presence of all parties concerned. In many cases agreement is reached during the hearing without the necessity of a formal decision by a chairman. In other cases he refers the matter back for local adjustment either before rendering a decision or to work out the details of applying the principle stated in a decision. Although most cases involve directly only the management and workers of one mill, the establishing of precedents by the chairman's decision leads to the application of a leading case in similar situations throughout the jurisdiction of the chairman.

The following description of principles established in the chairman's decisions is under three general headings: The application of the impartial machinery, wages and hours, and employment and discharge.

#### Application of the Impartial Machinery

PREEMINENT in the principles established for the application of the impartial machinery for settling differences is the invalidity of any local understanding, in the mill of an association member, which is contrary to the word or spirit of the agreement. There is no local option concerning the application of any provision. The chairman has held that this applies even to modifications of agreements made informally in joint conferences or adopted by referendum vote of union and association members. This principle was so well established in early cases that a decision has not been required since 1931.

The application of this principle has affected all cases where there has been a desire on the part of either one or both parties to make an exception because of peculiar local conditions. In one case concerning wage rates, however, an exception was made when the application of the standard rate would have resulted in throwing earnings so far out of line that the intent of the parties to equalize conditions would have been violated. This case was not to be considered as setting a precedent.



Although the chairman has invariably censured those guilty of a stoppage of work, the penalties imposed have varied with the special circumstances surrounding the violation of the agreement. Compensation for losses sustained by a mill is usually made by requiring a specified amount of overtime work at straight pay.

In one case a fine was levied on the workers, payable if and when a second stoppage occurred, and in another they were required to forego one of the usual holidays. In cases of extreme provocation no penalty was imposed for stopping work; in others the loss of wages during the stoppage was considered sufficient penalty. In only one case has the chairman ruled discharge to be the appropriate penalty for a walk-out.

Two cases arose concerning the extension of the agreement to mills owned in whole or in part by a company which had signed the agreement. The chairman ruled that in cases of partial ownership such extension must be made insofar as the signatory company has the ability to enforce compliance with the agreement. When any one of a group of mills under common ownership signs an agreement, however, extension to the other mills is not required and may be made only if the parent company itself signs the agreement.

In a case concerning the application of an independent mill for wage-rate reductions granted in the association agreement, a ruling was made that the equalization-of-costs principle did not pertain in this case since the union had received in exchange for the drastic wage cuts equally drastic changes with regard to employer and employee duties. The chairman therefore disallowed the rate reductions unless the company would accept other changes which were substantially those provided in the current association agreement.

Other decisions acknowledged the precedence of an agreement provision over decisions made before such a provision was written, and established a definite field within which administrative prerogative was to pertain, regardless of contrary rules by the union shop committee.

#### Wages and Hours

HOSIERY manufacture is a piece-work industry, with a complicated system of rates depending upon the particular job content. Rates vary with skills required, machine speed, amount of hand labor involved, quality of silk, and an infinite number of other factors. Since the original rate structure was not established according to requirements of the operation, the cooperative attempt to determine

and equalize rates was hindered by the unequal rates for equal work which had been customary in various localities. Time and production studies, conducted jointly or by the impartial chairman, have accordingly been the basis of most rates established since the signing of the first full-fashioned association agreement. General changes in the rate structure are made during negotiations by applying a percentage increase or decrease to all rates without disturbing job differentials.

Many decisions relative to wages and hours merely involve the application or interpretation of the pertinent provision in the agreement, while others refer to precedents established in previous decisions. In several cases the chairman has ruled that even in cases where inequalities were inadvertently provided in the agreement, his authority was not sufficient to alter rates so determined. Other decisions, especially under the early association agreements, were concerned with the elimination of regional differentials.

A large proportion of the cases considered by the impartial chairman concern the setting of rates on new styles or processes. Many of these are paid for as "extras", a fixed bonus in addition to the piece rates for each dozen of a specified style produced; other more general changes require setting of new piece rates. Since the latter involve more far-reaching changes, the procedure is to pay a style-development allowance equal to 98 percent of the employee's average earnings over the preceding 5 weeks. As soon as a time or production study has been made, a temporary piece rate is set, with an allowance for increased production under piece rates. A final piece rate is set, perhaps several months later, on the basis of experience under the temporary rates.

For time lost in style changes, as distinguished from the development of altogether new styles, a definite hourly rate has been in effect since the signing of the 1931 agreement. The chairman has ruled that this applies only when production under the style change is less than normal. An exception to this rule was made in the case of one seamless-hosiery mill where its application would have resulted in an undue increase in costs, the chairman recommending that the mill obligate itself for a daily wage guaranty rather than the hourly minimum. In deciding whether or not an extra allowance should be paid, the determining factors are the additional skills required and whether production will be permanently reduced due to more time-consuming operation. Since 1930 knitting on certain types of old and less productive machines has been granted an extra allowance.

Several decisions concerned the application of minimum weekly rates in effect under the agreement from September 1, 1931 to 1933. The chairman ruled that these rates were intended to prevail in all cases and were set at suitable amounts with that intention in view.

Reductions of the minima for substandard work were accordingly disallowed. Other decisions involved the payment of minimum rates as such and prevented their becoming maximum standards. Recently the minimum-wage guaranties for learners in certain occupations were changed by the chairman's decision from a fixed lower rate for the first 3 months and a full wage thereafter to a series of rates gradually increasing to the full wage during the first 4 months of employment.

After the code with its ban on all overtime work was invalidated, the chairman ruled that local arrangements for overtime work were permissible, provided that such work did not exceed 8 hours a week and 2 a day. Several rulings established the principle that work done beyond the usual working hours should be paid as overtime even though the daily maximum hours provided in the agreements had not been worked.

#### Employment and Discharge

SEVERAL differences arose under the agreement provision making union membership a condition of employment. The chairman ruled in one case that a member expelled by the union was not eligible for a job in a union mill. In another concerning a union disciplinary measure which prohibited three members from continuing to work in a certain mill, the union's right to discipline its members in such a way was upheld.

The union's right to refuse admission to membership when many of its members were unemployed was granted, as were restrictions on the training of learners in the face of a surplus of skilled workers. The principle of equal division of available work was applied to day and night shifts, but not to temporary employees, whose term of employment was considered to be definitely limited. Temporary employment was defined for this purpose to apply to anyone working at a mill for less than 4 months in a year; if at the end of the 4-month period the employer announced his intention to terminate the job within 2 weeks, the job would not become permanent.

Decisions by the impartial chairman have established the employee's right to a job in another department of a mill when his own job is eliminated or changed so that he cannot maintain his former earnings. The employee's right to his job after illness has been granted, provided that notice of the probable duration of the absence is given the employer. The chairman has ruled that eligibility for promotion depends upon ability, seniority applying only when other factors are equal.

In 1930 the union signed two independent agreements which did not require organization of auxiliary workers. Several association members requested that their agreement's provision for organization

of such workers be declared inoperative on the ground that all agreements with full-fashioned mills were to be substantially the same. As this request was not made until about 9 months after the association agreement was signed, the chairman refused to make such a ruling. Acquiescence over such a long period of time was considered as a waiver of the association members' right to have agreements similar to those with competitors.

If a discharge is not made in good faith or involves union discrimination, the chairman reinstates the dismissed employee with back pay or with the opportunity of making up the time lost since the discharge. In one case reinstatement of a temporary employee unfairly discharged was considered impractical, and a specified amount was paid him for time lost. Many of these cases involve a decision as to whether the penalty of discharge is proportionate to the offense. Even when a worker has been guilty of disobedience, poor work, etc., the chairman has occasionally changed the penalty to disciplinary lay-off or recommended leniency in reemployment. Exemplary discharge of some workers when a whole department is substandard or negligent has been considered unfair. Since the union is responsible for maintaining efficient production under the closed-shop agreements, the chairman has ruled that the shop committee should be informed of unsatisfactory work or conduct which might lead to discharge. Under this procedure the union assumes direct responsibility for improving substandard job performances and for securing compliance with shop rules.

## International Federation of Trade Unions

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**T**O UNDERSTAND the International Federation of Trade Unions and the program enunciated at its recent congress, it must be considered as only one, though the most inclusive, of several related trade-union organizations. Through years of experiment and experience, the trade-union movement in the different countries has built up a variety of international as well as national organizations to deal with the economic problems of workers. For instance, when a machinist in Great Britain joins a trade union, he automatically becomes a participant in several larger trade-union organizations. He signs the membership card and thereby becomes a party to the privileges and obligations of the national union of his trade (the Amalgamated Engineering Union). Through this organization he is also affiliated to the national federation of all trades (the British Trade Union Congress), and to the international organization of his trade (the Metal Workers International Federation). Through the national federation, he is also connected with a union of national unions inclusive of all countries, the International Federation of Trade Unions.

The division of functions among these organizations is relatively clear. All the affiliations of the individual worker emanate from the organization of which he is a member, and whose discipline he acknowledges. This national trade-union represents him both locally and nationally in the adjustment of the industrial problems directly connected with his job. But in those economic and industrial problems of his industry which are international in scope, his national union cooperates with the national unions in other countries through the international union of his trade. In those problems that affect all the workers in his country, his trade-union cooperates with the national labor federation—the A. F. of L. of his country. By the membership of this latter organization in the International Federation of Trade Unions it cooperates in meeting the wider, international problems of workers. All these organizations collaborate not only in joint efforts to influence employers, governments, and the public, but also, through a policy of mutual recognition, in keeping their own organizations unified and disciplined and in assisting in their expansion.

The most inclusive of these organizations, the International Federation of Trade Unions (the I. F. T. U.) has a long history<sup>1</sup>

<sup>1</sup> For a full history and description of the International Federation of Trade Unions, see Lorwin, Lewis J., *Labor and Internationalism*, New York, The Macmillan Co., 1929. For an excellent recent summary, see Report of the Executive Council of the American Federation of Labor to the 1935 Convention, pp. 134-138.

dating back to its formation in 1901 (under the name of International Secretariat of National Trade Union Centers) and its reorganization after the hiatus caused by the World War. It was started in order to serve as an international clearing house for trade-union information, and to provide an agency for the exchange of ideas between national trade-union leaders. At first the organization did little more than arrange periodic meetings between those leaders. Its activities gradually increased, and it began to express the international views of labor. Following the war it became an organized agency with a continuous life and a considerable force in directing the international program of its constituent members.

The American labor movement took an active interest in the development of the international trade-union movement, and between 1911 and 1919 American labor was represented at its meetings. Although Samuel Gompers, president of the American Federation of Labor, attended the reorganization meeting in 1919, the A. F. of L. has never affiliated with the I. F. T. U. However, the report of the Executive Council of the A. F. of L. to its 1935 convention dealt at length with its relations to the international movement and the meeting adopted a committee report declaring that "Unless there can be created some effective vehicle for international labor solidarity, the trade-union movement may be further seriously weakened in those countries adjoining dictatorships. \* \* \* The power of international organized labor is perhaps the most effective instrument" to prevent war, and that the participation of American labor in the International Labor Organization can be made more efficient by cooperation with the I. F. T. U. whose executive committee "serves as a steering committee on labor strategy there." The report therefore urged a reexamination of the problem of affiliation, recommended that the executive council initiate a discussion to that end with the I. F. T. U., and empowered the Executive Council to affiliate if there proved to be "a basis of effective cooperation."

The recognized national federations of trade unions of 29 countries make up the present membership of the I. F. T. U. These represent the free trade-union movements of all the democratic European countries and those of Argentina, Canada, Dutch East Indies, India, Mexico, Palestine, South Africa, and Southwest Africa. The organization also achieves, in varying degree, fraternal and cooperative relations with the free trade-union movement of practically every other democratic nation in the world. The peak of the membership of its affiliated national members was reached shortly after the war, when it totaled about 22 million. By 1933, it had fallen to about 8½ million. This decline was sharp at first, and then was gradual until a second precipitous drop in 1933. It is accounted for in part by the decline in trade-union membership in almost all countries, following

the gains that came with the war period, and in part by the loss to the federation of the Italian, and more recently, the German and Austrian movements. More important even than this recent loss of membership has been the loss of prestige to the I. F. T. U., which resulted from the suppression of the free trade-union movements of Germany and Austria. However in the past year, by the large increase in membership of some of its members, and by new affiliates, the total membership has increased to about 13½ million. Although the movement cannot claim to be so nearly universal as it was immediately following the war, it still remains the international expression of the labor movements of democratic countries.

It is quite clear, both from the pronouncements of its leaders and the activities it has undertaken, that the I. F. T. U. is intended to serve several purposes. It is an agency through which the trade-union leaders of different countries can formulate a common statement of their basic policies. This agency is then enabled to express to the rest of the world the views and objectives of labor. This unity of purpose also helps to concentrate the demands of the labor movements of different countries, and thus to strengthen such demands within each nation. It also serves as the spokesman for labor in dealing with international organizations and movements. In this connection, the I. F. T. U. has played a very active part in the functioning of the International Labor Organization and has sought also to influence the League of Nations and other international organizations. Another international activity has been the mutual support of trade-union movements. Not the least of its international activities has been the collection and dissemination of information upon the trade-union movements and labor conditions of the various countries.

Each national federation which becomes and continues to be a member of the I. F. T. U. accepts the basic trade-union philosophy of voluntary organization of workers and employers, collective bargaining and collective agreements directed toward the improvement in the economic life of its members, and freedom from political domination; but these principles, though basic, are very general. How they shall be interpreted and applied so as to advance internationally the programs of the national trade-union movements requires redetermination periodically. The seventh triennial congress of the organization met in London on July 8-11, 1936, and brought up to date the application of these policies. A summary of its resolutions and reports gives the clearest indication of the present program of the organization.

#### The 1936 Congress

IN THE 1936 congress each affiliated national federation was given a voting strength proportionate to the size of its 1935 per-capita contribution to the I. F. T. U.; 132 delegates came from the following

countries (arranged in the order of their voting strength): Great Britain, Sweden, Czechoslovakia, France, Belgium, Spain, Denmark, Holland, Switzerland, Poland, Norway, Rumania, Palestine, Finland, Luxembourg, Canada, India, and Greece, with nonvoting delegates from Mexico, Austria, Germany, Italy, and Danzig.

The 25 recognized international unions of trades had a right to be represented there; these delegates may participate but not vote in the deliberations of the Conference. Thirty-seven such delegates represented the following 19 organizations: Building and wood workers, civil and public services, clothing workers, diamond workers, employees, factory workers, food and drink workers, hatters, land workers, leather workers, miners, painters, postal workers, stone workers, teachers, textile workers, tobacco workers, transport workers, and typographers.

Practically all the other industrial and democratic countries of the world were represented by fraternal delegates or visitors. Fraternal delegates from Australia, Brazil, Ireland, Japan, New Zealand, and South Africa spoke in a vein that suggested that their national federations were in sympathy with the general policies of the I. F. T. U. and that at least some of these might soon affiliate with it. In keeping with the great interest displayed by its former president, Samuel Gompers, William Green as president of the American Federation of Labor sent fraternal greetings to the congress, and, referring to the possibility of war and current "menaces to democratic institutions," said that "your interests are our interests, and we must cooperate in making labor's interests an effective factor in public opinion insistent upon peace between nations." Although the American Federation of Labor is not a member of the I. F. T. U., two American trade-union leaders visited the conference. David Dubinsky, president of the International Ladies' Garment Workers' Union, attended the congress in his capacity of an executive officer of the International Clothing Workers' Federation.<sup>2</sup> Emil Rieve, president of the American Federation of Hosiery Workers, visited the congress on his way home from the International Labor Conference in Geneva.

The largest and strongest members of the I. F. T. U. are the European national organizations, because, outside of the United

<sup>2</sup> The term "international" may cause some confusion. The American unions are international because they include workers of the United States and Canada. On the other hand, the "internationals" of the I. F. T. U., in particular industries, whose headquarters are in various cities of Europe, include the unions in a particular industry of a considerably larger number of countries. Some American unions are members of these larger international trade organizations.

These internationals again must be distinguished from the political internationals (First) International Working Men's Association (now extinct), the (reorganized Second) Labor and Socialist International, and the (Third) Communist International. The international trade unions have no affiliation with any of these latter organizations.

They must also be distinguished, of course, from the International Labor Organization, of which states (nations), not labor organizations, are the constituent members. The annual session of the conference of the latter completed its work just before the I. F. T. U. congress met in London. That session is described in the August 1936 number of the Monthly Labor Review (p. 316).



States, most of the trade unionists of the world are in Europe. In addition to the membership of Canada, India, and Palestine, however, both the new affiliations of Argentine and Mexico, and the presence of fraternal delegates from the recognized movements in Australia, New Zealand, Japan, and South Africa, demonstrated the world-wide character of the organization, and made it obvious that it is the organization best able to speak on behalf of all the free trade-union movements.

Some of the problems with which the congress dealt had not materially changed since its last session in 1933. For these, the congress served as an opportunity for the international trade-union movement to reaffirm and broadcast its previous decisions. Other problems had so changed since they had been debated by the congress that it was necessary to modify and redirect trade-union policy. Still other problems faced by the congress are matters of its internal organization and procedure. Under this classification, the action of the congress will be summarized.

In an analysis of congress debates and action, it is necessary to bear in mind the structure of the I. F. T. U. Its constitution does not require either its national members nor the international unions of specific trades to execute its decisions. In most matters, therefore, the congress aims to "give a lead" to the policies of the labor movements of different countries by working out a unanimously accepted statement of general principles. Of course, within the sphere of its own organization, the congress can take direct action. The execution of such decisions is entrusted to an executive committee, at present composed of the executive heads of the trade-union movements of Great Britain, France, Belgium, Denmark, Holland, and Czechoslovakia. The general secretary of the British Trade Union Congress, Sir Walter Citrine, is president of the I. F. T. U., and Walter Schevenels of Belgium is its full-time general secretary.

#### Collective Security Against War

As the fraternal greeting of the president of the American Federation of Labor stated, the most urgent problems before the trade-union movement internationally are the interrelated threats of war and of fascism. In the first years after the World War, the I. F. T. U. had decided that the organized power of the workers, mobilized in an international general strike, should be used to prevent any future war. It was assumed that, since such a strike would paralyze the economic life of all countries whose political leaders had declared war, a war could be made impossible. Such a program assumed the presence in each important country of a strong, peace-determined trade-union movement which was independent of its own government.

This last session of the congress reaffirmed its position that if war threatened between countries where such trade-union movements existed, an international general strike should be called by its executive committee, for it "is unrelentingly opposed to war as an instrument of policy" and will condemn nations which "refuse to submit their disputes to international arbitration."

But this congress also recognized that such a program was in some degree outdated. "The lack of an independent trade-union movement in such countries as Germany, Italy, and Austria makes the calling of a general strike against their governments an impossibility. \* \* \* A general strike under such circumstances could not possibly be made effective by the trade unions in those countries." If such countries were involved in a war, a general strike in any other country would merely leave it open to attack. Consequently, in recent years a very different peace program has become accepted among the national trade-union movements, has been enunciated by the executive of the I. F. T. U., and was confirmed by the congress this year.

The new program is based upon "collective security." It depends upon a strengthening and invigoration of the League of Nations, because it concludes that the only way to prevent the aggression of any nation is by mobilizing against such aggression the entire strength of the peace-loving nations of the world. In such a mobilization, the trade-union movement would urge the application of economic and financial sanctions to the very limit in order to muster the maximum pressure against an aggressor. Each peace-loving country must be ready, acting under the leadership of the League, to restrain an aggressor with military means, if necessary. The determination of aggression, in the opinion of the federation, is to be made by the League, and is to be applied to the present boundaries, not only of the great powers but of all sovereign States, for "peace is indivisible." Once there is such an honest readiness to "use the military and naval forces in support of the League in restraining an aggressor nation which declines to submit to the authority of the League," then "sanctions (both economic and military) would inevitably mean peace and consequent disarmament."

In the execution of such a policy of collective security, therefore, the I. F. T. U. urged each national member to impress upon its government the necessity of an honest support for the principles of the League, and a readiness to unite through it in the vigorous defense of any nation which may be the victim of aggression. It went farther, and urged that if aggression was declared by the League, and any government does not accept its obligation, the trade-union movement should insist upon a wholehearted support of the League program, even by a general strike if necessary. The congress was aware that

such a peace program was not easy to follow, but resolved that it "is fully prepared to instruct its affiliated membership to shoulder the risks and responsibilities thereby entailed."

Only by an honest support of this program of collective security could progress be made toward disarmament. It resolved that "the fight must go on for that final stable system of disarmament which can only be built upon equality of rights and duties and permanent international supervision."

Another measure designed to reduce the causes of war was voted by the congress. Each member was urged to press for the "supervision of armaments or the nationalization of the armaments industry," so that the profit motive might be taken out of war preparation.

The elaboration of this program in the light of changing world events remains in the hands of the executive committee, which in the past 3 years has issued statements and called conferences of trade union and political leaders at times of crises.

#### Fascism, Democracy, and Economic Planning

The I. F. T. U. had previously declared strongly against any form of fascism, and renewed that opposition in 1936. The opposition was based on the firm belief that fascism was a denial and a defeat for all the aims as well as the procedures of the free trade-unions. In this connection, the I. F. T. U. "instructs its members to urge upon their governments to offer the maximum resistance to fascist attacks, and assures them of its cooperation and support in so doing." Within fascist countries the fight was to be carried on also. The executive committee reported, in guarded terms, upon the extensive underground work which was being carried on by trade-union groups within countries where free trade-unions were prohibited. It was directed to continue "to support all efforts to restore freedom of association wherever it has been abolished, curtailed, or for the time being withdrawn."

To speakers at the congress it appeared that within countries at present democratic, the dangers of fascism were not quite so great as they had appeared in 1933. But there was general agreement that within such countries strong fascist tendencies existed, and had to be strongly resisted. Even more dangerous, however, appeared the relation between fascism and war, for "fascism constitutes a constant menace to peace, and an ever-present danger of war."

The congress was greatly concerned with all tendencies to circumscribe or even eliminate the freedom of action of workers and their trade unions, whether or not these were called "fascist." It expressed as its basic belief that "the liberty and independence of the trade-unions constitute an indispensable condition for an effective representation of the interests of the working class." So it concluded that "the free decision of the trade-unions cannot be replaced by an organi-

zation which workers are compelled to join, and by means of which the trade-unions are made hopeless tools of the State or of the employers." For "the efforts to secure a corporate structure of the State and a corporate organization of the workers are simply a means of reducing or destroying the influence of the workers upon their economic social and cultural conditions."

The insistence upon the "right not to organize" was judged to be an indirect method used by employers to combat union organization, and so had to be watched. But not all forms of compulsion were equally condemned. Compulsory arbitration seemed undesirable to the congress, but it was noted that some national movements had experimented with it.

On the other hand, the congress considered favorably the possibility of the compulsory application to the whole of an industry "of a collective agreement freely concluded between the most representative organization of workers and employers throughout the industry concerned, thus also covering unorganized workers and employers." This is an idea not unfamiliar in America, for it was included in section 7b of the N. I. R. A., and later was incorporated in somewhat different form in the Guffy Coal Act and in the Ellenbogen textile bill.

Carrying farther this same principle of the representation of workers through their free trade-unions, the congress reaffirmed its conviction of the desirability of economic planning.

The I. F. T. U. makes a plea for all elements of the community to strengthen and defend democracy. But a general defense of the freedom of the individual and the desirability of progress through the free choice of all members of the community does not appear to the I. F. T. U. to be sufficient. Following up its earlier pronouncements it reaffirmed in 1936 that economic planning is a wiser alternative than fascism to the policy of "drift," of *laissez-faire*. It sharply distinguished economic planning from fascism because both economic and political organizations are to be purely voluntary. It also is distinguished from State socialism because it places a greater emphasis upon the voluntary participation of freely organized workers, employers, and consumers. In this connection, it may be noted that in its emphasis upon economic planning the I. F. T. U. shows its trade-union outlook. A congress report states: "Our trade-union movement is not a party political movement, and guarantees its members the fullest liberty of political opinion and individual philosophy." This in no sense indicates, however, that there is no cooperation between the trade-union movements and the Socialist parties in Europe. The congress gave a warm welcome to the president of the Socialist International as a fraternal delegate, and its executive committee has many times joined with the Socialist International in declarations concerning international problems.

The last congress, in 1933, formulated the general principles of which the trade-union movement approved in the development of economic planning. It was expected that each national movement would deal with these general objectives by the formulation of a more specific and concrete program for its own country. These plans have been elaborated by a number of the most important national movements. The congress viewed each conscious attempt of a State, with the participation of the free economic organizations, to give direction and control to economic effort as a desirable experiment toward an inclusive economic planning. It noted, however, that such planning might become so nationalistic that it would represent a further limitation upon international trade. To guard against this, it instructed its executive committee to summon a conference "to study the creation of some organ capable of formulating recommendations" for the international coordination of national plans.

#### The 40-Hour Week

As far back as 1931, the I. F. T. U. had declared in favor of an international reduction of the maximum working week to 40 hours, in order both to provide increased leisure for workers, and as an attack upon unemployment. This campaign became a basic part of the "struggle carried on by trade-unions against the crisis and unemployment, and against fascism, which is their corollary." The congress reviewed world developments in the 3 years since its last session.

The national members of the I. F. T. U. had urged such a program of hours reduction in their own countries. Such national efforts had not been very successful before 1936, however, and the principal campaign had been directed into the international field, in the hope of securing action through the International Labor Organization. There, over the years, the workers group, under the leadership of the I. F. T. U., attempted to persuade governments and employers to adopt a convention (treaty) specifying the application of the 40-hour week to all industry. The congress noted that this effort had been unsuccessful, and that since 1935 there "no longer appeared any chance of a general convention." The I. L. O., after the adoption in 1935 of a convention of principle, had turned to the consideration of separate conventions for various important industries.

When the congress met in July 1936, its executive committee reported that only two conventions applying the 40-hour week had been adopted, that covering public works at the 1936 conference and that covering the glass-bottle industry a year earlier. It regretted that more progress by separate industries had not been made, and decided "that this method must be abandoned and efforts resumed for the adoption of a general draft convention establishing the 40-hour week for all workers without distinction."

At the same time, the congress noted that in 1936 the national movements in France, Spain, and Belgium had been quite successful in the establishment of the 40-hour week in their own countries. It therefore concluded that "it is up to the trade-unions to aim, with redoubled energy, at getting the 40-hour week recognized as a trade practice, even before the reform is incorporated in law." It concluded that after an extension of the drive by trades and by national movements, its international accomplishment through the I. L. O. would be more likely.

#### Membership Problems

The sharpest debate of the congress centered upon a resolution that would have instructed the executive committee to "take up negotiations with the Trade Union Center of the Soviet Union and the Red International of Labor Unions, for trade-union concentration or collaboration." In an extended debate, its advocates urged that a united front of all workers in the world was necessary for the defeat of fascism and the most effective use of the economic power of workers. Its opponents contended that there was more danger than possible advantage in such a united front, that the Red International had no substantial membership outside of Russia, and that it would be a mistake to unite in any way with any unions which were subject to government or party control.

A compromise finally was adopted unanimously, the first part of which commended the previous efforts of the I. F. T. U. to secure trade-union unity. This referred to a long series of statements issued by the I. F. T. U., and letters exchanged with the Red International in which the former had taken the position that unity could be founded only on acceptance of the general principles of the free trade-unions. It may be assumed that the I. F. T. U. will continue to accept in membership only such national federations as accept those principles.

The resolution ended by urging "the I. F. T. U. to open negotiations with the national centers of America, Australasia, the Far East, the U. S. S. R., and all other nonaffiliated trade-union centers with a view to establishing a united trade-union movement throughout the world." This modified form was in part designed to take account of the views of a number of speakers who had indicated that their primary desire was that the American Federation of Labor should follow up the resolutions passed at its last convention by negotiations that might lead to affiliation.

#### Other I. F. T. U. Activities

Some suggestion of the continuing activities of the I. F. T. U. is given in the elaborate report of its secretary and executive committee, which it received and adopted. It shows that during the interval

since the last triennial session of the congress, the general council, consisting of the executive committee and the secretaries of all the trade internationals had met 6 times, and the executive committee 24 times, in order to bring up to date and apply international trade-union policies to constantly changing world events. In order to agree upon joint policies with other organizations, the executive committee had also held meetings with the secretaries of the international trade-unions, with the Socialist International officers, and with the heads of various national federations. It had sent representatives to attend 18 conventions of different national federations and 27 conventions of internationals of trade-unions.

The report indicated the extensive activity of the secretary's office in the release of press reports, the collection and supply of analytical and statistical materials, and the publication of pamphlets. The secretary's office had also entered into friendly contact with practically all the nonaffiliated national centers of trade-unions, had cooperated closely with the international trade secretariats, and had assisted in efforts toward amalgamation of several of the smaller trade internationals.

This summary of the congress indicates that the principal activities of the I. F. T. U. during the past 3 years have been directed against fascism and war, for economic planning, and for the 40-hour week and other reforms through the International Labor Organization. The report makes it clear that these have also included support of workers' education, and coordination of national trade-union efforts of women. In carrying on these latter activities, special conferences on women's trade-union problems and on workers' education were held in connection with the congress.

The financial report to the congress indicates that the I. F. T. U. has been loyally supported by its member labor federations, but that during the trough of the depression, as a result of its own loss of membership and the decease of the German and Austrian national trade-union movements, the I. F. T. U. did not balance its budget, despite substantial economies. In 1934 and 1935, however, it saved some of its income, to the amount of about \$58,000 in 1935, and ended the year with assets of about \$167,000. Some of these assets consisted of the unexpended portions of the special funds already collected.

## SOCIAL SECURITY

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### Status of Old-Age Assistance in the United States, August 15, 1936

THE old-age assistance plans of 36 States, 1 Territory, and the District of Columbia had received formal approval by the Federal Social Security Board by August 15, 1936, and all but three of these had received grants in aid from Federal funds. The status of the various States with regard to their provision for the needy aged through the medium of public allowances is shown in the accompanying statement (p. 585).

It will be noted that New Mexico, which has no old-age assistance act, nevertheless submitted a plan which was acceptable to the national board, received a Federal grant, and put its system of aid into effect.

Under the terms of the Social Security Act (Public, No. 271, 74th Cong.) the Board must "approve any plan which fulfills the conditions" laid down in the act. The conditions include the following: The plan must (1) be State-wide in effect and, if administered by political subdivisions, be mandatory upon them; (2) provide for financial participation by the State; (3) provide for a State agency either to administer or to supervise the plan; (4) set an age limit not over 65 years (70 until 1940); (5) require a period of residence in the State of not more than 5 years in the past 9, 1 year of continuous residence to precede immediately the application for pension; and (6) not contain citizenship requirements excluding any citizen of the United States.

Hawaii, Kentucky, and Louisiana, as the statement shows, had had no Federal grant. Hawaii, however, has had old-age assistance since 1934, first under an optional county act, then under a mandatory Territory-wide system which was still in effect on August 15 (the date of the compilation). Kentucky has had an ineffective county-option act since 1926, whose greatest coverage was in 1935 when 7 of the 120 counties had it in force; this act was succeeded in 1936 by a State-wide compulsory law effective July 1. The 1936 Legislature of Louisiana passed an act which, however, cannot go into effect until authorized by an amendment to the State constitution.



Only two States (Arizona and Nevada) still had a county system on August 15, 1936. In Nevada, where the counties have borne the entire burden, the act remained practically inoperative until 1935, whereas in Arizona under a system of State aid all of the 14 counties had put the system in effect by the end of 1935.

The effectiveness of the Kansas statute passed in 1936 is conditional upon an amendment to the State constitution.

Seven States still remain without old-age pension legislation of any kind, although as noted, one of these (New Mexico) is paying pensions under a "plan" approved by the Federal Board.

*Status of Old-Age Pensions in the United States, as of Aug. 15, 1936*

Under Federal Social Security Act:

Plans approved and Federal funds granted:

States with old-age pension acts:

Ala.	Ind.	Mont.	R. I.
Ark.	Iowa.	Nebr.	Tex.
Calif.	Maine.	N. H.	Utah.
Colo.	Md.	N. J.	Vt.
Conn.	Mass.	N. Y.	Wash.
Del.	Mich.	N. Dak.	Wis.
D. C.	Minn.	Ohio.	Wyo.
Idaho.	Miss.	Okla.	
Ill.	Mo.	Oreg.	

States without old-age pension acts:

N. Mex.

Plans approved but no Federal funds granted:

Hawaii. Ky. La.<sup>1</sup>

Under State acts providing for—

State-wide systems:<sup>2</sup>

In effect:

Alaska.<sup>3</sup> Hawaii. Ky. Pa.

Not in effect:

Fla. Kans.<sup>1</sup> W. Va.

County systems:

Ariz. Nev.

No acts:

Ga. N. C. S. Dak. Va.  
N. Mex. S. C. Tenn.

<sup>1</sup> Act cannot become effective until validated by amendment to State constitution.

<sup>2</sup> Includes those which either had submitted no plan to the National Social Security Board or whose plan submitted had not been approved by it or which (although their plans may have been approved) had not yet been granted Federal funds.

<sup>3</sup> Covers all white population, but excludes Eskimos and Indians.

## EMPLOYMENT CONDITIONS

### Labor Requirements on a Railroad Electrification Program

By HERMAN B. BYER, of the BUREAU OF LABOR STATISTICS

THE Public Works Administration loaned \$37,000,000 to the Pennsylvania Railroad Co. to be used in the electrification of its lines between New York and Washington. During 1934 and 1935, \$31,900,000 of the loan was used by the company, 30-year serial bonds of a like par value being sold to the Government therefor.

Of the money so obtained and used by the railroad, \$13,705,000, or 43 percent, was disbursed to labor at the site; \$12,160,000, or 38.1 percent, was spent for materials; and \$4,970,000, or 15.6 percent, for miscellaneous items such as work-train expenses, hired equipment, time keeping and accounting, workmen's compensation, fire and water insurance, and consulting and designing engineering; and \$1,065,000, or 3.3 percent was retained by the company to retire bonds and pay interest thereon. The work was carried on in the States of New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and the District of Columbia. The main part of the work, however, was performed on the lines between Wilmington and Washington, inasmuch as the program of electrification between New York and Wilmington, with the exception of the freight lines between Liddonfield and New York, had been virtually completed before the allotment of funds by the Public Works Administration.

Work began during the latter part of January 1934 and employment reached the peak in October of the same year, when more than 12,000 people were working at the site of construction. (See table 1.) Employment exceeded 10,000 in each month from August to December, 1934. In Maryland and Delaware the employment peak occurred in August 1934, with 5,810 and 1,338 workers, respectively. New Jersey had more wage earners working in July 1934 than in any other month, and Virginia in April 1935. The level of employment in Pennsylvania was highest in November 1934, in New York in May 1935, and in the District of Columbia in March 1935. (See table 2.)

Table 1.—Employment Created in Railroad Electrification Improvements Financed by P. W. A. Loans, 1934-35, by Months

Month and year	Number of wage earners employed	Amount of pay roll	Number of man-hours worked
All States.....		\$13,704,614	22,673,039
1934			
February.....	773	25,887	44,328
March.....	2,289	116,514	210,252
April.....	3,716	218,800	405,381
May.....	5,811	371,711	665,258
June.....	7,084	525,406	952,098
July.....	9,134	718,505	1,255,877
August.....	11,478	1,009,227	1,757,765
September.....	11,494	1,053,855	1,815,468
October.....	12,060	1,071,177	1,844,068
November.....	11,806	1,227,669	2,103,513
December.....	10,249	997,255	1,688,718
1935			
January.....	9,701	998,965	1,635,371
February.....	8,587	952,156	1,522,127
March.....	8,392	911,173	1,441,484
April.....	8,288	976,371	1,549,976
May.....	7,502	876,086	1,341,845
June.....	5,738	627,293	920,592
July.....	3,925	396,686	589,386
August.....	2,821	319,947	471,194
September.....	786	96,256	133,005
October.....	913	104,007	156,577
November.....	742	92,468	141,585
December.....	451	17,200	27,171

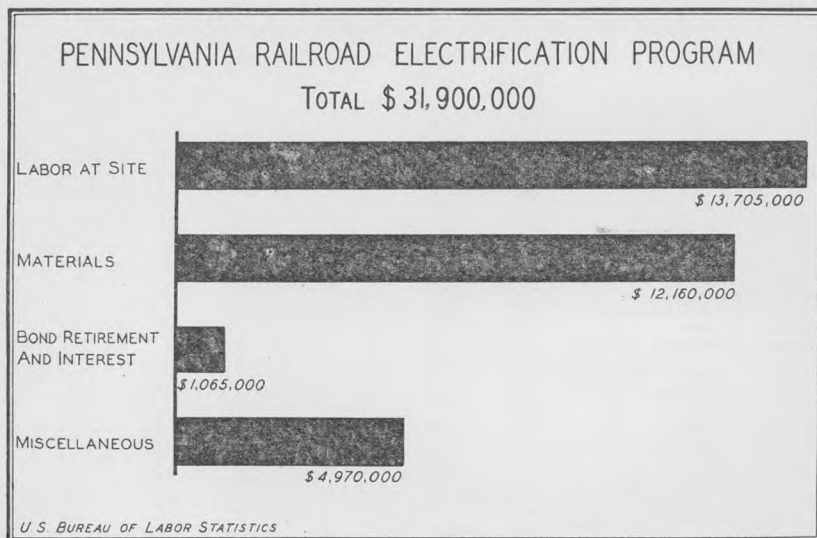
Table 2.—Employment Created in Railroad Electrification Improvements Financed by P. W. A. Loans, 1934-35, by States

State	Number of wage earners <sup>1</sup>	Total pay-roll disbursements	Total number of man-hours worked
New York.....	127	\$47,251	68,610
New Jersey.....	1,474	2,494,537	3,917,596
Pennsylvania.....	1,027	765,630	1,245,879
Delaware.....	1,338	895,575	1,435,856
Maryland.....	5,810	6,336,606	10,554,154
District of Columbia.....	3,149	2,887,944	4,926,756
Virginia.....	629	307,071	524,183

<sup>1</sup> Data shown are for the month of maximum employment in each State.

Pay-roll disbursements for work at the site totaled more than \$13,700,000. Of this amount \$10,427,000, or 76 percent, was earned by employees working in Delaware, Maryland, the District of Columbia, and Virginia. In New Jersey total wages paid amounted to \$2,465,000, in Pennsylvania to \$766,000, and in New York to slightly less than \$50,000.

The electrification program created more than 22,670,000 man-hours of labor at the site of construction. In Maryland over 10,550,000 hours of work were provided; in the District of Columbia, 4,927,000 hours; and in New Jersey, 3,918,000 hours. The remaining States—New York, Pennsylvania, Delaware, and Virginia—accounted for 3,275,000 hours of labor at the site of the project.



### Wage Rates

IN TABLE 3 data concerning basic wage rates are given by occupation. As a result of agreements by railroad labor and management, effective February 1932, a scale of earnings representing a 10-percent deduction from the basic rates of pay was in force from the time work started up to June 30, 1934. On July 1, 1934, wages were increased by the restoration of one-fourth of the 10-percent deduction. On January 1, 1935, there was a further restoration of one-fourth which remained in effect until April 1, 1935, at which time the remainder of the wage deduction was restored, and these rates remained in force the remainder of the period during which this work was under way.

At the peak of employment in October, there were more than 3,900 common laborers employed on the project. During the same month there were employed 587 carpenters, 909 signal and telegraph maintainers, and over 2,000 linemen and linemen's helpers. Other occupations employing more than 100 men were autotruck drivers, carpenters' helpers, electricians, electricians' helpers, labor foremen, machine operators, signal and telegraph maintainers' helpers, structural-iron workers, structural-iron workers' helpers, trackmen, and watchmen.

Table 3.—Average Basic Wage Rates on Railroad Electrification Improvements Financed by P. W. A. Loans, by Occupations, 1934 and 1935 <sup>1</sup>

Occupation	Number of employees, October 1934	Basic rate in force	Occupation	Number of employees, October 1934	Basic rate in force
		<i>Per month</i>			<i>Per hour</i>
Autotruck drivers.....	233	\$130.00	Carpenters' helpers.....	499	\$0.522
Foremen, bonders.....	9	175.00	Cement finishers.....	68	.700
Foremen, carpenters.....	14	200.00	Electricians.....	172	.822
Foremen, assistant, carpenters.....	5	170.00	Electricians' helpers.....	107	.548
Foremen, laborers.....	131	140.00	Engineers (work equipment).....	65	.760
Foremen, maintainers, signal and telegraph.....	56	250.30	Firemen (work equipment).....	60	.540
Foremen, assistant, maintainers, signal and telegraph.....	80	235.00	Laborers.....	3,992	.409
Foremen, masons.....	9	195.00	Linemen.....	1,033	.820
Foremen, painters.....	2	195.00	Linemen's helpers.....	986	.571
Foremen, repairmen, maintenance-of-way equipment.....	3	200.00	Machine operators.....	143	.540
Foremen, assistant, repairmen, maintenance-of-way equipment.....	3	170.00	Machinists.....	31	.820
Foremen, structural-iron workers.....	19	200.00	Machinists' helpers.....	19	.524
Foremen, assistant, structural-iron workers.....	22	170.77	Maintainers, signal and telegraph.....	909	.821
Foremen, trackmen.....	36	149.29	Maintainers' helpers, signal and telegraph.....	569	.580
Gang foremen, electricians.....	15	240.00	Masons.....	49	.704
Gang foremen, linemen.....	27	240.00	Painters.....	24	.684
Gang foremen, assistant, linemen.....	34	200.00	Pipe fitters.....	3	.820
		<i>Per hour</i>	Plumbers.....	5	.820
Assistant foremen, trackmen.....	22	\$0.540	Plumbers' helpers.....	10	.523
Blacksmiths.....	15	.820	Repairmen, maintenance-of-way equipment.....	46	.820
Blacksmiths' helpers.....	10	.523	Repairmen's helpers, maintenance-of-way equipment.....	32	.520
Burners, acetylene.....	7	.540	Structural iron-workers.....	564	.760
Cable splicers.....	44	.860	Structural iron-workers' helpers.....	327	.521
Carpenters.....	587	.695	Trackmen.....	306	.409
			Watchmen.....	167	.418
			Welders, autogenous.....	5	.820

<sup>1</sup> Not all occupations are shown in the table; occupations omitted are chiefly supervisory, technical, and administrative.

### Expenditures for Materials

THE value of material orders placed for use on the project was \$12,160,000. It is estimated that in fabricating these materials nearly 4,500,000 man-hours of labor were required. This estimate of man-hours is only for the labor required in final fabrication and does not include labor created in mining, transportation, or in pre-fabrication plants.

The value of material orders placed and the number of man-hours of labor created in fabricating the materials used on the electrification program are presented in table 4.

Table 4.—Work Created in Fabrication of Materials Used in Railroad Electrification Improvements, by Type of Material

Type of material	Value of material orders placed	Man-hours created in fabrication
All types of material.....	\$12,159,750	4,494,860
Bolts, nuts, rivets, washers, etc.....	124,544	65,620
Cement.....	173,755	64,430
Electric apparatus, fixtures, and supplies:		
Circuit breakers and switches.....	1,592,804	507,260
Conduit, fittings, and lighting devices.....	360,697	114,870
Frequency changer sets, generators, and motors.....	97,980	31,210
Switchboards, relay and control equipment, measuring instruments and meters.....	855,966	272,600
Transformers and current-limiting reactors.....	1,264,533	402,720
Wire, cable and potheads.....	3,189,274	1,015,690
Wiring devices and assemblies.....	785,474	250,150
Electrical equipment and supplies, miscellaneous.....	219,837	70,010
Foundry and machine-shop products, not elsewhere classified.....	529,692	297,160
Lumber and timber products.....	169,298	186,830
Sand and gravel.....	103,594	82,620
Steel-works and rolling-mill products.....	1,640,920	616,890
Tools, other than machine tools.....	106,267	60,860
All other materials.....	945,115	455,940

Electrical apparatus, fixtures, and supplies accounted for \$8,367,000, or 69 percent of the total expenditures of \$12,160,000 for materials. In the fabrication of this material more than 2,664,000 man-hours of labor were required. In this classification are such materials as circuit breakers and switches; conduit, fittings, and lighting devices; frequency-changer sets, generators, and motors; switchboards, relay and control equipment, measuring instruments and meters; transformers and current-limiting reactors; wire, cable, and potheads; and wiring devices and assemblies. The above figures include expenditures for wire, cable, and potheads in excess of \$3,000,000 and in the fabrication of this material more than 1,000,000 hours of labor were required in manufacturing plants.

Purchases of steel-works and rolling-mill products required expenditures of \$1,641,000; cement, \$174,000; lumber and timber products, \$169,000; tools, other than machine tools, \$106,000; bolts, nuts, rivets, washers, etc., \$125,000; foundry and machine-shop products, \$530,000; and sand and gravel products \$104,000. In fabricating these materials 1,374,000 man-hours of labor were needed.

All other materials used on the program accounted for approximately \$945,000 of total expenditures and required over 455,000 hours of labor in fabrication plants. Among the more important materials included in this classification were cast-iron pipe and fittings, concrete products, copper products, cordage and twine, crushed stone, miscellaneous hardware, marble, granite, and other stone products, automobiles and trucks, nonferrous metal alloys, paints and varnishes, petroleum products, rubber goods, and wrought pipe.

# PRODUCTIVITY OF LABOR AND INDUSTRY

## Mechanization in British Coal Mines

COAL cut, transported, and treated by mechanical processes rather than hand labor has increased considerably in proportion to the total product of mines in Great Britain since 1929. Output cut by machine in 1929 represented 28 percent, and in 1934, 47 percent of the total tonnage; the proportion of total output conveyed by mechanical means both at the coal face and elsewhere increased from 14 to 37 percent in the same period; and coal-cleaning plants handled 40 percent of the tonnage in 1934 as compared with 28 percent in 1929. These and other basic statistics of mine mechanization are included in recent reports of the Mines Department.<sup>1</sup> Commenting on mechanization, a private British research agency<sup>2</sup> concludes that technical improvement has been the chief factor in making possible a decrease in the cost of coal production in recent years. The authors of the study state that in an industry such as coal mining, where labor costs comprise 70 percent of the total outlay, productivity must obviously be the greatest influence in determining total costs, and that in this case the output of workers has been raised to such a point by use of machinery as to make possible financial savings in total production costs in spite of the fact that wage rates have remained constant and that there has been a decrease in hours worked since 1930.

The table following shows statistics of mines in operation, total production, and the total product mined by mechanical means in 1929 and 1934.

Progress of Mechanization of Coal Mines in Great Britain, 1929 and 1934

Item	1929	1934
Number of mines in operation.....	2,419	2,123
Number of mines using cutting machines.....	881	840
Total production..... tons..	257,970,000	220,726,000
Cut by machine:		
Amount..... do.....	71,950,000	103,701,000
Percent of total.....	28	47
Conveyed mechanically:		
Amount..... tons..	37,150,000	81,493,000
Percent.....	14	37
Cleaned mechanically:		
Amount..... tons..	71,331,000	87,458,000
Percent.....	28	40

<sup>1</sup> Great Britain. Mines Department. Annual reports, 1929 and 1934.

<sup>2</sup> PEP (Political and Economic Planning). Report on British coal industry. London, 1936.

The figures relating to coal cut by machine, showing an increase from 28 to 47 percent of the total, in 5 years in a period when the total number of mines and the number using mechanized methods decreased, indicate that mechanized mines have succeeded in mining an increasing proportion of the market requirement, and that the change is due not so much to the installation of a large number of machines as to the decline in output of unmechanized mines. While practically the same volume of coal was cleaned mechanically as was cut in 1929, mechanized cleaning in 1934 did not show quite so large an increase as mechanized cutting, the percentages of the total being 40 and 47 respectively. Coal mechanically conveyed made up 37 percent of the total product in 1934, but the increase from 1929, when the percentage was 14, has been more rapid than that of either coal cutting or cleaning.

Use of mechanical picks and drills in producing coal has been a long-established practice in European mines. In 1927 there were in Great Britain 5,679 pneumatic picks and drills, increasing to 8,881 in 1929 and 13,789 in 1934. The use of coal cutters was fairly evenly divided between the compressed-air type (1,590) and the electrical type (1,305) in 1913; by 1929 the relationship was reversed, there being then 3,574 compressed-air cutters and 3,787 electrically driven cutters; and in 1934 electrical cutters were in the decided majority, the total for that year being 4,451 as compared with 2,955 compressed-air cutters. Use of electrical equipment for conveying coal has likewise superseded that of compressed-air conveyors. At the coal face there were 1,534 compressed-air and 1,064 electric conveyors in 1929, as compared with 1,942 and 2,148, respectively, in 1934.



## COOPERATION

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### Cooperative Societies Under the Rural Electrification Program<sup>1</sup>

WITH the purpose of providing for a higher standard of living for rural people, Congress, in its work-relief program, provided that 100 million dollars might be spent for electrifying farms, and on May 11, 1935, President Roosevelt by Executive order created the Rural Electrification Administration as an independent agency to "initiate, formulate, administer, and supervise a program of approved projects with respect to the generation, transmission, and distribution of electric energy in rural areas." A permanent agency with the same name was created by the Rural Electrification Act (Public, No. 605, 74th Cong.), approved May 20, 1936, the President being authorized to transfer to the newly created agency the property and personnel of the agency created by Executive order.

#### Policies of the R. E. A.

THE controlling objective of the R. E. A. has been "to take electricity to as many farms as possible in the shortest possible time, and to have it used in quantities sufficient to affect rural life." To this end it has granted loans for self-liquidating projects for the extension of distribution lines into rural areas, to carry light and power to farm homes and other farm buildings, and also for the wiring of such homes and buildings. The Rural Electrification Act of 1936 also authorizes loans for the purchase and installation of electrical and plumbing appliances and equipment.<sup>2</sup> If necessary to protect the loans, the Administrator is authorized, in the event of foreclosure, to bid for and purchase property pledged or mortgaged as security, and to operate or lease such property for not over 5 years, or to sell it.

Under the procedure as first established, loans could be made for the entire cost of the project; they were normally for 20 years, with

<sup>1</sup> Data in this article are from Rural Electrification Administration, Rural Electrification News, Washington, October, November, and December 1935, January-February and May 1936; Light and Power for the Farm, Washington, 1935; What Every Farm Leader Should Know about Rural Electrification, Washington, 1935; and unpublished data supplied to the Bureau of Labor Statistics by the Rural Electrification Administration.

<sup>2</sup> Prior to that act funds for installation of electric pumps and the purchase of electric appliances and equipment were obtainable from the Electric Home and Farm Authority, and loans for pressure water systems, including modern kitchens and inside bathrooms, could be secured from the Federal Housing Administration.

interest usually at 3 percent, and were secured by mortgages on the property. An Executive order of August 7, 1935, provided that not less than 25 percent of the loan was to be spent for labor, and at least 90 percent of all persons working on the project should be taken from the public relief rolls. The act of 1936 provides that loans are to be self-liquidating within a period of not over 25 years and bear interest at a rate equal to the average rate of interest on United States obligations with a maturity of 10 years or over issued during the preceding fiscal year.

It has been the practice of the R. E. A. from the first to give preference to public, cooperative, and nonprofit organizations. This policy is continued by the act of 1936, which authorizes the Administrator "to make loans to persons, corporations, States, Territories, and subdivisions and agencies thereof, municipalities, people's utility districts, and cooperative, nonprofit, or limited-dividend associations organized under the laws of any State or Territory of the United States, for the purpose of financing the construction and operation of generating plants, electric transmission and distribution lines or systems for the furnishing of electric energy to persons in rural areas who are not receiving central station service," and directs him to give preference to public, cooperative, nonprofit, and similar bodies in the granting of loans.

In order to obtain a loan for a rural electrification project a cooperative association must represent a sufficient number of homes in the area to make the project economically feasible, must have acquired all possible easements, and have a contracted source of wholesale power.

*Sources of funds for loans.*—The 1936 act provides that funds for financing loans for the fiscal year ending June 30, 1937, are to be obtained from the Reconstruction Finance Corporation, which is authorized to make loans to the Administrator, on approval by the President, up to an aggregate of 50 million dollars. For the succeeding 9 years, an annual appropriation from the Treasury of 40 million dollars is authorized. Costs of administration and of making studies, reports, etc., are to be met by annual appropriations.

Each year half of the annual sums made available are to be allotted "for loans in the several States in the proportion which the number of their farms not then receiving central station electric service bears to the total number of farms of the United States not then receiving such service." The remaining half is to be loaned as the Administrator may direct, no State, however, to receive more than 10 percent thereof.

#### Loans to Cooperative Associations

EXISTING and newly formed cooperative societies have taken an active part in the Rural Electrification Program. In many States cooperative organizations of farmers have obtained loans from the

Rural Electrification Administration to build and operate their own light and power lines and thus obtain electric service which they had not previously been able to secure.<sup>3</sup>

The first loan contracts were signed on November 4, 1935. By the middle of July 1936 there had been loaned, or finally earmarked, the sum of \$14,699,412, for 104 projects. These loans made possible the building of 13,120.8 miles of power lines, to serve 50,312 new rural customers. More than three-fifths of the money loaned was advanced to cooperative associations, as the following table indicates.

R. E. A. Projects Approved up to July 14, 1936, by Type of Organization

Type of borrowing organization	Number of projects		Loans granted		Customers		Miles of line	
	Number	Per-cent	Amount	Per-cent	Number	Per-cent	Number	Per-cent
Cooperative associations.....	66	63.5	\$9,477,676	64.5	33,187	66.0	8,281.8	63.1
State corporations.....	1	1.0	542,328	3.7	2,125	4.2	511.9	3.9
Municipal corporations.....	9	8.7	531,958	3.6	1,839	3.7	540.9	4.1
Power districts.....	7	6.7	2,054,000	14.0	4,838	9.6	1,835.0	14.0
Private nonprofit corporations.....	5	4.8	747,000	5.1	2,992	5.9	637.0	4.9
Private utility companies.....	16	15.4	1,346,450	9.2	5,328	10.6	1,314.2	10.0
Total.....	104	100.0	14,699,412	100.0	50,312	100.0	13,120.8	100.0

Some very successful small rural electric cooperatives had been in operation for many years, but their business had been conducted so quietly that few had been aware of their existence. The preference given in the granting of loans under the R. E. A. program to public bodies, cooperatives, and nonprofit groups has stimulated greatly the growth of cooperative action in the electrical field and many new societies have been organized for the purpose of obtaining R. E. A. loans. Of the first 11 projects authorized, 5 were obtained by county electric cooperatives, 2 of which operate under State-wide organization, and 1 other was in effect a cooperative.

A serious obstacle to the formation of rural electric cooperatives in some States has been the absence of laws permitting the formation of cooperatives, and in other States the existence of legal provisions which handicap or forbid their organization in the electrical field. In

<sup>3</sup> It has been estimated that only about 11 percent of the farms and 27 percent of the rural nonfarms, including villages of 150 people or less, are electrified. Because of the lack of electricity and of electric pumps, the majority of rural residents have not been able to obtain the sanitation and living comforts coexistent with household and farm water systems. Of the 32.7 million persons in this country who live on farms, it has been ascertained by national surveys (according to Light and Power for the Farm, p. 1) that—

- 73 percent must carry water from wells or other sources of supply;
- 77 percent must put up with unsanitary, inconvenient outdoor toilets;
- 93 percent have neither bathtub nor shower;
- 76 percent must depend upon kerosene or gasoline lamps; apparently about 10 percent use candles or are entirely without light;
- 33 percent heat their homes partially or entirely with fireplaces, and 54 percent with stoves;
- 48 percent are compelled to do their laundry work out of doors.

some States where there is no existing legislation for organizing cooperatives, it has been found possible to organize under the general State corporation law and yet include many cooperative features.

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### Farmers' Cooperative Associations, 1934-35

IN JULY 1935 there were 10,700 farmers' cooperative marketing or purchasing associations in the United States, and they had a total estimated membership of 3,280,000, according to a recent report of the Cooperative Division of the Farm Credit Administration.<sup>1</sup> The largest percentage (70.1) of these associations, as well as of the total membership (63.6), was in the 12 North Central States. Minnesota, Wisconsin, Iowa, and Illinois led all the States in number of associations, and Minnesota, Illinois, Iowa, Wisconsin, and Missouri led in membership.

About 30 percent of the associations marketed grain, more than 21 percent manufactured and marketed dairy products, and about 18 percent were engaged in purchasing farm supplies for their members.

During the 1934-35 marketing season these associations did an estimated business of \$1,530,000,000, the important States in volume of business being California (\$180,910,000), Illinois (\$141,700,000), New York (\$124,520,000), Minnesota (\$122,450,000), and Iowa (\$106,830,000).

#### Cooperative Purchasing Associations

COOPERATIVE purchasing of supplies by farmers has been practiced for many years. One association is still in existence which was organized in 1863 at Riverhead, N. Y.; another, located in Kansas, was formed in 1872.

In 1905, there were 82 farmers' cooperative purchasing associations, according to available data. The number of associations has increased steadily from that time, except for a slight decline between 1923 and 1925. In 1913 the purchasing associations formed only 3.6 percent of the total farmers' cooperative associations, and their business amounted to 1.9 percent of the total cooperative business done by the farmers. In 1934-35 the proportions had risen to 17.8 and 12.2 percent, respectively. The number of farmers' associations whose principal business was that of cooperative buying of farm supplies, their membership, and the value of business done by them during the period from 1913 to 1934-35, are shown in table 1.

<sup>1</sup> U. S. Farm Credit Administration. Cooperative Division. Bulletin No. 6: Statistics of Farmers' Cooperative Business Organizations, 1920-35, by R. H. Elsworth. Washington, 1936.

Table 1.—Number, Membership, and Business of Farmers' Cooperative Purchasing Associations, 1913 to 1934-35

Year	Associations		Estimated membership		Estimated business	
	Number	Percent <sup>1</sup>	Number of members	Percent <sup>2</sup>	Amount	Percent <sup>3</sup>
1913.....	111	3.6			\$5,928,000	1.9
1915.....	275	5.1	59,503	9.1	11,677,000	1.8
1921.....	898	12.2			57,721,000	4.6
1925-26.....	1,217	11.3	247,000	9.1	135,000,000	5.6
1927-28.....	1,205	10.6	398,000	13.3	128,000,000	5.6
1929-30.....	1,454	12.1	470,000	15.2	190,000,000	7.6
1930-31.....	1,588	13.3	392,000	13.1	215,000,000	9.0
1931-32.....	1,645	13.8	533,000	16.7	181,000,000	9.4
1932-33.....	1,648	15.0	542,700	18.1	140,500,000	10.5
1933-34.....	1,848	17.0	692,000	21.9	152,000,000	11.1
1934-35.....	1,906	17.8	790,000	24.1	187,000,000	12.2

<sup>1</sup> Percent of all marketing and purchasing associations listed by Farm Credit Administration.

<sup>2</sup> Percent of total estimated membership for all associations listed.

<sup>3</sup> Percent of total estimated business for all associations listed.

The number of cooperative purchasing associations, their membership, and business in 1934-35, by geographic divisions, are shown in table 2.

Table 2.—Number, Membership, and Business of Farmers' Cooperative Purchasing Associations, 1934-35, by Geographic Division

Geographic division or State	Active associations		Estimated membership		Estimated business	
	Number	Percent	Number	Percent	Amount	Percent
United States.....	1,906	100.0	790,000	100.0	\$187,000,000	100.0
East North Central.....	418	21.9	244,000	30.9	44,550,000	23.8
East South Central.....	53	2.8	15,800	2.0	2,010,000	1.1
Middle Atlantic.....	244	12.8	64,200	8.1	39,600,000	21.2
Mountain.....	87	4.6	22,960	2.9	4,030,000	2.1
New England.....	76	4.0	71,000	9.1	19,800,000	10.6
Pacific.....	82	4.3	23,540	3.0	17,200,000	9.2
South Atlantic.....	83	4.4	39,900	5.0	7,830,000	4.2
West North Central.....	784	41.1	283,900	35.9	46,900,000	25.1
West South Central.....	79	4.1	24,100	3.1	5,080,000	2.7

Besides the associations (included in the preceding table) which were organized principally for cooperative purchasing, approximately 40 percent of the farmers' cooperative marketing associations did buying for their members of such supplies as fertilizers, dairy and poultry feeds, seeds, containers, coal, and petroleum products. The value of such purchases in 1934-35 is estimated at \$90,000,000. The estimated total amount of purchasing done by both purchasing and marketing associations was more than \$250,000,000.

## HEALTH AND INDUSTRIAL HYGIENE

### Experience Under Industrial Medical Plan Allowing Freedom of Choice of Physician<sup>1</sup>

INDUSTRIAL group-medicine plans which allow freedom of choice of physician have not generally been regarded as feasible, but the 4-year experience under the "Spaulding plan"<sup>2</sup> which was started in Binghamton, N. Y., has shown that a mutual-benefit society can operate such a plan and at the same time preserve the personal relation between physicians and patients.

The plan, adopted in 1932, 2 years after the organization of a mutual-benefit association among the employees of Spaulding Bakeries Inc., resulted from the disinclination many employees felt toward giving up their family physicians in order to benefit by the medical service offered by the association. The basic feature of the plan, therefore, is the ability of the members to be attended by physicians of their choice while receiving the benefits provided by the associations.

The plan, briefly summarized, provides that members may receive both medical and surgical care, including major and minor operations; eye, ear, nose, and throat treatments; X-ray examination; dental service limited to X-rays and extraction; and laboratory and ward service in the hospital, not to exceed 30 days in any one year at the rate of \$3 per day. The allowance for a major operation is fixed at \$100 and a limit of \$50 is placed upon office and house calls for any one member, while the total expenditure per year is limited to \$350 per person. The benefits paid to members are based on the rate of dues, which is determined by the wages of the members. The employees are divided into four wage classes, the dues ranging from 20 to 45 cents per week and the weekly cash benefits from \$7.50 to \$20.

The plan is in effect in plants of the Spaulding Bakeries located in Binghamton, Elmira, and Oneonta, N. Y., and Wilkes-Barre, Pa., and a division is being organized in a plant of the company at Middletown, N. Y. Similar plans have been adopted by two other plants in Binghamton—the Agfa Ansco Corporation, manufacturers of cameras and photographic supplies, and Truitt Bros., shoe manufacturers.

<sup>1</sup> Data are from Journal of the American Medical Association, June 6, 1936: Freedom of Choice of Physician in Industrial Medicine, by M. S. Bloom, M. D.

<sup>2</sup> See Monthly Labor Review, August 1933 (p. 295).

The county medical societies in the cities in which these plants are located have approved the plan and have cooperated with the associations. During the 4 years the plan has been in operation there has been an increased accumulation of reserve funds, so that the plan seems to be financially sound. It has been investigated by the general medical director of the Standard Oil Co. of New Jersey, and that company is offering a plan to its employees based on the principles of the Spaulding plan. Dr. Bloom states, "With almost 4 years of experience in this pioneer project, I am more convinced than ever that the plan is not only practicable, workable, and highly desirable, but necessarily the mean between the extremes of complete and uncompromising laissez faire and an equally complete and uncompromising State medicine."

Largely on the basis of the success of the Spaulding plan, the medical society in the county in which Binghamton is located has gone on record as favoring the prepayment plan for medical care. It seems, therefore, that if the medical society can work out a satisfactory project for the community, or for a section of it, at least a partial solution of the problem of medical care could be arrived at—a solution which would take into consideration the interests of the doctor, the patient, and the community.

A classification of the expenditures by the companies shows the percentage distribution for physicians, sick relief, hospitalization, and dentists for the 3-year period April 1, 1932, to April 1, 1935. Dental care, including only X-rays and extractions, is provided by only one of the plants of the Spaulding Co.

Percentage Distribution of Expenditures for Medical Care Under Specified Group Plans

Firm	Fiscal year ended—	Physicians	Sick relief	Hospitals	Dentists
Spaulding Bakeries, Inc.: Binghamton.....	Mar. 1, 1933	73.2	10.7	8.2	7.9
	Mar. 1, 1934	66.2	12.3	13.8	7.7
	Mar. 1, 1935	71.0	11.0	8.2	9.6
	3-year average.....	70.1	11.2	10.1	8.4
Elmira.....	Jan. 1, 1935	67.7	8.8	23.5	-----
	Jan. 1, 1936	82.0	4.6	13.4	-----
	2-year average.....	74.8	6.7	18.4	-----
Oneonta..... Wilkes-Barre.....	Nov. 1, 1935	73.0	5.2	21.8	-----
	Jan. 1, 1936	67.5	3.3	29.2	-----
Agfa Ansco Corporation.....	Mar. 1, 1935	63.8	20.5	15.7	-----
	Mar. 1, 1936	75.8	11.5	12.7	-----
	2-year average.....	69.8	16.0	14.2	-----
Truitt Bros.....	May 1, 1935	68.1	24.8	7.1	-----

No limit is placed upon the amount which can be paid to any one physician, since there is absolute freedom of choice and the amount of work a physician gets depends, therefore, upon his reputation as a doctor, just as it does in regular practice. As the reserve increases to a point where it is felt that it is large enough to take care of any risks likely to arise, it is planned to provide additional services for members.

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### Diets of Low-Income Families, 1933

THE adequacy of the food supply of families at various lower income levels was the subject of a survey<sup>1</sup> in the spring of 1933 in nine localities—Baltimore, Birmingham, Cleveland, Detroit, New York, Pittsburgh, Syracuse, a cotton-mill area in South Carolina, and a coal-mining district in West Virginia. This study was part of one covering the health of low-income families which was made by the United States Public Health Service in cooperation with the Milbank Memorial Fund.<sup>2</sup> The food-supply records were taken for the period of 1 week for about 100 families in each locality with the exception of New York, where 276 records were secured. Although food consumption for a 1-week period does not afford sufficient information as to the adequacy of the different elements of the diet, it does show in a general way the proportion of certain foods or food groups used, such as milk, meats, bread, vegetables, fruits, etc. Even for this short period, however, the averages of the food supply for groups of families of comparable economic status, the report states, are reasonably reliable, so that it is possible to draw certain conclusions as to the type of dietary in these low-income families and the nutritional deficiencies presented by such a diet.

The families covered by the study were selected from those included in the general study of illness, and were chosen so as to have approximately equal representation at the different income levels. The families supplying information regarding their food consumption were also questioned as to the amount of wages or other funds available during the week of inquiry. The average quantities of various foods or groups of foods were computed for families in each income class in each of the localities. As there were no basic differences in the food habits of the families in Baltimore, Cleveland, Detroit, Pittsburgh, and Syracuse, the data were combined into one group of 472 families, which, it was considered, was fairly typical of low-income families in the large industrial cities of the North. But since the inquiry extended to the end of June in New York, while the information for the other localities was secured between April 24 and

<sup>1</sup> U. S. Public Health Service. Public Health Reports, Jan. 24, 1936: Diets of Low-Income Families: Surveyed in 1933, by Dorothy G. Wiehl. Washington.

<sup>2</sup> See Monthly Labor Review, September 1935 (p. 634).



May 19, and also because food costs there were slightly higher, data were presented separately for that city. In the South the diet was basically different, containing large amounts of fat meat, biscuit or corn bread, and sirup, which are typical of the diet of the low-income southern family. In the three communities, however, there were recognizable differences in the type of food consumption, so that they were considered separately.

#### Energy Value of Food Supply

THE quantity of food needed to supply the energy needs of individuals is expressed in terms of calories and has been calculated for individuals of specific age, sex, and body weight. For the present study a daily supply of 3,000 calories was taken as adequate for the moderately active adult male, and using this as a base, the energy needs of persons of each sex and age are expressed as a percentage.

Therefore, for each 100 percent or equivalent of an adult male there should be food yielding 3,000 calories. This amount, it is considered, is desirable in order to assure full provision for growing children and protection of the health of adults, although more nearly marginal requirements which have been set by nutritionists yield from 2,600 to 2,700 calories per day per adult male unit.

In the five northern cities it was found that when the income for the week was \$3 or more per person, the food supply in these families averaged something over 3,000 calories per equivalent adult male, while with incomes of \$2 to \$3 per person the calories averaged 2,800 and for families with less than \$2, 2,470 per day. Families on relief, whether receiving cash or work relief, food supplies, or more than one form of assistance, were grouped together. The food supply of these families averaged 2,700 calories per day, which met the minimum requirements and was higher than that of the lowest-income nonrelief group. The percentages were somewhat heavily weighted by the families having 3,400 calories or more per person per day. In the group of five cities, however, 57.1 percent of the families on relief has less than 2,700 calories per day per adult male unit; of those having weekly per capita incomes of less than \$2 and between \$2 and \$3, the percentages having less than 2,700 calories were 61.3 and 51.7 respectively, while for incomes between \$3 and \$4 and \$4 and over the percentages were 21.7 and 21.5. The percentages of the families in the different groups having 3,400 calories or more were 17.5, 7.8, 20.0, 37.0, and 45.5 in the order named.

In New York City three groups had a high percentage of the families getting less than 2,700 calories per person per day. These were the work-relief group with 74.0 percent under this figure, those having less than \$3 with 71.1 percent, and those with from \$3 to \$3.99, with 60.0 percent. Of the families having \$4 to \$5.99 per day, 25.0 percent

had 3,400 calories per day or more, and of those with \$6 or more income per week, 37.5 percent. Families on home relief—that is, receiving food orders—reported a more adequate amount of food than those on work relief or those with an income of less than \$4. The calories per adult male unit in these groups averaged 2,790, which is a little higher than the energy value of diets planned by nutrition experts to provide a limited or marginal diet that will prevent serious undernutrition if a proper choice of foods is made.

Increase in the number of persons in the families was accompanied by a reduction in the number of calories per person. Home-relief families of two to four persons had an adequate number of calories, but larger families were below the marginal standard. However, among the families with less than \$4 per person the smaller families of two to four persons had slightly less food than families of from five to seven persons, the explanation being that the small family with a total income of \$6 to \$10 has to use a relatively large proportion of the income for rent.

In the Birmingham survey the incomes were relatively higher than in the other cities, except New York, and all income groups except the relief group had an average of more than 3,000 calories per day, the average for the relief group being 2,960 calories or approximately reaching the standard.

In 4 cotton-mill villages in South Carolina all of the 102 families scheduled had some earned income, though 3 families received flour from the Red Cross. In each income group of these families the calories averaged more than 3,000 per day, and families with an income of more than \$3 per week per person and the 27 families owning a cow had more than 4,000 calories.

The records of 101 coal miners' families in several towns near Morgantown, W. Va., showed that none of the families were living entirely on relief, but about one-half of all the families and three-fourths of those with incomes per person of less than \$2 per week were given flour or milk or both. In one relief group, those receiving flour only, the calories averaged 2,910 but in all other relief and income groups the average was over 3,000 ranging from 3,150 to 4,070.

#### Adequacy of Dietsaries

AN ADEQUATE diet necessitates a proper balance of essential nutrients, especially of the mineral elements and vitamins which are necessary to insure health and proper growth of children. It is essential, therefore, that there should be an adequate supply of milk, vegetables, fruit, and eggs. In order to judge the approximate adequacy of the food elements in the dietary of these families, the amounts of the different foods reported were compared with a minimum-cost adequate dietary and also with a more restricted diet which

is designed to furnish "approximately the minimum requirements of the body for the various nutrients, but allows little margin for safety. \* \* \* It represents quantities of 'protective' and other foods below which it is not safe to reduce the food supply." The average amount per week per adult male unit which is used as the standard for the minimum-cost adequate dietary was computed from the requirements for each type of food to supply persons of each sex and different ages with an adequate diet at minimum cost, given by Stiebelling and Ward.<sup>3</sup> The average amounts in the restricted dietary were computed in a similar manner.

In the five cities, families with \$3 to \$4, and \$4 or more, income per person per week had as much as, or more than, the adequate standard for all foods except dried legumes, dried fruits, and milk. Their diets had an excess of meat, fish, eggs, and sweets, and might have been more satisfactory from the standpoint of calcium and vitamins with the substitution of milk and fresh vegetables for some of this excess, and also less expensive if more dried fruits and legumes had been used. The lower-income families had the same type of diet, but in smaller quantities, and their diets were deficient in milk, dried legumes, dried fruits, and cereals. The average milk supply for every income class was less than the adequate standard per adult male unit, although for families with more than \$3 per person per week the supply exceeded the restricted standard. The shortage of milk was found to be the most serious lack in the dietary of these families.

In New York City for all income groups the average supply of all foods except bread, cereals, potatoes, dried legumes, and dried fruits, with minor exceptions, equaled or exceeded the adequate standard. In the lower-income groups smaller amounts of meat and fish were purchased, but the average amount of these foods was slightly above the adequate standard. The diet of work-relief families was similar to that of the lowest-income nonrelief families, but those of the home-relief families more nearly approached the standard. The average milk supply of families of \$4 to \$6 per person per week almost reached the adequate standard, and the average amount consumed by the lower-income families and both relief groups equaled or exceeded the restricted standard. The proportion of families with less than 3 quarts weekly per child was small and at every income level fewer families were inadequately supplied than in the "five cities."

In Birmingham the diets of families in each income class except the relief families were high in fatty foods and in sugars and moderately high in cereals. Relief families and those with less than \$2 per person per week had only slightly more vegetables on the average than the

<sup>3</sup> Diets at Four Levels of Nutritive Content and Cost. By Hazel K. Stiebelling and Medora M. Ward. U. S. Department of Agriculture. Circular No. 296, p. 4.

restricted standard calls for, while lean meat and fish were below the averages for the northern cities in all the income groups, although only the relief families had less than the restricted standard. The milk supply of families with less than \$4 per person per week averaged less than the restricted standard and above that income the average was a quart a day for the children but less than the adequate standard. The average dietary of these families, therefore, contained approximately minimum amounts of the essential nutrients, the excess amounts of fat and sweets and limited quantities of milk and vegetables making for poor nutritional balance in the diets.

In the South Carolina cotton-mill villages large quantities of flour and corn meal, lard and salt pork, and sugar were used by all income groups, and eggs were used in approximately adequate quantities by the low-income groups and in very large quantities by the higher-income classes. In families with incomes of less than \$2 per person per week only 0.44 pound of lean meat, fowl, or fish per adult male unit was used, or 20 percent less than the restricted standard. Among the lowest-income families the quantities of fruit used were much less than the standard, but the fresh and canned vegetables were nearly adequate. The milk supply was inadequate except in those families owning a cow. A comparison of the food supplies of these families with a study of the relation of diet to pellagra incidence made in 1916, covering a larger number of villages and households, showed a considerably increased use of the protective foods by the mill-village families.

Families in the coal-mining towns of West Virginia used relatively large amounts of cereal foods, fats, sugar, potatoes, and dried vegetables, and a liberal supply of eggs, but in the lowest-income and relief groups the supplies were far below the restricted standard for fresh and canned vegetables and fruits. Families in higher-income classes also had less than the restricted standard of vegetables, but the supply of fruits equaled or exceeded this standard. The average supply of milk was below the restricted dietary for all income groups.

#### Sickness and Food Supply

No ATTEMPT was made to correlate the diets of these families with the sickness records obtained for the 3 months immediately preceding this survey, but the incidence of sickness as shown by that study indicated "a consistent correlation with the economic status of the families, the lower the income the higher the sickness rate, and also a striking association with unemployment, families with no employed workers having about 50 percent more cases of disabling illness than those with a full-time worker." These results are consistent with the situation found in the food supply, which, at income levels of less than \$3 or \$4 per person per week showed a marked tendency to be

poorly balanced, to include less than "safe" requirements of milk and other "protective" foods, and to be insufficient in quantity. Sickness rates in the early spring of 1933 were highest in families with less than an annual income of \$150 per person in 1932.

Specific food deficiency diseases were not found among the illnesses reported by the families surveyed in these cities, with the exception of some cases of pellagra in South Carolina. The relationship between the diet and sickness, if it is accepted that there was some association, would seem to be more a matter of lowered vitality and reduced resistance to disease.

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### Minimum-Wage Legislation in Latin America

**T**HIRTEEN Latin American republics (Argentina, Bolivia, Brazil, Chile, Costa Rica, Cuba, Ecuador, Guatemala, Mexico, Panama, Peru, Uruguay, and Venezuela) have taken some legislative action fixing minimum wages in one or more industries, setting up machinery for the fixing of minimum wages, or authorizing such legislation in their constitutions. The minimum wages fixed are to be in force not to exceed 1 year in Chile, Costa Rica, and for home industries in Argentina; for 2 years in Mexico and for home industries in Uruguay; and for 3 years in Brazil. Commissions are authorized in Argentina, Brazil, Chile, Costa Rica, Cuba, Mexico, and Venezuela. Costa Rica and Cuba have one commission each, but in Cuba the members of this commission work through subcommissions for various industries. In Argentina, Chile, and Venezuela the commissions are industrial in scope, while in Brazil and Mexico they are geographical, for major divisions of territory in Brazil and for municipalities in Mexico.

In Argentina a law of October 8, 1918, authorized wage commissions for the Federal Capital and National Territories, to fix minimum wages for all home workers (except domestic servants), regardless of sex. By decree of December 30, 1918, regulations under this act were made for the Federal Capital.

In Bolivia, by a decree of June 1, 1936, minimum wages for office workers, manual laborers, and domestic servants were established. Separate action is to be taken regarding night work by the above classes and for agricultural labor.

The Constitution of Brazil, adopted July 16, 1934, assures equal wages for equal work, regardless of sex, and provides for the establishment of minimum wages. The equal wage for women was decreed on May 17, 1932, and on January 14, 1936, there were authorized for the major geographical divisions of Brazil wage commissions, which are to fix minimum wages for a term of 3 years, revision, however, being provided for if living conditions change materially.

In Chile, the Labor Code of May 13, 1931, authorized the establishment of wage commissions for each industry. A regulatory decree of September 12, 1932, provided that the wages fixed by the

commissions should be in force not to exceed 1 year. For the nitrate industry the minimum wage was temporarily fixed by a law of January 8, 1934.

For Costa Rica, minimum-wage-fixing machinery was authorized by laws of November 21, 1933, and December 19, 1934. The commission provided for was to study the cost of living and on the basis of that study to fix wages for not to exceed 1 year. A temporary minimum wage for agricultural labor was fixed by a law of August 21, 1935.

In Cuba, women are to receive the same wages as men for similar work by virtue of a decree law of October 16, 1934, which also fixed minimum wages for home work. A resolution of June 27, 1935, authorized the establishment of a commission to fix minimum wages for home work. The general minimum-wage commission was established by decree law of November 30, 1934, which has been amended and clarified by subsequent legislative action. Working through sub-commissions, the commission was to fix minimum wages in industry and commerce, subject to revision upon the request of either employers or workers. Temporary minimum wages were established by the act.

The Constitution of Ecuador, adopted March 26, 1929, authorizes the establishment by law of minimum wages in relation to the cost of living in various regions of the country and under various conditions.

A minimum wage for farm workers in the Department of Alta Verapaz in Guatemala was established by legislative action on January 28, 1936.

In Mexico, the constitution adopted February 5, 1917, made provision for minimum-wage legislation, which was included in the Federal Labor Code of August 28, 1931, and amended October 6, 1933. The municipal wage commissions authorized were to fix the minimum wages every 2 years, with the approval of the central boards of conciliation and arbitration (*Juntas Centrales de Conciliación y Arbitraje*). The right of women and minors to receive the minimum wage was specified in orders of January 26 and February 28, 1934.

In Panama, provision was made by law of December 28, 1932, for the payment of minimum wages to office workers, the minimum wage to be fixed in each case by the Executive through the labor office, taking into account the current minimum of subsistence.

A minimum wage for native workers in Peru was established by law of October 16, 1916, and by supreme decree of May 11, 1923. Wages were to be fixed each year by the provincial councils. The constitution adopted April 9, 1933, authorized minimum-wage legislation which should take into account age and sex of the worker, the nature of the work, and regional conditions. A law of July 16, 1936,

provides that woman school teachers are to receive the same pay as men in the same rank and class.

In Uruguay, a minimum wage for agricultural workers was set by law of February 15, 1923, as regulated by decrees of April 8 and June 20, 1924. The minimum wage fixed for port workers on November 18, 1926, and regulated by decree of February 14, 1927, was extended by law of June 25, 1930, to include workers in refrigerating plants who load and unload boats. Minimum wage for those persons employed in public works was set by resolution of June 7, 1927. By a law of January 23, 1934, the Superior Labor Council (*Consejo Superior del Trabajo*) was authorized to fix a minimum wage for home industries every 2 years, which was not to be less than that paid in nearby factories. The constitution approved April 19, 1934, provides that just remuneration and length of working day are to be fixed by law, with special regulations for women and minors.

In Venezuela, the labor law of July 16, 1936, authorized the Federal Executive to name wage commissions for the various industries to fix compulsory minimum wages as well as piece-work rates.

SOURCES: U. S. Bureau of Labor Statistics Buls. Nos. 467, 510, and 569; Monthly Labor Review, August 1935 and July 1936; International Labor Office, Geneva, Legislative Series 1923, Uruguay 1, 1924, Uruguay 1, 1931, Chile 1, 1932, Brazil 5, 1932, Panama 2, 1933, Costa Rica 3, and 1934, Cuba 6 and 10; consular reports from Bolivia, June 8, 1936, Costa Rica, Aug. 29, 1935, and Peru, July 21, 1936; *Diario Oficial* (Rio de Janeiro), July 16, 1934, Supplement; *Boletim do Ministerio do Trabalho, Industria e Comercio* (Rio de Janeiro), February 1936; *Diario Oficial* (Santiago, Chile), Oct. 1, 1932, and Jan. 8, 1934; *La Gaceta* (San José, Costa Rica), Dec. 22, 1934; *Gaceta Oficial* (Habana, Cuba), July 1, 1935, ex. ed. No. 118; *Registro Oficial* (Quito, Ecuador), 1929, No. 138; *Diario de Centro America* (Guatemala), Feb. 15, 1936; *Diario Oficial* (Mexico), Oct. 11, 1933; *Nueva Ley Federal del Trabajo* (Mexico), edited by Enrique Calderon, 3d ed., Mexico, 1934; *Oficina Internacional del Trabajo* (Geneva), *Legislación social de America Latina, 1928-29*, vol. 2; *Constitucion politica del Peru, 1933*, Lima 1933; *Diario Oficial* (Montevideo, Uruguay), Nov. 22, 1926, Feb. 24, 1927, June 13, 1927, July 22, 1930, and Feb. 2, 1934; *Proyecto de Constitucion* (Uruguay) sancionada por la Convencion Nacional Constituyente el 24 de marzo de 1934 (adopted Apr. 19, 1934), Montevideo, 1934; *Gaceta Oficial* (Caracas, Venezuela), July 16, 1936, Extraordinary number.



## WOMEN IN INDUSTRY

### Hours and Earnings in Connecticut Laundries, 1934 and 1935

ALTHOUGH average hourly rates and earnings of woman laundry workers in Connecticut showed virtually no change between 1934 and 1935, the number of women receiving low hourly rates was greater in 1935 than in 1934, according to findings of the minimum wage division of the Connecticut Department of Labor and Factory Inspection.<sup>1</sup> The decline in earnings was particularly pronounced in the smaller communities, being as much as 11.1 percent in the 10,000 to 25,000 population group. Hours of work were practically unchanged, except that the proportion of women working 40 hours or more decreased, while the number working between 30 and 40 hours increased, and the number working 50 hours or more was materially reduced.

In large laundries, employing 100 or more workers, median hourly earnings increased 2.9 percent without materially affecting weekly earnings. A substantial increase in the median hourly earnings in laundries employing 50 to 100 workers was not reflected in weekly earnings, and in other size groups weekly earnings fell. Median hourly and weekly earnings by size of laundry are shown in table 1.

Table 1.—Median Hourly and Weekly Earnings of Women in Connecticut Laundries for 1 Week in 1934 and 1935, by Size of Laundry

Laundries employing—	Median hourly earnings			Median weekly earnings		
	1935	1934	Percent of change	1935	1934	Percent of change
	<i>Cents</i> (1)	<i>Cents</i>				
Under 10 workers.....		27.8		\$10.63	\$11.04	-3.7
10 to 25 workers.....	27.5	27.8	-1.1	9.33	10.05	-7.2
25 to 50 workers.....	27.8	27.8	0	10.62	10.69	-.7
50 to 100 workers.....	30.2	27.8	+8.6	11.90	12.12	-1.8
100 workers and over.....	28.8	28.0	+2.9	12.06	12.05	+.1

<sup>1</sup> Less than 35 cases.

The same general tendency for earnings to decrease with the size of the unit is shown when the size of the community is considered. While median weekly earnings decreased somewhat in towns of all

<sup>1</sup> Connecticut Department of Labor and Factory Inspection, minimum wage division. Hours and Earnings in Connecticut Laundries, Fall, 1935. Hartford, 1936. (Mimeographed.)

sizes, the smaller communities showed the greatest shrinkage, although in the smallest group (under 10,000 population) earnings decreased less than in the next larger group. Median hourly and weekly earnings by size of community are shown in table 2.

Table 2.—Median Hourly and Weekly Earnings of Women in Connecticut Laundries for 1 Week in 1934 and 1935, by Size of Community

Population	Median hourly earnings			Median weekly earnings		
	1935	1934	Percent of change	1935	1934	Percent of change
Under 10,000.....	<i>Cents</i> 27.5	<i>Cents</i> 30.5	-9.8	\$9.46	\$10.00	-5.4
10,000 to 25,000.....	27.9	<sup>1</sup> 29.0	<sup>1</sup> -3.8	10.42	11.72	-11.1
25,000 to 100,000.....	27.6	27.7	-.4	10.08	10.44	-3.4
100,000 and over.....	29.1	27.9	+4.3	11.67	11.94	-2.3

<sup>1</sup> Based on 29 cases.

Classified weekly earnings and hours for the week covered by the study in 1934 and 1935 are shown in table 3.

Table 3.—Weekly Earnings and Hours of Women Employed in Laundries in Connecticut, 1 Week, 1934 and 1935

Item	1935		1934	
	Number of employees	Percent of total	Number of employees	Percent of total
<i>Weekly earnings</i>				
Total reported.....	1,688	100.0	1,682	100.0
Less than \$4.....	50	3.0	43	2.6
\$4 and less than \$6.....	74	4.4	77	4.6
\$6 and less than \$8.....	149	8.8	150	8.9
\$8 and less than \$10.....	280	16.6	291	17.3
\$10 and less than \$12.....	542	32.1	440	26.2
\$12 and less than \$14.....	375	22.2	432	25.7
\$14 and less than \$16.....	157	9.3	165	9.8
\$16 and less than \$18.....	35	2.1	58	3.4
\$18 and over.....	26	1.5	26	1.5
<i>Hours worked</i>				
Total reported.....	1,563	100.0	1,294	100.0
Less than 10 hours.....	23	1.5	15	1.2
10 hours and less than 20.....	52	3.3	49	3.8
20 hours and less than 30.....	192	12.3	191	14.7
30 hours and less than 40.....	669	42.8	400	30.9
40 hours and less than 50.....	618	39.5	569	44.0
50 hours and less than 60.....	9	.6	70	5.4

## Wages of Women in Laundries and Dry-Cleaning Plants in Ohio

WAGES of women employed in laundries in Ohio increased 36 percent between May 1933 and July 1934, and those of women employed in cleaning and dyeing plants in that State increased 39 percent between May 1933 and October 1935. Federal regulation through the President's Reemployment Agreement with

regard to laundries and the N. R. A. code for cleaning and dyeing establishments, and the fixing of a minimum fair-wage rate under the State minimum-wage law, are credited by the Women's Bureau of the United States Department of Labor for this material improvement in the wage rates and earnings of women in those occupations. The Women's Bureau recently published an analysis of the wage and hour records of the division of minimum wage of the Ohio Department of Industrial Relations covering laundries and dry-cleaning plants, to determine the effects on earnings of minimum-wage orders dealing with those industries.<sup>1</sup>

For the purpose of determining action under the minimum-wage law, the Ohio Department of Industrial Relations made a survey of wages paid to women and minors in laundries throughout the State in the week including May 8, 1933, just prior to the date on which the President's Reemployment Agreement became effective, and in the week including September 18, 1933. Laundries of various sizes and types in 37 cities and towns were investigated, and pay rolls for the selected weeks were copied. Later the same method of determining earnings of women was applied to the cleaning and dyeing industry, when 453 establishments in 89 cities and towns were visited and wage data were compiled for 864 women.

Because these surveys suggested that the women employed in laundry and in cleaning and dyeing establishments were not receiving "fair" wages commensurate with the service rendered, as contemplated by State law, minimum-wage boards were created to deal with the situation. The minimum-wage award for laundry workers, effective March 26, 1934, established a minimum rate of 27½ cents an hour, or \$11 for a 40-hour week, with an increase of 10 percent, to 30¼ cents an hour, for a week of less than 20 hours, and time and one-third (36½ cents an hour) for all work in excess of 45 hours a week. The original directory order was made mandatory on July 26, in accordance with the provisions of the law and without opposition. The minimum-wage award for the dyeing and cleaning industry, effective September 10, 1934, set 35 cents an hour as the minimum rate, with a 40-hour week for production workers and a 48-hour week for woman employees in the retail shops. The latter group was granted time and a half for all hours worked in excess of 48. This order became mandatory on January 7, 1935.

The United States Women's Bureau analyzed the data compiled by the Ohio Department of Industrial Relations in its preliminary wage studies and the reports of employers submitted to the State agency under the minimum-wage ruling, to determine the effects, in weekly earnings, of the mandatory wage scale.

<sup>1</sup> U. S. Department of Labor. Women's Bureau. Bulletin No. 145: Special Study of Wages Paid to Women and Minors in Ohio Industries Prior and Subsequent to the Ohio Minimum-Wage Law for Women and Minors. Washington, 1936.

## Earnings in Laundries

MEDIAN earnings in 60 identical laundries were \$8.15 for the selected week in May 1933; \$10.80 in April 1934 under the directory order; \$10.15 in the week of August 22, the first reported under the mandatory order, and \$11.40 in April 1935, after the mandatory order had been in effect about 9 months. In May 1933, 76.6 percent of the woman workers employed in these laundries received less than 27½ cents per hour; under the directory order 2.1 percent received less than the minimum rate of 27½ cents per hour and at the time of the first report under the mandatory order (August 1934) this percentage had been reduced to 0.7. In April 1935, none of the women employed by the 60 laundries received less than the minimum, and 40.7 percent were reported as earning more.

Table 1.—Week's Earnings of Women and Minors Employed in 60 Ohio Laundries

Earnings	Women and minors employed							
	Before wage order (Survey of May 8, 1933)		Directory period (Report, Apr. 25, 1934)		Mandatory period			
	Number	Percent	Number	Percent	First report Aug. 22, 1934		Second report Apr. 27, 1935	
					Number	Percent	Number	Percent
<i>Week's earnings</i>								
Total.....	1,131	100.0	1,835	100.0	1,889	100.0	1,806	100.0
Median earnings.....	\$8.15		\$10.80		\$10.15		\$11.40	
Under \$1.....	5	0.4			6	0.3	2	0.1
\$1 and under \$3.....	34	3.0	14	0.8	21	1.1	18	1.0
\$3 and under \$5.....	123	10.9	36	2.0	30	1.6	27	1.5
\$5 and under \$7.....	262	23.2	83	4.5	125	6.6	81	4.5
\$7 and under \$9.....	244	21.6	307	16.7	377	20.0	163	9.0
\$9 and under \$11.....	215	19.0	531	28.9	657	34.8	466	25.8
\$11.....	15	1.3	97	5.3	52	2.8	101	5.6
Over \$11 and under \$13.....	114	10.1	540	29.4	423	22.4	627	34.7
\$13 and under \$15.....	74	6.5	132	7.2	118	6.2	193	10.7
\$15 and under \$17.....	27	2.4	49	2.7	44	2.3	67	3.7
\$17 and over.....	18	1.6	46	2.5	36	1.9	61	3.4
Under \$11.....	883	78.1	971	52.9	1,216	64.4	757	41.9
\$11.....	15	1.3	97	5.3	52	2.8	101	5.6
Over \$11.....	233	20.6	767	41.8	621	32.9	948	52.5
<i>Average hourly earnings</i>								
Total.....	1,131	100.0	1,835	100.0	1,889	100.0	1,806	100.0
Median earnings (cents).....	22.9		27.5		27.5		27.5	
10 and under 12½ cents.....	38	3.4						
12½ and under 15 cents.....	47	4.1						
15 and under 17½ cents.....	70	6.2						
17½ and under 20 cents.....	151	13.4	6	.3				
20 and under 22½ cents.....	240	21.2	4	.2	5	.3		
22½ and under 25 cents.....	124	11.0	2	.1				
25 and under 27½ cents.....	196	17.3	26	1.4	9	.5		
27½ cents.....	1	.1	1,184	64.5	1,141	60.4	1,071	59.3
Over 27½ and under 30 cents.....	87	7.7	182	9.9	261	13.8	182	10.1
30 and under 32½ cents.....	57	5.0	215	11.7	180	9.5	196	10.8
32½ and under 35 cents.....	61	5.4	79	4.3	106	5.6	113	6.3
35 cents and over.....	59	5.2	137	7.5	187	9.9	244	13.5
Under 27½ cents.....	866	76.6	88	2.1	14	.7		
27½ cents.....	1	.1	1,184	64.5	1,141	60.4	1,071	59.3
Over 27½ cents.....	264	23.3	613	33.4	734	38.9	735	40.7

<sup>1</sup> Sample.

<sup>2</sup> Note that in these distributions the median can be interpreted only as the middle case; see summary at bottom of table for proportions earning more and less than 27½ cents.

In the week of May 8, 1933, 59.2 percent of the women and minors employed in the 60 laundries studied, worked less than 40 hours, 24.8 percent worked 40 but less than 48 hours, and 78.1 percent earned less than \$11, while 20.6 percent earned more than that. More than half (51.4 percent) worked less than 40 hours a week in April 1935, 47.4 percent worked 40 but less than 48 hours, and 1.2 percent worked 48 hours and more. By that time the percentage earning less than \$11 a week had fallen to 41.9, and more than half (52.5 percent) were earning more than \$11.

Details of average hourly and weekly earnings are shown in table 1.

#### Earnings in Cleaning and Dyeing Establishments

FOR THE cleaning and dyeing industry as a whole, median weekly earnings for the specified pay periods were: May 1933 (unregulated), \$10.65; September 1934 (under directory order) \$14; January 1935 (under mandatory order) \$13.90. More definite data are given for 114 identical establishments in table 2, which shows median hours worked and median hourly rates as well as weekly earnings.

Table 2.—Median Earnings and Hours of Women and Minors in 114 Identical Ohio Dyeing and Cleaning Establishments

Median	May 1933	Directory period, September 1934	Mandatory period	
			January 1935	October 1935
Median of the week's earnings.....	\$10.90	\$13.95	\$13.95	\$15.15
Median of the hours worked.....	41.6	40.6	37.3	40.3
Median of the average hourly earnings (cents).....	28.1	35.0	38.4	38.6

The average hourly and weekly earnings of women and minors employed in all dyeing and cleaning establishments reporting to the State agency are shown in tables 3 and 4.

Table 3.—Average Hourly Earnings of Women and Minors in all Dyeing and Cleaning Establishments Reporting to Ohio Division of Minimum Wage

Average hourly earnings	Original study— May 1933 (173 establishments)		Directory period— September 1934 (362 establish- ments)		Mandatory peri- od—January 1935 (445 estab- lishments)	
	Number	Percent	Number	Percent	Number	Percent
Total.....	610	<sup>1</sup> 100.0	2,005	<sup>1</sup> 100.0	1,910	<sup>1</sup> 100.0
Median earnings (cents).....	27.4		35.0		38.4	
10 and under 12½ cents.....	5		2			
12½ and under 15 cents.....	12		4			
15 and under 17½ cents.....	49		1		2	
17½ and under 20 cents.....	31		4			
20 and under 22½ cents.....	82		20			
22½ and under 25 cents.....	36		7			
25 and under 27½ cents.....	94		96		5	
27½ and under 30 cents.....	46		175		16	
30 and under 32½ cents.....	102		324		10	
32½ and under 35 cents.....	27		112		11	
35 cents.....	21		435		740	
Over 35 and under 40 cents.....	35		309		614	
40 and under 45 cents.....	41		280		294	
45 and under 50 cents.....	23		178		172	
50 and under 55 cents.....	2		15		18	
55 and under 60 cents.....	1		24		21	
60 and under 70 cents.....	2		14		5	
70 and under 80 cents.....	1		5		2	
80 cents and over.....						
Under 35 cents.....	484	79.3	745	37.2	44	2.3
35 cents.....	21	3.4	435	21.7	740	38.7
Over 35 cents.....	105	17.2	825	41.1	1,126	59.0

<sup>1</sup> Percentages shown for significant groups only.

Table 4.—Week's Earnings of Women and Minors in all Dyeing and Cleaning Establishments Reporting to Ohio Division of Minimum Wage

Week's earnings	Original study— May 1933 (173 estab- lishments)	Directory period— September 1934 (362 establish- ments)	Mandatory period— January, 1935 (445 estab- lishments)
Total.....	610	<sup>1</sup> 2,051	1,910
Median earnings.....	\$10.65	\$14.00	\$13.90
Under \$1.....	1	1	9
\$1 and under \$3.....	6	19	56
\$3 and under \$5.....	26	37	57
\$5 and under \$7.....	77	67	78
\$7 and under \$9.....	86	116	141
\$9 and under \$11.....	134	205	189
\$11 and under \$13.....	101	270	298
\$13 and under \$14.....	42	313	144
\$14.....	21	111	110
Over \$14 and under \$17.....	66	513	573
\$17 and under \$19.....	24	186	143
\$19 and under \$21.....	12	98	56
\$21 and under \$24.....	4	54	38
\$24 and under \$27.....	5	39	12
\$27 and under \$29.....		8	1
\$29 and under \$31.....		5	2
\$31 and under \$33.....	3	6	3
\$33 and under \$35.....	1	1	
\$35 and under \$40.....	1	2	

<sup>1</sup>Includes 46 for whom hours worked (and average hourly earnings) were not reported.

## Decrease in Employment of Women in Mines in Japan

SIX of the 102 Japanese mines which employed women in January 1935 ceased operation during the year, leaving only 96 mines active in December 1935, according to figures recently published by Japanese Bureau of Social Affairs and quoted in Industrial and Labor Information (Geneva) of July 1936.

The accompanying statement records the steady decline in the number of women employed in mines, this decrease resulting from the promulgation of an order amending the regulations relative to the employment and relief of miners in 1928. These regulations, with some exceptions, prohibited the employment of women in mines. A period of 5 years' grace, however, was allowed. In 1928 there were 36,510 women employed in mines and in 1935 the number had shrunk to 4,779.

	<i>Number of women employed</i>		<i>Number of women employed</i>
1928-----	36, 510	1932-----	6, 020
1929-----	29, 174	1933-----	5, 306
1930-----	16, 579	1934-----	5, 281
1931-----	8, 147	1935-----	4, 779

## LABOR LAWS AND COURT DECISIONS

### Provisions of Belgian Labor Legislation of 1936<sup>1</sup>

A WIDESPREAD strike movement which developed in Belgium in the early part of June resulted in concessions by which the workers were granted vacations with pay, freedom from deductions from wages, a minimum wage established by agreements between employers and workers, liberalization of unemployment-insurance provisions, and the establishment of the 40-hour week in certain industries.

An announcement of Government policy on various economic and financial questions read by the Prime Minister, M. Van Zeeland, before the Chamber of Representatives on June 24, 1936, stated that upon the intervention of the Government, negotiations between employers and workers had resulted in the adoption of a minimum wage of 32 francs for 8 hours' work for adult, able-bodied industrial workers. This minimum will be paid also to workers employed by the Government and to those employed by contractors working for the Government.

In regard to unemployment insurance the Government announced that the allowances would be increased 5 percent; the waiting period for the payment of benefits was fixed at 12 days per year (formerly there was a 3-day waiting period at the beginning of each 6 months in addition to the regular waiting period of 1 day a month); the right to registration in the unemployment funds on the first day of work was granted as was also payment of benefits to children up to the end of the school year in which they reach the age of 16; and the deduction from unemployment allowances equal to 25 percent of the wages of the wife of the unemployed person was discontinued. It was also announced that a royal decree would be issued lowering the pension age in industries hazardous to health.

A law of July 7 rescinded the law of August 16, 1887, by which deductions from wages were allowed for wastage or spoilage of work materials or products, for payments to welfare and assistance funds, and for advances made upon wages, including building loans made by the employer to the worker. The law does not affect certain deductions, however, notably those for pensions.

<sup>1</sup> Bulletin du Comité Central Industriel de Belgique. Brussels, July 1, p. 973; July 15, p. 1022; July 22, p. 1058.



The bill establishing the 40-hour week, which will apply particularly to port workers, metal industries, mines, and certain chemical industries, was introduced in Parliament following a conference between the Prime Minister and representatives of employers' and workers' organizations. The law was given royal assent July 9, 1936. It provides that the King, upon the proposal of the Cabinet, can progressively reduce the hours of work to 40 per week for workers engaged in industries or branches of industries where the work is carried on under unhealthful, dangerous, or difficult conditions. The law provides that the reduction in hours of work may be put into effect progressively by the Government, after consultation with the joint commissions of employers and employees or the employers' or workers' organizations in the different industries. Agents will be designated by the Government to see that the decrees putting the law in effect are carried out. These agents will have free access to all establishments covered by the decrees, and employers, managers, etc., are required to furnish them with information regarding the observance of the law. Fines or imprisonment may be imposed upon employers for failure to observe the law or upon employers or workers who put any obstacle in the way of those entrusted with the enforcement of the law.

The law of July 8, 1936, relating to vacations with pay, covers workers in mines and quarries; manufacturing and commercial enterprises; building; public works; public utilities; shipbuilding; warehousing and loading at ports, stations, etc.; land, air, and water transportation within the country; theaters, hotels, restaurants, etc.; hospitals and insane asylums; public services; and maritime fishing; and to all related services in the different industries. The law at present applies only to establishments employing at least 10 persons, but it is provided that it may be extended by royal decree to establishments or enterprises employing at least 5 persons.

Employees are entitled, after 1 year's service with the same employer in the specified industries, to at least 6 days' vacation with pay, and a special decree will be issued providing for vacations in industrial or commercial branches where the work is of a seasonal character.

The King may, upon the proposal by the Cabinet and depending upon decisions of the joint commissions of employers and employees, provide for compulsory vacations of more than 6 days or make other changes or grants of leave than those provided for. He may also, with the concurrence of the Cabinet, extend the act to cover industries not specifically included.

Employees will receive their customary remuneration for the vacation period, calculated according to regulations which will be issued later. The worker has a right to the vacation notwithstanding any agreement he may have entered into, and he cannot surrender his right to the vacation.

Agents will be appointed by the Government to see that the law is enforced, and a system of fines is provided for failure to grant the vacations or for putting obstacles in the way of the enforcement officers.

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### Canadian Federal Labor Legislation, 1936

SEVERAL laws of special interest to labor were enacted by the Canadian Parliament during its session from February 6 to June 23, 1936. Included in this legislation were an act providing for the setting up of a National Employment Commission; an act to aid in the relief of unemployment, in promoting agricultural settlement, and in conserving and developing natural and other resources; and an act to further the employment of World War veterans. A proposed amendment to the Combines Investigation Act was introduced but did not pass. A brief review of Dominion labor legislation for 1936 is published in the Canadian Labor Gazette (July 1936), from which the following information is taken.

*Unemployment.*—The act for the establishment of the National Employment Commission of not more than seven members was assented to April 8, 1936. These members were appointed by the Governor in Council on May 14. The duties of this new body are "to carry out, in cooperation with Provinces, municipalities, and private and public bodies, a national registration and classification of persons on relief and to investigate, report upon, and make recommendations concerning the following:"

The conditions to be complied with by Provinces obtaining grants for relief purposes from the Dominion Government; means of mobilizing public and voluntary relief agencies and so coordinating their work as to avoid overlapping and abuses and to secure, when necessary, effective supervision and auditing of expenditures; measures respecting proposals for public works programs and projects of the Dominion, the Provinces, municipalities, and other agencies to provide employment so as to mobilize and coordinate their activities; measures of cooperation with commercial and industrial groups in devising means to maintain and increase employment; plans for the establishment of an apprenticeship system in industry; means of providing employment for disabled persons and efforts to secure suitable employment for ex-soldiers in cooperation with the Veterans' Assistance Commission to be set up under the act to assist in the employment of war veterans; comprehensive measures constituting long-range plans of national development which may be proceeded with or discontinued from time to time as conditions may determine.

The duties of this body also include the supervision, under the Ministry of Labor's direction, of the expenditures of funds appropriated by Parliament to afford relief and provide employment, and such administrative activities in connection with relief and unemployment as may be designated by the Governor in Council. This official is authorized to select the members of a National Advisory Commis-

sion, including representatives of industrial, occupational, philanthropic, and social-welfare organizations, whose services shall be gratis but who will be allowed travel and subsistence expenses. The Minister of Labor may appoint from the members of the National Advisory Commission special committees to deal with the employment of women and youth. The National Employment Commission may appoint, with the Minister of Labor's approval, local advisory committees.

Under the Unemployment Relief and Assistance Act, which received Royal assent on May 7, 1936, the Governor General in Council is authorized to carry out such projects as he may consider in the general interest of the Dominion. As far as practicable employment shall be accorded to relief recipients in the Province in which the project is being undertaken by the Dominion Government.

Under the new statute the Governor General in Council may enter into agreements with corporations, partnerships, or individuals engaged in industry, concerning the extension of industrial employment, consolidate or renew "advances, loans, or guarantees made under previous relief acts, and make regulations which are to have the force of law for carrying out the Unemployment Relief and Assistance Act."

A report must be submitted to Parliament within 30 days after the expiration of the act, concerning the moneys loaned or expended and the obligations contracted under the law. If, however, Parliament is not in session, the report shall be published and made available for distribution by the Dominion Department of Labor.

The Veterans' Assistance Commission Act, assented to June 23, 1936, provides for the appointment by the Governor in Council of a Commission of three members to be connected with the Department of Pensions and National Health. The membership term is 1 year and may be extended for 6 months. This agency is to inquire into the extent of unemployment among Canadians who served in any of the Allied forces during the World War and "to classify those who are unemployed, according to their physical and mental capacity to undertake gainful employment in restricted and unrestricted occupations and in any other categories which the Commission may consider applicable." The Commission is also authorized to investigate and report on the existing methods of providing veterans with employment, especially those who are disabled or handicapped; on plans for additional schemes and agencies to make provision for their rapid return to employment; on the possibility of returning to gainful occupation disabled or handicapped veterans who cannot be absorbed in industrial employment, by developing small holdings, community centers, and such other schemes as may be regarded as practicable; and on present facilities for the care and maintenance of veterans when they have no jobs.

Upon the expiration of the commission's term of office its power will be vested in the Minister of Pensions and National Health.

*Unlawful associations.*—Amendments to the Criminal Code, which were assented to on June 23, will become effective September 1, 1936, including the repeal of section 98 enacted in 1919. According to this repealed section, any association was unlawful "whose professed purpose was to bring about governmental, industrial, or economic change within Canada by force or violence or by threats of force."

*Seamen.*—Many of the amendments made to the Canada Shipping Act of 1934 were designed to clarify the power of pilotage authorities to make regulations and impose penalties.

*Economic Council.*—The Economic Council of Canada Act of 1935, providing for a council of 15 members serving without remuneration, was repealed.

*Resolutions.*—On March 9, 1936, a resolution was agreed to which read in part as follows:

Therefore be it resolved, that the Government consider the desirability of investigating the broad question of the reestablishment of the young men and young women of Canada;

And be it further resolved, that, in the conduct of such investigation, attention be given to the possibility of making available to those of our youth who are adapted for such training and who would otherwise be denied it, technical training in various branches;

And be it further resolved, that, in the conduct of such investigation, consideration should be given to the feasibility of setting up and maintaining a National Youth Reestablishment Commission.

On the same date agreement was reached on a resolution to extend pensions to blind persons.

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## Decisions of Canadian Supreme Court on Recent Social Legislation

ON June 17, 1936, the Supreme Court of Canada rendered its decision relative to social legislation embodied in various statutes enacted by the Dominion Parliament in 1934 and 1935, including the Employment and Social Insurance Act, the Weekly Rest in Industrial Undertakings Act, the Minimum Wages Act, and the Limitation of Hours of Work Act.

These acts were referred to the Dominion Supreme Court to obtain judicial decisions on whether or not they were beyond the powers of the Canadian Parliament. Hearings were held before the Supreme Court between January 15 and February 5, 1936. The decisions of that court on these acts were summarized in the July 1936 issue of the Canadian Labor Gazette, from which the data here given are taken.

On June 17, 1936, the Dominion Supreme Court held, by a vote of 4 to 2, that the Employment and Social Insurance Act was unconstitutional. This act established a commission to set up a national employment service, insurance against unemployment, aid to unemployed, and "other forms of social insurance and security." As to the constitutional validity of the acts relative to the weekly rest in industrial enterprises, minimum wage, and limitation of hours of work, the court was equally divided. These statutes were designed to give effect to draft conventions adopted by the International Labor Conferences of 1919, 1921, and 1928, respectively. The question of their constitutionality therefore depended chiefly on the interpretation of the treaty-making power of the Dominion and was considered highly important. On July 8 the Dominion Government announced its intention of applying to the Privy Council for leave to appeal from these judgments.

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### Provisions of French Labor Laws Enacted in June 1936

**F**IVE laws having a wide application and profoundly affecting working conditions of industrial and commercial workers in France were passed in June following the change in the Government under which M. Leon Blum became Premier. These laws established the 40-hour week, vacations with pay, and provisions governing collective agreements, and rescinded the decree laws relating to deductions from the pay of Government employees and the tax on pensions of war veterans, issued in 1934 and 1935. They modify and complete the sections of the labor code on these subjects. With the exception of the provisions relating to the pensions of veterans, the new legislation is summarized below.<sup>1</sup>

#### Forty-Hour Week

HOURS of labor, under the law passed June 21, 1936, may not exceed 40 per week. This applies to every type of commercial and industrial establishment, whether public or private, secular or religious, including establishments of an educational or welfare character, hospitals, and insane asylums. Decrees will be issued later by the council of ministers, after consultation with the competent sections of the National Economic Council, fixing the method of application of the law and its coverage.

In underground mines the time underground of each worker may not exceed 38 hours and 40 minutes per week; the Cabinet is to determine the method of application, particularly the method of calculating the time underground.

<sup>1</sup> Data are from *Le Bulletin Législatif* (Paris), no. 12, 1936, pp. 397-412.

The law is not to affect cases in which shorter hours are in effect, either as a result of custom or established by collective agreements in any of the establishments or industries covered.

The application of the law may not carry with it any lowering in the standard of living and it may not be the determining cause, therefore, for a reduction in the remuneration of the workers either in wages or in other payments.

#### Vacations With Pay

ANNUAL vacations with pay amounting to 15 days, 12 of which must be working days, are established for industry and commerce and the liberal professions, by the law of June 20, 1936. All workers, salaried employees, or apprentices in such employment, or employed by cooperative societies or as associates or apprentices in artisans' workshops, are entitled to the vacation after one year's continuous service. If the usual vacation period in an establishment occurs after 6 months' continuous service by a worker, he will be entitled to a vacation of 1 week. Longer vacations which have been in effect either as a result of custom or collective agreements are not to be affected by the law.

All persons covered by the law will be entitled, if they are time workers, to the wages which would have been earned during the vacation period; or if they are paid on another basis, to the average pay which would have been received for an equivalent period in the year preceding the vacation. In fixing the amount of the payment, allowance must be made for family allowances and other payments, including payments in kind, which the worker does not receive during his vacation.

Any agreement made by any worker by which he gives up his vacation, even if he receives compensatory pay, is prohibited.

In the professions, industry, and commerce in which the workers, salaried employees, associates, and apprentices are not normally occupied continuously during a year in the same establishment, the council of ministers will determine the method of payment, notably by the establishment of compensation funds by the employers concerned.

A regulation by the public authorities, made after consultation with the agricultural associations and the joint agricultural unions or workers' unions, will determine the method of application of the preceding regulations to agricultural workers. A similar regulation will determine the method of application of the law to domestic services.

Agreements may permit fractional vacations.

Violations of the administrative regulations will be investigated by officers of the courts of justice.

## Collective Agreements

ON THE demand of an employers' or workers' organization, the Minister of Labor or his representative is required to appoint a joint committee for the purpose of concluding a collective agreement having for its purpose the regulation of relations between employers and employees in the branch of industry or commerce concerned, either for a specified district or for the entire territory. This law was passed on June 24, 1936.

If the joint committee cannot reach an agreement upon one or several of the provisions to be included in the agreement, the Minister of Labor shall intervene upon the demand of one of the parties, in order to assist in reaching an agreement after securing the advice of the interested professional section or sections of the National Economic Council.

The collective agreement reached by the joint committee must specify whether or not it is concluded for a definite period and must contain provisions concerning (1) trade-union freedom and freedom of opinion of the workers; (2) the appointment, in establishments employing more than 10 persons, of delegates elected by the employees to represent them in claims relative to the application of rates of wages, the labor code and other laws and regulations concerning workers' protection, safety and sanitation (these delegates may demand the assistance of a representative of their trade-union); (3) minimum wages by class and by district; (4) notice of dismissal; (5) the organization of apprenticeship; (6) the procedure to be followed in enforcement; and, (7) the procedure by which the agreement may be amended or changed.

The collective agreements may not contain provisions conflicting with the laws and regulations in force, but may provide more favorable conditions.

Agreements thus concluded may be made compulsory by the issuance of a decree by the Minister of Labor for all employers and employees in the district, in the industries to which they apply, for the period provided for in the agreements. Before the decree is issued the Minister shall publish a notice in the *Journal Officiel* relative to the provisions and requesting the filing of comments and advice within a period which he shall fix but which shall not be less than 15 days.

The provisions of the decree will cease to be effective when the contracting parties agree to terminate, revise, or modify it. Also the Minister of Labor can rescind the decree, after securing the advice of the interested parties and the National Economic Council when it appears that the agreement is not in accord with the economic situation of the industry in the district concerned.

Any trade-union which is not a party to the agreement may become so by notifying the secretariat or the clerk's office when the agreement has been filed.

#### Salaries of Government Employees

VARIOUS decree laws were issued in 1934 and 1935 affecting the pay of Government employees. These laws provided for deductions from the salaries of the employees, postponed the regular promotions of civil servants, and abolished the double household bonus which had been paid in many instances to husbands and wives employed in the Government service. The law of June 20, 1936, repealed the decree of July 16, 1935, which had affected the advancement of employees and had abolished the second household or lodging bonus, and the decree of June 30, 1934, which had reduced family allowances. The allowances established by the law of April 16, 1930, are now restored. The present law also provides for an increase in the minimum salaries and pensions of employees and agents of the public services, State, Departments, communes, and similar services, under which they are not subject to the deductions instituted by the decrees of February 1934 and June 1935. Above this minimum the deductions will be established according to a progressive scale. The receipt of more than one pension (*cumuls de retraites*)—such as a veteran's pension, the regular old-age annuity, or the survivor's pension—is prohibited as being contrary to the good administration and financial management of the State.

The decree of June 25, putting the law in effect, provides that the promotions may be retroactive as regards their effect upon pensions, but the increase in pay will be effective only as of the date of the enactment of the law. The general deduction from salaries, which was fixed at a minimum of 5 percent and a maximum of 10 percent by the decree law of April 4, 1934, was reduced to a minimum of 3 percent by the decree law of July 16, 1935. The present law provides that salaries below 12,000 francs shall not be taxed, but above that amount the taxes range from 2 percent for salaries of 12,001 to 15,000 francs up to 18 percent for employees and agents earning more than 80,000 francs per year.

These four laws apply to Algeria, and decrees will be issued determining the conditions governing their application in the French colonies and protectorates.



## WORKMEN'S COMPENSATION

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### Regulation of Medical Practice in Compensation Cases Held Constitutional

THE attempt by the State of New York to limit medical practice in workmen's compensation cases to certain authorized physicians was upheld by the Supreme Court of that State. (*Szold v. Outlet Embroidery Supply Co.*, 289 N. Y. Supp. 411, decided June 2, 1936.)

A 1935 amendment to the State workmen's compensation law (ch. 258, Acts of 1935) provides that the industrial commissioner shall, upon the recommendation of medical societies, authorize physicians to treat compensation cases, and prohibits such medical care by other persons (unless authorized by the commission) except in cases of emergency or when the employee is a patient of a hospital. Fees for such medical services are payable only to a physician authorized to render such service.

Dr. Eugene Szold, the plaintiff in this case, was engaged by the Outlet Embroidery Supply Co. to render medical aid to an injured employee, but the employer refused to pay for the treatment. Dr. Szold thereupon brought an action to recover payment for the services rendered, but failed to state that he was authorized by the industrial commissioner to render medical service in accordance with the provisions of the amended law, that there was an emergency, or that the employee was treated in a hospital.

In the opinion of Mr. Justice Shientag of the State supreme court, the failure of the plaintiff to include such an allegation in the complaint rendered it so defective as to entitle the defendant to a dismissal. The court said that the requirement that only authorized physicians may practice in compensation cases "is reasonable and one within the power of the legislature to make in the interest of the health and welfare of injured employees and in order that the employers and the community may receive the full benefits of the humanitarian law the costs of administering which they bear."

Dr. Szold contended that he had a common-law right to proceed against the employer for the collection of his bill, and that such common-law right was not subject to the limitations of the amended law. The court rejected this contention, and said that "even if some of the common-law rights of the plaintiff have been abrogated or restricted, the provisions of the amended statute do not offend against any vested right."

The practice of medicine is a property right, but one which is subject to the most stringent regulations. The right to practice medicine must yield to the paramount right of the State to protect health by any rational means. \* \* \* The rule is well established that a State may, without violating the constitutional rights of an individual, prescribe reasonable regulations for the practice of medicine within its boundaries.

In view of this well-established rule, the court reached the conclusion that the State may impose additional requirements as a condition to permitting a physician already licensed as such to practice and to treat employees under the workmen's compensation law.

Mr. Justice Shientag, in his decision, called attention to the fact that the amendment was passed to do away with "the cut-throat competition and commercialization of compensation medical practice, the improper 'lifting' of cases, and the inadequate and inefficient treatment of injured workers."

Under the amendment if an employer furnishes medical treatment to an employee he must provide an authorized physician, since no other may legally treat compensation patients. To hold otherwise would be to circumvent and render nugatory the salutary amendments which those interested in the proper administration of this beneficent statute have striven so long to obtain.

In holding the amended statute valid, the court decided that the legislature has power to abrogate in whole or in part the common-law rights of physicians who treat workmen's compensation cases; that the requirement that only physicians who are authorized may treat injured employees is a reasonable one; and that no physician is permitted to treat compensation cases or entitled to be paid therefor unless he is "authorized" by the industrial commissioner.

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### Death of Salesman Shot by Highwayman Held Compensable

**I**N A decision June 5, 1936, the Supreme Court of Nebraska held that the death of a traveling salesman who was shot by a highwayman while driving from one town to another was compensable as "arising out of the employment." (*Goodwin v. Omaha Printing Co. et al.*, 267 N. W. 419.)

Russell Goodwin had been employed by the Omaha Printing Co. as a traveling salesman for a period of 15 years. It was his duty to call on and sell to various county officers in Nebraska, using his own automobile in so doing.

On September 6, 1934, after conferring with the officers of his company in Omaha, he started in his automobile for Columbus for the purpose of interviewing officials of Platte County. He had with him in the car his personal baggage and supplies belonging to the Omaha Printing Co. About 10 miles west of Omaha, he permitted

one Harold Malmberg to ride in the car with him. When he reached a point near Schuyler, Malmberg got out of the car, held him up, shot him, and left with the car. Goodwin died from the injuries.

His widow brought suit to recover compensation in the district court of Douglas County. In that court compensation was awarded, and the Omaha Printing Co. and the Employers' Liability Assurance Corporation, Ltd., of London, England (the insurance carrier), appealed to the Supreme Court of Nebraska.

The defendants admitted that Goodwin died as a result of an accident within the meaning of the statute, and that the accident was in the course of the employment. The question to be determined was whether the accident arose out of the employment.

After citing several cases of a similar character and quoting from them, the court said:

In the case at bar, the duties of the deceased required him to travel the highway where the accident occurred. He was killed while being robbed of property, a part of which was his own and a part that of the employer. A salesman who is required to travel from town to town for the purpose of selling his employer's goods is as much within the employment in so doing as he is when selling goods at such towns. Highway robbery is a hazard of the highway and a hazard of an employee whose employment requires him to travel the highways in the service of his employer.

In answer to the contention that the deceased brought the injuries upon himself by inviting Malmberg to ride with him, the court said: "While it is true that highway robbery and murder are sometimes committed on the highways, yet it cannot be said that such acts are so common that the inviting of a 'hitchhiker' to ride in the car is anything more than a charitable act." The court also called attention to the fact that the record did not disclose that Goodwin disobeyed any directions or instructions of his employer in permitting Malmberg to ride with him.

A traveling salesman in inviting a "hitchhiker" to ride in his automobile, under such circumstances as are shown in this case, does not step aside from his employment and act for himself on business or pleasure of his own. He is still within the scope of his employment. After a consideration of all the facts, and in view of the authorities cited, we are constrained to hold that the accident arose out of and in the course of his employment.

The Supreme Court of Nebraska therefore affirmed the judgment of the lower court, awarding compensation.

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### Compensation Disallowed for Injury Caused by Constant Jarring of Truck

**T**HE Court of Appeals of Ohio in a recent decision held that an organic disease sustained by a truck driver in the course of his employment was not compensable, since the condition was not the

result of an accidental injury, and, though occupational, was not enumerated in the statute as a compensable occupational disease. (*Industrial Commission of Ohio v. George*, 2 N. E. (2d) 10.)

A. R. George was employed by the board of trustees of Henry Township for a period from about April 10, 1930, until about November 1, 1930, as a truck driver, hauling stone. In August 1930, while employed by the board, George suffered an attack of hematuria of the kidneys. He did not immediately stop driving the truck, but continued working for 7 or 8 weeks. He was totally disabled from April 1931 to November 1933.

In April 1931, he filed a claim with the industrial commission, but after a hearing and a rehearing the commission refused to award him compensation. He appealed to the court of common pleas of Wood County. The appeal was heard by the court, a jury having been waived, and resulted in a judgment in favor of the claimant. The industrial commission then carried the case to the court of appeals.

In the petition filed in the common pleas court, George alleged that the injury was sustained while he was employed in driving the truck above mentioned. Pieces were broken out of the solid rubber tires on the truck, he stated, and it was the resulting excessive jar that had resulted in a traumatic injury to his kidneys.

The court of appeals, in considering the case, first called attention to the fact that it appeared from the claimant's own testimony that in 1926 he had a similar attack during his employment on a corn shredder which vibrated considerably while in operation. "It appears, therefore", said the court, "that he was perhaps unusually susceptible to kidney difficulty when engaged in work that vibrated or jarred the kidneys."

The court of common pleas had found that the disability "was brought about by the continuous bumping of the truck, and resulted in an injury", but the court of appeals did not agree with this finding, because "this court and the Supreme Court have repeatedly held that there can be no recovery where the disability arises from occupational sources, that is, heavy work, lifting, jarring, straining, gases, fumes, weather conditions, etc., unless there was an accident, a specific physical injury, an unusual and unexpected occurrence on a specified occasion different from other occasions."

Finally, in holding that George was not entitled to a recovery, the court of appeals said:

His injuries were occupational, not accidental, and the workmen's compensation law compensates only certain occupational diseases enumerated in the statute (of which hematuria of the kidneys is not one), and all other claims must be based on physical injury accidental in its cause and origin occurring on some specified occasion or occasions.

The court reversed the judgment of the court of common pleas, with directions to enter final judgment for the industrial commission.

## Interstate Bus Employee Awarded Workmen's Compensation

THE Supreme Court of Ohio recently rendered an interesting and far-reaching decision in a case involving the payment of workmen's compensation to an employee injured while engaged in interstate bus service (*Hall v. Industrial Commission of Ohio*, 3 N. E. (2d) 367). This is a case which has occupied the attention of the Ohio courts for several years. Woodford Hall was injured on August 22, 1932, while employed as a porter on a bus owned and operated by the Great Eastern Stages, Inc., of Cleveland, Ohio. The injury was sustained in Michigan while the bus was making one of its interstate passenger trips between Cleveland, Ohio, and Detroit, Mich.

The bus company had regularly employed more than three employees and had paid premiums into the Ohio State Insurance Fund for the coverage of its employees engaged in the interstate bus business, its payments being computed on the basis of two-thirds of a salary of \$120 a month. As the distance from Cleveland to Detroit is 180 miles, the proportion in Ohio was fixed at two-thirds of the entire mileage. Although Hall's salary was reported as stated above, he in fact was furnished a room in Detroit for his own use and was paid \$1 a month which was applied to the purchase of a uniform until paid for. Hall relied upon tips from the bus passengers for the main part of his income. The contract of employment was made in the city of Cleveland, the home of the injured employee.

The Industrial Commission of Ohio denied compensation to Hall, under the State Workmen's Compensation Act. He thereupon appealed to the court of common pleas of Cuyahoga County and judgment was rendered against him, and in favor of the industrial commission. The court of appeals reversed the lower court in a subsequent appeal, and the supreme court of the State was asked to make a final decision. The main question for consideration was whether Hall could recover compensation for an injury sustained outside the State while employed as a porter on an interstate bus line. Judge Williams, after reviewing the pertinent sections of the Ohio workmen's compensation law, referred to a former case,<sup>1</sup> and said that while this case considered a different question, it nevertheless contained "instructive language bearing upon the subject of inquiry." The language used by the court in the cited case is worthy of mention, as the Ohio Supreme Court approved the doctrine there given, in its entirety.

The legislative intent is quite manifest that the provisions of the act shall apply to all those employed within the State, and also where, as incident to their employment, and in the discharge of the duties thereof, they are sent beyond the

<sup>1</sup> *Industrial Commission v. Gardinio*, 164 N. E. 758. See also U. S. Bureau of Labor Statistics Bul. No. 548, p. 361.

borders of the State. Undoubtedly an injury received by an employee of an Ohio employer is compensable under the workmen's compensation law, though the injury was actually received in another State, if the service rendered by him in such other State was connected with, or part of, the duties and service contemplated to be performed in Ohio.

The court, speaking through Judge Williams, held that the injured employee was entitled to compensation unless he was barred because of his interstate employment at the time of his injury outside the State of Ohio. Numerous cases were cited by the court to indicate that a State may provide compensation to a person engaged in interstate commerce, "so long as the Congress of the United States, acting under its constitutional power to regulate commerce among the States, has not preempted the field."

In opposition to the payment of the award, it was argued that the payment of insurance premiums was an unwarranted burden on the employer and hence on interstate commerce, since the right to regulate commerce was granted solely to Congress by the United States Constitution. The court agreed that no direct burden may be imposed by a State; however, the court also pointed out that in a case in which Congress has not acted, the "State power may be exercised within certain limitations. If the matter is such as to require a general system or uniformity of regulation, the power of Congress is exclusive. In situations which admit of diverse treatment due to peculiar local conditions, the State may act until such time as Congress legislates on the subject."

The court cited the Minnesota Rate Cases (230 U. S. 352) in which the United States Supreme Court said in part as follows:

But within these limitations there necessarily remains to the States until Congress acts a wide range for the permissible exercise of power appropriate to their territorial jurisdiction although interstate commerce may be affected. It extends to those matters of a local nature as to which it is impossible to derive from the constitutional grant an intention that they should go uncontrolled pending Federal intervention. \* \* \*

Where the subject is peculiarly one of local concern, and from its nature belongs to the class with which the State appropriately deals in making reasonable provision for local needs, it cannot be regarded as left to the unrestrained will of individuals because Congress has not acted, although it may have such a relation to interstate commerce as to be within the reach of the Federal power.

The court thought that, upon the decision in this case, it must be concluded "that a direct burden is not imposed by providing compensation to those injured outside the State in interstate commerce and that such legislation is a matter of peculiar concern to this State. The provisions for compensation can hardly be said to be unreasonable or to transcend the bounds of proper local need and protection."

The industrial commission in assessing premiums for part of the work performed by employees engaged in interstate commerce while in the State, recognized the right of such employees to compensation;

but when the employee was engaged in the same employment in another State the commission assumed that he was not entitled to compensation. The court said:

Such a construction of the law would place employees who are compelled to cross the State line in commerce in an unparalleled position. In businesses located in Ohio along the State border the employees are frequently required to deliver goods sold into adjoining States. Are these employees to be left without protection because they are engaged in interstate commerce? This query points emphatically to the peculiar necessity for local action until such time as Congress steps in.

The commission also argued that the claim was not compensable because section 1465-98, of the Ohio General Code, provided that the act applied only to employers and employees for whom "a rule of liability or method of compensation has been or may be established by the Congress of the United States."

In explanation of the section quoted, the court stated that the words "may be established" referred to Federal legislation that should thereafter be enacted. Since Congress had not acted with reference to employers and employees engaged in interstate commerce in the operation of bus lines, up to the time of the claimant's injury, the court held that the statute had no application to the present case.

It was finally shown by the court that compensation liability "is neither contractual nor tortious, but grows out of a status which in turn springs from the hiring by operation of law." After citing several cases tending to prove this statement, the court concluded:

The contract of hire, having been entered into in Ohio by an employer, having its principal place of business therein, and an employee resident thereof, for service within and beyond this State, gave rise to a legal status which did not end when the employee crossed the State line in interstate commerce as porter on the bus. In performing the required service he went beyond the border clothed with his rights as an employee. By holding the claim compensable this court does not give extraterritorial effect to the workmen's compensation law but rather to the status arising from the contract of hire by virtue of the constitutional and statutory provisions. The contract and resulting status are, however, always subject to the right of Congress to preempt the field by appropriate legislation.

The Supreme Court of Ohio in affirming the right of the claimant to compensation thus safeguarded the rights of innumerable employees engaged in interstate bus service who have hitherto been considered unprotected in their rights for compensation on account of injuries, because the Congress of the United States had not preempted the field by appropriate legislation.

# INDUSTRIAL DISPUTES

## Trend of Strikes

PRELIMINARY information indicates a reduction of approximately 14 percent in the number of strikes beginning in July 1936 as compared with the number in June; the July strikes were small on the average and involved only a little more than half as many workers as were involved in the June strikes. Many of the strikes beginning in June and prior months continued into July, however, so that the number of workers involved in the strikes in progress during July was only 10 percent lower than the corresponding number for June. The number of man-days of idleness in July was less than in June by about 15 percent.

Trend of Strikes, January 1935 to July 1936<sup>1</sup>

Year and month	Number of strikes					Workers involved in strikes		Man-days idle during month
	Continued from preceding month	Beginning in month	In progress during month	Ended in month	In effect at end of month	Beginning in month	In progress during month	
<i>1935</i>								
January.....	73	140	213	130	83	81,194	92,630	720,778
February.....	83	149	232	130	102	64,238	96,533	836,498
March.....	102	175	277	163	114	53,089	98,457	966,980
April.....	114	180	294	161	133	67,857	124,174	1,178,851
May.....	133	174	307	177	130	102,491	151,163	1,697,848
June.....	130	189	319	186	133	48,917	129,784	1,311,278
July.....	133	184	317	179	138	70,046	141,829	1,297,730
August.....	138	239	377	228	149	74,313	150,835	1,191,663
September.....	149	162	311	169	142	453,820	514,427	3,027,040
October.....	142	190	332	200	132	48,223	133,742	1,562,908
November.....	132	142	274	154	120	38,279	100,732	1,003,852
December.....	120	90	210	126	84	14,746	61,782	660,911
<i>1936</i>								
January.....	84	161	245	147	98	31,819	58,566	632,285
February.....	98	142	240	123	117	63,090	89,701	747,362
March.....	117	174	291	173	118	74,875	122,025	1,327,734
April.....	118	163	281	166	115	62,785	92,648	687,904
May.....	115	188	303	199	104	71,625	120,332	977,905
June.....	104	185	289	169	120	60,000	129,000	1,262,000
July.....	120	160	280	155	125	33,000	116,000	1,075,000

<sup>1</sup> Strikes involving fewer than 6 workers or lasting less than 1 day are not included in this table, nor in the following tables. Notices or leads regarding strikes are obtained by the Bureau from 670 daily papers, labor papers, and trade journals, as well as from all Government labor boards. Schedules are sent to representatives of the parties in the disputes in order to get detailed and authentic information. Since there is delay in the return of some of these schedules, the figures given for the late months are not all-inclusive and are, therefore, subject to change as additional information is received. This is particularly true with regard to figures for the last 2 months, and these should be considered as preliminary estimates.



As compared with July a year ago the number of strikes in July 1936 was lower by about 13 percent; the number of workers involved in the strikes beginning in the month was lower by about 53 percent; and the number of man-days of idleness during the month was lower by about 17 percent.

An analysis of strikes in July 1936, based on detailed and verified information, will appear in the Monthly Labor Review for November 1936.

### Analysis of Strikes in May 1936<sup>1</sup>

THE following analysis is based on detailed and verified information obtained on 188 strikes which began in May 1936 and 115 strikes which began prior to but continued into May, making a known total of 303 strikes in progress during the month. These strikes involved 120,000 workers and resulted in 978,000 man-days of idleness during the month. Newspaper notices have appeared concerning 18 strikes beginning in May on which detailed information has not yet been obtained and which are, therefore, not included in this report.

Table 1.—Strikes in May 1936, by Industry

Industry	Beginning in May		In progress during May		Man-days idle during May
	Number	Workers involved	Number	Workers involved	
<b>All industries</b> .....	<b>188</b>	<b>71,625</b>	<b>303</b>	<b>120,332</b>	<b>977,905</b>
<b>Iron and steel and their products, not including machinery</b> .....	<b>9</b>	<b>6,277</b>	<b>13</b>	<b>7,640</b>	<b>59,391</b>
Blast furnaces, steel works, and rolling mills.....	1	5,500	3	6,697	51,401
Forgings, iron and steel.....	1	35	1	35	105
Hardware.....	1	1	1	31	186
Stoves.....	3	156	4	291	3,363
Structural and ornamental metal work.....	1	349	1	349	1,047
Tin cans and other tinware.....	1	115	1	115	2,070
Tools (not including edge tools, machine tools, files, and saws) (hand tools).....	1	65	1	65	1,105
Wirework.....	1	57	1	57	114
<b>Machinery, not including transportation equipment</b> .....	<b>8</b>	<b>8,356</b>	<b>10</b>	<b>9,191</b>	<b>56,907</b>
Electrical machinery, apparatus, and supplies.....	2	507	2	507	9,916
Engines, turbines, tractors, and water wheels.....	1	1	1	635	8,890
Foundry and machine-shop products.....	4	703	4	703	1,439
Radios and phonographs.....	1	146	1	146	3,212
Typewriters and parts.....	1	7,000	1	7,000	33,250
Other.....	1	1	1	200	200
<b>Transportation equipment</b> .....	<b>1</b>	<b>22</b>	<b>3</b>	<b>722</b>	<b>15,394</b>
Automobiles, bodies, and parts.....	1	22	1	22	44
Shipbuilding.....	1	1	2	700	15,350
<b>Nonferrous metals and their products</b> .....	<b>1</b>	<b>11</b>	<b>3</b>	<b>242</b>	<b>2,741</b>
Other.....	1	11	3	242	2,741
<b>Lumber and allied products</b> .....	<b>14</b>	<b>10,401</b>	<b>27</b>	<b>13,571</b>	<b>182,539</b>
Furniture.....	5	281	11	1,765	26,027
Millwork and planing.....	5	1,905	6	2,085	20,170
Sawmills and logging camps.....	4	8,215	8	8,632	124,300
Other.....	1	1	2	1,089	12,042
<b>Stone, clay, and glass products</b> .....	<b>3</b>	<b>389</b>	<b>3</b>	<b>389</b>	<b>3,164</b>
Glass.....	2	229	2	229	1,724
Other.....	1	160	1	160	1,440

<sup>1</sup> Since schedules on all strikes have not yet been received (see footnote 1 to preceding table), the following tables do not include data on all strikes beginning or ending in this month. Data on missing strikes will be included in the annual report.

Table 1.—Strikes in May 1936, by Industry—Continued

Industry	Beginning in May		In progress during May		Man-days idle during May
	Number	Workers involved	Number	Workers involved	
<b>Textiles and their products</b> .....	25	4,045	61	12,168	176,290
Fabrics:					
Cotton goods.....	3	1,084	10	5,368	94,569
Dyeing and finishing textiles.....			1	41	328
Silk and rayon goods.....	6	607	15	1,604	30,861
Woolen and worsted goods.....	2	680	3	795	6,735
Wearing apparel:					
Clothing, men's.....	1	57	2	125	511
Clothing, women's.....	6	483	10	1,230	7,435
Men's furnishings.....	1	121	1	121	242
Hats, caps, and millinery.....	2	600	4	807	8,807
Shirts and collars.....	1	165	4	633	3,488
Hosiery.....	1	150	4	945	18,070
Knit goods.....	1	20	3	77	1,477
Other.....	1	78	4	422	3,707
<b>Leather and its manufactures</b> .....	3	592	7	1,172	12,081
Boots and shoes.....	3	592	6	1,022	8,331
Other leather goods.....			1	150	3,750
<b>Food and kindred products</b> .....	9	2,766	13	3,136	15,364
Baking.....	6	573	9	883	8,226
Canning and preserving.....	3	2,193	3	2,193	5,278
Flour and grain mills.....			1	60	1,860
<b>Tobacco manufactures</b> .....	1	15	1	15	285
Cigars.....	1	15	1	15	285
<b>Paper and printing</b> .....	4	137	10	1,154	11,210
Boxes, paper.....			1	800	6,400
Paper and pulp.....			1	125	2,625
Printing and publishing:					
Book and job.....	1	14	3	53	498
Newspapers and periodicals.....	1	10	2	18	58
Other.....	2	113	3	158	1,629
<b>Chemicals and allied products</b> .....	2	211	2	211	2,254
Other.....	2	211	2	211	2,254
<b>Rubber products</b> .....	3	7,620	3	7,620	8,600
Rubber tires and inner tubes.....	2	7,500	2	7,500	8,000
Other rubber goods.....	1	120	1	120	600
<b>Miscellaneous manufactures</b> .....	9	889	11	944	7,989
Electric light, power, and manufactured gas.....	1	100	1	100	300
Furriers and fur factories.....	5	122	5	122	1,112
Other.....	3	667	5	722	6,577
<b>Extraction of minerals</b> .....	12	9,813	17	16,160	153,870
Coal mining:					
Anthracite.....	4	1,065	5	1,315	16,787
Bituminous.....	4	2,654	7	8,051	48,589
Metalliferous mining.....	2	2,094	2	2,094	2,094
Quarrying and nonmetallic mining.....	2	4,000	3	4,700	56,400
<b>Transportation and communication</b> .....	17	4,850	21	6,018	33,237
Water transportation.....	6	522	10	1,690	10,826
Motor-truck transportation.....	7	3,742	7	3,742	20,095
Motor-bus transportation.....	1	14	1	14	14
Taxicabs and miscellaneous.....	2	512	2	512	3,062
Electric railroad.....	1	60	1	60	240
<b>Trade</b> .....	18	4,004	24	4,464	36,659
Wholesale.....	5	717	7	1,126	12,186
Retail.....	13	3,287	17	3,338	24,473
<b>Domestic and personal service</b> .....	13	960	18	21,277	141,573
Hotels, restaurants, and boarding houses.....	8	562	10	593	1,977
Personal service, barbers, beauty parlors.....			2	20,235	137,305
Laundries.....	2	295	3	346	1,696
Dyeing, cleaning, and pressing.....	2	38	2	38	140
Elevator and maintenance workers.....	1	65	1	65	455
<b>Professional service</b> .....	2	295	3	304	2,782
Recreation and amusement.....	1	225	1	225	2,475
Professional.....			1	9	27
Semiprofessional, attendants, and helpers.....	1	70	1	70	280
<b>Building and construction</b> .....	23	6,176	37	7,453	51,017
Buildings, exclusive of P. W. A.....	13	4,730	17	5,170	32,480
All other construction (bridges, docks, etc., and P. W. A. buildings).....	10	1,446	20	2,283	18,537
<b>Agriculture, etc</b> .....	4	3,437	6	4,037	27,087
Agriculture.....	3	2,737	5	3,337	22,887
Fishing.....	1	700	1	700	4,200
<b>Relief work and W. P. A</b> .....	3	186	5	2,264	4,612
<b>Other nonmanufacturing industries</b> .....	4	173	5	180	1,859

The industry groups with the largest number of strikes beginning in the month were textiles (25), building and construction (23), trade (18), transportation and communication (17), lumber and allied products (14), domestic and personal service (13), and extraction of minerals (12). There were more than 50,000 man-days of idleness because of strikes during May in each of seven industry groups: Lumber (183,000), textiles (176,000), domestic and personal service (142,000), mining (124,000), machinery manufacturing (57,000), iron and steel (59,000), and building and construction (51,000).

Approximately half of the strikes beginning in May were in five States. There were 29 in Pennsylvania, 21 in New York, 17 in Ohio, 16 in California, and 10 in Washington.

Five of the strikes beginning in May extended into two or more States. The most important of these were the Remington Rand strike in New York, Ohio, and Connecticut, which was still in effect at the end of the month, and the strike of loggers in the Columbia River Basin of Washington and Oregon, which also continued into June.

Table 2.—Strikes in May 1936, by States

State	Beginning in May		In progress during May		Man-days idle during May
	Number	Workers involved	Number	Workers involved	
All States.....	188	71,625	303	120,332	977,905
Alabama.....	2	3,064	7	5,098	35,832
Arkansas.....	1	2,500	1	2,500	15,000
California.....	16	3,234	26	5,306	45,625
Colorado.....	2	1,055	2	1,055	6,330
Connecticut.....	2	321	6	1,203	8,979
District of Columbia.....	1	350	1	350	6,300
Illinois.....	9	1,297	14	2,230	24,918
Indiana.....	2	2,100	3	2,130	36,475
Iowa.....	2	195	2	195	1,190
Kentucky.....	1	400	2	5,400	34,744
Maine.....	1	60	1	60	240
Maryland.....	2	461	2	461	3,776
Massachusetts.....	3	432	6	1,997	26,204
Michigan.....	4	339	6	599	7,349
Minnesota.....	9	3,075	10	3,135	29,154
Missouri.....	3	2,425	4	2,493	14,440
Montana.....	1	34	1	34	170
Nebraska.....	1	100	1	100	200
Nevada.....	2	69	2	69	147
New Hampshire.....	1	225	1	225	2,700
New Jersey.....	7	212	15	552	4,683
New York.....	21	1,266	43	22,788	159,322
North Carolina.....	2	84	2	84	428
Ohio.....	17	18,597	25	20,659	103,855
Oklahoma.....	2	91	2	91	1,490
Oregon.....	6	1,248	7	1,526	13,131
Pennsylvania.....	29	6,171	51	12,143	123,881
Rhode Island.....	4	1,417	5	1,426	8,714
South Carolina.....	3	1,084	9	3,152	58,749
Tennessee.....	3	179	4	249	2,379
Texas.....	7	714	10	1,037	9,736
Vermont.....	1	700	1	700	8,400
Washington.....	10	3,280	15	4,381	33,385
West Virginia.....	3	398	4	510	2,641
Wisconsin.....	5	783	6	804	3,964
Interstate.....	5	14,590	6	15,590	143,374

The strikes beginning in May in each industry group are classified in table 3 according to the number of workers involved. The average number of workers involved in the 188 strikes was 381. More than half of the strikes involved less than 100 workers each and only four involved as many as 5,000 workers each. These were (1) the Wheeling Steel Corporation strike at Portsmouth, Ohio; (2) the Remington Rand strike in New York, Ohio, and Connecticut; (3) the loggers' strike in the Columbia River Basin of Washington and Oregon; and (4) a one-day sit-down strike of employees in one plant of the Goodyear Tire & Rubber Co. at Akron, Ohio.

Table 3.—Strikes Beginning in May 1936, Classified by Number of Workers Involved

Industrial group	Total	Number of strikes in which the number of workers involved was—					
		6 and under 20	20 and under 100	100 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000
All industries.....	188	19	82	63	10	10	4
<i>Manufacturing</i>							
Iron and steel and their products, not including machinery.....	9		6	2			1
Machinery, not including transportation equipment.....	8		3	4			1
Transportation equipment.....	1		1				
Nonferrous metals and their products.....	1	1					
Lumber and allied products.....	14	1	4	6	2		1
Stone, clay, and glass products.....	3		1				
Textiles and their products.....	25		13	11	1		
Leather and its manufactures.....	3	1		2			
Food and kindred products.....	9	1	4	3		1	
Tobacco manufactures.....	1	1					
Paper and printing.....	4	2	2				
Chemicals and allied products.....	2			2			
Rubber products.....	3			1	1		1
Miscellaneous manufactures.....	9	1	5	3			
<i>Nonmanufacturing</i>							
Extraction of minerals.....	12		2	5	1	4	
Transportation and communication.....	17	2	10	3	1	1	
Trade.....	18	3	5	8	1	1	
Domestic and personal service.....	13	3	8	2			
Professional service.....	2		1	1			
Building and construction.....	23	2	12	5	2	2	
Agriculture, etc.....	4		1	1	1	1	
Relief work and W. P. A.....	3		2	1			
Other nonmanufacturing industries.....	4	1	2	1			

Union organization matters were the major issues in 47.4 percent of the strikes beginning in May 1936 and wages and hours were the major issues in 38.3 percent. The organization strikes included 63.4 percent of the total number of workers involved and the wage-and-hour disputes 24.9 percent. The 22 strikes classified in table 4 under "other" were disputes over such matters as seniority rights, "speed-up" in work, wage-payment methods, and work assignments.

Table 4.—Major Issues Involved in Strikes Beginning in May 1936

Major issues	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
All issues.....	188	100.0	71,625	100.0
Wages and hours.....	72	38.3	17,845	24.9
Wage increase.....	34	18.1	10,885	15.1
Wage decrease.....	11	5.9	1,842	2.6
Wage increase, hour decrease.....	23	12.2	4,835	6.8
Wage decrease, hour increase.....	1	.5	121	.2
Hour decrease.....	3	1.6	162	.2
Organization.....	89	47.4	45,388	63.4
Recognition.....	8	4.3	520	.7
Recognition and wages.....	20	10.6	16,476	23.1
Recognition and hours.....	1	.5	120	.2
Recognition, wages, and hours.....	32	17.1	8,121	11.3
Closed shop.....	16	8.5	12,306	17.2
Discrimination.....	12	6.4	7,845	10.9
Miscellaneous.....	27	14.3	8,392	11.7
Sympathy.....	2	1.1	99	.1
Jurisdiction.....	2	1.1	200	.3
Other.....	22	11.6	8,051	11.2
Not reported.....	1	.5	42	.1

Table 5.—Duration of Strikes Ending in May 1936

Industrial group	Total	Number of strikes with duration of—					
		Less than 1 week	1 week and less than ½ month	½ and less than 1 month	1 month and less than 2 months	2 and less than 3 months	3 months or more
All industries.....	199	72	49	40	25	8	5
<i>Manufacturing</i>							
Iron and steel and their products, not including machinery.....	7	2	1	3	1		
Machinery, not including transportation equipment.....	7	2	2	3			
Transportation equipment.....	1	1					
Nonferrous metals and their products.....	2				2		
Lumber and allied products.....	14	2	2	4	4	1	1
Stone, clay, and glass products.....	2	1	1				
Textiles and their products.....	33	6	10	4	7	3	3
Leather and its manufactures.....	5	2	1	1	1		
Food and kindred products.....	9	3	4	1	1		
Tobacco manufactures.....	1			1			
Paper and printing.....	8	2	1	2	2		1
Chemicals and allied products.....	1			1			
Rubber products.....	3	3					
Miscellaneous manufactures.....	7	3	3	1			
<i>Nonmanufacturing</i>							
Extraction of minerals.....	11	5	2	4			
Transportation and communication.....	16	12			1	1	
Trade.....	15	7	5	2	1		
Domestic and personal service.....	15	8	3	2	2		
Professional service.....	3	2	1				
Building and construction.....	29	7	11	7	2	2	
Agriculture, etc.....	2	2					
Relief work and W. P. A.....	4		2	1	1		
Other nonmanufacturing industries.....	4	2		1		1	

There were 199 strikes which ended in May 1936, with an average duration of approximately 19 calendar days. In table 5 the strikes in each industry group are classified according to their duration. Thirty-six percent of the 199 strikes lasted less than a week and 60

percent were terminated in less than one-half month after they began. There were 5 strikes, however, which had been in progress for 3 months or more. The most important of these was the strike of more than 1,500 workers at the Lincoln Mills in Huntsville, Ala., which began on February 12 and was settled on May 20. The others were small strikes against individual firms, none of them involving as many as 200 workers.

Of the 199 strikes ending in May 1936 the largest group (42.8 percent), including 56.9 percent of the workers involved, were settled directly by the employers and representatives of the organized workers. In 28.1 percent of the strikes, including 30.8 percent of the workers, Government conciliators or labor boards assisted in negotiating the settlements. In most of these, union representatives were also present. There were 39 strikes, as shown in table 6, which were terminated without formal settlements. In these cases the strikers simply returned to work and dropped their demands or they lost their jobs when their employers discontinued operations or hired new workers to fill their places.

Table 6.—Methods of Negotiating Settlements of Strikes Ending in May 1936

Negotiations toward settlements carried on by—	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	199	100.0	51,643	100.0
Employers and workers directly.....	9	4.5	1,344	2.6
Employers and representatives of organized workers directly.....	85	42.8	29,392	56.9
Government conciliators or labor boards.....	56	28.1	15,891	30.8
Private conciliators or arbitrators.....	8	4.0	3,268	6.3
Terminated without formal settlement.....	39	19.6	1,528	3.0
Not reported.....	2	1.0	220	.4

More than half of the workers involved in the 199 strikes which ended in May obtained substantially what they demanded through their strike action. About one-fourth of the workers obtained little or no gains, while 20 percent of them obtained partial gains or compromises. This information is shown in table 7 which classifies the 199 strikes and the workers involved in them according to results.

Table 8, which shows the relation between the major issues involved and the results of the 199 strikes ending in May, indicates that the workers were a little more successful in winning the strikes over union organization matters than the strikes over wages and hours, having won 57 percent of the organization strikes, as compared with 46 percent of the wage and hour disputes. However, 30 percent of the organization disputes and 26 percent of the wage and hour disputes were lost by the workers. Only 13 percent of the organization strikes, but 28 percent of the strikes over wages and hours, were compromised.

Table 7.—Results of Strikes Ending in May 1936

Results	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	199	100.0	51,643	100.0
Substantial gains to workers.....	95	47.7	27,486	53.3
Partial gains or compromises.....	40	20.1	10,426	20.2
Little or no gains to workers.....	62	31.2	13,514	26.1
Jurisdictional or rival union settlements.....	1	.5	175	.3
Not reported.....	1	.5	42	.1

Table 8.—Results of Strikes Ending in May 1936, in Relation to Major Issues Involved

Major issues	Total	Number of strikes resulting in—				
		Substantial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdictional or rival union settlements	Not reported
All issues.....	199	95	40	62	1	1
Wages and hours.....	79	36	22	21		
Wage increase.....	32	13	8	11		
Wage decrease.....	21	7	7	7		
Wage increase, hour decrease.....	22	13	7	2		
Wage decrease, hour increase.....	1	1				
Hour decrease.....	3	2		1		
Organization.....	90	51	12	27		
Recognition.....	13	6	1	6		
Recognition and wages.....	21	12	3	6		
Recognition and hours.....	4	3		1		
Wages, hours, and recognition.....	25	15	3	7		
Closed shop.....	14	10	3	1		
Discrimination.....	13	5	2	6		
Miscellaneous.....	30	8	6	14	1	1
Sympathy.....	4	1	1	2		
Jurisdiction.....	1				1	
Other.....	24	7	5	12		
Not reported.....	1					1

### Conciliation Work of the Department of Labor in July 1936

DURING July 1936 the Secretary of Labor, through the Conciliation Service, exercised her good offices in connection with 68 disputes, which affected a known total of 32,635 employees. Of these disputes, 38 were adjusted, 3 were referred to the National Labor Relations Board, 1 was settled by the parties at interest, 1 could not be adjusted, in 1 mediation was not desired, and 24 were still pending. 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 lock-out 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.

## Labor Disputes Handled by Conciliation Service During the Month of July 1936

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Commissioner assigned	Assignment completed	Workers involved—	
							Directly	Indirectly
Vincent McCall, Kenosha, Wis.	Threatened strike.	Bedspring makers.....	Asked 45-hour week and check-off.	Adjusted. Signed agreement providing 45-hour week, check-off, and wage adjustments.	1936 July 2	1936 July 7	115	15
Structural Glass Co., St. Louis, Mo.	Controversy.	Glaziers and marble setters.	Jurisdiction of structural-glass setting for exterior wall.	Adjusted. Satisfactory agreement; glaziers returned.	July 1	July 20	10	2
Bailey Warehouse, Philadelphia, Pa.	Strike .....	Warehouse workers....	Wage increase and shorter hours..	Adjusted. Allowed increase of \$2 per week and 44-hour week.	do	July 3	52	-----
Illinois Art Industries, Inc., Chicago, Ill.	Threatened strike.	Picture-frame workers..	Asked wage increase and renewal of agreement.	Pending.....	July 7	July 28	60	17
Taxicab Drivers, Dallas, Tex.	Strike.....	Drivers.....	Wages, union recognition, and collective bargaining.	Adjusted. Accepted arbitration and returned.	July 6	July 10	400	60
I. J. Fox Co., Cleveland, Ohio	do	Fur workers.....	Wages, working conditions, and closed shop.	Adjusted. Signed agreement providing increase of 10 percent, 40-hour week, and improved conditions.	do	Aug. 7	23	-----
Hudson Lumber Co., San Leandro, Calif.	do	Pencil makers.....	Wage increase and union recognition.	Pending.....	July 3	-----	100	15
Eagle Ottawa Leather Co., Whitehall, Mich.	Controversy.	Leather workers.....	4 men discharged.....	Adjusted. Satisfactory agreement.	do	July 11	210	25
R. Veal & Son, Albany, Oreg.	Strike.....	Furniture workers.....	Asked union recognition.....	Pending.....	July 6	-----	(1)	-----
Gulf Oil Corporation, Port Arthur, Tex.	Controversy.	Machinists.....	Working conditions.....	Adjusted. Allowed increase of 5 percent to hourly workers.	June 29	July 14	132	4,008
Ohio Box Board Co., Rittman, Ohio.	Strike.....	Box-board makers.....	Asked union recognition.....	Pending.....	July 8	-----	400	-----
Alabama & Jefferson Packing Co., Birmingham, Ala.	Threatened strike.	Packing-house workers..	Overtime, back pay, and discrimination.	Adjusted. Accepted award of arbitrator.	July 5	July 15	94	26
Soldiers' Memorial Hospital, St. Louis, Mo.	Strike.....	Building-trades workers.	Asked that stone be cut by local unions.	Adjusted. Returned with satisfactory agreement as to fabrication of stone.	July 8	July 27	30	5
Lewin Metal Works, East St. Louis, Ill.	do	Metal workers.....	Wages and working conditions...	Pending.....	July 11	-----	300	30
Duratex Shirt Co., Roseto, Pa.	do	Shirt makers.....	Dispute relative to payment of wages.	Unclassified. Mediation not desired.	July 2	July 20	225	-----
Lumber Operators, Omak, Wash.	do	Lumber and sawmill workers.	Asked 50 cents per hour, 40-hour week, and collective bargaining.	Pending.....	May 4	-----	(1)	-----
Mengal Plant, Baton Rouge, La.	do	Sawmill workers.....	Asked wage increases and changes in working conditions.	Adjusted. Strike withdrawn and all returned.	July 14	July 15	594	-----
Nicholson Universal Steam Co., Buffalo, N. Y.	do	Longshoremens.....	Asked union recognition and signed agreement.	Unclassified. Referred to National Labor Relations Board.	July 11	July 14	60	300



Crescent Furniture Co., Warren, Pa.	.....do.....	Furniture workers	Wage increase	Adjusted. Allowed increase of 10 percent, union recognition, and signed agreement.	July 14	July 17	130	20
National Copper Co., Cleveland, Ohio.	.....do.....	Machinists	Wages, working conditions, and agreement.	Pending	July 16		75	
Bennett-Hubbard Candy Co., Chattanooga, Tenn.	.....do.....	Candy workers	Asked union agreement	Adjusted. Agreed to accept terms to be arranged in conference.	June 11	July 28	50	10
Bubbard Steel Co., Pittsburgh, Pa.	.....do.....	Steel workers	Wage increase	Adjusted. Increase of 5 percent and union recognition.	July 14	July 23	660	120
Anchor Toy Co., Coudersport, Pa.	.....do.....	Toy makers	Working conditions	Pending	.....do.....		55	
Chandler & Price Co., Cleveland, Ohio.	Threatened strike	Machinists	Wages, agreement, and conditions.	Adjusted. Satisfactory agreement providing seniority rights and working conditions.	June 20	July 30	200	
Traction workers, Indianapolis, Ind.	.....do.....	Traction workers	Asked wage increase	Pending	July 16		150	
Concrete companies, Seattle, Wash.	Strike	Concrete-pipe workers	Wages, hours, and union recognition.	Adjusted. Wages now ranging from 60 to 80 cents per hour, 40-hour week, and improved conditions.	July 10	July 25	65	
Poultry workers, Sacramento, Calif.	.....do.....	Poultry workers	Wage increase and union recognition.	Pending	June 22		17	14
Enamel workers, Belaire, Ohio.	.....do.....	Enamel workers	Wages and working conditions	Adjusted. Satisfactory agreement and work resumed.	June 18	July 28	350	
Sharon Coal & Ice Co., Sharon, Pa.	.....do.....	Teamsters	Asked closed shop	Unclassified. Settled before arrival of commissioner.	July 14	July 16	13	5
Yellow Cab Co., Philadelphia, Pa.	Controversy	Drivers	Alleged violation of agreement	Adjusted. Allowed new bonus system, 40-hour week, and closed shop.	July 13	Aug. 6	900	100
Northwestern Barb Wire Co., Sterling, Ill.	Strike	Iron, steel, and tin workers	Wages and collective bargaining	Adjusted. Increase of 10 percent and collective bargaining.	July 16	July 30	1,100	700
I. Stephenson Lumber Co., Escanaba, Mich.	.....do.....	Lumber workers	Asked increase and new agreement.	Unclassified. Referred to National Labor Relations Board.	July 17	.....do.....	310	15
Consolidated Laundry, San Jose, Calif.	.....do.....	Laundry workers	Asked union agreement covering wages, hours, and conditions.	Pending	July 20		35	8
Fox Park Timber Co., Laramie, Wyo.	.....do.....	Timber workers	Wages and agreements	.....do.....	July 1		140	7
Pejepscot Paper Co., Pejepscot, Maine.	Threatened strike	Paper workers	Asked restoration of 10 percent wage cut.	Adjusted. Allowed increase of 10 percent on Oct. 1, 1936.	July 18	July 24	38	300
Oscar Mayer Packing Co., Madison, Wis.	Controversy	Packing-house workers	Alleged violation of agreement	Adjusted. Satisfactory settlement.	.....do.....	.....do.....	500	75
Central Foundry Co., Holt, Ala.	Threatened strike	Machinists	Asked wage increase	Adjusted. Strike averted; agreed on further conferences.	July 20	July 29	53	1,153
Roum Shirt Co., Harrington, Del.	Strike	Shirt makers	Wages, hours, discharges, and collective bargaining.	Unclassified. Referred to National Labor Relations Board.	July 21	July 25	50	
Fumigators, Greater New York.	.....do.....	Fumigators	Wage increase from \$25 to \$35 per week and 40-hour week.	Pending	July 20		430	
Parcel Post Building, Boston, Mass.	Threatened strike	Building-trades workers	Objection to nonunion workers	Adjusted. Satisfactory settlement; union workers employed.	June 30	July 28	300	8
Shell Petroleum Corporation, Wood River, Ill.	Strike	Machinists and others	Working conditions	Pending	July 1		2,200	200

<sup>1</sup> Not reported.

## Labor Disputes Handled by Conciliation Service During the Month of July 1936—Continued

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Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Commissioner assigned	Assignment completed	Workers involved—	
							Directly	Indirectly
Henry Halle Tanning Co., Newark, N. J.	Controversy.	Leather workers.....	Working conditions and discharge.	Pending.....	1936 July 23	1936	70	-----
Ladies' Garment Workers, San Jose, Calif.	Strike.....	Garment workers.....	Wages, hours, and working conditions.	Adjusted. Satisfactory settlement.	June 1	July 24	80	-----
Gager Lime Co., Sherwood, Tenn.	Controversy.	Lime workers.....	Wages and working conditions...	Unable to adjust.....	July 28	Aug. 3	118	-----
Eckert Fair Construction Co., Waxahachie, Tex.	.....do.....	Carpenters.....	Prevailing wage for carpenters...	Adjusted. Scales to be continued on this job; future jobs to be \$1 per hour.	July 20	Aug. 1	6	30
Clark Trucking Co., Syracuse, N. Y.	Threatened strike.	Teamsters.....	Discharges for union affiliation...	Adjusted. Reinstated discharged teamsters with union recognition.	July 12	July 27	7	21
Terperson Dress Co., Steelton, Pa.	Strike.....	Dress workers.....	Piece-work rates and discharge of worker.	Pending.....	July 24	-----	19	12
Homer G. Phillips Hospital, St. Louis, Mo.	Lock-out....	Mechanics.....	Working conditions.....	Adjusted. Satisfactory settlement.	July 25	Aug. 7	18	200
Theaters, New York City	Threatened strike.	Engineers.....	Wage increase and working conditions.	.....do.....	July 16	July 20	1,000	-----
Waldock Packing Co., Cleveland, Ohio.	.....do.....	Packing-house workers.	Wage increase, shorter hours, and seniority rights.	Pending.....	July 28	-----	75	-----
Sonneborn Building, Baltimore, Md.	Lock-out....	Engineers.....	Discharge in violation of agreement.	.....do.....	July 13	-----	4	-----
Patterson Manufacturing Co., Urichsville, Ohio.	Threatened strike.	Electrical workers.....	Working conditions and discharges.	Adjusted. Satisfactory settlement.	July 15	July 31	34	-----
Northside Lumber Co., Milwaukee, Wis.	Controversy.	Teamsters.....	Wage increase.....	Adjusted. Increase of 10 cents per hour and improved conditions.	July 28	July 30	13	32
Florida Fish Producers Association, Fort Myers, Fla.	Strike.....	Fish handlers.....	Price of fish.....	Adjusted. Allowed 3 cents minimum per pound with sliding scale, union recognition, and check-off.	July 13	Aug. 4	3,000	4,000
Truck drivers, Waterbury, Conn.	.....do.....	Drivers.....	Wages and conditions.....	Adjusted. Wage increases ranging from \$1.50 to \$6 per week in 2-year agreement.	July 28	.....do.....	300	-----
Caloric Stove Co., Topton, Pa.	.....do.....	Foundry employees....	Asked agreement with union recognition.	Adjusted. Signed agreement covering union recognition.	July 27	Aug. 6	600	10
Pocketbook makers, Bethlehem, Pa.	.....do.....	Pocketbook makers....	Working conditions.....	Pending.....	July 24	-----	(1)	-----
Continental Stove Co., Ironton, Ohio.	.....do.....	Stove mounters.....	.....do.....	Adjusted. Allowed agreement to December 31, 1936.	July 29	July 31	170	130
Upholsterers, St. Louis, Mo.	Lock-out....	Upholsterers.....	Wages and working conditions...	Pending.....	.....do.....	-----	300	75

Building trades, Avalon, Tex.	Controversy.	Building-trades workers.	Prevailing wage rates.....	Adjusted. Continue 75 and 80 cents per hour this job, future jobs \$1 per hour.	July 20	Aug. 1	6	33
All States Freight, Inc., and others, Akron, Ohio	do	Drivers.....	Working conditions.....	Pending.....	July 31		1,200	
Marshall Transportation Co., Baltimore, Md.	Strike	do.....	Wages.....	Adjusted. Allowed 30 percent increase and closed-shop agreement.	July 10	July 30	13	1
Singer Transfer & Storage Co., Baltimore, Md.	do	do.....	do.....	Adjusted. Allowed 35 percent increase and closed-shop agreement.	do	Aug. 3	25	4
Pressed Steel Car Co., McKees Rocks, Pa.	do	Steel-car workers.....	Asked wage increase.....	Adjusted. Allowed \$7.10 per day.	July 29	Aug. 8	600	2,000
Nathan Rosenblum & Co., Sharon, Pa.	do	Teamsters.....	Wages and union recognition.....	Adjusted. Allowed \$26 per week of 48 hours.	July 28	July 30	22	74
Lancaster Iron Works, Lancaster, Pa.	Threatened strike.	Ironworkers.....	Wages and schedules.....	Pending.....	July 24		375	25
St. Clair Laundry, San Jose, Calif.	Strike	Laundry workers.....	Asked union agreement covering wages, hours, and conditions.	do.....	July 16		18	6
Red Star Laundry Co., San Jose, Calif.	do	do.....	do.....	do.....	do		35	10
Total.....							18,734	13,901

<sup>1</sup> Not reported.

# LABOR TURN-OVER

## Labor Turn-Over in Manufacturing Establishments, June 1936

A DECLINE in the lay-off rate and a rise in quit and discharge rates as compared with May characterized the labor turn-over reports received from manufacturing establishments reporting to the Bureau of Labor Statistics for June.

### All Manufacturing

THE hiring rate for all manufacturing increased from 4.05 per 100 employees in May 1936, and 3.18 in June 1935, to 4.49 in June 1936. This is the highest accession rate reported in June since 1933. The quit rate increased from 1.06 in the preceding month to 1.13 in June. The discharge rate (0.23) was slightly higher than for May and for the corresponding month of last year. Although increases were shown in the quit and discharge rates, the decline in the lay-off rate from 2.06 in May to 1.92 in June caused the total separation rate (3.28) to remain below the rate for May (3.32). The total separation rate was also much lower than for the corresponding month of last year.

The entire study covers more than 5,000 representative manufacturing establishments in 144 industries. The turn-over rates represent the number of changes per 100 employees on the pay rolls during the month. Approximately 2,200,000 workers were employed by the firms reporting to the Bureau in June.

Table 1 shows the quit, discharge, lay-off, total separation, and accession rates in all manufacturing for 1935 and the first 6 months of 1936.

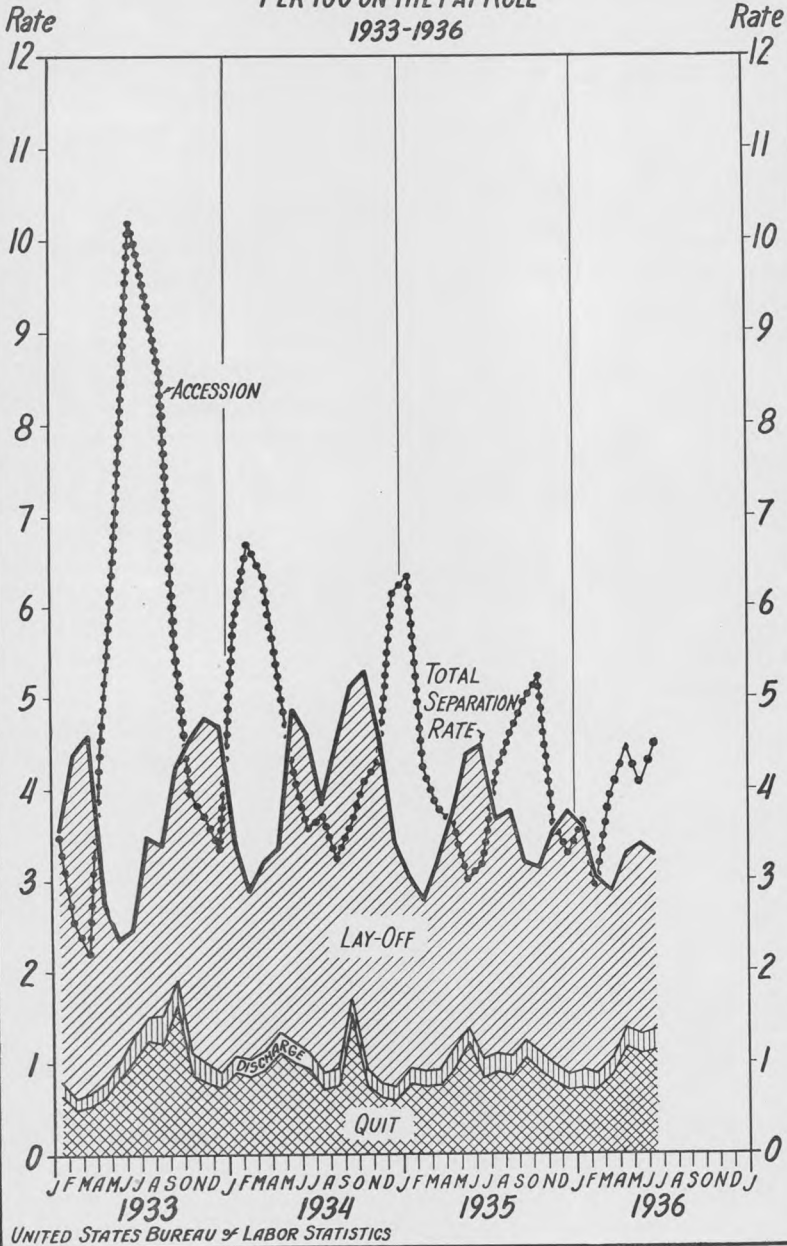
**Table 1.—Monthly Labor Turn-Over Rates (per 100 employees) in Representative Factories in 144 Industries**

Class of rate and year	January	February	March	April	May	June	July	August	September	October	November	December	Average
Quit rate:													
1936.....	0.71	0.68	0.86	1.16	1.06	1.13							
1935.....	.76	.73	.75	.93	1.21	.83	0.90	0.86	1.05	0.89	0.77	.69	0.86
Discharge rate:													
1936.....	.20	.17	.19	.21	.20	.23							
1935.....	.18	.18	.17	.20	.17	.20	.20	.21	.19	.21	.20	.18	.19
Lay-off rate: <sup>1</sup>													
1936.....	2.66	2.21	1.83	1.92	2.06	1.92							
1935.....	2.10	1.88	2.32	2.60	3.00	3.46	2.57	2.70	1.95	2.03	2.58	2.89	2.51
Total separation rate:													
1936.....	3.57	3.06	2.88	3.29	3.32	3.28							
1935.....	3.04	2.79	3.24	3.73	4.38	4.49	3.67	3.77	3.19	3.13	3.55	3.76	3.56
Accession rate:													
1936.....	3.65	2.95	3.97	4.45	4.05	4.49							
1935.....	6.33	4.23	3.79	3.63	3.01	3.18	4.17	4.60	4.95	5.23	3.63	3.30	4.17

<sup>1</sup> Including temporary, indeterminate, and permanent lay-offs.

# LABOR TURN-OVER RATES in MANUFACTURING

PER 100 ON THE PAY ROLL  
1933-1936



## Thirteen Industries

IN ADDITION to the information for manufacturing as a whole, details of labor turn-over are available for 13 separate manufacturing industries. For these industries, the Bureau's sample covers firms accounting for at least 25 percent of the total number of wage earners employed.

Table 2.—Monthly Turn-Over Rates (per 100 employees) in Specified Industries

Class of rates	June 1936	May 1936	June 1935	June 1936	May 1936	June 1935	June 1936	May 1936	June 1935
	Automobiles and bodies			Automobile parts			Boots and shoes		
Quit rate.....	1.23	1.58	0.99	1.64	1.76	0.82	0.74	0.75	0.59
Discharge rate.....	.29	.29	.22	.37	.42	.17	.33	.16	.15
Lay-off rate.....	2.99	2.06	9.64	4.26	2.91	11.95	2.86	2.64	2.36
Total separation rate.....	4.51	3.93	10.85	6.27	5.09	12.94	3.93	3.55	3.10
Accession rate.....	3.08	3.84	2.01	4.22	5.12	2.90	3.49	1.34	6.15
	Bricks			Cigars and cigarettes			Cotton manufacturing		
Quit rate.....	1.10	1.34	0.55	2.17	1.50	1.51	1.43	1.22	0.97
Discharge rate.....	.18	.32	.15	.21	.23	.18	.26	.29	.25
Lay-off rate.....	2.16	2.43	5.98	6.43	1.13	.51	1.60	3.25	6.44
Total separation rate.....	3.44	4.09	6.68	8.81	2.86	2.20	3.29	4.76	7.66
Accession rate.....	7.69	7.78	7.91	4.35	2.68	3.47	4.70	3.46	3.46
	Foundries and machine shops			Furniture			Iron and steel		
Quit rate.....	1.17	1.59	0.86	1.18	1.73	0.53	1.00	0.97	0.86
Discharge rate.....	.41	.28	.39	.34	.37	.17	.10	.09	.15
Lay-off rate.....	1.49	1.65	3.55	1.98	1.97	2.64	.46	.61	1.59
Total separation rate.....	3.07	3.52	4.80	3.50	4.07	3.34	1.56	1.67	2.60
Accession rate.....	5.25	4.74	3.47	8.58	7.27	4.55	4.61	3.99	1.10
	Men's clothing			Petroleum refining			Sawmills		
Quit rate.....	0.94	0.92	0.74	0.56	0.76	0.51	2.68	1.89	3.43
Discharge rate.....	.07	.05	.07	.12	.07	.13	.42	.35	.30
Lay-off rate.....	3.45	3.88	3.73	2.31	2.31	1.27	4.76	3.65	3.53
Total separation rate.....	4.46	4.85	4.54	2.99	3.14	1.91	7.86	5.89	7.26
Accession rate.....	6.87	5.64	4.12	4.82	3.53	3.52	6.13	8.51	8.19
	Slaughtering and meat packing			All industries					
Quit rate.....	1.03	1.12	0.58	1.13	1.06	0.83			
Discharge rate.....	.29	.25	.20	.23	.20	.20			
Lay-off rate.....	4.10	4.96	4.90	1.92	2.06	3.46			
Total separation rate.....	5.42	6.33	5.68	3.28	3.32	4.49			
Accession rate.....	8.41	9.21	5.66	4.49	4.05	3.18			

In 8 of the 13 industries the accession rates exceeded the total separation rates. Furniture registered the highest accession rate (8.58), automobiles and bodies the lowest. The highest quit rate (2.68) occurred in the sawmill industry, the lowest (0.56) in petroleum refining. Sawmills registered the highest discharge rate, men's clothing the lowest. The highest lay-off rate (6.43) was indicated in cigar and

cigarette manufacturing, the lowest (0.46) was shown in iron and steel. Cigars and cigarettes also reported the highest total separation rate and iron and steel the lowest.

### Labor Turn-Over in the Iron and Steel Industry, 1934 and 1935<sup>1</sup>

THE annual labor turn-over rates in the iron and steel industry in 1934 and 1935 were lower than the rates for manufacturing as a whole. The annual total separation rate in iron and steel in 1934 was 30.00 per 100 employees as against 22.88 in 1935, whereas in all manufacturing the separation rates were 49.17 and 42.74, respectively. The annual accession rates were 33.98 in 1934 and 29.58 in 1935 in the iron and steel industry, as compared with 56.91 in 1934 and 50.05 in 1935 in all manufacturing. In 1934 the annual quit rate in the iron and steel industry was 8.92 per 100 employees, the discharge rate 1.07, and the lay-off rate 20.01; the following year the rates were 9.42, 1.02, and 12.44, respectively. The number of quits represented 29.49 percent of the total separations in 1934 and 43.07 percent in 1935. Discharges reported were 3.67 percent of the total in 1934 and 4.62 percent in 1935. The large decrease in the lay-offs indicated in 1935, compared with 1934, is of particular interest. This class of separations declined from 66.84 percent of all separations reported in 1934 to 52.31 percent in 1935.

Table 1 shows the number of firms, number of employees, quits, discharges, lay-offs, total separations, and accessions in 98 identical iron and steel plants, by rate groups for the years 1934 and 1935. These firms employed an average of 219,173 workers in 1934 and an average of 224,444 in 1935.

Table 1.—Changes in Personnel in 98 Identical Plants in the Iron and Steel Industry, 1934 and 1935, by Rate Groups

Rate group	<i>Quits</i>					
	Number of establishments		Number of employees		Number of quits	
	1934	1935	1934	1935	1934	1935
Under 2.5 percent.....	16	17	25,396	15,341	371	262
2.5 and under 5 percent.....	26	17	78,813	35,775	3,499	1,436
5 and under 7.5 percent.....	16	8	38,222	26,188	2,372	1,781
7.5 and under 10 percent.....	8	16	13,084	73,072	1,172	5,976
10 and under 15 percent.....	15	16	27,129	35,515	3,114	4,246
15 and under 20 percent.....	5	9	17,389	16,410	2,956	2,729
20 and under 25 percent.....	3	7	11,570	17,178	2,530	3,962
25 and under 30 percent.....	3	2	343	758	93	307
30 and under 35 percent.....	0	4	0	2,662	0	885
35 percent and over.....	6	2	7,227	1,545	3,732	849
Total.....	98	98	219,173	224,444	19,839	22,333

<sup>1</sup> This is the second article published by the Bureau of Labor Statistics on labor turn-over, in the iron and steel industry. The first appeared in the Monthly Labor Review, June 1934 (pp. 1393-1396).

Table 1.—Changes in Personnel in 98 Identical Plants in the Iron and Steel Industry, 1934 and 1935, by Rate Groups—Continued

Rate group	<i>Discharges</i>					
	Number of establishments		Number of employees		Number of discharges	
	1934	1935	1934	1935	1934	1935
Under 0.2 percent.....	23	21	41, 072	28, 438	14	4
0.2 and under 0.4 percent.....	9	16	34, 361	67, 867	102	208
0.4 and under 0.5 percent.....	6	4	9, 343	6, 431	38	27
0.5 and under 0.8 percent.....	17	10	54, 470	12, 745	285	73
0.8 and under 1 percent.....	3	7	5, 277	24, 695	42	205
1 and under 1.5 percent.....	9	10	22, 296	20, 299	274	249
1.5 and under 2 percent.....	9	6	20, 563	12, 995	330	200
2 and under 3 percent.....	6	15	8, 331	42, 111	202	959
3 and under 5 percent.....	9	4	11, 309	6, 562	474	267
5 percent and over.....	7	5	12, 151	2, 331	707	204
Total.....	98	98	219, 173	224, 444	2, 468	2, 396

Rate group	<i>Lay-offs</i> <sup>1</sup>					
	Number of establishments		Number of employees		Number of lay-offs	
	1934	1935	1934	1935	1934	1935
Under 5 percent.....	18	34	50, 046	81, 610	717	1, 408
5 and under 10 percent.....	14	20	63, 631	60, 704	4, 554	3, 705
10 and under 20 percent.....	19	21	40, 818	47, 952	6, 543	6, 884
20 and under 30 percent.....	11	7	17, 126	18, 722	4, 389	5, 189
30 and under 40 percent.....	9	5	15, 894	8, 861	5, 474	1, 539
40 and under 60 percent.....	11	4	22, 840	8, 843	10, 788	3, 762
60 and under 90 percent.....	7	2	5, 689	576	4, 572	469
90 and under 120 percent.....	2	1	600	256	601	274
120 and under 150 percent.....	0	2	0	300	0	394
150 percent and over.....	7	2	2, 529	1, 620	7, 331	3, 704
Total.....	98	98	219, 173	224, 444	44, 969	27, 128

Rate group	<i>Total separations</i>					
	Number of establishments		Number of employees		Total separations	
	1934	1935	1934	1935	1934	1935
Under 10 percent.....	13	17	47, 005	43, 461	3, 689	2, 894
10 and under 20 percent.....	15	29	54, 926	94, 268	7, 245	13, 647
20 and under 30 percent.....	23	20	50, 799	37, 327	13, 145	8, 942
30 and under 40 percent.....	9	11	19, 025	18, 660	6, 502	6, 085
40 and under 60 percent.....	16	11	21, 377	26, 296	10, 571	13, 786
60 and under 90 percent.....	8	3	17, 946	1, 659	12, 503	1, 263
90 and under 120 percent.....	6	1	5, 428	450	5, 787	475
120 and under 150 percent.....	1	3	138	447	187	585
150 and under 180 percent.....	1	1	145	256	246	394
180 percent and over.....	6	2	2, 384	1, 620	7, 401	3, 786
Total.....	98	98	219, 173	224, 444	67, 276	51, 857

<sup>1</sup> Including temporary, indeterminate, and permanent lay-offs.



Table 1.—Changes in Personnel in 98 Identical Plants in the Iron and Steel Industry, 1934 and 1935, by Rate Groups—Continued

Rate group	Accessions					
	Number of establishments		Number of employees		Number of accessions	
	1934	1935	1934	1935	1934	1935
Under 5 percent.....	3	8	1,925	17,800	62	298
5 and under 10 percent.....	6	4	10,930	8,137	614	487
10 and under 20 percent.....	19	23	51,811	81,008	7,360	12,155
20 and under 30 percent.....	22	15	77,148	31,916	19,883	7,806
30 and under 40 percent.....	8	11	18,619	37,158	6,420	12,947
40 and under 50 percent.....	8	9	18,854	15,136	8,401	6,580
50 and under 70 percent.....	11	11	27,568	22,054	15,630	14,030
70 and under 110 percent.....	10	9	9,133	6,531	8,084	5,203
110 and under 150 percent.....	3	4	387	2,230	492	2,718
150 percent and over.....	8	4	2,798	1,874	7,592	5,002
Total.....	98	98	219,173	224,444	74,538	67,226

The number of quits reported increased from 19,839 in 1934 to 22,333 in 1935. More than two-thirds of the firms employing 71 percent of the workers during 1934 and 58 plants with 67 percent of the employees on the pay roll in 1935 had a quit rate of less than 10 percent. Only nine firms in 1934 employing 3.5 percent of the workers and eight firms in 1935 with 2.2 percent of the employees registered a quit rate of more than 25 percent.

In 1934, 59.2 percent of the firms with two-thirds of the employees reported a discharge rate of less than 1 percent. The same percentage of firms with 62.5 percent of the workers had a discharge rate of less than 1 percent in 1935. Seven firms with 12,151 employees on the pay roll had a discharge rate of more than 5 percent in 1934 and five plants employing 2,331 persons were in the same rate group in 1935.

The lay-off rate in the iron and steel industry decreased from 20.01 per 100 employees in 1934 to 12.44 in 1935. There was an actual decrease in lay-offs from 44,969 in 1934 to 27,128 in 1935, although the average number of employees increased from 219,173 in 1934 to 224,444 in 1935. In 1934, 32.7 percent of the plants with 51.9 percent of the employees, and in 1935, 55 percent of the firms employing 63.4 percent of the workers, had a lay-off rate of less than 10 percent. Nine plants in 1934, employing approximately 3,000 persons, and five firms in 1935, with nearly 2,200 employees on the pay roll, had a lay-off rate of more than 90 percent.

In 1934 a total separation rate of less than 20 percent was reported by 28 firms employing more than 100,000 workers, and in 1935 by 46 plants with 137,000 workers. The percentage of firms keeping the separation rate down to 20 per 100 employees rose from 28.6 in 1934 to 47 in 1935. In terms of employees, the 20-percent separation rate was not exceeded in establishments employing 46.7 percent

of the employees in 1934, and 61.4 percent of the employees in 1935. There was, therefore, a marked improvement in the separation rate, whether tested by the number of establishments or the number of employees.

The 98 firms reported 74,538 accessions in 1934 and 67,226 in 1935. Approximately two-thirds of the firms with 18.2 percent of the employees in 1934 and 28 plants employing 14.6 percent of the workers in 1935 reported an accession rate of more than 50 percent. Less than one-third of the plants, employing 29.5 percent of the workers, had an accession rate of less than 20 percent in 1934. In 1935, 35.7 percent of the firms employing 47.5 percent of the workers showed an accession rate of less than 20 percent.

Table 2 shows the comparative turn-over rates in 98 identical establishments in the iron and steel industry for the years 1934 and 1935, by size of establishment.

Table 2.—Comparative Rates in Plants with Fewer than 1,000 Employees and in Those with 1,000 or More

Class of rates	Plant having—			
	Under 1,000 employees, 1934	1,000 or more employees, 1934	Under 1,000 employees, 1935	1,000 or more employees, 1935
Quit rate.....	11.04	8.86	12.40	9.70
Discharge rate.....	1.97	1.04	1.45	1.03
Lay-off rate.....	37.95	18.79	20.61	11.21
Total separation rate.....	50.96	28.69	34.46	21.94
Accession rate.....	50.05	32.42	48.50	28.05

The quit, discharge, lay-off, and accession rates in firms that had an average of fewer than 1,000 employees on the pay roll were higher in both years than in the plants having an average of 1,000 or more workers.

The total separation rate in the smaller firms in 1934 was 50.96 compared with 28.69 in the larger firms. This rate decreased to 34.46 for the smaller firms in 1935 and the rate for the larger firms dropped to 21.94. The decrease in the accession rate in the 2 years in all firms was less than in the total separation rate. The accession rate for the smaller firms was 50.05 in 1934 and 48.50 in 1935, and for the larger firms 32.42 in 1934 and 28.05 in 1935.

Forty-eight firms had fewer than 1,000 employees per establishment and 50 plants had 1,000 or more. The smaller firms had an average of 19,713 workers on the pay roll in 1934 and 20,889 in 1935, while for the larger firms the averages were 199,460 persons in 1934 and 203,555 in 1935.

# NATIONAL INCOME

## National Income in 1935

NATIONAL income produced in 1935 increased to almost 53 billion dollars, according to preliminary statistics issued by the Division of Economic Research, United States Bureau of Foreign and Domestic Commerce.<sup>1</sup> Per-capita income of all employees, including salaried workers and wage earners, rose to \$1,201 after reaching a low point of \$1,097 in 1933. These estimates also show that income produced in the year just past was more nearly equal to income paid out than at any time since 1929, the deficiency having been 628 million dollars as compared with nearly 9 billion dollars in 1932, when the difference between the amount produced and paid out was greatest. All 12 industrial divisions covered by the survey shared in the rise in income produced; agriculture, electric light and power and gas, communications, and the service industries have made the greatest recovery in terms of the level of 1929 and construction has remained in the least favorable position.

### Income Produced and Paid Out

TABLE 1 shows national income produced and paid out by years for the period 1929 to 1935 according to source.

Table 1.—National Income Produced and Paid Out, 1929 to 1935

Item	Amount (in millions of dollars)						
	1929	1930	1931	1932	1933	1934	1935
Income produced.....	81,034	67,917	53,584	39,545	41,742	48,397	52,959
Total savings.....	2,402	-5,015	-8,120	-8,817	-3,198	-1,776	-628
Corporate savings.....	1,423	-3,909	-5,877	-6,366	-2,796	-2,340	-1,443
Business savings of individuals.....	979	-1,106	-2,243	-2,451	-402	563	815
Income paid out.....	78,632	72,932	61,704	48,362	44,940	50,174	53,587
	Percent of 1929						
Income produced.....	100.0	83.8	66.1	48.8	51.5	59.7	65.4
Income paid out.....	100.0	92.8	78.5	61.5	57.2	63.8	68.1
Bureau of Labor Statistics—cost-of-living index.....	100.0	97.9	89.5	80.8	76.2	78.7	81.1
Bureau of Labor Statistics—wholesale-price index.....	100.0	90.7	76.6	68.0	69.2	78.6	83.9

<sup>1</sup> Department of Commerce. Survey of Current Business, July 1936, p. 14: Expansion in the National Income Continued in 1935, by Robert R. Nathan.

Between 1933 and 1935 the gain in income paid out amounted to 8.6 billion dollars, or 19 percent. This means that more than one-fourth of the decline between 1929 and 1933 has been made up in the subsequent rise. Of this increase approximately 600 million dollars was accounted for by work relief. While the total income produced in 1935 was more than one-third below that of 1929, the original study here reviewed calls attention to the fact that the real income in 1935 was much higher than shown by the dollar return, owing to the decline in prices.

While negative business savings, that is the difference between income produced and paid out, amounted to almost two-thirds of a billion dollars in 1935, the marked decline that has taken place in disbursement from previous savings since 1932 is of particular significance. In 1932 only 82 percent of the national income paid out accrued from the productive efforts of that year, as compared with nearly 99 percent in 1935. The more favorable position in 1935 resulted in part from the increased valuation of inventories incident to the advance in prices but is believed to reflect basic improvement.

Compensation of all employees increased over 7 percent in the 1-year period between 1934 and 1935 and 23 percent from 1933 to 1935. The total paid out to employees was 70 percent of that in 1929. If wages in selected industries are considered separately, it is found that the total paid out in 1935 formed a slightly lower proportion of the total as of 1929 (59.0 percent) than did salaries (60.3 percent). However, the gain in wages between the low point and 1935 was greater than for salaries, which never dropped to the same extent.

Wages for work relief were lower in 1935 than in 1934, the totals paid out having been 1,313 million and 1,389 million dollars, respectively. This is attributed to the fact that the pay rolls of the Civilian Conservation Corps and the Federal Emergency Relief Administration were insufficient to offset discontinuance of the Civil Works Administration.

## Labor Income

INCOME paid out, by types of payment, is given in table 2 following.

Table 2.—National Income Paid Out, by Types of Payment, 1929 to 1935

Item	Amount (in millions of dollars)						
	1929	1930	1931	1932	1933	1934	1935
Total income paid out.....	78,632	72,932	61,704	48,362	44,940	50,173	53,587
Total compensation of employees.....	51,487	47,198	39,758	30,920	29,420	33,528	36,057
Salaries (selected industries) <sup>1</sup> .....	5,663	5,548	4,606	3,387	3,048	3,250	3,417
Wages (selected industries) <sup>1</sup> .....	17,197	14,251	10,608	7,017	7,189	8,944	10,149
Salaries and wages (all other industries).....	27,690	26,409	23,461	19,417	17,591	19,046	20,173
Work-relief wages <sup>2</sup> .....					619	1,389	1,313
Other labor income.....	937	990	1,083	1,099	973	899	1,005
Total dividends and interest <sup>3</sup> .....	11,218	11,302	9,764	7,980	6,969	7,211	7,303
Dividends.....	5,964	5,795	4,312	2,754	2,208	2,549	2,830
Interest.....	5,104	5,305	5,169	4,975	4,592	4,569	4,422
Entrepreneurial withdrawals.....	12,503	11,666	10,086	7,992	7,306	8,052	8,701
Net rents and royalties.....	3,424	2,766	2,096	1,470	1,245	1,382	1,526
	Percent of 1929						
Total income paid out.....	100.0	92.8	78.5	61.5	57.2	63.8	68.1
Total compensation of employees.....	100.0	91.7	77.2	60.1	57.1	65.1	70.0
Salaries (selected industries) <sup>1</sup> .....	100.0	98.0	81.3	59.8	53.8	57.4	60.3
Wages (selected industries) <sup>1</sup> .....	100.0	82.9	61.7	40.8	41.8	52.0	59.0
Salaries and wages (all other industries).....	100.0	95.4	84.7	70.1	63.5	68.8	72.9
Work-relief wages <sup>2</sup> .....							
Other labor income.....	100.0	105.7	115.6	117.3	103.8	95.9	107.3
Total dividends and interest <sup>3</sup> .....	100.0	100.7	87.0	71.1	62.1	64.3	65.1
Dividends.....	100.0	97.2	72.3	46.2	37.0	42.7	47.5
Interest.....	100.0	103.9	101.3	97.5	90.0	89.5	86.6
Entrepreneurial withdrawals.....	100.0	93.3	80.7	63.9	58.4	64.4	69.6
Net rents and royalties.....	100.0	80.8	61.2	42.9	36.4	40.4	44.6

<sup>1</sup> Includes mining, manufacturing, construction, steam railroads, Pullman, railway express, and water transportation.

<sup>2</sup> Includes pay rolls and maintenance of Civilian Conservation Corps enrollees and pay rolls of Civil Works Administration, Federal Emergency Relief Administration, and Works Progress Administration work projects plus administrative pay rolls outside of Washington.

<sup>3</sup> Includes also net balance of international flow of property incomes.

## Per-Capita Income

TABLE 3 gives the number and the per-capita income of employees. The increase in per-capita income of all employees that occurred in 1934 was continued in 1935. In the latter year the per-capita income was \$1,201, the highest level for any depression year since 1931, when the figure was \$1,336. For all three classes of employees making up the total, 1935 was a year of improvement in per-capita incomes. The greatest absolute increase between 1934 and 1935 was for wage earners in selected industries, the figures being \$1,024 and \$1,117.

In interpreting the figures the original study states that they do not represent the average income of all employable persons, or even the average income of those who worked at any time during the year. Rather, they approximate the average earnings of employees engaged throughout the year.

Table 3.—Number and Per-Capita Income of Employees, 1929 to 1935<sup>1</sup>

Item	Number of employees (in thousands)						
	1929	1930	1931	1932	1933	1934	1935
All employees <sup>2</sup> .....	34,485	32,373	28,943	25,308	25,358	27,325	28,094
Salaried employees (selected industries) <sup>3</sup> .....	2,212	2,183	1,911	1,594	1,503	1,610	1,643
Wage earners (selected industries) <sup>3</sup> .....	12,247	10,751	8,930	7,300	7,740	8,734	9,085
Salaried employees or wage earners (all other industries).....	20,026	19,439	18,102	16,414	16,115	16,981	17,366
	Per-capita income of employees						
All employees.....	\$1,466	\$1,427	\$1,336	\$1,178	\$1,097	\$1,143	\$1,201
Salaried employees (selected industries) <sup>3</sup> .....	2,560	2,542	2,410	2,125	2,028	2,019	2,080
Wage earners (selected industries) <sup>3</sup> .....	1,404	1,326	1,188	961	929	1,024	1,117
Salaried employees or wage earners (all other industries).....	1,383	1,359	1,296	1,183	1,092	1,122	1,162

<sup>1</sup> The estimates of the number employed are averages for the year and represent full-time equivalent numbers for industries in which data permit such adjustments.

<sup>2</sup> Does not include employers and self-employed persons, such as farmers, merchants, independent professional practitioners, etc.

<sup>3</sup> Includes mining, manufacturing, construction, steam railroads, Pullman, railway express, and water transportation.

## WAGES AND HOURS OF LABOR

### Earnings and Hours in the Iron and Steel Industry, 1933 and 1935<sup>1</sup>

IN March 1935, the average weekly earnings of wage earners in the iron and steel industry were \$24.24. These employees worked on the average 35.7 hours per week, and their average hourly earnings amounted to 67.9 cents. The above figures cover both male and female employees in the 21 manufacturing departments of the industry included in the recent survey made by the Bureau of Labor Statistics.

Comparable data covering the month of March in 1933 and 1935 are available only for 10 departments of the industry. In those departments, the average earnings per week of wage earners of both sexes increased from \$11.71 in 1933 to \$24.68 in 1935, a gain of 110.8 percent. This very large rise is attributable about equally to longer weekly hours and higher hourly earnings. The increase in average weekly hours, due to improved business conditions, was 47.9 percent, or from 24.2 hours in 1933 to 35.8 hours in 1935. The gain in average hourly earnings, which was the result of higher wage rates under the code as well as of greater tonnage production, amounted to 42.1 percent, or from 48.5 cents in 1933 to 68.9 cents in 1935.

#### Scope of Survey<sup>2</sup>

THIS is the fifth article relating to earnings and hours in the iron and steel industry in March 1933 and March 1935. The preceding articles dealt with figures for the 21 individual departments, whereas here summary data are presented for the industry as a whole.

As previously indicated, this article deals with two sets of data, namely, one covering the 21 departments included in the March 1935 survey, and the other embracing the 10 departments for which comparable data are available for both March 1933 and March 1935. The figures based on the 21 departments give a more comprehensive picture of the industry than has heretofore been available. On the other hand, the data for the 10 departments provide a basis for determining the changes that took place between 1933 and 1935. It

<sup>1</sup> Prepared by Edward K. Frazier, of the Bureau's Division of Wages, Hours, and Working Conditions.

<sup>2</sup> For the methods employed in collecting the data in this survey, see April 1936 issue of the Monthly Labor Review (pp. 1027-1029). Data on earnings, hours, and coverage for each of the 21 departments were given in the April, June, July, and August 1936 issues. A bulletin will be published later containing in detail all information obtained in this survey.

will be noticed, however, that, as far as the 1935 figures are concerned, there was very little difference in the average hours worked per week in the 21 departments and in the 10 departments. Average hourly earnings in the smaller sample were 1.0 cent an hour higher than in the larger one, a condition which explains the fact that weekly earnings were 1.8 percent higher in the smaller sample. Table 1 presents a summary of the coverage of both the 1933 and 1935 surveys by district and divisions of the industry.

Table 1.—Coverage of 1935 and 1933 Surveys of Iron and Steel Industry, by District

Year	Number of departments	All districts		Eastern district		Pittsburgh district		Great Lakes and Middle West district		Southern district	
		Number of plants	Number of employees	Number of plants	Number of employees	Number of plants	Number of employees	Number of plants	Number of employees	Number of plants	Number of employees
1935 <sup>1</sup> .....	21	280	92,626	62	11,908	90	38,994	92	32,962	36	8,762
1933 <sup>2</sup> .....	10	200	53,335	35	5,189	68	25,712	71	19,122	26	3,312
1935 <sup>3</sup> .....	10	182	67,724	39	8,040	56	28,174	60	24,804	27	6,706

<sup>1</sup> The figures for the number of employees include plant and office workers of both sexes.

<sup>2</sup> The figures for the number of employees include plant workers of both sexes. Office workers were not covered in this survey.

<sup>3</sup> The figures for the number of employees include only plant workers of both sexes. These figures refer to the number of employees reported in 1935 in the 10 departments covered in 1933. However, they also embrace rail mills, plate mills and sheet mills in the South and sheet and tinplate mills in the East, which were covered in these areas in 1935 and not in 1933.

The 21 departments<sup>3</sup> included in the 1935 survey covered a total of 92,626 employees of both sexes, including office workers attached to these departments, and were found in 280 plants located in 20 States. The coverage of the 10 departments<sup>4</sup> in the 1933 survey included 53,335 wage earners in 200 plants located in 16 States. In 1935, the data for the same departments covered 67,724 employees in 182 plants.

Owing to the small number of female workers found in iron and steel plants, the previous articles were limited to male wage earners. In the ensuing pages, separate figures are presented for male and female plant workers. Separate data pertaining to office employees of both sexes are also presented.

As regards occupational data for male wage earners, the figures for the occupations peculiar to each department have already been published,<sup>5</sup> and therefore the present data deal only with the occupations common to all departments.

<sup>3</sup> The 21 departments are blast furnaces, Bessemer converters, open-hearth furnaces, electric furnaces, blooming mills, rail mills, structural mills, plate mills, billet mills, bar mills, puddling mills, sheet-bar mills, rod mills, wire mills, sheet mills, tin-plate mills, strip mills, skelp mills, lap-weld tube mills, butt-weld tube mills, and seamless tube mills.

<sup>4</sup> These 10 departments are blast furnaces, Bessemer converters, open-hearth furnaces, blooming mills, rail mills, plate mills, bar mills, puddling mills, sheet mills, and tin-plate mills.

<sup>5</sup> The figures on common labor were also included in the discussion under each department, but in this article they are summarized on an industry basis.



## Male Wage Earners

## Average Hourly Earnings

*The industry.*—The 90,484 male wage earners reported in the 21 manufacturing departments in March 1935 earned an average of 68.1 cents per hour. A distribution of these employees, shown in table 3, reveals that approximately one-third received under 55 cents, another third 55 and under 70 cents, and the remaining one-third 70 cents and over.

The effects of the code and improved business conditions in the industry are shown by a comparison of the 1933 and 1935 data based on the 10 departments. In these 10 departments the average hourly earnings of male workers rose from 48.6 cents in March 1933 to 69.2 cents in March 1935, which is an increase of 20.6 cents, or 42.4 percent.

Table 2.—Distribution of Male Plant Wage Earners in all Districts, by Average Hourly Earnings, 1933 and 1935 <sup>1</sup>

[Based on 10 departments]

Average hourly earnings	1933			1935		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
Under 20.0 cents.....	491	0.9	0.9	2	(2)	(2)
20.0 and under 22.5 cents.....	367	.7	1.6	3	(2)	(2)
22.5 and under 25.0 cents.....	356	.7	2.3	5	(2)	(2)
25.0 and under 27.5 cents.....	889	1.7	4.0	33	0.1	0.1
27.5 and under 30.0 cents.....	1,110	2.1	6.1	190	.3	.4
30.0 and under 32.5 cents.....	2,435	4.6	10.7	266	.4	.8
32.5 and under 35.0 cents.....	3,748	7.1	17.8	227	.4	1.2
35.0 and under 37.5 cents.....	3,111	5.9	23.7	289	.5	1.7
37.5 and under 40.0 cents.....	6,576	12.3	36.0	348	.6	2.3
40.0 and under 42.5 cents.....	5,180	9.8	45.8	1,401	2.3	4.6
42.5 and under 45.0 cents.....	3,803	7.2	53.0	1,984	3.2	7.8
45.0 and under 47.5 cents.....	3,668	6.9	59.9	3,011	4.9	12.7
47.5 and under 50.0 cents.....	3,271	6.2	66.1	5,295	8.6	21.3
50.0 and under 55.0 cents.....	5,111	9.6	75.7	7,945	12.7	34.0
55.0 and under 60.0 cents.....	3,592	6.8	82.5	7,911	12.7	46.7
60.0 and under 65.0 cents.....	2,334	4.4	86.9	5,924	9.6	56.3
65.0 and under 70.0 cents.....	1,849	3.5	90.4	5,111	8.3	64.6
70.0 and under 75.0 cents.....	1,235	2.3	92.7	4,282	6.9	71.5
75.0 and under 80.0 cents.....	860	1.6	94.3	3,479	5.6	77.1
80.0 and under 85.0 cents.....	702	1.3	95.6	2,716	4.4	81.5
85.0 and under 90.0 cents.....	462	.9	96.5	2,292	3.7	85.2
90.0 and under 95.0 cents.....	348	.7	97.2	1,735	2.8	88.0
95.0 and under 100.0 cents.....	225	.4	97.6	1,493	2.4	90.4
100.0 and under 110.0 cents.....	465	.9	98.5	2,005	3.2	93.6
110.0 and under 120.0 cents.....	310	.6	99.1	1,008	1.6	95.2
120.0 and under 130.0 cents.....	189	.4	99.5	792	1.3	96.5
130.0 and under 140.0 cents.....	127	.2	99.7	549	.9	97.4
140.0 and under 150.0 cents.....	76	.1	99.8	411	.7	98.1
150.0 and under 160.0 cents.....	45	.1	99.9	311	.5	98.6
160.0 and under 170.0 cents.....	29	1	100.0	252	.4	99.0
170.0 and under 180.0 cents.....	21	(2)	100.0	181	.3	99.3
180.0 cents and over.....	20	(2)	100.0	422	.7	100.0
Total.....	53,005	100.0	-----	61,873	100.0	-----

<sup>1</sup> The 1935 data in this table relate only to the 10 departments covered in 1933 and therefore they do not include rail, plate, and sheet mills in the South nor sheet and tin-plate mills in the East, as such departments were not covered in these districts in 1933.

<sup>2</sup> Less than  $\frac{1}{10}$  of 1 percent.

The upward shift in average earnings per hour between the 2 years is also brought out by a comparison of the distributions covering these 10 departments (table 2). It will be seen that the percentage of employees in every class below 47.5 cents decreased between 1933 and 1935, with the reductions particularly noticeable in the lowest classes. Thus, in 1933, 36.0 percent of the male workers received less than 40 cents, as compared with 2.3 percent in 1935. The percentage paid less than 47.5 cents dropped from about 60 in 1933 to approximately 13 in 1935. At the same time, every class beginning with 47.5 cents showed an increase in the percentage, the gains being from 32.8 percent in 1933 to 58.8 percent in 1935 in the classes from 47.5 and under 75 cents, and from 7.3 percent in 1933 to 28.5 percent in 1935 in the classes of 75 cents and over.

*Regional differentials.*—An examination of the averages in the 4 districts,<sup>6</sup> based on the data for the 21 departments in 1935, seems to indicate the existence of two or three distinct wage levels in the industry. The lowest average earnings per hour were found in the Eastern (62.7 cents) and Southern (64.0 cents) regions,<sup>7</sup> while the highest earnings occurred in the Pittsburgh (69.1 cents) and Great Lakes and Middle West (69.9 cents) districts.

Although the average hourly earnings in the Eastern and Southern districts were nearly the same, there were important differences between the two distributions. (See table 3.) The Eastern district does not contain so large a proportion of low-wage labor as the Southern district. In the Eastern district less than one-half of 1 percent of the male workers earned less than 37.5 cents per hour, whereas 15.5 percent of the Southern workers were found in that group. The Eastern district shows a preponderance of workers in the intermediate wage groups, with 83.1 percent of the workers receiving 37.5 to 80.0 cents an hour, as compared with 64.2 percent in the Southern district. However there are relatively more high-wage workers in the Southern district; the number of Eastern employees receiving 80 cents and over was 16.5 percent, as against 20.3 percent in the Southern district.

There was very little difference in the distributions between the Pittsburgh and Great Lakes and Middle West districts. In each area, approximately one-third of the employees earned under 55 cents, another third 55 and under 70 cents, and the remainder 70 cents and over.

<sup>6</sup> See footnote 7, p. 1029, of the April 1936 issue of the Monthly Labor Review for an outline of the territory included in each district.

<sup>7</sup> The figures for the 10 departments in 1935 reveal a somewhat different situation, as the Southern average was 58.7 cents as compared with 61.7 cents in the Eastern district.

Table 3.—Distribution of Male Plant Wage Earners, by Average Hourly Earnings and District, 1935

[Based on 21 departments]

Average hourly earnings	All districts			Eastern district			Pittsburgh district		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
Under 25.0 cents	14	(1)	(1)				3	(1)	(1)
25.0 and under 27.5 cents	38	(1)	(1)	1	(1)	(1)	5	(1)	(1)
27.5 and under 30.0 cents	262	0.3	0.3	1	(1)	(1)	20	0.1	0.1
30.0 and under 32.5 cents	301	.3	.6	7	0.1	0.1	21	.1	.2
32.5 and under 35.0 cents	324	.4	1.0	4	(1)	.1	13	(1)	.2
35.0 and under 37.5 cents	555	.6	1.6	33	.3	.4	16	(1)	.2
37.5 and under 40.0 cents	851	.9	2.5	520	4.4	4.8	65	.2	.4
40.0 and under 42.5 cents	2,076	2.3	4.8	1,090	9.3	14.1	81	.2	.6
42.5 and under 45.0 cents	2,937	3.2	8.0	943	8.1	22.2	781	2.1	2.7
45.0 and under 47.5 cents	4,977	5.5	13.5	675	5.8	28.0	2,547	6.7	9.4
47.5 and under 50.0 cents	7,652	8.5	22.0	868	7.4	35.4	3,295	8.7	18.1
50.0 and under 55.0 cents	11,840	13.0	35.0	1,379	11.7	47.1	5,313	14.1	32.2
55.0 and under 60.0 cents	11,808	13.0	48.0	1,202	10.3	57.4	5,713	15.1	47.3
60.0 and under 65.0 cents	8,884	9.8	57.8	1,044	8.9	66.3	3,621	9.6	56.9
65.0 and under 70.0 cents	7,574	8.4	66.2	806	6.9	73.2	3,347	8.9	65.8
70.0 and under 75.0 cents	6,131	6.8	73.0	692	5.9	79.1	2,640	7.0	72.8
75.0 and under 80.0 cents	5,025	5.6	78.6	517	4.4	83.5	2,179	5.8	78.6
80.0 and under 85.0 cents	3,916	4.3	82.9	368	3.1	86.6	1,713	4.5	83.1
85.0 and under 90.0 cents	3,131	3.5	86.4	319	2.7	89.3	1,449	3.8	86.9
90.0 and under 95.0 cents	2,343	2.6	89.0	217	1.9	91.2	951	2.5	89.4
95.0 and under 100.0 cents	1,947	2.2	91.2	213	1.8	93.0	744	2.0	91.4
100.0 and under 110.0 cents	2,683	3.0	94.2	316	2.7	95.7	1,110	2.9	94.3
110.0 and under 120.0 cents	1,408	1.6	95.8	176	1.5	97.2	581	1.5	95.8
120.0 and under 130.0 cents	1,041	1.2	97.0	92	.8	98.0	367	1.0	96.8
130.0 and under 140.0 cents	732	.8	97.8	69	.6	98.6	300	.8	97.6
140.0 and under 150.0 cents	524	.6	98.4	38	.3	98.9	237	.6	98.2
150.0 and under 160.0 cents	400	.4	98.8	54	.5	99.4	173	.5	98.7
160.0 and under 170.0 cents	341	.4	99.2	30	.3	99.7	146	.4	99.1
170.0 and under 180.0 cents	217	.2	99.4	15	.1	99.8	92	.2	99.3
180.0 and under 190.0 cents	167	.2	99.6	3	(1)	99.8	81	.2	99.5
190.0 and under 200.0 cents	116	.1	99.7	3	(1)	99.8	58	.2	99.7
200.0 cents and over	269	.3	100.0	18	.2	100.0	96	.3	100.0
Total	90,484	100.0		11,713	100.0		37,758	100.0	

Average hourly earnings	Great Lakes and Middle West district			Southern district		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
Under 25.0 cents	1	(1)	(1)	10	0.1	0.1
25.0 and under 27.5 cents	1	(1)	(1)	31	.4	.5
27.5 and under 30.0 cents	2	(1)	(1)	239	2.8	3.3
30.0 and under 32.5 cents	3	(1)	(1)	270	3.1	6.4
32.5 and under 35.0 cents	6	(1)	(1)	301	3.5	9.9
35.0 and under 37.5 cents	20	0.1	0.1	486	5.6	15.5
37.5 and under 40.0 cents	29	.1	.2	237	2.7	18.2
40.0 and under 42.5 cents	349	1.1	1.3	556	6.4	24.6
42.5 and under 45.0 cents	917	2.8	4.1	296	3.4	28.0
45.0 and under 47.5 cents	1,509	4.7	8.8	246	2.8	30.8
47.5 and under 50.0 cents	3,042	9.4	18.2	447	5.1	35.9
50.0 and under 55.0 cents	4,187	12.9	31.1	961	11.0	46.9
55.0 and under 60.0 cents	4,202	13.0	44.1	691	7.9	54.8
60.0 and under 65.0 cents	3,493	10.8	54.9	726	8.3	63.1
65.0 and under 70.0 cents	2,791	8.6	63.5	630	7.3	70.4
70.0 and under 75.0 cents	2,330	7.2	70.7	469	5.4	75.8
75.0 and under 80.0 cents	1,989	6.2	76.9	340	3.9	79.7
80.0 and under 85.0 cents	1,462	4.5	81.4	373	4.3	84.0
85.0 and under 90.0 cents	1,139	3.5	84.9	224	2.6	86.6
90.0 and under 95.0 cents	991	3.1	88.0	184	2.1	88.7
95.0 and under 100.0 cents	819	2.5	90.5	171	2.0	90.7
100.0 and under 110.0 cents	1,006	3.1	93.6	251	2.9	93.6
110.0 and under 120.0 cents	506	1.6	95.2	145	1.7	95.3
120.0 and under 130.0 cents	472	1.5	96.7	110	1.3	96.6
130.0 and under 140.0 cents	278	.9	97.6	85	1.0	97.6
140.0 and under 150.0 cents	183	.6	98.2	66	.8	98.4
150.0 and under 160.0 cents	132	.4	98.6	41	.5	98.9
160.0 and under 170.0 cents	134	.4	99.0	31	.4	99.3
170.0 and under 180.0 cents	98	.3	99.3	12	.1	99.4
180.0 and under 190.0 cents	74	.2	99.5	9	.1	99.5
190.0 and under 200.0 cents	42	.1	99.6	13	.1	99.6
200.0 cents and over	121	.4	100.0	34	.4	100.0
Total	32,328	100.0		8,685	100.0	

<sup>1</sup> Less than 1/10 of 1 percent.

The changes in the average hourly earnings between 1933 and 1935 by district may be seen from the data based on the 10 departments.

In the Eastern district, the average earnings per hour increased from 43.0 cents in 1933 to 61.7 cents in 1935, a gain of 18.7 cents, or 43.5 percent. As a result, there was an important shift in the distribution of employees between the 2 years, which may be seen by an examination of table 4. Every class under 40 cents showed a decrease in the percentage of workers, the number in that group declining from 51.2 percent of the total in 1933 to 2.8 percent in 1935. On the other hand, there was an increase in the percentages in all classes of 40 cents and over between the 2 years. Thus, the number paid 40 and under 75 cents rose from 44.4 percent in 1933 to 80.9 percent in 1935, while the number receiving 75 cents and over advanced from only 4.4 percent in 1933 to 16.3 percent in 1935.

The average hourly earnings in the Southern district increased from 39.9 cents in 1933 to 58.7 cents in 1935, which is a gain of 18.8 cents, or 47.1 percent. The general improvement of wage conditions in this district is shown by the fact that the percentage of employees under 30 cents declined from 41.1 in 1933 to 5.2 in 1935. This was accompanied by an increase in the number paid 30 and under 60 cents from 45.8 percent in 1933 to 59.1 percent in 1935. Likewise, those earning 60 cents and over advanced from 13.1 percent in 1933 to 35.7 percent in 1935, the number paid 75 cents and over having increased from only 5.2 percent in 1933 to 18.5 percent in 1935.

The average earnings per hour of workers in the Pittsburgh district rose from 50.4 cents in 1933 to 70.3 cents in 1935, an increase of 19.9 cents, or 39.5 percent. The effect of this gain on the distribution of employees was as follows: First, a decrease in the percentages of each class under 47.5 cents, the decline being from 58.3 percent in 1933 to 9.0 percent in 1935; second, an increase in the percentages of all classes earning 47.5 cents and over. The number paid 47.5 and under 75 cents advanced from 33.4 percent in 1933 to 61.6 percent in 1935. This left only 8.3 percent with earnings of 75 cents and over in 1933, as compared with 29.4 percent in 1935.

In the Great Lakes and Middle West district, the average hourly earnings advanced from 50.0 cents in 1933 to 71.1 cents in 1935, a gain of 21.1 cents, or 42.2 percent. As in the Pittsburgh region, there was here a decrease in the percentage of every class under 47.5 cents and an increase in every class of 47.5 cents and above in the distribution of employees between the 2 years. The number earning under 47.5 cents was reduced from 56.6 percent of the total in 1933 to 8.2 percent in 1935. On the other hand, the percentage paid 47.5 and under 75 cents increased from 36.3 in 1933 to 59.8 in 1935, while the number receiving 75 cents and over rose from 7.1 percent in 1933 to 32.0 percent in 1935.

Table 4.—Distribution of Male Plant Wage Earners, by Average Hourly Earnings and District, 1933 and 1935

[Based on 10 departments]

Average hourly earnings (in cents)	Eastern district					Pittsburgh district						
	1933			1935			1933			1935		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
Under 20.0	10	0.2	0.2				34	0.1	0.1	1	(1)	(1)
20.0 and under 22.5	24	.5	.7				74	.3	.4	2	(1)	(1)
22.5 and under 25.0	36	.7	1.4				81	.3	.7			(1)
25.0 and under 27.5	332	6.4	7.8	1	(1)		219	.9	1.6	5	(1)	(1)
27.5 and under 30.0	407	7.8	15.6			(1)	300	1.2	2.8	19	0.1	0.1
30.0 and under 32.5	490	9.4	25.0	6	0.1	0.1	1,033	4.1	6.9	20	.1	.2
32.5 and under 35.0	464	8.9	33.9	4	.1	.2	1,639	6.4	13.3	12	(1)	.2
35.0 and under 37.5	420	8.1	42.0	21	.4	.6	1,379	5.4	18.7	11	(1)	.2
37.5 and under 40.0	478	9.2	51.2	126	2.2	2.8	3,465	13.7	32.4	63	.2	.4
40.0 and under 42.5	550	10.6	61.8	713	12.6	15.4	2,687	10.6	43.0	77	.3	.7
42.5 and under 45.0	272	5.2	67.0	414	7.3	22.7	1,989	7.8	50.8	662	2.4	3.1
45.0 and under 47.5	264	5.1	72.1	292	5.2	27.9	1,917	7.5	58.3	1,624	5.9	9.0
47.5 and under 50.0	231	4.5	76.6	415	7.3	35.2	1,620	6.4	64.7	2,350	8.5	17.5
50.0 and under 55.0	410	7.9	84.5	729	12.9	47.1	2,305	9.1	73.8	3,856	13.9	31.4
55.0 and under 60.0	242	4.7	89.2	620	11.0	58.1	1,733	6.8	80.6	3,988	14.3	45.7
60.0 and under 65.0	145	2.8	92.0	594	10.5	69.6	1,164	4.6	85.2	2,529	9.1	54.8
65.0 and under 70.0	114	2.2	94.2	434	7.7	77.3	994	3.9	89.1	2,442	8.8	63.6
70.0 and under 75.0	73	1.4	95.6	363	6.4	83.7	672	2.6	91.7	1,938	7.0	70.6
75.0 and under 80.0	98	1.9	97.5	211	3.7	87.4	440	1.7	93.4	1,577	5.7	76.3
80.0 and under 85.0	34	.7	98.2	125	2.2	89.6	382	1.5	94.9	1,280	4.6	80.9
85.0 and under 90.0	18	.3	98.5	127	2.2	91.8	272	1.1	96.0	1,130	4.1	85.0
90.0 and under 95.0	10	.2	98.7	71	1.3	93.1	189	.7	96.7	768	2.8	87.8
95.0 and under 100.0	9	.2	98.9	89	1.6	94.7	112	.4	97.1	630	2.3	90.1
100.0 and under 110.0	9	.2	99.1	109	1.9	96.6	205	.8	97.9	954	3.4	93.5
110.0 and under 120.0	35	.7	99.8	53	.9	97.5	178	.7	98.6	481	1.7	95.2
120.0 and under 130.0	6	.1	99.9	35	.6	98.1	120	.5	99.1	311	1.1	96.3
130.0 and under 140.0	1	(1)	99.9	24	.4	98.5	93	.4	99.5	253	.9	97.2
140.0 and under 150.0	1	(1)	99.9	16	.3	98.8	52	.2	99.7	217	.8	98.0
150.0 and under 160.0	3	.1	100.0	36	.6	99.4	31	.1	99.8	151	.5	98.5
160.0 and under 170.0	2	(1)	100.0	12	.2	99.6	19	.1	99.9	131	.5	99.0
170.0 and under 180.0			100.0	9	.2	99.8	15	.1	100.0	78	.3	99.3
180.0 and over	1	(1)	100.0	12	.2	100.0	10	(1)	100.0	194	.7	100.0
Total	5,189	100.0		5,661			25,423	100.0		27,754	100.0	

<sup>1</sup> Less than 1/10 of 1 percent.

Table 4.—Distribution of Male Plant Wage Earners, by Average Hourly Earnings and District, 1933 and 1935—Continued

Average hourly earnings (in cents)	Great Lakes and Middle West district						Southern district					
	1933			1935			1933			1935		
	Number of wage earn- ers	Sim- ple per- cent- age	Cu- mu- lative per- cent- age	Number of wage earn- ers	Sim- ple per- cent- age	Cu- mu- lative per- cent- age	Number of wage earn- ers	Sim- ple per- cent- age	Cu- mu- lative per- cent- age	Number of wage earn- ers	Sim- ple per- cent- age	Cu- mu- lative per- cent- age
Under 20.0	9	(1)	(1)				438	13.2	13.2	1	(1)	(1)
20.0 and under 22.5	21	0.1	0.1	0.1	(1)	(1)	248	7.5	20.7			
22.5 and under 25.0	58	.3	.4			(1)	181	5.5	26.2	5	0.1	0.1
25.0 and under 27.5	113	.6	1.0	1	(1)	(1)	225	6.8	33.0	26	.7	.8
27.5 and under 30.0	134	.7	1.7	2	(1)	(1)	269	8.1	41.1	169	4.4	5.2
30.0 and under 32.5	763	4.0	5.7	3	(1)	(1)	149	4.5	45.6	237	6.3	11.5
32.5 and under 35.0	1,467	7.7	13.4	6	(1)	(1)	178	5.4	51.0	205	5.4	16.9
35.0 and under 37.5	1,141	6.0	19.4	19	0.1	0.1	171	5.2	56.2	238	6.3	23.2
37.5 and under 40.0	2,465	13.0	32.4	23	.1	.2	166	5.1	61.3	136	3.6	26.8
40.0 and under 42.5	1,777	9.3	41.7	250	1.0	1.2	166	5.0	66.3	361	9.5	33.3
42.5 and under 45.0	1,443	7.6	49.3	743	3.0	4.2	99	3.0	69.3	165	4.3	40.6
45.0 and under 47.5	1,391	7.3	56.6	989	4.0	8.2	96	2.9	72.2	106	2.8	43.4
47.5 and under 50.0	1,263	6.6	63.2	2,355	9.6	17.8	157	4.7	76.9	175	4.6	48.0
50.0 and under 55.0	2,172	11.4	74.6	2,976	12.1	29.9	224	6.8	83.7	384	10.1	58.1
55.0 and under 60.0	1,510	7.9	82.5	3,068	12.3	42.2	107	3.2	86.9	235	6.2	64.3
60.0 and under 65.0	905	4.7	87.2	2,542	10.3	52.5	120	3.6	90.5	259	6.8	71.1
65.0 and under 70.0	655	3.4	90.6	2,014	8.2	60.7	86	2.6	93.1	221	5.8	76.9
70.0 and under 75.0	434	2.3	92.9	1,807	7.3	68.0	56	1.7	94.8	174	4.6	81.5
75.0 and under 80.0	266	1.4	94.3	1,591	6.5	74.5	56	1.7	96.5	100	2.6	84.1
80.0 and under 85.0	258	1.4	95.7	1,187	4.8	79.3	28	.8	97.3	124	3.3	87.4
85.0 and under 90.0	162	.8	96.5	955	3.9	83.2	10	.3	97.6	80	2.1	89.5
90.0 and under 95.0	134	.7	97.2	840	3.4	86.6	15	.5	98.1	56	1.5	91.0
95.0 and under 100.0	96	.5	97.7	704	2.9	89.5	8	.2	98.3	70	1.8	92.8
100.0 and under 110.0	231	1.2	98.9	844	3.4	93.9	20	.6	98.9	98	2.6	95.4
110.0 and under 120.0	77	.4	99.3	409	1.7	94.6	20	.6	99.5	65	1.7	97.1
120.0 and under 130.0	52	.3	99.6	423	1.7	96.3	11	.3	99.8	23	.6	97.7
130.0 and under 140.0	29	.2	99.8	245	1.0	97.3	4	.1	99.9	27	.7	98.4
140.0 and under 150.0	21	.1	99.9	159	.6	97.9	2	.1	100.0	19	.5	98.9
150.0 and under 160.0	11	.1	100.0	113	.5	98.4				11	.3	99.2
160.0 and under 170.0	8	(1)	100.0	106	.4	98.8				3	.1	99.3
170.0 and under 180.0	6	(1)	100.0	88	.4	99.2				6	.2	99.5
180.0 and over	9	(1)	100.0	196	.8	100.0				20	.5	100.0
Total	19,081	100.0		24,659	100.0		3,312	100.0		3,799	100.0	

<sup>1</sup> Less than 1/10 of 1 percent.

*Occupational differentials.*—In each of the several departments of the iron and steel industry there are certain occupations in which the work is essentially the same. For this reason, no separate figures will be shown by departments for such occupations, the data being presented only on an industry basis. These occupations cover primarily mechanical, transportation, and service workers.

According to table 5, the occupational averages for all districts combined, in the 21 departments included in 1935, ranged from 47.9 cents for plant service workers to 86.8 cents for bricklayers. Of the 28 occupational classes shown, 1 averaged less than 50 cents, 11 between 50 and 60 cents, 9 between 60 and 70 cents, and 7 above 70 cents. The last group includes such skilled occupations as blacksmiths, bricklayers, locomotive engineers, power engineers, motor inspectors and repairmen, machinists, and roll turners.

Table 5.—Average Hourly Earnings of Males in Mechanical, Transportation, and Service Work, by Occupation and District, 1935

[Based on 21 departments]

Occupation	All districts		Eastern district		Pittsburgh district		Great Lakes and Middle West district		Southern district	
	Number of wage earners	Average hourly earnings	Number of wage earners	Average hourly earnings	Number of wage earners	Average hourly earnings	Number of wage earners	Average hourly earnings	Number of wage earners	Average hourly earnings
Blacksmiths.....	194	\$0.704	40	\$0.646	69	\$0.740	65	\$0.710	23	\$0.673
Blacksmiths' helpers.....	149	.512	25	.463	53	.532	54	.540	17	.431
Boilermakers.....	73	.694	(1)	(1)	32	.731	28	.697	10	.597
Bricklayers.....	550	.868	57	.664	271	.889	185	.879	37	.991
Bricklayers' helpers.....	286	.502	35	.435	111	.515	115	.517	25	.446
Carpenters.....	227	.665	23	.644	89	.681	97	.673	18	.566
Cranemen, miscellaneous.....	3,121	.609	337	.561	1,351	.603	1,146	.634	287	.588
Crane followers.....	1,656	.539	157	.465	634	.523	737	.571	128	.514
Electricians.....	698	.682	163	.628	270	.705	191	.690	74	.689
Electricians' helpers.....	135	.544	16	.454	44	.569	46	.562	29	.533
Engineers, locomotive.....	538	.732	56	.588	258	.748	180	.774	44	.659
Engineers, power.....	176	.701	10	.656	86	.704	54	.714	26	.681
Firemen, locomotive.....	102	.614	(1)	(1)	33	.716	46	.652	21	.375
Firemen and water tenders, power.....	427	.585	33	.502	193	.617	128	.589	73	.536
Inspectors and repairmen, motors.....	582	.705	10	.614	275	.686	267	.735	30	.645
Machinists.....	1,195	.731	166	.680	409	.751	556	.738	64	.671
Machinists' helpers.....	253	.535	41	.460	46	.566	156	.557	10	.347
Millwrights.....	1,175	.679	177	.654	465	.658	454	.716	79	.633
Millwrights' helpers.....	709	.558	92	.584	349	.544	207	.579	61	.465
Oilers and greasers, equipment.....	1,156	.537	116	.505	454	.542	469	.549	117	.502
Pipe fitters.....	500	.660	60	.633	206	.677	203	.664	31	.574
Pipe fitters' helpers.....	207	.534	(1)	(1)	100	.550	87	.526	16	.488
Pumpers.....	142	.592	(1)	(1)	59	.595	55	.595	19	.608
Riggers.....	224	.594	14	.572	90	.602	101	.577	19	.553
Roll turners.....	330	.850	28	.730	153	.874	98	.857	51	.829
Service workers, plant.....	721	.479	94	.429	317	.491	265	.497	45	.373
Switchmen, locomotive.....	738	.663	82	.515	331	.679	274	.701	51	.578
Welders.....	446	.686	66	.634	162	.691	174	.702	44	.679

<sup>1</sup> Not a sufficient number reported to present averages.

The occupational averages in each district, based on the data for the 21 departments in 1935, ranged from 42.9 cents for plant service workers to 73.0 cents for roll turners in the Eastern district, from 49.1 cents for plant service workers to 88.9 cents for bricklayers in the Pittsburgh district, from 49.7 cents for plant service workers to 87.9 cents for bricklayers in the Great Lakes and Middle West district, and from 34.7 cents for machinists' helpers to 99.1 cents for bricklayers in the Southern district. In general, there was very little difference in the corresponding averages for the various occupations between the Pittsburgh and the Great Lakes and Middle West regions. With the exception of bricklayers, pumpers, and riggers, every one of the 28 occupational averages was lower in the Southern district than the respective figures in either the Pittsburgh or the Great Lakes and Middle West areas. However, the Southern region had higher averages in 15 of the 24 occupational classes for which comparisons can be made between the Southern and Eastern districts. It will also be seen that in only one instance (millwrights' helpers) was the average in the Eastern area greater than in either the Pittsburgh or the Great Lakes and Middle West districts.

According to table 6, which presents a comparison of the occupational averages between 1933 and 1935 based on the data for 10 departments, the increases varied from 10.9 cents for plant service workers to 28.5 cents for roll turners in all districts combined. By individual districts, the range of gain was from 4.8 cents for plant service workers to 22.9 cents for millwrights' helpers in the Eastern region, from 10.1 cents for machinists' helpers and plant service workers to 36.0 cents for bricklayers in the Pittsburgh district, from 7.2 cents for plant service workers to 29.1 cents for roll turners in the Great Lakes and Middle West areas, and from 8.2 cents for machinists' helpers to 30.6 cents for roll turners in the Southern district.

Table 6.—Average Hourly Earnings of Males in Mechanical, Transportation, and Service Work, by Occupation and District, 1933 and 1935<sup>1</sup>

[Based on 10 departments]

Occupation	All districts				Eastern district				Pittsburgh district			
	1933		1935		1933		1935		1933		1935	
	Number of wage earners	Average hourly earnings	Number of wage earners	Average hourly earnings	Number of wage earners	Average hourly earnings	Number of wage earners	Average hourly earnings	Number of wage earners	Average hourly earnings	Number of wage earners	Average hourly earnings
Blacksmiths.....	112	\$0.505	134	\$0.698	19	\$0.424	23	\$0.621	35	\$0.528	43	\$0.731
Blacksmiths' helpers.....	102	.361	111	.512	( <sup>2</sup> )	( <sup>2</sup> )	17	.460	33	.381	40	.536
Boilermakers.....	60	.511	59	.684	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	16	.572	21	.723
Bricklayers.....	263	.571	513	.863	28	.448	48	.637	78	.520	252	.880
Bricklayers' helpers.....	150	.372	263	.503	16	.361	31	.431	33	.367	98	.519
Carpenters.....	92	.485	173	.665	( <sup>2</sup> )	( <sup>2</sup> )	11	.621	38	.495	65	.668
Cranemen, miscellaneous.....	1,859	.431	2,112	.602	184	.375	234	.541	907	.440	857	.597
Crane followers.....	570	.365	1,003	.533	25	.311	69	.467	298	.373	419	.519
Electricians.....	325	.499	528	.674	68	.471	135	.624	83	.518	169	.699
Electricians' helpers.....	65	.395	106	.542	( <sup>2</sup> )	( <sup>2</sup> )	10	.465	26	.443	27	.562
Engineers, locomotive.....	578	.506	514	.733	61	.420	48	.582	277	.502	245	.745
Engineers, power.....	71	.529	147	.690	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	36	.526	78	.688
Firemen, locomotive.....	68	.404	94	.610	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	11	.498	27	.723
Firemen and water tenders, power.....	394	.421	353	.594	19	.330	22	.511	155	.445	166	.619
Inspectors and repairmen, motors.....	438	.530	462	.706	10	.506	10	.614	237	.533	229	.685
Machinists.....	655	.541	824	.731	39	.506	102	.681	118	.549	263	.748
Machinists' helpers.....	155	.405	203	.536	( <sup>2</sup> )	( <sup>2</sup> )	31	.478	28	.469	34	.570
Millwrights.....	753	.500	904	.677	134	.421	143	.646	320	.508	339	.651
Millwrights' helpers.....	352	.391	528	.551	33	.348	65	.577	228	.407	262	.546
Oilers and greasers, equipment.....	658	.385	873	.530	50	.361	86	.495	317	.394	343	.535
Pipe fitters.....	357	.483	416	.652	33	.422	49	.625	145	.496	163	.660
Pipe fitters' helpers.....	111	.388	170	.531	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	53	.393	76	.542
Pumpers.....	175	.465	125	.694	19	.375	( <sup>2</sup> )	( <sup>2</sup> )	59	.464	50	.600
Riggers.....	138	.425	176	.586	( <sup>2</sup> )	( <sup>2</sup> )	10	.575	41	.429	79	.595
Roll turners.....	122	.565	226	.850	14	.577	12	.805	63	.578	109	.877
Service workers, plant.....	343	.376	496	.485	81	.390	41	.438	122	.392	230	.493
Switchmen, locomotive.....	636	.439	710	.662	78	.368	75	.515	250	.437	311	.674
Welders.....	164	.473	310	.682	28	.412	56	.629	45	.486	87	.610

<sup>1</sup> The 1935 data cover only the 10 departments included in the 1933 survey.

<sup>2</sup> Number reported not sufficient to present averages.

<sup>3</sup> None reported.



Table 6.—Average Hourly Earnings of Males in Mechanical, Transportation, and Service Work, by Occupation and District, 1933 and 1935—Continued

Occupation	Great Lakes and Middle West district				Southern district			
	1933		1935		1933		1935	
	Number of wage earners	Average hourly earnings	Number of wage earners	Average hourly earnings	Number of wage earners	Average hourly earnings	Number of wage earners	Average hourly earnings
Blacksmiths.....	43	\$0.535	49	\$0.715	15	\$0.478	19	\$0.673
Blacksmiths' helpers.....	49	.398	39	.544	11	.252	15	.424
Boilermakers.....	33	.531	26	.695	(2)	(2)	(2)	(2)
Bricklayers.....	136	.612	176	.875	21	.758	37	.991
Bricklayers' helpers.....	82	.418	109	.519	19	.260	25	.446
Carpenters.....	41	.498	83	.687	10	.406	14	.554
Cranemen, miscellaneous.....	703	.438	799	.639	65	.387	222	.548
Crane followers.....	225	.372	450	.573	22	.246	65	.413
Electricians.....	144	.501	161	.691	30	.501	63	.670
Electricians' helpers.....	21	.392	46	.562	15	.362	23	.518
Engineers, locomotive.....	188	.548	177	.777	52	.481	44	.659
Engineers, power.....	28	.584	39	.697	(2)	(2)	26	.681
Firemen, locomotive.....	36	.503	46	.652	21	.259	21	.375
Firemen and water tenders, power.....	151	.457	96	.604	69	.361	69	.548
Inspectors and repairmen, motors.....	178	.535	200	.741	13	.457	23	.657
Machinists.....	453	.554	415	.740	45	.463	44	.666
Machinists' helpers.....	113	.398	128	.558	12	.265	10	.347
Millwrights.....	233	.525	351	.723	66	.538	71	.639
Millwrights' helpers.....	74	.394	148	.573	17	.327	53	.480
Oilers and greasers, equipment.....	251	.393	357	.547	40	.336	87	.470
Pipe fitters.....	174	.486	177	.663	(2)	(2)	27	.561
Pipe fitters' helpers.....	54	.399	77	.527	(2)	(2)	15	.502
Pumpers.....	75	.490	48	.595	22	.481	19	.608
Riggers.....	87	.432	73	.585	(2)	(2)	14	.547
Roll turners.....	34	.564	71	.855	11	.463	34	.769
Service workers, plant.....	118	.433	184	.505	22	.211	41	.378
Switchmen, locomotive.....	216	.508	273	.702	92	.356	51	.578
Welders.....	78	.521	129	.719	13	.401	38	.651

<sup>2</sup> Number reported not sufficient to present averages.

*Common labor.*—The average hourly earnings of common laborers based on the data in the 21 departments in 1935 amounted to 45.0 cents for all districts combined, with 36.7 cents for the Southern, 41.5 cents for the Eastern, 46.7 cents for the Great Lakes and Middle West, and 47.3 cents for the Pittsburgh districts. An analysis of the distribution of common laborers for all districts combined, which appears in table 7, shows that 9.8 percent received less than 40 cents, 30.1 percent 40 and under 45 cents, 53.7 percent 45 and under 50 cents, and only 6.4 percent 50 cents and over. Those earning under 40 cents were found almost entirely in the Southern and Eastern areas. In the Southern district, 58.8 percent earned under 40 cents (these were scattered in the classes from 20 to 40 cents), with 32.4 percent receiving 40 and under 45 cents, the remaining 8.8 percent being in the class of 45 cents and over. By contrast, in the Eastern district, 26.3 percent earned under 40 cents (all of these were in the class of 37.5 and under 40 cents), 64.1 percent were paid 40 and under 45 cents, and 9.6 percent 45 cents and over. Only a few individuals earned less than 40 cents in the Pittsburgh and the Great Lakes and Middle West districts, the great majority of the common laborers in each case being found in the classes of 45 and under 50 cents.

Table 7.—Distribution of Common Laborers, by Average Hourly Earnings and District, 1935

[Based on 21 departments]

Average hourly earnings	All districts			Eastern district			Pittsburgh district		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
20.0 and under 25.0 cents	1	( <sup>1</sup> )	( <sup>1</sup> )						
25.0 and under 27.5 cents	15	0.2	0.2						
27.5 and under 30.0 cents	87	1.4	1.6				1	( <sup>1</sup> )	( <sup>1</sup> )
30.0 and under 32.5 cents	73	1.2	2.8				1	( <sup>1</sup> )	( <sup>1</sup> )
32.5 and under 35.0 cents	186	3.0	5.8				3	0.1	0.1
35.0 and under 37.5 cents	13	.2	6.0				1	( <sup>1</sup> )	.1
37.5 and under 40.0 cents	233	3.8	9.8	228	26.3	26.3	1	( <sup>1</sup> )	.1
40.0 and under 42.5 cents	872	14.3	24.1	461	53.1	79.4	22	.9	1.0
42.5 and under 45.0 cents	963	15.8	39.9	95	11.0	90.4	407	16.4	17.4
45.0 and under 47.5 cents	1,932	31.6	71.5	47	5.4	95.8	1,124	45.5	62.9
47.5 and under 50.0 cents	1,349	22.1	93.6	17	2.0	97.8	724	29.3	92.2
50.0 cents and over	389	6.4	100.0	19	2.2	100.0	194	7.8	100.0
Total	6,113	100.0		867	100.0		2,478	100.0	

Average hourly earnings	Great Lakes and Middle West district			Southern district		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
20.0 and under 25.0 cents				1	0.1	0.1
25.0 and under 27.5 cents	1	( <sup>1</sup> )	( <sup>1</sup> )	14	2.2	2.3
27.5 and under 30.0 cents			( <sup>1</sup> )	86	13.6	15.9
30.0 and under 32.5 cents			( <sup>1</sup> )	72	11.4	27.3
32.5 and under 35.0 cents			( <sup>1</sup> )	183	29.0	56.3
35.0 and under 37.5 cents			( <sup>1</sup> )	12	1.9	58.2
37.5 and under 40.0 cents			( <sup>1</sup> )	4	.6	58.8
40.0 and under 42.5 cents	190	8.9	8.9	199	31.6	90.4
42.5 and under 45.0 cents	456	21.3	30.2	5	.8	91.2
45.0 and under 47.5 cents	755	35.3	65.5	6	1.0	92.2
47.5 and under 50.0 cents	583	27.4	92.9	25	4.0	96.2
50.0 cents and over	152	7.1	100.0	24	3.8	100.0
Total	2,137	100.0		631	100.0	

<sup>1</sup> Less than 1/10 of 1 percent.

In view of the fact that the minimum rates of pay assigned by the code to the various regions applied to common labor only, it is significant to note the changes in the data (based on 10 departments) for this class of labor between 1933 and 1935. The increase in the average hourly earnings for all districts combined was from 32.6 cents in 1933 to 44.9 cents in 1935, a gain of 12.3 cents, or 37.7 percent. The effect of this rise upon the distribution, which may be seen from table 8, was to reduce the 4.1 percent earning under 25 cents (the lowest code minimum for any region) in 1933 to none in 1935. In fact, whereas 97.3 percent of the common laborers received under 40 cents in 1933, there were only 9.8 percent in that group in 1935.

Table 8.—Distribution of Common Laborers in All Districts, by Average Hourly Earnings, 1933 and 1935<sup>1</sup>

[Based on 10 departments]

Average hourly earnings	1933			1935		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
15.0 and under 20.0 cents.....	2 123	2.6	2.6			
20.0 and under 22.5 cents.....	29	.6	3.2			
22.5 and under 25.0 cents.....	41	.9	4.1			
25.0 and under 27.5 cents.....	276	5.8	9.9	10	0.2	0.2
27.5 and under 30.0 cents.....	221	4.6	14.5	53	1.1	1.3
30.0 and under 32.5 cents.....	821	17.1	31.6	73	1.5	2.8
32.5 and under 35.0 cents.....	1,415	29.4	61.0	179	3.6	6.4
35.0 and under 37.5 cents.....	359	7.5	68.5	13	.3	6.7
37.5 and under 40.0 cents.....	1,382	28.8	97.3	155	3.1	9.8
40.0 and under 42.5 cents.....	69	1.4	98.7	786	15.9	25.7
42.5 and under 45.0 cents.....	32	.7	99.4	819	16.6	42.3
45.0 and under 47.5 cents.....	9	.2	99.6	1,435	29.1	71.4
47.5 and under 50.0 cents.....	5	.1	99.7	1,136	23.0	94.4
50.0 cents and over.....	14	.3	100.0	276	5.6	100.0
Total.....	4,796	100.0	-----	4,935	100.0	-----

<sup>1</sup> The 1935 data relate only to the 10 departments covered in 1933.<sup>2</sup> Includes 5 whose earnings were less than 15 cents.

The increases in average earnings per hour of common laborers between 1933 and 1935 by region (based on the data for 10 departments) were 60.8 percent in the Southern (from 22.7 to 36.5 cents), 47.0 percent in the Eastern (from 27.9 to 41.0 cents), 37.2 percent in the Pittsburgh (from 34.4 to 47.2 cents), and 36.0 percent in the Great Lakes and Middle West (from 34.4 to 46.8 cents) districts. The effect of the above increases upon the district distributions is shown in table 9. In the Southern district, the number earning under 25 cents dropped from 60.3 percent in 1933 to none in 1935, with only 10.9 percent receiving under 30 cents in 1935 as compared with 95.2 percent in 1933. In the Eastern district, the percentage paid less than 37.5 cents was reduced from 91.8 in 1933 to none in 1935. The decrease in the Pittsburgh district in the number earning under 40 cents was from 97.3 percent in 1933 to less than 1 percent in 1935, while in the Great Lakes and Middle West district it was from 96.7 percent in 1933 to one-tenth of 1 percent in 1935.

Table 9.—Distribution of Common Laborers, by Average Hourly Earnings and District, 1933 and 1935<sup>1</sup>

[Based on 10 departments]

Average hourly earnings (in cents)	Eastern district						Pittsburgh district					
	1933			1935			1933			1935		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
20.0 and under 22.5	1	0.3	0.3									
22.5 and under 25.0	4	1.1	1.4									
25.0 and under 27.5	144	37.9	39.3				52	2.2	2.2			
27.5 and under 30.0	153	40.2	79.5				23	1.0	3.2	1	0.1	0.1
30.0 and under 32.5	43	11.3	90.8				456	18.9	22.1	1	.1	.2
32.5 and under 35.0	2	.5	91.3				727	30.0	52.1	3	.2	.4
35.0 and under 37.5	2	.5	91.8				163	6.8	58.9	1	.1	.5
37.5 and under 40.0	28	7.4	99.2	150	22.7	22.7	927	38.4	97.3	1	.1	.6
40.0 and under 42.5	2	.5	99.7	434	65.7	88.4	35	1.5	98.8	21	1.1	1.7
42.5 and under 45.0	1	.3	100.0	38	5.8	94.2	12	.5	99.3	347	18.1	19.8
45.0 and under 47.5				17	2.6	96.8	6	.2	99.5	846	44.3	64.1
47.5 and under 50.0				12	1.8	98.6	2	.1	92.6	554	29.0	93.1
50.0 and over				9	1.4	100.0	10	.4	100.0	132	6.9	100.0
Total	380	100.0		660	100.0		2,413	100.0		1,907	100.0	

Average hourly earnings (in cents)	Great Lakes and Middle West district						Southern district					
	1933			1935			1933			1935		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
15.0 and under 20.0							123	39.9	39.9			
20.0 and under 22.5	2	0.1	0.1				26	8.4	48.3			
22.5 and under 25.0							37	12.0	60.3			
25.0 and under 27.5	7	.4	.5	1	0.1	0.1	73	23.6	83.9	9	1.6	1.6
27.5 and under 30.0	10	.6	1.1			.1	35	11.3	95.2	52	9.3	10.9
30.0 and under 32.5	319	18.8	19.9			.1	3	1.0	96.2	72	12.9	23.8
32.5 and under 35.0	682	40.4	60.3			.1	4	1.3	97.5	176	31.6	55.4
35.0 and under 37.5	191	11.3	71.6			.1	3	1.0	98.5	12	2.2	57.6
37.5 and under 40.0	426	25.1	96.7			.1	1	.3	98.8	4	.7	58.3
40.0 and under 42.5	31	1.8	98.5	140	7.7	7.8	1	.3	99.1	191	34.4	92.7
42.5 and under 45.0	17	1.0	99.5	429	23.7	31.5	2	.6	99.7	5	.9	93.6
45.0 and under 47.5	2	.1	99.6	566	31.2	62.7	1	.3	100.0	6	1.1	94.7
47.5 and under 50.0	3	.2	99.8	548	30.3	93.0				22	3.9	98.6
50.0 and over	4	.2	100.0	127	7.0	100.0				8	1.4	100.0
Total	1,694	100.0		1,811	100.0		309	100.0		557	100.0	

<sup>1</sup> The 1935 data relate only to the 10 departments covered in 1933.<sup>2</sup> Includes 5 whose earnings were less than 15 cents.

## Weekly Hours

In 1935, the average weekly hours of male wage earners in all districts of the iron and steel industry, based on the data for the 21 departments, amounted to 35.7. The averages differed very little among the various districts, the figures being 36.2 in the Southern,

35.0 in the Eastern, 34.9 in the Pittsburgh, and 36.8 in the Great Lakes and Middle West districts.<sup>8</sup>

The code limited the workweek (with certain exemptions) to 48 hours in any one week, with an average of 40 hours in any 6 months' period. The effect of this provision is brought out in table 10, which shows the distribution of male employees according to weekly hours in 1935. Only 1.1 percent of the workers had a week in excess of 48 hours, with 15.5 percent working over 40 and under 48 hours. On the other hand, the number of employees having a workweek of exactly 40 hours amounted to 40.9 percent. The remaining 42.5 percent worked less than 40 hours, most of these working 24 and under 40 hours. A more or less similar distribution was found in each of the four districts.

Table 10.—Distribution of Male Wage Earners, by Weekly Hours and District, 1935

[Based on 21 departments]

Weekly hours	All districts			Eastern district			Pittsburgh district		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
Under 16 hours.....	4,429	4.9	4.9	437	3.7	3.7	2,108	5.6	5.6
16 and under 24 hours.....	5,486	6.1	11.0	950	8.1	11.8	2,592	6.9	12.5
24 and under 32 hours.....	10,383	11.5	22.5	1,667	14.2	26.0	4,288	11.4	23.9
32 and under 40 hours.....	18,057	20.0	42.5	2,738	23.4	49.4	8,543	22.6	46.5
40 hours.....	37,037	40.9	83.4	4,233	36.2	85.6	15,239	40.3	86.8
Over 40 and under 48 hours.....	4,097	4.5	87.9	611	5.2	90.8	1,465	3.9	90.7
48 hours.....	9,960	11.0	98.9	904	7.7	98.5	3,106	8.2	98.9
Over 48 hours.....	1,035	1.1	100.0	173	1.5	100.0	417	1.1	100.0
Total.....	90,484	100.0	-----	11,713	100.0	-----	37,758	100.0	-----

Weekly hours	Great Lakes and Middle West district			Southern district		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
Under 16 hours.....	1,269	3.9	3.9	615	7.1	7.1
16 and under 24 hours.....	1,463	4.5	8.4	481	5.5	12.6
24 and under 32 hours.....	3,650	11.3	19.7	778	9.0	21.6
32 and under 40 hours.....	5,382	16.6	36.3	1,394	16.1	37.7
40 hours.....	14,023	43.5	79.8	3,542	40.7	78.4
Over 40 and under 48 hours.....	1,688	5.2	85.0	333	3.8	82.2
48 hours.....	4,457	13.8	98.8	1,493	17.2	99.4
Over 48 hours.....	396	1.2	100.0	49	.6	100.0
Total.....	32,328	100.0	-----	8,685	100.0	-----

<sup>8</sup> The 1935 averages for males in the 10 departments covered in 1933 were 35.8 hours for all districts combined, and 35.6 hours for the Southern, 34.2 hours for the Eastern, 35.6 hours for the Pittsburgh, and 36.5 hours for the Great Lakes and the Middle West districts. Similar data for these departments in 1933 are not available. However, since there were only 330 females reported in that year out of a total of 53,335 workers, the 1933 averages for males and females may be accepted as representing males for comparative purposes. These figures were 24.2 hours for the country as a whole, and 33.1 hours for the Southern, 25.1 hours for the Eastern, 25.0 hours for the Pittsburgh, and 21.2 for the Great Lakes and Middle West districts.

The average hours per week in 1935 among the mechanical, transportation, and plant service occupations for all districts combined in the 21 departments ranged from 31.8 for bricklayers to 40.3 for carpenters. (See table 11.) Of the 28 occupational classes for which figures are shown, only 3 averaged below 35 and 2 above 40 hours. By districts, the spread in average weekly hours was from 32.2 for plant service workers to 41.3 for locomotive engineers in the Southern, from 28.1 for bricklayers' helpers to 41.2 for firemen and water tenders in the Eastern, from 28.6 for bricklayers to 40.2 for machinists in the Pittsburgh, and from 35.6 for oilers and greasers to 42.2 for carpenters in the Great Lakes and Middle West districts.<sup>9</sup>

Table 11.—Average Weekly Hours of Males in Mechanical, Transportation, and Service Work, by Occupation and District, 1935

(Based on 21 departments)

Occupation	All districts		Eastern district		Pittsburgh district		Great Lakes and Middle West district		Southern district	
	Number of wage earners	Average weekly hours	Number of wage earners	Average weekly hours	Number of wage earners	Average weekly hours	Number of wage earners	Average weekly hours	Number of wage earners	Average weekly hours
Blacksmiths.....	194	38.3	40	37.3	69	37.1	65	39.9	20	38.7
Blacksmiths' helpers.....	149	38.4	25	38.3	53	38.1	54	38.8	17	38.4
Boilermakers.....	73	35.9	( <sup>1</sup> )	( <sup>1</sup> )	32	32.5	28	39.9	10	40.8
Bricklayers.....	550	31.8	57	33.2	271	28.6	185	35.7	37	33.2
Bricklayers' helpers.....	286	33.9	35	28.1	111	32.3	115	37.2	25	33.9
Carpenters.....	227	40.3	23	35.0	89	39.8	97	42.2	18	39.1
Cranemen, miscellaneous.....	3,121	35.7	337	35.0	1,351	34.6	1,146	37.0	287	36.6
Crane followers.....	1,656	37.5	157	34.3	634	37.2	737	38.2	128	39.3
Electricians.....	698	38.3	163	38.1	270	38.6	191	38.3	74	37.8
Electricians' helpers.....	135	35.4	16	36.6	44	31.8	46	36.1	29	39.3
Engineers, locomotive.....	538	34.6	56	35.0	258	30.6	180	38.5	44	41.3
Engineers, power.....	176	37.9	10	39.4	86	37.0	54	39.0	26	38.0
Firemen, locomotive.....	102	38.9	( <sup>1</sup> )	( <sup>1</sup> )	33	39.2	46	39.2	21	39.8
Firemen and water tenders, power.....	427	37.6	33	41.2	193	37.0	128	38.0	73	36.9
Inspectors and repairmen, motors.....	582	36.9	10	36.8	275	37.8	267	36.0	30	35.7
Machinists.....	1,195	38.9	166	37.1	409	40.2	556	38.4	64	39.6
Machinists' helpers.....	253	37.1	41	36.0	46	36.7	156	37.4	10	38.7
Millwrights.....	1,175	38.0	177	39.7	465	36.3	454	39.0	79	38.8
Millwrights' helpers.....	709	35.2	92	38.1	349	33.5	207	36.6	61	36.1
Oilers and greasers, equipment.....	1,156	35.0	116	37.3	454	34.2	469	35.6	117	33.0
Pipe fitters.....	500	38.9	60	37.2	206	38.6	203	40.2	31	36.1
Pipe fitters' helpers.....	207	37.9	( <sup>1</sup> )	( <sup>1</sup> )	100	36.9	87	39.1	16	37.7
Pumpers.....	142	37.9	( <sup>1</sup> )	( <sup>1</sup> )	59	38.9	55	36.8	19	39.6
Riggers.....	224	37.6	14	33.1	90	36.7	101	38.5	19	41.2
Roll turners.....	330	40.1	28	39.5	153	38.8	98	42.1	51	40.4
Service workers, plant.....	721	35.8	94	33.0	317	34.6	265	38.7	45	32.2
Switchmen, locomotive.....	738	35.6	82	32.9	331	32.9	274	38.9	51	40.1
Welders.....	446	37.8	66	35.1	162	37.4	174	38.7	44	40.2

<sup>1</sup> Not a sufficient number reported to present averages.

Common laborers in the 21 departments for the country as a whole worked an average of 32.2 hours per week in 1935.<sup>10</sup> Among the district averages, the lowest was 29.4 hours in the Pittsburgh area

<sup>9</sup> Comparable data for the 10 departments between 1933 and 1935 not available.

<sup>10</sup> The weekly hours of common laborers in the 10 departments covered in that year averaged 19.7, as compared with 32.5 in 1935.

and the highest 34.4 hours in the Eastern region. The averages in the Southern and the Great Lakes and Middle West districts were, respectively, 33.2 and 34.1 hours.

The distribution of common laborers according to weekly hours in 1935 (see table 12) shows that for the country as a whole 20 percent worked under 24 hours. Slightly less than one-third had a work-week of 24 and under 40 hours. The largest group, 37.1 percent, were employed exactly 40 hours. Those having a week of over 40 hours comprised 10 percent of the total, a large part of these working 48 hours. In each of the four districts, the largest percentage of common laborers in any class were those working exactly 40 hours, with relatively few working in excess of that figure.

Table 12.—Distribution of Common Laborers, by Weekly Hours and District, 1935

[Based on 21 departments]

Weekly hours	All districts			Eastern district			Pittsburgh district		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
Under 8 hours.....	78	1.3	1.3	8	0.9	0.9	45	1.8	1.8
8 and under 16 hours.....	496	8.1	9.4	49	5.7	6.6	235.	9.5	11.3
16 and under 24 hours.....	651	10.6	20.0	75	8.7	15.3	359	14.5	25.8
24 and under 32 hours.....	855	14.0	34.0	93	10.7	26.0	449	18.1	43.9
32 and under 40 hours.....	1,154	18.9	52.9	142	16.5	42.5	589	23.8	67.7
40 hours.....	2,267	37.1	90.0	389	44.8	87.3	691	27.9	95.6
Over 40 and under 48 hours.....	195	3.2	93.2	56	6.5	93.8	38	1.5	97.1
48 hours.....	402	6.6	99.8	48	5.5	99.3	69	2.8	99.9
Over 48 hours.....	15	.2	100.0	6	.7	100.0	3	.1	100.0
Total.....	6,113	100.0	-----	867	100.0	-----	2,478	100.0	-----

Weekly hours	Great Lakes and Middle West district			Southern district		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
Under 8 hours.....	21	1.0	1.0	4	0.6	0.6
8 and under 16 hours.....	149	7.0	8.0	63	10.0	10.6
16 and under 24 hours.....	171	8.0	16.0	46	7.3	17.9
24 and under 32 hours.....	262	12.3	28.3	51	8.1	26.0
32 and under 40 hours.....	310	14.5	42.8	112	17.7	43.7
40 hours.....	886	41.4	84.2	301	47.7	91.4
Over 40 and under 48 hours.....	88	4.1	88.3	13	2.1	93.5
48 hours.....	244	11.4	99.7	41	6.5	100.0
Over 48 hours.....	6	.3	100.0	-----	-----	-----
Total.....	2,137	100.0	-----	631	100.0	-----

## Weekly Earnings

The male wage earners in the 21 departments for all districts combined earned on the average \$24.30 per week in 1935.<sup>11</sup> On a district basis the averages amounted to \$23.15 in the Southern district, \$21.94 in the Eastern district, \$24.12 in the Pittsburgh area, and \$25.68 in the Great Lakes and Middle West region.<sup>12</sup>

The distribution of male employees according to weekly earnings in the 21 departments in 1935, which is presented in table 13, shows that for all districts combined 11.2 percent earned under \$12, 15.8 percent \$12 and under \$18, 28.8 percent \$18 and under \$24, 20.7 percent \$24 and under \$30, 15.4 percent \$30 and under \$40, and 8.1 percent \$40 and over. On a district basis the number receiving under \$12 formed 16.6 percent in the South, 12.1 percent in both the Eastern and Pittsburgh regions, and only 8.5 percent in the Great Lakes and Middle West area. The percentages paid \$12 and under \$24 were 54.5 in the Eastern, 44.5 in the Pittsburgh, 42.2 in the Great Lakes and Middle West, and 42.4 in the Southern districts. Those earning \$24 and under \$40 were 40.3 percent in the Great Lakes and Middle West, 35.6 percent in the Pittsburgh, 31.9 percent in the Southern, and 28.3 percent in the Eastern districts. Lastly, the percentages receiving \$40 and over amounted to 9.1 in the Southern, 9.0 in the Great Lakes and Middle West, 7.8 in the Pittsburgh, and 5.1 in the Eastern districts.

The average earnings per week by occupational classes for the 21 departments in 1935 appear in table 14. The spread for all districts combined was from \$17 for bricklayers' helpers to \$34.03 for roll turners. The latter occupation also had the highest average in each district, while the former occupation showed the lowest average in three districts, the lowest average in the South being for plant service workers.<sup>9</sup>

<sup>9</sup> Comparable data for the 10 departments between 1933 and 1935 not available.

<sup>11</sup> The 1935 average for males in the 10 departments in the country as a whole amounted to \$24.76, which is only 8 cents greater than the average for males and females combined. In view of this, the 1933 average of \$11.71 may be accepted as representative of males only, even though it includes the earnings of a small number of females. No comparable data for males in 1933 are available.

<sup>12</sup> The district averages for males in 1935 for the 10 departments were \$20.87 in the Southern, \$21.12 in the Eastern, \$25.00 in the Pittsburgh, and \$25.94 in the Great Lakes and Middle West. The 1933 district averages for males and females were \$13.19 in the Southern, \$10.77 in the Eastern, \$12.55 in the Pittsburgh, and \$10.60 in the Great Lakes and Middle West.



Table 13.—Distribution of Male Wage Earners, by Weekly Earnings and District, 1935

[Based on 21 departments]

Weekly earnings	All districts			Eastern district			Pittsburgh district		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
Under \$4.....	1,540	1.7	1.7	172	1.5	1.5	664	1.8	1.8
\$4 and under \$6.....	1,652	1.8	3.5	132	1.1	2.6	760	2.0	3.8
\$6 and under \$8.....	1,946	2.2	5.7	304	2.6	5.2	899	2.4	6.2
\$8 and under \$10.....	2,192	2.4	8.1	399	3.4	8.6	932	2.5	8.7
\$10 and under \$12.....	2,823	3.1	11.2	412	3.5	12.1	1,282	3.4	12.1
\$12 and under \$14.....	3,258	3.6	14.8	679	5.8	17.9	1,245	3.3	15.4
\$14 and under \$16.....	4,947	5.5	20.3	1,065	9.1	27.0	1,986	5.3	20.7
\$16 and under \$18.....	6,025	6.7	27.0	1,405	12.1	39.1	2,289	6.1	26.8
\$18 and under \$20.....	8,872	9.7	36.7	1,207	10.4	49.5	3,837	10.2	37.0
\$20 and under \$22.....	8,428	9.3	46.0	1,039	8.9	58.4	3,561	9.4	46.4
\$22 and under \$24.....	8,921	9.8	55.8	959	8.2	66.6	3,897	10.2	56.6
\$24 and under \$26.....	7,287	8.1	63.9	782	6.7	73.3	3,035	8.0	64.6
\$26 and under \$28.....	6,233	6.9	70.8	640	5.5	78.8	2,711	7.2	71.8
\$28 and under \$30.....	5,160	5.7	76.5	553	4.7	83.5	2,132	5.6	77.4
\$30 and under \$32.....	4,414	4.9	81.4	444	3.8	87.3	1,772	4.7	82.1
\$32 and under \$34.....	3,211	3.5	84.9	310	2.6	89.9	1,299	3.4	85.5
\$34 and under \$36.....	2,606	2.9	87.8	225	1.9	91.8	1,125	3.0	88.5
\$36 and under \$38.....	2,062	2.3	90.1	223	1.9	93.7	790	2.1	90.6
\$38 and under \$40.....	1,595	1.8	91.9	146	1.2	94.9	591	1.6	92.2
\$40 and under \$44.....	2,397	2.6	94.5	213	1.8	96.7	950	2.5	94.7
\$44 and under \$48.....	1,364	1.5	96.0	122	1.0	97.7	555	1.5	96.2
\$48 and under \$52.....	875	1.0	97.0	83	.7	98.4	333	.9	97.1
\$52 and under \$56.....	716	.8	97.8	61	.5	98.9	273	.7	97.8
\$56 and under \$60.....	501	.6	98.4	34	.3	99.2	204	.5	98.3
\$60 and under \$68.....	694	.8	99.2	64	.5	99.7	298	.8	99.1
\$68 and over.....	765	.8	100.0	40	.3	100.0	338	.9	100.0
Total.....	90,484	100.0	-----	11,713	100.0	-----	37,758	100.0	-----

Weekly earnings	Great Lakes and Middle West district			Southern district		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
Under \$4.....	399	1.2	1.2	305	3.5	3.5
\$4 and under \$6.....	538	1.7	2.9	222	2.6	6.1
\$6 and under \$8.....	514	1.6	4.5	229	2.6	8.7
\$8 and under \$10.....	518	1.6	6.1	343	3.9	12.6
\$10 and under \$12.....	780	2.4	8.5	349	4.0	16.6
\$12 and under \$14.....	754	2.3	10.8	580	6.7	23.3
\$14 and under \$16.....	1,286	4.0	14.8	610	7.0	30.3
\$16 and under \$18.....	1,583	4.9	19.7	748	8.7	39.0
\$18 and under \$20.....	3,316	10.3	30.0	512	5.9	44.9
\$20 and under \$22.....	3,131	9.7	39.7	697	8.0	52.9
\$22 and under \$24.....	3,538	11.0	50.7	527	6.1	59.0
\$24 and under \$26.....	2,899	9.0	59.7	571	6.6	65.6
\$26 and under \$28.....	2,377	7.4	67.1	505	5.8	71.4
\$28 and under \$30.....	2,043	6.3	73.4	432	5.0	76.4
\$30 and under \$32.....	1,884	5.8	79.2	314	3.6	80.0
\$32 and under \$34.....	1,269	3.9	83.1	333	3.8	83.8
\$34 and under \$36.....	1,041	3.2	86.3	215	2.5	86.3
\$36 and under \$38.....	839	2.6	88.9	210	2.4	88.7
\$38 and under \$40.....	666	2.1	91.0	192	2.2	90.9
\$40 and under \$44.....	979	3.0	94.0	255	2.9	93.8
\$44 and under \$48.....	542	1.7	95.7	145	1.7	95.5
\$48 and under \$52.....	357	1.1	96.8	102	1.2	97.7
\$52 and under \$56.....	297	.9	97.7	85	1.0	97.7
\$56 and under \$60.....	207	.6	98.3	56	.6	98.3
\$60 and under \$68.....	267	.8	99.1	65	.7	99.0
\$68 and over.....	304	.9	100.0	83	1.0	100.0
Total.....	32,328	100.0	-----	8,685	100.0	-----

Table 14.—Average Weekly Earnings of Males in Mechanical, Transportation, and Service Work, by Occupation and District, 1935

(Based on 21 departments)

Occupation	All districts		Eastern district		Pittsburgh district		Great Lakes and Middle West district		Southern district	
	Number of wage earners	Average weekly earnings	Number of wage earners	Average weekly earnings	Number of wage earners	Average weekly earnings	Number of wage earners	Average weekly earnings	Number of wage earners	Average weekly earnings
Blacksmiths.....	194	\$26.92	40	\$24.13	69	\$27.47	65	\$28.32	20	\$26.04
Blacksmiths' helpers.....	149	19.67	25	17.76	53	20.26	54	20.94	17	16.56
Boilermakers.....	73	24.89	(1)	(1)	32	23.75	28	27.79	10	24.37
Bricklayers.....	550	27.60	57	22.00	271	25.47	185	31.38	37	32.93
Bricklayers' helpers.....	286	17.00	35	12.22	111	16.63	115	19.23	25	15.10
Carpenters.....	227	26.81	23	22.51	89	27.10	97	28.44	18	22.12
Cranemen, miscellaneous.....	3,121	21.73	337	19.64	1,351	20.85	1,146	23.44	287	21.50
Crane followers.....	1,656	20.22	157	15.94	634	19.44	737	21.81	128	20.21
Electricians.....	698	26.11	163	23.91	270	27.24	191	26.43	74	26.04
Electricians' helpers.....	135	19.26	16	16.60	44	18.09	46	20.27	29	20.92
Engineers, locomotive.....	538	25.31	56	20.58	258	22.89	180	29.79	44	27.21
Engineers, power.....	176	26.57	10	25.84	86	26.07	54	27.83	26	25.90
Firemen, locomotive.....	102	23.91	(1)	(1)	33	28.06	46	25.53	21	14.95
Firemen and water tenders, power.....	427	22.00	33	20.69	193	22.81	128	22.38	73	19.81
Inspectors and repairmen, motors.....	582	25.99	10	22.61	275	25.96	267	26.49	30	23.04
Machinists.....	1,195	28.43	166	25.24	409	30.20	556	28.30	64	26.55
Machinists' helpers.....	2,193	19.83	41	16.55	46	20.77	156	20.82	10	13.45
Millwrights.....	1,175	25.78	177	25.95	465	23.86	454	27.91	79	24.66
Millwrights' helpers.....	709	19.63	92	22.25	349	18.53	207	21.18	61	16.79
Oilers and greasers, equipment.....	1,156	18.78	116	18.83	454	18.56	469	19.53	117	16.57
Pipe fitters.....	500	25.70	60	23.53	206	26.12	203	26.69	31	20.73
Pipe fitters' helpers.....	207	20.24	(1)	(1)	100	20.27	87	20.56	16	18.40
Pumpers.....	142	22.45	(1)	(1)	59	23.14	55	21.89	19	24.04
Riggers.....	224	22.33	14	18.96	90	22.07	101	22.18	19	26.90
Roll turners.....	330	34.03	28	28.80	153	33.87	98	36.05	51	33.48
Service workers, plant.....	721	17.15	94	14.16	317	17.01	265	19.25	45	12.04
Switchmen, locomotive.....	738	23.63	82	16.96	331	22.33	274	27.27	51	23.19
Welders.....	446	25.96	66	22.23	162	25.86	174	27.15	44	27.25

<sup>1</sup> Not a sufficient number reported to present averages.

The average weekly earnings of common laborers for the 21 departments amounted to \$14.48 in March 1935.<sup>13</sup> In the Southern district, common laborers earned an average of only \$12.21 per week. Low as this average was, it was only \$3.69 less than the highest, \$15.90, in the Great Lakes and Middle West district. In the Eastern district, common laborers earned an average of \$14.29, which was slightly more than that of \$13.91 in the Pittsburgh area.

The distribution of common laborers according to weekly earnings in the 21 departments is shown in table 15. For the country as a whole, approximately one-third earned under \$12, another third \$12 and under \$18, and the remainder \$18 and over, with very few workers earning as much as \$24. The distributions by district vary considerably. In the Southern district, where the average was the lowest, 42.0 percent earned less than \$12, as compared with 22.9 percent in the Eastern, 26.3 percent in the Great Lakes and Middle West, and 38.9 percent in the Pittsburgh areas. The percentages receiving \$12 and under \$18 amounted to 49.9 in the Southern, 63.1

<sup>13</sup> The average weekly earnings of common laborers in 1933 for the 10 departments covered in that year were only \$6.42. This figure may be compared with \$14.59 in the same departments in 1935.

in the Eastern, 23.5 in the Great Lakes and Middle West, and 29.8 in the Pittsburgh regions. Lastly, the number paid \$18 and over was only 8.1 percent in the South and 14.0 percent in the East, as compared with 50.2 and 31.3 percent, respectively, in the Great Lakes and Middle West and the Pittsburgh districts.

Table 15.—Distribution of Common Laborers, by Weekly Earnings and District, 1935

[Based on 21 departments]

Weekly earnings	All districts			Eastern district			Pittsburgh district		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
Under \$4.....	475	7.8	7.8	45	5.2	5.2	232	9.4	9.4
\$4 and under \$8.....	586	9.6	17.4	59	6.8	12.0	313	12.6	22.0
\$8 and under \$10.....	238	3.9	21.3	66	7.6	19.6	54	2.2	24.2
\$10 and under \$12.....	690	11.3	32.6	29	3.3	22.9	364	14.7	38.9
\$12 and under \$14.....	383	6.3	38.9	96	11.1	34.0	81	3.3	42.2
\$14 and under \$16.....	836	13.7	52.6	171	19.7	53.7	407	16.4	58.6
\$16 and under \$18.....	882	14.3	66.9	279	32.3	86.0	250	10.1	68.7
\$18 and under \$20.....	1,422	23.2	90.1	86	9.9	95.9	609	24.5	93.2
\$20 and under \$24.....	517	8.5	98.6	28	3.2	99.1	141	5.7	98.9
\$24 and over.....	84	1.4	100.0	8	.9	100.0	27	1.1	100.0
Total.....	6,113	100.0	-----	867	100.0	-----	2,478	100.0	-----

Weekly earnings	Great Lakes and Middle West district			Southern district		
	Number of wage earners	Simple percentage	Cumulative percentage	Number of wage earners	Simple percentage	Cumulative percentage
Under \$4.....	138	6.5	6.5	60	9.5	9.5
\$4 and under \$8.....	151	7.1	13.6	63	10.0	19.5
\$8 and under \$10.....	37	1.7	15.3	81	12.8	32.3
\$10 and under \$12.....	236	11.0	26.3	61	9.7	42.0
\$12 and under \$14.....	47	2.2	28.5	159	25.2	67.2
\$14 and under \$16.....	223	10.4	38.9	35	5.5	72.7
\$16 and under \$18.....	232	10.9	49.8	121	19.2	91.9
\$18 and under \$20.....	715	33.4	83.2	12	1.9	93.8
\$20 and under \$24.....	324	15.2	98.4	24	3.8	97.6
\$24 and over.....	34	1.6	100.0	15	2.4	100.0
Total.....	2,137	100.0	-----	631	100.0	-----

### Female Wage Earners

#### Average Hourly Earnings

THE nature of the work performed in iron and steel plants does not lend itself to the employment of woman workers except in the assorting section of the tin-plate department. In 1935, out of a total of 91,121 wage earners in 21 departments, only 637 female employees were found. Of that number 610, or 96 percent, were in the tin-plate department. The occupation of assorters included 540, or nearly 90 percent of the females employed in that department. In 1933, out of a total of 53,335 wage earners in 10 departments, only 330

were females. Furthermore, all of these were found in the tin-plate department, the occupation of assorters covering 295, or nearly 90 percent of the total.

The average hourly earnings of the 637 female plant workers in 1935 amounted to 41.6 cents, as compared with 30.1 cents for the 330 in 1933, an increase of 38.2 percent. The distribution of these employees according to average hourly earnings shows that, whereas 59.1 percent earned less than 30 cents in 1933, only 0.9 percent were in that group in 1935. Those paid 30 and under 40 cents amounted to 24.1 percent in 1935, as against 36.4 percent in 1933. On the other hand, 75.0 percent received 40 cents and over in 1935, as compared with 4.5 percent in 1933.

Female assorters in 1935 were paid an average of 41.1 cents per hour. These earnings had risen from 29.4 cents in 1933, a gain of 39.8 percent.

#### Weekly Hours

The average hours per week of female wage earners in 1935 were 36.2. According to the distribution, 18.4 percent worked less than 32 hours, and 5.5 percent over 40 hours. This left 76.1 percent working from 32 to 40 hours, inclusive, most of whom had a workweek of exactly 40 hours.<sup>14</sup>

In 1935, assorters had average weekly hours of 36.3, as compared with 39.0 in 1933.

#### Weekly Earnings

The average weekly earnings of female plant workers were \$15.05 in 1935. The distribution shows that 19.3 percent earned under \$12, and only 7.4 percent \$18 and over. The remaining 73.3 percent received \$12 and under \$18.<sup>14</sup>

In 1935, assorters received an average of \$14.92, which represents an increase of 30 percent over the 1933 average of \$11.50.

#### Office Employees

IN ADDITION to the 91,121 wage earners of both sexes reported in the 21 departments, the 1935 data also cover 1,134 male and 371 female office employees.<sup>15</sup> No information was collected on the earnings and hours of office employees in former years.

#### Male Workers

In 1935 the average hourly earnings of male office workers for the country as a whole amounted to 75.1 cents. The distribution of employees according to average hourly earnings shows that 10.4

<sup>14</sup> Comparable data for 1933 are not available.

<sup>15</sup> Excluding auditors, chief accountants, salesmen, supervisory and clerical forces in general offices, supervisory and clerical forces in plant offices not directly chargeable to the departments scheduled, and some higher plant office supervisory employees whose salaries were carried on private rolls.

percent received under 50 cents and a like percentage \$1 and over. The latter group was not confined altogether to supervisory workers, as 9.0 percent of the nonsupervisory employees had earnings of \$1 and over. The group receiving 50 to 75 cents constituted 42.8 percent, as compared with 36.4 percent earning 75 cents and under \$1.

Male office employees averaged 38.9 hours per week in 1935. A distribution of the workers shows that 50.5 percent worked a week of exactly 40 hours, and an additional 19.7 percent one of over 40 hours. The remainder, 29.8 percent, worked a week of less than 40 hours. Of this latter group, very few had less than 4 days, or 32 hours, of work.

The average weekly earnings of male office employees amounted to \$29.24 in 1935. The distribution of employees shows that 15.1 percent received less than \$20, and 11.6 percent \$40 and over. The number paid \$20 and under \$30 amounted to 43.2 percent, compared with 30.1 percent with earnings of \$30 and under \$40.

#### Female Workers

The 371 female office employees earned an average of 53.6 cents per hour in 1935. About one-third of the women received less than 45 cents, another one-third 45 and under 55 cents, and the remaining one-third 55 cents and over.

In 1935 the female office workers averaged 39.0 hours per week. Only 2.4 percent of the women worked less than 32 hours, and none worked as much as 48 hours. The most important group were those working exactly 40 hours, as 58.2 percent had a week of that length. The remaining 39.4 percent fell into two groups, namely, 15.1 percent with hours of over 40 and under 48, and 24.3 percent with hours of 32 and under 40.

The average weekly earnings of female office workers amounted to \$20.87 in 1935, which was \$8.37 less than that received by males. The distribution of employees shows that approximately one-third of the women were paid less than \$18 per week and another third \$18 and under \$22. The remaining one-third received \$22 and over. Only four employees in this latter group had weekly earnings of \$40 and over.

## Hours, Wages, and Working Conditions in Air Transportation

FURTHER appraisal of existing limitations of air pilots' and copilots' flight-hours and of the possible need for other limitations, including total hours on duty and mileage, an adequate system of training and further licensing of ground-service employees in the interests of safety, the establishment of permanent machinery for the collection of labor statistics, and the development of machinery and procedures for collective bargaining in the industry are recommended in a recent report by the Federal Coordinator of Transportation,<sup>1</sup> from which the following data are taken.

The recommendations are based on a detailed study of all available sources of information pertaining to scheduled domestic air transportation.<sup>2</sup> The study was "part of a broad survey intended, among other things, to throw light on competitive relationships in several branches of domestic transportation and to lay the basis for such suggestions for legislation on such action as might be required in the public interest, particularly with respect to safety." Similar studies have also been made or are under way in motor bus and truck, water, and petroleum-pipe-line transportation, as well as a general comparative study of rail transportation. The report under review covers the duties, licensing, hours, and mileage of the flight personnel; the pay rates and earnings of the flight personnel; the hours and earnings of the ground-service personnel; the relation of flight-hours and mileage to fatigue; wage controversies and collective bargaining in the industry; and conclusions and suggestions in regard to these subjects.

### Hours, Mileage, Pay Rates, and Earnings of Flight Personnel

AFTER the termination of Government operation of the air-mail service in 1927, pilots' flight-hours increased considerably, from an average of about 43 per month during the period of Government operation to 85.5 in July 1933. No data are available as to mileage flown for any period previous to July 1933, but in that month the

<sup>1</sup> United States, Federal Coordinator of Transportation: *Hours, Wages, and Working Conditions in Scheduled Air Transportation*, Washington, 1936; also Senate Document No. 208, 74th Cong., 2d sess.

<sup>2</sup> The first comprehensive field survey of wages and hours in commercial air transportation was made by the Bureau of Labor Statistics in 1931 (in its Bulletin No. 575). The data obtained covered the month of October, embracing 95 percent of the total number of employees in the industry. In 1933, at the request of and with the cooperation of the Federal Coordinator, the Bureau made another field survey, which covered the month of July and included approximately 98 percent of the workers (see *Monthly Labor Review*, March 1934, pp. 647-664). While these surveys, especially the 1933 study, constituted the chief source of factual data concerning wages and hours which were used in the Federal Coordinator's report, information collected by the N. R. A. through a mail questionnaire from the members of the Air Line Pilots' Association in 1933, the testimony before a fact-finding committee appointed in connection with an arbitration case before the National Labor Board in 1933, current data on pilots' hours and wages furnished the Coordinator by the airlines, etc., were also utilized.

mileage was 9,919 for the 462 pilots included in the field study of the Bureau of Labor Statistics.<sup>3</sup> It is reasonable to assume that, due to the increased efficiency of both the ground and flight equipment, this average increased even more than the average flying hours per month. Information obtained by the N. R. A. from members of the Air Line Pilots' Association showed that in July 1933 pilots were averaging 54 minutes of required ground duty for every 60 minutes of flying time.<sup>4</sup>

#### Pay Rates and Earnings of Flight Personnel

IN JULY 1933 the average earnings of the 462 pilots for whom data were obtained amounted to \$621.33, which was at the rate of \$7.25 per flight-hour or 6.3 cents per mile. The range was considerable, 1.7 percent earning less than \$150 and 7.1 percent more than \$1,000 during the month, with 23.2 percent, or the largest single group, receiving between \$600 and \$750. Those in the employ of companies with mail contracts averaged \$644.36 (or \$7.52 per flight-hour and 6.6 cents per mile), as compared with only \$264.47 (or \$3.07 per flight-hour or 2.3 cents per mile) for those in companies without mail contracts.

When the Bureau of Labor Statistics made its survey in the fall of 1931, the prevailing method of wage payment consisted of a monthly basic rate, plus mileage varying with the hazard of the terrain of flight—a method which had been carried over from the days of Government operation. By July 1933, however, a number of companies, while retaining the monthly basic rate, had changed from the mileage to the flight-hour or trip-hour<sup>5</sup> system, and shortly afterwards all of the larger carriers of mail had adopted this change. The Air Line Pilots' Association immediately charged that each increase in the speed of the equipment used under the flight-hour system would mean an automatic reduction in its members' earning capacity.

On October 1, 1933, five of the largest mail carriers adopted a uniform pay scale, which consisted of the following:

1. Initial basic pay of \$1,600 per year, to be increased \$200 for each year of service up to a maximum of \$3,000 per year.
2. Additional pay per flight-hour, as follows:

Flight speed (miles per hour) of—	Day	Night
125 or less.....	\$4. 00	\$6. 00
126 to 140.....	4. 20	6. 20
141 to 155.....	4. 40	6. 40
156 to 175.....	4. 60	6. 60
176 to 200.....	4. 80	6. 80
Over 200.....	5. 00	7. 00

<sup>3</sup> By way of contrast, the findings of the N. R. A. for July 1933, based on reports from 311 members of the Air Line Pilots' Association, indicate an average of 93 flight-hours and 10,795 miles of flight. These higher figures are due to the smaller coverage of the N. R. A. report, which included a greater proportion of full-time pilots.

<sup>4</sup> This ratio is higher than that derived from the Bureau of Labor Statistics' data, based upon an examination of pay-roll records and conferences with various company officials.

<sup>5</sup> The number of hours the trip should take, as estimated by the management on the basis of past experience, the pilot being paid for that time irrespective of the actual flight-hours consumed.

One of the companies also provided for a bonus varying with the character of the terrain and according to whether day or night flying was involved. The other companies, however, abandoned all terrain bonuses.

The adoption of this scale and the speeding up of plane schedules led to a wage controversy. The pilots proposed payment on the mileage basis, with initial base pay of \$1,800 per year plus \$200 for each year of service up to \$3,000, and an additional rate per mile of 4 cents during the day and 7 cents at night for flat terrain and 5 cents during the day and 9 cents at night for hazardous terrain; they proposed, also, that each individual's flying time any 1 month should be limited to 80 hours or 10,000 miles. The matter was carried to the National Labor Board which announced its decision on May 10, 1934, as follows:

1. Initial basic pay of \$1,600 a year, to be increased \$200 for each year of service up to \$3,000.

2. Additional pay per flight-hour, as follows:

Flight speed (miles per hour) of—	Day	Night
Under 125.....	\$4. 00	\$6. 00
125 to 139.....	4. 20	6. 30
140 to 154.....	4. 40	6. 60
155 to 174.....	4. 60	6. 90
175 to 199.....	4. 80	7. 20
200 or over.....	5. 00	7. 50

3. Additional pay per mile for monthly mileage flown,<sup>6</sup> as follows:

	Cents
Under 10,000 miles.....	2
10,000 to 11,999 miles.....	1½
12,000 miles and over.....	1

4. Maintenance of existing differentials (as of Oct. 1, 1933) for flying over hazardous terrain.

The effect of this decision was to raise considerably the earnings of pilots. According to an inquiry made by the Coordinator, covering October 1935, in which information was received from 15 companies employing 454 pilots, their average earnings increased to \$663.93 per month and \$8.97 per flight-hour, representing gains of 6.9 and 23.7 percent, respectively, as compared with July 1933. The October 1935 average for mail-carriers was \$668.48 per month (a gain of 3.7 percent) and \$9.02 (an increase of 19.9 percent) per flight-hour, while for non-mail-carriers it was \$373.27 (a gain of 41.1 percent) per month and \$6.24 (an increase of 103.3 percent) per hour.

Copilots have always been paid a straight monthly salary, regardless of the hours worked or miles flown. The 210 copilots included in the July 1933 field survey earned an average of \$226.81 for the month or \$1.82 per hour on duty. The mileage flown by them was not available at that time. Copilots are often given the chance to

<sup>6</sup> This was limited to flight speed in excess of 100 miles per hour.



augment their earnings by acting as first pilot, for which service they receive the flight pay of a first pilot.

#### Hours and Earnings of Ground-Service Personnel

SAFETY of air travel depends in no small measure upon the efficiency of the ground-service personnel. This is especially true of the mechanics, both shop and service, who are either themselves licensed by the United States Department of Commerce or work under the direct supervision of persons so licensed.

The report emphasizes the long hours and low wages of certain workers of the ground-service personnel. In July 1933 the 3,079 employees scheduled in this department averaged 49.7 hours of labor per week, the average earnings being 60.6 cents per hour and \$30.15 per week. However, 18 percent of all employees worked 54 and under 60 hours; in the individual occupations the proportion working these hours was 43.7 percent for dispatchers, 26.2 for radio operators, 23.3 for chief mechanics and crew chiefs, 13.8 for other licensed mechanics, and 12.4 for radio mechanics—all of which are important from the standpoint of air safety. There were 8.6 percent of the total number of employees earning less than 35 cents per hour, and 16.2 percent received less than \$20 per week; these percentages do not, however, include very many of the skilled workers, most of whom receive pay comparing favorably with that in other industries. It should also be remembered that most of the workers in this industry obtain fairly steady employment throughout the year.

The code of fair competition for scheduled airlines, prepared under the National Industrial Recovery Act, became effective late in November 1933. This code did not apply to pilots or copilots, who were considered professional workers, but it did cover the ground-service personnel. The main effect of the code was to change the industry from a 50-hour week to a basic 44-hour week. No minimum wage was established by the code, except that every employee in the industry was guaranteed at least \$15 per week. Says the report: "The results of the code cannot be appraised with any degree of accuracy. It had been in force for only two months, of seasonally low traffic and poor flying weather, when the airmail contracts were canceled. Emergency arrangements at once resulted, as to both personnel and pay roll."

#### Flight-Hours and Mileage as Related to Fatigue

CONSIDERABLE attention has been given to pilot fatigue as a safety factor. Present regulations emphasize the limitation of flight-hours, whereas mileage is stressed by the Air Line Pilots' Association, which states that "pilot risk varies directly with the amount of exposure and \* \* \* the unit of exposure is miles and not hours." On

this basis, the Pilots' Association proposed a limitation of 10,000 miles per month. However, it is evident that both factors bear on fatigue. The Aero Medical Association of the United States recommending a limitation of flight-hours to 85 per month and 900-1,000 per year, at the same time recognizing that increased operating speed involves "additional human stresses" and a tendency to augment the cumulative fatigue of the pilot. The decision of the National Labor Board in 1933 fixed an 85-hour maximum.

The Secretary of Commerce, under authority of the Air Mail Act of 1934, set the monthly hours at 100 for pilots, simultaneously inserting for the first time a yearly maximum of 1,000 hours. This reduced the monthly hours from the previous allowable maximum of 110, and the 100-hour limit also became applicable to copilots. However, consideration of speed was omitted from the regulations, even though the average had advanced from 108 miles per hour in May 1933 to 150 and over in September 1935, as reported to the Bureau of Air Commerce.

The fatigue factor is of great importance, however, and the Coordinator's report mentions three current developments, as follows:

(1) The introduction of the "automatic pilot", a gyroscopic device intended to free the pilot and copilot from many of the purely mechanical duties of flying.

(2) Downward revision of the maximum allowable flight-hours by the Department of Commerce.

(3) An investigation to be pursued by the medical examiners of the Bureau of Air Commerce of the effect of flight on airline pilots.

#### Unionization and Wage-Rate Controversies

ONE of the immediate results of the general pay-rate reduction in the spring of 1931 was the formation of the Air Line Pilots' Association. This association soon included more than three-quarters of the actual air-line pilots of the United States. It is affiliated with the American Federation of Labor and works in close cooperation with the Railway Labor Executives' Association.

Ground-service employees, being more diversified as to trades and callings, are not well organized. While several carriers have company unions of mechanics and shopworkers, many of the mechanics are members of the International Association of Machinists, which reports the existence of 10 aircraft local unions. A number of the radio operators are members of the American Radio Telegraphists' Association.

In the early days of commercial aviation, a number of the large companies received heavy financial backing and could afford to be generous with their operating budgets. The financial and industrial crash of 1929, however, brought about a quick curtailment of certain activities, and in the spring of 1931 a country-wide reduction was

made in pilots' pay rates, as noted above. Again in January 1932, one of the lines announced a further reduction of its pilots' wages. The next general wage controversy was in the fall of 1933, when the operators changed from the mile as the basic unit to the flight-hour or trip-hour.

Early in 1932, a bill was introduced in Congress to amend the Railway Labor Act, so as to extend its provisions to air transport companies and their employees. This bill was reported favorably to the Senate, but it did not reach a vote. This bill was again introduced in 1935 and was passed by the Senate on June 25, and after the release of the report it was passed by the House of Representatives.

#### Conclusions and Recommendations

THE Coordinator's report contains four principal recommendations<sup>8</sup> which are elaborated in the last chapter.

Because of the need for further scientific determination of pilot fatigue, the report suggests studies in cooperation with the Army, Navy, Public Health Service, Weather Bureau, Bureau of Standards, Society of Automotive Engineers, Aero Medical Association, and National Safety Council, as well as with the carriers and pilots themselves. It is pointed out that, although the present standards for pilots and copilots are high, the subject of fatigue has not been approached on a scientific basis. The accomplishments to date are not minimized, however, notably a 14 percent reduction in pilots' average flight-hours from 86 per month in July 1933 to 74 per month in October 1935. A study of other fatigue factors, such as noise and vibration, type of equipment and planes, visibility, navigation aids, terrain, altitude, temperature, and the effects of lay-overs and ground duty is also recommended.

With respect to the ground-service personnel, the report criticizes the increasing ratio of unlicensed to licensed mechanics, the growing burden upon supervisory shop and service employees, and takes note of allegations that repair work has been performed by learners and students. The establishment of qualifications and requirements in other safety branches, such as radio, weather observation, and plane dispatching, is also recommended. The subject of regulation leads the report to suggest more rigid enforcement methods. The function of safety regulation by the Department of Commerce and the promotional interest of the Post Office Department are mentioned, together with the fact that 98 percent of all air-line employees are in the service of mail-carrying lines, which should normally simplify the regulatory problem.

Labor statistics relating to air lines are fragmentary and incomplete, according to the report, so that it is often impossible to make conclusions and suggestions that should be based thereon. The dif-

ficuity of the National Labor Board, which had to set up its own fact-finding machinery in the controversy of 1933, is mentioned. Statistics are gathered by the Departments of Commerce, Labor, and Post Office, the Interstate Commerce Commission and others, but generally according to their own plan and immediate needs and without sufficient regard for broader analysis and interpretation. Comparative data with other transportation industries, as well as standardization of titles and occupational terms, are desirable correlative features.

In view of the public-service nature of air transportation, the avoidance of strikes, industrial disturbances, and friction between employers and employees in this industry is a matter of public concern and interest. The Federal Government is, therefore, justified in setting up agencies to assure the settlement of disputes concerning wages and working conditions in a manner similar to its position as mediator in railway transportation under the Railway Labor Act. The report points out that the jurisdiction of the National Labor Relations Board is here circumscribed, whereas the extension of the Railway Labor Act to the air lines and their employees would lend much assurance against the possibility of interruptions in service. The present wage scale for pilots and copilots is effective by a series of expedients which have virtually established rates of pay by statute. Hence, there arises a responsibility to the balance of employees, whose earnings and working conditions are not clearly defined, in conjunction with the responsibility of maintaining an even flow of service in the public interest.

## Employment, Wages, and Hours in Corrugated and Solid Fiber Shipping-Container Industry

**B**ETWEEN April 1933 and September 1935, according to a report based on a questionnaire survey by the National Container Association,<sup>1</sup> the corrugated and solid fiber shipping-container industry showed a gain of 41.6 percent in employment and 82.1 percent in pay rolls. During the same period, the average hourly earnings increased 38.7 percent, the average weekly hours declined 7.3 percent, and the average weekly earnings rose 28.6 percent.

### Scope of Report

THIS report deals primarily with data covering the week of September 16-21, 1935, with comparisons for April 1933, March 1934, March 1935, and September 1935.

The code in this industry became effective on February 5, 1934, so that the April 1933 figures reflect pre-code conditions and those for March 1934 and 1935 include the changes resulting from code provisions. On the other hand, the data for September 1935 represent post-code conditions, the code having become inoperative with the *Schechter decision* on May 27, 1935.

The corrugated and solid fiber shipping-container industry<sup>2</sup> is one of several branches of the converted-paper-products industry. Unlike the folding-paper-box and set-up paper-box branches,<sup>3</sup> it manufactures outside boxes used in the packing and shipping of goods. Owing to the wide geographical demand for corrugated and solid fiber shipping containers, the plants in the industry are fairly well scattered over the country. Moreover, this industry has recently undergone considerable expansion, due in a large measure to a shift from the use of other packages to corrugated and solid fiber shipping containers.

There are no separate census figures available concerning this industry, but the association has estimated the total number of

<sup>1</sup> The report was published by the trade practice committee of the association on Mar. 9, 1936, at Chicago. It consists of two parts: No. 1, covering the week of Sept. 16-21, 1935, is called "Percentage Distribution of Employees by Wage Brackets and Occupations"; No. 2 is entitled as follows: "Summary and Comparisons of Employment, Hours, and Wages", covering 1 week of April 1933, of March 1934, of March 1935, and of September 1935; "Summary and Comparisons of Hourly Earnings by Occupations", covering 1 week of March 1934, of March 1935, and of September 1935.

<sup>2</sup> This industry was defined by the code as including "the manufacture of corrugated and solid fiber board and/or the fabrication of the same into shipping containers, packing materials, and other similar products."

<sup>3</sup> About the same time the association made the survey under review, the Bureau of Labor Statistics made field surveys of the folding-paper-box and set-up paper-box industries. For a detailed discussion of the wages and hours data of the folding and set-up paper-box industries, see respectively the June 1936 (pp. 1588-1615), and the August 1936 (pp. 411-434) issues of the *Monthly Labor Review*.

employees during September 16–21, 1935, as 18,000. The association's survey in that period included 163 plants with 12,745 factory workers, thus embracing about 71 percent of the industry in terms of employment.

While the above coverage is quite large, including all plants reporting, it should be remembered that it is practically limited to the members of the association, and does not cover a few of the larger plants in the country at large and a number of the smaller plants in the metropolitan area of New York City that failed to report.

The report of the association is limited exclusively to statistical tables. In all cases, the figures in the detailed tables are shown by region (northern and southern zones as defined by the code <sup>4</sup>), sex, type of plant, department, and occupation.<sup>5</sup> The occupational figures for March 1934 and 1935 and September 1935 cover average hourly earnings, average weekly hours, and average weekly earnings. Frequency tabulations are also presented on an occupational basis.

#### Changes in Employment, Wages, and Hours

THE following summary table (table 1), which is reproduced from the report of the association, shows for 136 identical plants the changes in production, pay rolls, employment, average hourly earnings, average weekly hours, and average weekly wages for April 1933, March 1934, March 1935, and September 1935.

According to the figures of the association, all of the increase in employment in the corrugated and solid fiber shipping-container industry took place between April 1933 and March 1934. The gain amounted to 44.8 percent. However, this was accompanied by a decrease in average weekly hours from 43.9 to 35.7, or 18.7 percent, which is attributable to the operation of the code. As a result, there was a rise of only 17.7 percent in total man-hours,<sup>6</sup> as compared with an increase of 16 percent in production.

After March 1934 the report indicates a small but steady decline in employment, which amounted to 2.2 percent by September 1935. At the same time, average hours per week rose to 37.9 in March 1935, an advance of 6.2 percent, and to 40.7 in September 1935, a further increase of 7.4 percent. The gain in weekly hours more than compensated for the reduction in employment, so that total man-hours increased 11.5 percent between March 1934 and September 1935. During the same period, production rose 27.2 percent.

<sup>4</sup> The code included in the southern zone the States of Virginia, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas, Texas, and Oklahoma; the remainder of the United States was classified as belonging to the northern zone.

<sup>5</sup> The Bureau of Labor Statistics was glad to advise the association in the preparation of the schedules and instructions as well as in the tabulation of the data.

<sup>6</sup> Obtained by multiplying the total number of employees by the average weekly hours.

Taking the net changes for the entire period from April 1933 to September 1935, the data of the association show a gain of 41.6 percent in employment, a drop of 7.3 percent in average weekly hours, and a rise of 31.3 percent in total man-hours. The latter compares with an increase of 47.6 percent in production.

The increase in pay rolls, according to the report, was continuous throughout the entire period. Starting with a substantial gain of 54.2 percent between April 1933 and March 1934, there was a further rise of 11 percent by March 1935, and still another of 6.4 percent by September 1935. The total gain amounted to 82.1 percent.

Table 1.—Changes in Production, Pay Rolls, Employment, Earnings and Hours in Corrugated and Solid Fiber Shipping-Container Industry, by Sex and Region, for 4 Selected Pay-Roll Periods<sup>1</sup>

[Prepared by the National Container Association]

Item	September 1935			March 1935		
	Males	Females	Total	Males	Females	Total
Production (square feet):						
North.....	354,071,000			321,149,000		
South.....	26,936,000			25,999,000		
Total.....	381,007,000			347,148,000		
Percent of change since 1933.....	+47.6			+34.5		
Percent of change since 1934.....	+27.2			+15.9		
Percent of change since March 1935.....	+9.8					
Pay rolls:						
North.....	\$193,538	\$38,653	\$232,191	\$181,897	\$36,794	\$218,691
South.....	\$14,591	\$2,606	\$17,197	\$13,337	\$2,465	\$15,802
Total.....	\$208,129	\$41,259	\$249,388	\$195,234	\$39,259	\$234,493
Percent of change since 1933.....	+78.8	+100.6	+82.1	+67.8	+90.9	+71.2
Percent of change since 1934.....	+18.8	+14.7	+18.1	+11.4	+9.2	+11.0
Percent of change since March 1935.....	+6.6	+5.1	+6.4			
Number of employees:						
North.....	8,463	2,529	10,992	8,589	2,574	11,163
South.....	828	219	1,047	850	214	1,064
Total.....	9,291	2,748	12,039	9,439	2,788	12,227
Percent of change since 1933.....	+41.3	+42.6	+41.6	+43.5	+44.7	+43.8
Percent of change since 1934.....	-2.1	-2.3	-2.2	-.6	-.9	-.7
Percent of change since March 1935.....	-1.6	-1.4	-1.5			
Average earnings per hour:						
North.....	\$0.549	\$0.402	\$0.518	\$0.547	\$0.400	\$0.515
South.....	\$0.426	\$0.345	\$0.411	\$0.421	\$0.345	\$0.407
Total.....	\$0.538	\$0.398	\$0.509	\$0.536	\$0.396	\$0.506
Average hours per week:						
North.....	41.6	38.0	40.8	38.7	35.7	38.0
South.....	41.4	34.5	40.0	37.3	33.4	36.5
Total.....	41.6	37.7	40.7	38.6	35.5	37.9
Average earnings per week:						
North.....	\$22.84	\$15.28	\$21.13	\$21.17	\$14.28	\$19.57
South.....	\$17.64	\$11.90	\$16.44	\$15.70	\$11.52	\$14.86
Total.....	\$22.38	\$15.00	\$20.72	\$20.69	\$14.06	\$19.18

Table 1.—Changes in Production, Pay Rolls, Employment, Earnings and Hours in Corrugated and Solid Fiber Shipping-Container Industry, by Sex and Region, for 4 Selected Pay-Roll Periods<sup>1</sup>—Continued

Item	March 1934			April 1933		
	Males	Females	Total	Males	Females	Total
Production (square feet):						
North.....	278,488,000			236,386,000		
South.....	20,980,000			21,740,000		
Total.....	299,468,000			258,126,000		
Percent of change since 1933.....	+16.0					
Pay rolls:						
North.....	\$163,500	\$33,339	\$196,839	\$108,010	\$18,898	\$126,908
South.....	\$11,741	\$2,621	\$14,362	\$8,370	\$1,668	\$10,038
Total.....	\$175,241	\$35,960	\$211,201	\$116,380	\$20,566	\$136,946
Percent of change since 1933.....	+50.6	+74.9	+54.2			
Number of employees:						
North.....	8,545	2,575	11,120	5,878	1,746	7,624
South.....	950	239	1,189	698	181	879
Total.....	9,495	2,814	12,309	6,576	1,927	8,503
Percent of change since 1933.....	+44.4	+46.0	+44.8			
Average earnings per hour:						
North.....	\$0.518	\$0.387	\$0.490	\$0.402	\$0.272	\$0.375
South.....	\$0.396	\$0.338	\$0.384	\$0.301	\$0.236	\$0.288
Total.....	\$0.507	\$0.383	\$0.481	\$0.392	\$0.268	\$0.367
Average hours per week:						
North.....	36.9	33.4	36.1	45.7	39.8	44.4
South.....	31.2	32.5	31.5	39.8	39.1	39.6
Total.....	36.4	33.4	35.7	45.1	39.8	43.9
Average earnings per week:						
North.....	\$19.11	\$12.93	\$17.69	\$18.37	\$10.83	\$16.65
South.....	\$12.36	\$10.99	\$12.10	\$11.98	\$9.23	\$11.40
Total.....	\$18.45	\$12.79	\$17.17	\$17.68	\$10.67	\$16.11

<sup>1</sup> Based on 136 identical plants.

As in the case of pay rolls, the figures of the association indicate that the largest increase in average hourly earnings occurred during the initial period. Thus, the average rose from 36.7 cents in April 1933 to 48.1 cents in March 1934, or 31.1 percent. This may be attributed largely to the code. By March 1935 the average advanced to 50.6 cents, which was a further gain of 5.2 percent. There was very little change between March and September 1935, when the average became 50.9 cents. The increase for the entire period was 14.2 cents or 38.7 percent.

Examination of the data shows that both the increases in employment and average hourly earnings contributed to the large expansion in pay rolls between April 1933 and March 1934. The gain in pay rolls from March 1934 to March 1935, however, was caused by the rise in average weekly hours as well as by the advance in average earnings per hour. Lastly, the increase in pay rolls between March



1935 and September 1935 was due almost entirely to the further gain in average hours per week, there being only a slight rise during this period in the average hourly earnings.

The report indicates that in April 1933 the weekly earnings averaged \$16.11. In spite of the reduction in average weekly hours, the large rise in average earnings per hour increased this figure to \$17.17 in March 1934. The gains in weekly hours and hourly earnings raised the average to \$19.18 in March 1935, and the further advance in weekly hours was responsible for its increase to \$20.72 in September 1935.

#### Percentage Distributions for September 1935

AN INDICATION of the extent to which the industry was still conforming at the time of the survey to the minimum rates of wages and maximum hours of labor established by the code is shown in table 2, which presents for the post-code period of September 1935 percentage distributions according to average hourly earnings, weekly hours, and weekly earnings, with figures for the country as a whole and for each regional group. The table is based on similar data compiled by the association separately by occupation, sex, region, type of plant, and department.

As regards the distribution according to average earnings per hour, two points stand out in the figures of the association, namely, the almost negligible number of employees receiving less than the code minima and the concentration of workers in the classes containing these minima. The minimum rates of wages provided in the code were 40 cents for males and 35 cents for females in the North and 32 cents for males and 30 cents for females in the South, with the exception that a limited number of minors in the office and substandard workers could be employed at not less than 80 percent of these rates. Employees earning less than the minima, according to the figures of the association, formed 0.8 percent for males and 2.0 percent for females in the North, and in the South formed 1.7 percent for males and none for females. This is remarkable, as it indicates that at the time of the study the industry was still conforming rigidly to the code provisions as regards minimum rates. As the percentages of workers earning below the code minima have been found to be much higher in similar industries for which post-code information is available, it leads to the belief that, while the percentages for this industry may represent conditions in the plants of the members of the association, they might have been much higher if the survey had included the remaining 29 percent of the industry not reporting. The concentration of employees in the classes containing the code minima may be seen by the fact that in the North 24 percent of the males earned 40 and under 45 cents per hour and 56.2 percent of the females

received 35 and under 40 cents, while in the South 32.1 percent of the males earned 30 and under 35 cents and 67.8 percent of the females were in the same class.

Table 2.—Percentage Distribution of Employees in Industry According to Average Hourly Earnings, Weekly Earnings, and Weekly Hours, by Region and Sex, September 1935

[Prepared by National Container Association]

Average hourly earnings, weekly hours, and weekly earnings	Total, United States	North		South	
		Males	Females	Males	Females
<b>Average hourly earnings:</b>					
Under 30 cents.....	0.1	(1)	0.3	0.7	-----
30 and under 35 cents.....	3.9	0.2	1.7	32.1	67.8
35 and under 40 cents.....	13.8	.6	56.2	19.9	20.8
40 and under 45 cents.....	22.9	24.0	22.5	16.9	8.0
45 and under 50 cents.....	15.0	17.0	10.8	9.4	1.7
50 and under 55 cents.....	14.2	17.5	6.2	7.5	1.3
55 and under 60 cents.....	9.1	11.8	1.7	5.2	.4
60 and under 65 cents.....	7.3	9.9	.5	3.1	-----
65 and under 70 cents.....	4.4	6.2	-----	1.1	-----
70 and under 75 cents.....	3.6	5.0	-----	1.0	-----
75 and under 80 cents.....	2.2	3.0	.1	1.1	-----
80 and under 90 cents.....	2.2	3.0	-----	1.3	-----
90 cents and over.....	1.3	1.8	-----	.7	-----
Total.....	100.0	100.0	100.0	100.0	100.0
<b>Weekly hours:</b>					
Under 16 hours.....	2.1	1.5	4.1	1.5	3.5
16 and under 24 hours.....	2.6	2.0	4.9	1.8	6.2
24 and under 32 hours.....	7.4	6.3	10.3	4.4	27.0
32 and under 40 hours.....	21.9	19.7	28.2	24.3	31.4
40 and under 48 hours.....	47.2	49.5	41.6	46.8	24.4
48 and under 56 hours.....	14.0	15.2	9.5	16.0	7.5
56 hours and over.....	4.8	5.8	1.4	5.2	-----
Total.....	100.0	100.0	100.0	100.0	100.0
<b>Weekly earnings:</b>					
Under \$4.....	1.0	.7	2.0	1.1	1.3
\$4 and under \$8.....	2.3	1.3	5.1	1.8	8.0
\$8 and under \$12.....	5.7	2.4	12.6	8.2	46.1
\$12 and under \$16.....	16.2	8.3	34.6	38.1	31.4
\$16 and under \$20.....	26.5	25.0	33.7	25.9	9.7
\$20 and under \$24.....	20.8	25.3	9.8	12.4	3.5
\$24 and under \$28.....	12.5	16.8	1.6	5.0	-----
\$28 and under \$32.....	7.0	9.4	.3	3.3	-----
\$32 and under \$36.....	4.1	5.5	.2	1.9	-----
\$36 and under \$40.....	1.9	2.6	.1	.8	-----
\$40 and under \$44.....	.9	1.2	-----	.7	-----
\$44 and under \$48.....	.6	.8	-----	.6	-----
\$48 and over.....	.5	.7	-----	.2	-----
Total.....	100.0	100.0	100.0	100.0	100.0

<sup>1</sup> Less than  $\frac{1}{10}$  of 1 percent.

Attention has already been called to the fact that the industry increased the hours of work after the discontinuance of the code. This is brought out partially by the distribution of employees according to weekly hours, although no definite conclusions can be reached since there is no separation as between those who worked exactly 40 hours and those who worked over 40 hours. It is interesting to note, however, that a considerable number of workers were employed 48 hours and over, the percentages being 21.0 for males in

the North, 10.9 for females in the North, 21.2 for males in the South, and 7.5 for females in the South.<sup>7</sup>

As mentioned before, owing to the increase in weekly hours, there was also a corresponding rise in weekly earnings, as the hourly rates did not change materially after the abolition of the code. According to the distribution of employees by weekly earnings, about one half of the males in the North earned \$16 and under \$24 per week, about two-thirds of the females in the North earned between \$12 and \$20 per week, more than three-fifths of the males in the South fell in the same class, and more than three-fourths of the females in the South earned from \$8 to \$16 per week.

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### Employment and Earnings in Radio Broadcasting, 1935

IN 1935, an average of 14,561 persons was employed by 8 national and regional networks and 561 broadcast stations, according to an announcement made by the Bureau of the Census on July 21, 1936.<sup>8</sup> The aggregate pay rolls of the networks and stations during the year totaled \$26,911,392. Only five of the eight networks reported separate employment, the other three allocating their personnel to affiliated stations. The 5 networks making separate employment reports had 2,001 persons on the pay rolls in 1935 and their wage and salary disbursements for the year totaled \$5,420,279.

The 561 broadcast stations employed 12,560 persons, with a total pay roll for the year of \$21,491,113. About 92 percent of this sum was paid to full-time and 8 percent to part-time employees.

A more detailed analysis of broadcast-station employment is shown by the accompanying table, which gives employment and average earnings for a single representative week in 1935. In this week (October 26, 1935), 13,139 full-time and part-time workers were employed by the broadcast stations. Of the total, 10,335 (78.7 percent) were men and 2,804 (21.3 percent) were women. Part-time employees accounted for 21.7 percent of the total number and received 9.6 percent of the wage and salary disbursements.

Station talent, consisting of artists and announcers, totaled 5,864 or nearly half of the total station employees. Of these, however, 2,309 were employed on a part-time basis. Station talent, including both full-time and part-time artists and announcers, received 37.4 percent of the total pay roll for the week. Artists employed directly by advertisers are not included in station or network personnel.

<sup>7</sup> In this connection however, it is fair to state that the industry is a service industry; that for this reason the code permitted averaging of weekly hours properly to supply seasonal demands of customers; and that the week under survey happened to be the second highest peak week of the year.

<sup>8</sup> This report is part of the census of business now being conducted by the Bureau of the Census, Department of Commerce.

Employment and Pay-Roll Disbursements of 561 Radio Broadcast Stations for the Week of October 26, 1935<sup>1</sup>

Class of employees	All employees <sup>2</sup>		Full-time employees			Part-time employees		
	Number	Pay rolls	Number	Pay rolls		Number	Pay rolls	
				Total	Average		Total	Average
Total, 561 stations.....	13, 139	\$429, 401	10, 287	\$388, 068	\$38	2, 852	\$41, 333	\$15
Executives.....	476	43, 537	437	42, 079	96	39	1, 458	37
Supervisors.....	703	43, 197	690	42, 825	62	13	372	29
Office and clerical.....	2, 149	50, 552	2, 035	49, 349	24	114	1, 203	11
Station technicians.....	2, 451	84, 803	2, 360	83, 609	35	91	1, 104	13
Station talent:								
Artists.....	4, 169	114, 270	1, 999	82, 026	41	2, 170	32, 244	15
Announcers.....	1, 695	46, 412	1, 556	45, 027	29	139	1, 385	10
Other <sup>3</sup> .....	1, 496	46, 630	1, 210	43, 153	36	286	3, 477	12

<sup>1</sup> For some stations the week ending Oct. 26, 1935, was not representative and another week was selected.

<sup>2</sup> Does not include entertainers and other talent supplied by advertisers, nor employees of radio network.

<sup>3</sup> "Other" includes employees not otherwise classified. Persons performing a variety of functions where no one function requires a major portion of the employees' time and continuity writers are included in this classification. The classification also includes salesmen.

Technicians engaged in the operation and maintenance of broadcast stations were the second largest functional group. They accounted for 18.4 percent of all employees and received 19.8 percent of the total pay roll for the week. Other functional groups reported by the stations include office and clerical workers, supervisors, and executives. Salesmen, continuity writers, and persons performing a variety of functions have been grouped together as "other" employees.

The average weekly pay of full-time station employees in the different occupational groups ranged from \$24 for office and clerical workers to \$96 for executives. Supervisors received an average of \$62 a week, station artists averaged \$41 a week, and station technicians \$35 a week. The average weekly earnings of "other" employees is relatively high because salesmen are included in this group.

The analysis for the representative week does not include network personnel. In general, the average weekly salary is higher for persons employed by networks than for those employed by stations. Full-time station employees, for example, averaged \$38 a week, as against \$53 for full-time network employees. Network technicians averaged \$60 a week, artists \$91, and office and clerical workers \$39.

## Salaries in Land-Grant Colleges Before and During the Depression

REPORTS on salaries from 51 land-grant colleges and universities<sup>1</sup> for the fiscal years ending June 30, 1929, 1930, 1931, and 1935,<sup>2</sup> make possible a comparison of the remuneration of the full-time staff

<sup>1</sup> There are 69 land-grant institutions, 17 of which are for Negroes and are not included in this survey. The Massachusetts Institute of Technology is also omitted, as only 1 report, that for 1934-35, is available.

<sup>2</sup> Data were not collected for 1931-32, 1932-33, or 1933-34.

members of these institutions before and during the depression. One such college or university is located in each State and in Alaska, Hawaii, and Puerto Rico.

The membership of the combined staffs increased from 10,875 in the fiscal year 1928-29 to 11,416 in 1934-35. In the last-mentioned year these institutions enrolled 179,973 resident students (excluding summer students), and 77,710 extension and correspondence students. In 1934-35 the median (typical) salary of the 11,416 full-time staff members was \$2,698. One-third of these educators were deans or full professors, the remainder being in the lower ranks. The median range of salaries for the whole staff was \$2,500 to \$2,749, or \$500 under the median range for 1929-31. Minimum salaries under \$1,000 were paid to 97 persons, while 17 individuals had maximum salaries of \$10,000 or more.

In 1934-35 the percentage distribution of staff members by salary groups was as follows:

	<i>Percent</i>
Under \$3,000.....	60
\$3,000 to \$3,999.....	24
\$4,000 to \$4,999.....	11
\$5,000 to \$5,999.....	3
\$6,000 or over.....	2
Total.....	100

Since 1929 the proportion of full-time staff members employed on a 9-month basis has declined from 64 percent to 61 percent.

These findings are published in Circular No. 157 (February 1936) of the United States Office of Education, which is the source of this article.

*Median salaries.*—In addition to a regular annual salary, presidents usually receive certain perquisites such as house rent, etc., which are included, in the study under review, as a part of the salary. For 1934-35 these perquisites ranged from \$500 to \$6,000 among 39 presidents; the remaining 12 received no extras. Nine received less than \$1,000; 17 received from \$1,000 to \$1,500; 9 received from \$1,700 to \$2,400; 4 received \$2,500 each; 2, \$3,000; 1, \$5,000; and 1, \$6,000.

The median salary for presidents of these institutions, including perquisites, was as follows:

1928-29.....	\$10,720
1929-30.....	11,000
1930-31.....	11,500
1934-35.....	9,000

The median salaries for staff members in the same years are shown in the accompanying table.

Median Salaries of Full-Time Staff Members of 51 Land-Grant Institutions for Specified Years

Occupation and term	1928-29	1929-30	1930-31	1934-35
Deans:				
9 months.....	\$5, 193	\$5, 089	\$5, 036	\$4, 187
11-12 months.....	5, 071	5, 244	5, 457	4, 647
Professors:				
9 months.....	4, 278	4, 457	4, 513	3, 775
11-12 months.....	4, 161	4, 225	4, 293	3, 682
Associate professors:				
9 months.....	3, 342	3, 349	3, 362	2, 903
11-12 months.....	3, 207	3, 395	3, 414	2, 906
Assistant professors:				
9 months.....	2, 738	2, 818	2, 837	2, 449
11-12 months.....	2, 880	2, 936	2, 957	2, 516
Instructors:				
9 months.....	2, 005	2, 060	2, 066	1, 769
11-12 months.....	2, 134	2, 208	2, 168	1, 960

### Farm Wage and Labor Situation on July 1, 1936

FARM wage rates averaged \$1.54 per day without board for the country as a whole on July 1, 1936, as compared with \$1.41 on July 1, 1935. The rates on July 1 of this year ranged from 75 cents in South Carolina to \$2.70 in Rhode Island; on July 1, 1935, they ranged from 70 cents in South Carolina to \$2.55 in Massachusetts.

The supply of agricultural labor available for hire on July 1 was lower, on the average, than had been reported to the United States Department of Agriculture for any other date since December 1926. However, at 88.9 percent of normal, the supply was greater than the demand, which was only 82.7 percent of normal.

Table 1, taken from a press release dated July 15, 1936, issued by the Bureau of Agricultural Economics, shows average farm wage rates, supply of and demand for farm labor, and number of persons employed per farm on July 1, 1936, as compared with April 1, 1936, and April 1 and July 1, 1935, and for wages, with the annual average 1910-14.

Table 1.—Average Farm Wage Rates and Employment in July 1936, as Compared with April 1936, and April and July 1935

Item	Annual average 1910-14	Apr. 1, 1935	July 1, 1935	Apr. 1, 1936	July 1, 1936
Farm wage index.....	100	94	99	101	108
Farm wage rates:					
Per month, with board.....	\$20. 41	\$19. 11	\$20. 41	\$20. 89	\$22. 07
Per month, without board.....	\$29. 09	\$28. 82	\$30. 08	\$30. 87	\$32. 21
Per day, with board.....	\$1. 10	\$0. 97	\$1. 05	\$1. 05	\$1. 15
Per day, without board.....	\$1. 43	\$1. 34	\$1. 41	\$1. 43	\$1. 54
Supply of and demand for farm labor (percent of normal):					
Supply.....		101. 4	95. 7	93. 8	88. 9
Demand.....		73. 4	80. 5	82. 1	82. 7
Supply as a percentage of demand.....		138. 1	118. 9	114. 3	107. 5
Farm employment <sup>1</sup> (persons per farm):					
Family labor.....		2. 16	2. 41	1. 95	2. 23
Hired labor.....		. 73	1. 00	. 89	1. 01
Combined.....		2. 89	3. 41	2. 84	3. 24

<sup>1</sup> On farms of crop reporters.

In the New England, Middle Atlantic, East North Central, and Pacific States, the Bureau of Agricultural Economics reports, farm hands were receiving on July 1 the highest pay in 5 years. The average rates per month and per day, with board and without board, are given in table 2 by geographic division and State.

Table 2.—Average Farm Wage Rates on July 1, 1936, by State and Geographic Division

Geographic division and State	Per month		Per day	
	With board	Without board	With board	Without board
United States.....	\$22.07	\$32.21	\$1.15	\$1.54
New England.....	30.27	51.87	1.70	2.41
Maine.....	29.00	45.00	1.55	2.10
New Hampshire.....	28.75	49.00	1.65	2.55
Vermont.....	28.50	45.50	1.55	2.15
Massachusetts.....	30.75	57.50	1.90	2.65
Rhode Island.....	41.75	67.25	1.80	2.70
Connecticut.....	31.50	57.25	1.75	2.55
Middle Atlantic.....	26.64	41.94	1.54	2.12
New York.....	28.25	43.50	1.60	2.20
New Jersey.....	28.75	47.75	1.60	2.15
Pennsylvania.....	24.00	38.25	1.45	2.00
East North Central.....	26.40	37.16	1.43	1.89
Ohio.....	23.75	34.75	1.40	1.90
Indiana.....	24.25	34.00	1.30	1.70
Illinois.....	28.50	37.75	1.50	1.90
Michigan.....	25.50	37.50	1.50	2.00
Wisconsin.....	29.00	41.50	1.45	1.95
West North Central.....	26.29	36.07	1.41	1.89
Minnesota.....	30.00	40.75	1.55	2.15
Iowa.....	30.50	38.50	1.60	2.05
Missouri.....	20.50	29.25	1.05	1.40
North Dakota.....	26.50	39.00	1.20	1.80
South Dakota.....	25.50	37.00	1.25	1.80
Nebraska.....	26.25	36.50	1.50	2.05
Kansas.....	24.50	34.50	1.70	2.10
South Atlantic.....	15.05	22.51	.78	1.04
Delaware.....	23.00	34.50	1.20	1.70
Maryland.....	23.25	35.50	1.25	1.65
Virginia.....	19.00	28.00	.95	1.25
West Virginia.....	20.25	31.00	1.00	1.40
North Carolina.....	15.75	23.25	.85	1.10
South Carolina.....	11.00	16.75	.55	.75
Georgia.....	11.50	16.75	.60	.80
Florida.....	14.00	22.75	.75	1.10
East South Central.....	14.22	20.59	.72	.94
Kentucky.....	17.50	25.00	.85	1.10
Tennessee.....	15.25	22.00	.75	.95
Alabama.....	12.25	18.00	.65	.85
Mississippi.....	12.00	17.50	.65	.85
West South Central.....	17.52	25.23	.90	1.18
Arkansas.....	14.50	21.50	.70	.95
Louisiana.....	13.50	19.75	.70	.95
Oklahoma.....	19.75	28.25	1.05	1.35
Texas.....	19.50	27.75	1.00	1.30
Mountain.....	33.94	48.86	1.61	2.11
Montana.....	37.25	52.00	1.70	2.40
Idaho.....	40.25	54.50	1.95	2.50
Wyoming.....	33.25	50.75	1.60	2.15
Colorado.....	29.00	44.50	1.40	2.00
New Mexico.....	25.50	36.50	1.25	1.50
Arizona.....	34.50	53.25	1.55	1.90
Utah.....	41.50	57.00	1.95	2.35
Nevada.....	39.25	54.25	1.85	2.60
Pacific.....	40.33	61.27	1.83	2.53
Washington.....	35.75	53.50	1.80	2.45
Oregon.....	35.75	53.25	1.80	2.30
California.....	42.50	65.00	1.85	2.60

## Wages in Various Industries in Germany in 1935

THE State Statistical Office of Germany has published summaries of gross earnings in 15 industries in Germany in December 1935.<sup>1</sup> These summaries, based upon previous wage investigations undertaken by that office, are shown in table 1.

Table 1.—Gross Earnings in 15 Industries in Germany in December 1935

[Exchange rate of mark (100 pfennigs) in December 1935=40.2 cents]

Industry and group of workers	Gross earnings per—		Industry and group of workers	Gross earnings per—	
	Hour	Week		Hour	Week
	<i>Pf.</i>	<i>Marks</i>		<i>Pf.</i>	<i>Marks</i>
Iron and steel production.....	86.5	44.20	Printing trades:	120.2	56.94
Skilled workers.....	92.0	47.40	Skilled workers, male.....		
Semiskilled workers.....	87.2	43.94	Technical workers' helpers, male.....	98.8	47.31
Unskilled workers and workers' helpers.....	76.4	38.40	Technical workers' helpers, female.....	51.5	24.52
Metal-working industry:			Lithography, offset and stone printing:		
Skilled workers, male.....	96.4	47.81	Skilled workers, male.....	112.9	53.94
Semiskilled workers, male.....	84.5	41.43	Technical workers' helpers, male.....	78.0	37.92
Workers' helpers, male.....	65.8	32.43	Technical workers' helpers, female.....	44.3	21.16
Female workers.....	50.4	23.92	Textile industry:		
Chemical industry:			Skilled workers, male.....	69.0	27.31
Skilled workers, male.....	104.3	48.68	Workers' helpers, male.....	53.3	22.97
Semiskilled and unskilled workers, male.....	87.8	39.47	Skilled workers, female.....	48.7	19.56
Female workers.....	51.3	21.90	Workers' helpers, female.....	37.7	15.62
Building trades:			Clothing industry:		
Masons.....	80.2		Skilled and semiskilled workers, male.....	79.3	37.36
Carpenters.....	84.0		Skilled and semiskilled workers, female.....	45.3	20.88
Building workers' helpers.....	68.0		Shoe industry:		
Excavation workers.....	61.0		Male workers.....	76.0	30.75
Lumber industry:			Female workers.....	49.8	19.89
Skilled and semiskilled workers.....	57.9	27.57	Confectionery, bakery, and pastry industries:		
Workers' helpers.....	50.9	23.83	Skilled workers, male.....	86.4	43.46
Building carpentry and furniture manufacture:			Workers' helpers, male.....	67.4	33.69
Skilled workers.....	76.0	36.17	Skilled workers, female.....	50.2	23.89
Semiskilled workers.....	63.4	30.11	Workers' helpers, female.....	43.0	21.00
Workers' helpers.....	50.5	23.79	Brewery industry:		
Paper production:			Skilled workers.....	104.8	43.99
Skilled and semiskilled workers, male.....	71.2	35.38	Unskilled workers.....	91.0	38.03
Unskilled workers, male.....	64.2	31.28	Salaried employees.....	105.1	43.82
Female workers.....	41.7	18.76			
Paper-working industry:					
Skilled workers, male.....	97.5	51.54			
Workers' helpers, male.....	64.4	32.98			
Skilled workers, female.....	54.4	27.27			
Workers' helpers, female.....	40.2	19.18			

## Textile Industry

WAGE data are shown in more detail for the textile industry in Germany. The State Statistical Office investigation of earnings and hours in this industry in December 1935 covered 644 establishments in 243 localities, employing 197,108 workers, of whom 67,335 or 34.2 percent were time-rate workers and 129,773 or 65.8 percent were piece-rate workers.

Gross earnings per hour averaged 54.8 pfennigs for all investigated workers, 66.1 pfennigs for males, and 47.1 pfennigs for females. The average weekly working time was 40.3 hours. Gross weekly earnings averaged 22.09 marks per worker.

<sup>1</sup> *Wirtschaft und Statistik* (Berlin), Apr. 1, 1936, no. 7, pp. 283-285.



Table 2 shows hourly and weekly gross earnings by branch of industry and group of workers.

Table 2.—Average Hourly and Weekly Gross Earnings in the Textile Industry in Germany, December 1935

[Exchange rate of mark (100 pfennigs) in December 1935=40.2 cents]

Branch of industry	Males				Females			
	Skilled workers		Workers' helpers		Skilled workers		Workers' helpers	
	Per hour	Per week	Per hour	Per week	Per hour	Per week	Per hour	Per week
	<i>Pfennigs</i>	<i>Marks</i>	<i>Pfennigs</i>	<i>Marks</i>	<i>Pfennigs</i>	<i>Marks</i>	<i>Pfennigs</i>	<i>Marks</i>
The industry.....	69.0	27.31	53.3	22.97	48.7	19.56	37.7	15.62
Worsted spinning.....	67.5	26.21	58.1	25.33	46.3	18.17	37.4	14.93
Woolens.....	71.9	25.76	55.9	21.88	53.0	19.23	40.8	16.28
Cotton.....	65.8	28.14	52.0	23.00	49.8	21.13	36.5	15.75
Linen.....	58.8	24.10	47.6	20.29	43.3	17.43	35.7	14.38
Silk.....	71.3	28.92	58.2	26.20	55.7	20.71	44.4	17.88
Velvet.....	77.5	29.65	55.3	22.46	55.4	18.78	38.5	16.55
Ribbon.....	75.4	33.65	49.9	22.52	49.7	21.50	39.7	17.82
Lace and curtain.....	77.3	28.23	51.8	20.53	42.9	15.43	33.6	11.90
Knit goods.....	77.1	29.47	57.5	24.62	44.8	18.54	33.8	15.82

### Iron and Steel Industry

THE investigation in November 1935 of earnings and hours in iron and steel production by the German State Statistical Office covered 112 establishments in 79 localities employing 151,158 workers.

Gross earnings for all investigated workers averaged 86.5 pfennigs per hour per worker and 44.20 marks per week per worker. Average working time amounted to 51.1 hours.

Table 3 shows the gross hourly and weekly earnings by branch of production.

Table 3.—Average Hourly and Weekly Gross Earnings in Iron and Steel Production in Germany, November 1935

[Exchange rate of mark (100 pfennigs) in November 1935=40.2 cents]

Branch of production	Skilled workers		Semiskilled workers		Unskilled workers and helpers		Total	
	Per hour	Per week	Per hour	Per week	Per hour	Per week	Per hour	Per week
	<i>Pfennigs</i>	<i>Marks</i>	<i>Pfennigs</i>	<i>Marks</i>	<i>Pfennigs</i>	<i>Marks</i>	<i>Pfennigs</i>	<i>Marks</i>
The industry.....	92.0	47.40	87.2	43.94	76.4	38.40	86.5	44.20
Blast furnaces.....	96.4	53.29	82.1	44.68	78.6	41.29	84.9	45.32
Steel plants.....	120.3	65.67	93.7	49.41	81.8	41.73	94.0	48.68
Rolling mills.....	126.2	63.76	101.4	50.69	82.3	41.60	93.1	46.71
Foundries.....	90.6	43.82	79.3	38.27	69.9	33.82	80.3	38.84
Auxiliary plants.....	84.0	44.73	78.0	42.24	69.9	35.37	81.9	43.09

## Wage Increases for Industrial Employees of British Government<sup>1</sup>

**S**KILLED and nonskilled workers in engineering trades employed by the British Government were awarded a 3-shilling increase in weekly wages by a recent decision of the engineering trades joint council. The increase affects over 20,000 employees of Government establishments and applies to both time workers and piece workers. It is not immediately payable in full, however, as the award sets three dates upon which a 1-shilling increase is to be made. The first increase is retroactive to June 29; the second is due the end of September; and the third, the end of December.

These terms are identical with those recently agreed upon in wage negotiations between the Engineering Employers' Federation and the Amalgamated Engineering Union, which, in turn, affect many workers employed on Government contracts.

Employees of arsenals and Government munitions factories, who are not covered by the joint council, have been offered the same wage increases by the War Office.

<sup>1</sup> From report of Alfred Nutting, clerk, American Consulate General, London, dated July 13, 1936.

## FAMILY ALLOWANCES

### Expansion of French Family-Allowance System

THE number of approved family-allowance funds in France was given as 222 in a report submitted to the Sixteenth French Congress on Family Allowances, held at Strasbourg, May 20, 1936. In January 1935 the number of such funds was 208. Excerpts from the above-mentioned report are published in the June 1936 issue of *Bulletin Mensuel des Allocations Familiales et des Assurances Sociales* (Paris), which is the source of this article.

The following statistics on the progress of the family-allowance system were presented by the Director of the National Committee on Family Allowances:

#### Increase of Family Allowance Funds in France, January 1935 to May 1936

[Average exchange rate of franc in January 1935 and in May 1936=6.58 cents]

Item	January 1935	As reported to May 1936 congress	Percent of increase since January 1935
Number of family-allowance funds.....	208	222	6.7
Number of undertakings affiliated with funds.....	157,000	218,000	38.9
Number of workers covered.....	3,750,000	4,238,000	13.0
Amount paid in allowances.....	<i>Francs</i> 675,000,000	<i>Francs</i> 780,000,000	15.6

If the 75 approved special services were included, the total number of workers covered aggregated, according to the same report, 5,238,000 and the amount paid out in allowances 1,600 million francs. When the figures for the public services were added, the number of workers reached 6,038,000 and the amount paid out in allowances totaled 2,100 million francs.

An investigation conducted immediately before the national convention disclosed that the compulsory family allowance act of March 11, 1932, had been applied by less than 50 percent of the employers subject to the legislation. The delinquents were chiefly medium-sized enterprises and smaller undertakings. The National Committee on Family Allowance took the position that during an industrial crisis it would be inadvisable to be too peremptory in demanding a strict and universal application of the act, but at the

same time expressed disapproval of defaulting employers and certain bodies organized outside the law.

Notwithstanding the severe effects in 1935 of the industrial depression, the social services of the family-allowance funds continued to develop.

Among the reports made to the convention were those on the following subjects: Special conditions under which the family-allowance system was instituted in Italy; the evolution of Belgian legislation on family allowances; the development of noncompulsory family allowances in Switzerland; measures taken by the French administration for the application of the law of March 11, 1932; results of an inquiry on the demographic situation of families benefiting under the French family-allowance funds; principles of jurisprudence relative to family allowances; and the reasons for extending the French compulsory family allowance act to rural sections, with a view to preventing an increasing exodus to urban districts.

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### Aid for Large Families in Germany

THE German act of June 1, 1933, designed to remedy unemployment and increase the birth rate, provides for loans without interest to wage earners and employees who are married. It is also provided that these loans be paid back at the rate of 1 percent a month. However, at the birth of each child in a worker's or employee's family, 25 percent of the debt is canceled, so that no reimbursement is required after the birth of the fourth child. Further details of the new scheme are given in the May 1936 issue of *Bulletin Mensuel des Allocations Familiales et des Assurances Sociales* (Paris).

The loans authorized by the above-mentioned law average 600 marks, and the expense incurred by the Treasury is covered by a tax on celibates.

A decree of September 15, 1935, provided credits amounting to approximately 200,000,000 francs annually to meet the new expenses resulting from the establishment of a system of allowances in kind in addition to the loans already approved. These allowances are granted only once and are in the form of purchase orders of 10 to 50 marks for necessary household articles at designated stores, the Government thus assuring itself that such allowances will be used for the purpose for which they are provided.

As the available funds are not sufficient to grant allowances to all large families, such assistance is restricted to needy families of pure Aryan race having at least 4 children under 16 years of age who have no physical nor mental infirmity. The Ministry of Finance is authorized to decide as to the eligibility of families for these benefits.

The report calls attention to the fact that the German law provides allowances only when the children are in excellent physical condition, while French legislation prolongs the payment of family allowance in case of infirmity or chronic maladies.

### Family Allowances in New Zealand, 1934-35

**D**URING the year ended March 31, 1935, the number of claims for family allowances handled in New Zealand under the act <sup>1</sup> providing such benefits totaled 2,743. Of this number 2,166 were granted, 295 rejected, and 282 held over. Among the rejected claims were 135 that represented cases in which the family income, including the allowances, exceeded the limit beyond which these subsidies are not now paid. On March 31, 1935, the total number of families receiving allowances was 12,321. During the year ending on that date the total amount paid out was £152,818 <sup>2</sup> and the total paid out for the 8 years ending March 31, 1935, during which the act has been in operation, was £729,553. In the same 8-year period 19,063 family allowances were granted of which 6,742 have been discontinued. The above statistics and the following data are taken from the New Zealand Year Book, 1936 (pp. 483-484). The number of children in the 12,321 families in receipt of allowances March 31, 1935, was 54,040, of whom 29,398 were in families having more than 2 children. The average number of children per family was 4.39. The number of families granted allowances in the year 1934-35, according to the number of children in the family is shown in the following statement:

	<i>Number of families</i>		<i>Number of families</i>
3 children.....	1, 240	7 children.....	54
4 children.....	497	8 children.....	22
5 children.....	243	9 children.....	6
6 children.....	101	10 children.....	3

The weekly incomes of 2,166 families whose claims for allowances were granted in the year under review are given below:

	<i>Number of families</i>
£1 or under.....	178
Over £1 and up to £2.....	983
Over £2 and up to £3.....	642
Over £3 and up to £3 5s.....	337
Over £3 5s.....	26
<b>Total.....</b>	<b>2, 166</b>

<sup>1</sup> The Family Allowances Act was passed in 1926, and came into force Apr. 1, 1927. The allowance is at the rate of 2s. per week for each child in excess of two, the average weekly income of the applicant and his wife and children, including allowance, not to exceed £4 (reduced to £3 5s. by section 26 of the National Expenditure Adjustment Act, 1932) plus 2s. for each child in excess of two. For the purposes of the act the term "child" in general means a child under the age of 15. The application for the allowance is made by the father, but in general the allowance is paid to the mother.

<sup>2</sup> Pound at par=\$4.8665; exchange rate varies.

The number of these families receiving specified weekly allowances was as follows:

	<i>Number of families</i>		<i>Number of families</i>
1s. per week.....	8	8s. per week.....	94
2s. per week.....	1, 249	9s. per week.....	1
3s. per week.....	8	10s. per week.....	48
4s. per week.....	497	12s. per week.....	18
5s. per week.....	3	14s. per week.....	4
6s. per week.....	233	18s. per week.....	1
7s. per week.....	2		

## EMPLOYMENT OFFICES

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### Operations of United States Employment Service, July 1936

A TOTAL of 435,445 placements in public and private employment and on relief-work projects was made by offices of the United States Employment Service during July. The field of public employment continued in the lead over private employment for the month of July 1936, in placements made by offices of the United States Employment Service. Public placements showed a slight decrease of 2.1 percent from June which had reached an all-time high. Private placements decreased 4.5 percent from the June figure. Placements on relief projects continued to decline, reaching the lowest level reported in any month during the past year.

A total of 261,196 placements in public prevailing-wage employment was made by the employment offices in July. This was the second highest monthly figure reported by the Service, and represented only a slight decrease from the preceding record month.

Activity in the solicitation of openings from private employers resulted in 116,059 placements in private industry for the month of July. While this total represented a decline of 4.5 percent from the June level, it was the third highest in the past 2 years.

During July, 390,839 additional new applicants were registered in the public employment offices, an increase of 7.1 percent from the number reported for June. This total was the highest registration in the past 6 months.

The Employment Service made 26,003 veterans' placements during July, of which 18,794 were in public and governmental employment at prevailing wages, a 4.9 percent decrease from the number reported in June. Private employment accounted for 4,341 of the veterans' placements, while 2,868 placements of veterans on relief projects were made.

During the month of July, 11,381 veterans were registered by offices of the Employment Service, an increase of 67.7 percent from the June total. At the end of July the applications of 382,910 veterans were reported in the active file of the Employment Service.

Offices of the affiliated and cooperating State Employment Services made a total of 216,877 placements of all classes in July, 49.8 percent of the total for the entire Employment Service. The State offices led in the field of private employment with 81,994 verified placements.

This total was 5.3 percent less than that for June and comprised 70.6 percent of the aggregate for the combined services.

In the field of public prevailing-wage employment, the State services were responsible for 106,769 placements, a slight decrease of 3.3 percent over the previous month. State offices played a much smaller part in the total referral activity in this field than did the National Reemployment Service offices, making only 40.9 percent of the placements for the entire service.

State employment services reported 28,114 assignments of relief persons during the month, a decline of 19.3 percent from the preceding month. This total represented 48.3 percent of the relief assignments made through the combined operations of both branches of the Employment Service.

A total of 215,876 new applicants was registered and classified by State offices, 55.2 percent of the total for the entire service and 1.5 percent less than in June. Active files of the State employment offices increased 2.3 percent during July to a month-end total of 3,321,395—50.3 percent of the total for the entire Employment Service.

Offices of the National Reemployment Service made 218,568 placements of all classes during July, or 50.2 percent of the national total. Public placement was the predominant field of activity of the National Reemployment Service offices, with 154,427 verified placements made, or 59.1 percent of the combined total for the two branches of the Employment Service. This number was 1.3 percent less than the June volume. In the field of private industry National Reemployment Service offices made 34,065 placements, or 29.4 percent of the combined total. Assignments on security-wage work numbered 30,076, or 33.7 percent below those for June.

Table 1.—Summary of Operations, State Employment and National Reemployment Service, July 1936

Activity	State employment services			National Reemployment Service		
	Number	Percent of change from June	Percent of United States total	Number	Percent of change from June	Percent of United States total
New applications.....	215,876	-1.5	55.2	174,963	+15.0	44.8
Total placements.....	216,877	-6.8	49.8	218,568	-7.9	50.2
Private.....	81,994	-5.3	70.6	34,065	-1.7	29.4
Public.....	106,769	-3.3	40.9	154,427	-1.3	59.1
Relief.....	28,114	-19.3	48.3	30,076	-33.7	51.7
Active file.....	3,321,395	+2.3	50.3	3,283,030	+1.5	49.7

During July, 174,963 new applicants registered with National Reemployment Service offices, which represented 44.8 percent of the total for the entire service. This was 15 percent more than for June. At the end of July, 3,283,030 active applicants were registered with the National Reemployment Service offices. The active



files of the National Reemployment Service offices contained 49.7 percent of the total active registrations with the Employment Service.

Table 2.—Operations of Offices of Combined State Employment Services and National Reemployment Service, July 1936

State	Placements					Relief <sup>1</sup>	New applications		Active file	
	Total	Private		Public			Number	Percent of change from June	July 31	Percent of change from June 30
		Number	Percent of change from June	Number	Percent of change from June					
United States.....	435,445	116,059	-4.5	261,196	-2.1	58,190	390,839	+7.1	6,604,425	+2.3
Alabama.....	5,771	255	-8.6	4,463	-19.7	1,053	6,763	+27.6	100,881	+2.2
Arizona.....	3,273	1,021	+25.0	2,015	-18.5	237	1,910	-3.1	31,774	+4.6
Arkansas.....	6,670	929	+52.5	3,253	+32.1	2,488	6,279	+37.6	84,421	+9.4
California.....	40,906	15,732	+5.0	18,381	+31.9	6,793	29,863	+3.2	230,027	-4.9
Colorado.....	4,596	1,710	-26.0	2,094	-12.6	792	4,866	-5.3	75,569	+8.2
Connecticut.....	4,480	1,629	-8.1	2,404	-5.5	447	4,684	+0	56,441	+6.7
Delaware.....	1,546	615	-20.3	835	-24.6	96	660	-26.8	10,997	-3
Florida.....	5,543	1,042	+1.3	3,702	-6	799	4,864	+7.6	68,853	+9.1
Georgia.....	6,721	1,093	-2.4	4,846	+29.8	782	10,304	+55.0	111,443	+12.9
Idaho.....	4,872	673	-13.9	2,618	+13.1	1,581	3,006	-22.7	21,492	-6.8
Illinois.....	26,345	12,193	-1.3	12,276	-7.2	1,876	26,802	-14.4	395,619	+6.7
Indiana.....	11,492	4,262	-1.8	7,142	+8.7	88	11,998	+7.3	186,958	+3.0
Iowa.....	11,295	3,409	+4.7	7,678	-25.8	208	8,072	+7.9	64,548	+9.2
Kansas.....	11,666	1,294	-9.2	9,762	+38.9	610	7,525	+76.9	85,743	+6.6
Kentucky.....	5,370	931	-4.7	4,152	-5.2	287	5,533	+31.1	139,602	+5.7
Louisiana.....	3,543	489	+5.8	3,010	-35.3	44	9,095	+47.4	88,332	+11.6
Maine.....	2,871	62	-46.1	1,947	-23.9	862	1,557	-31.1	28,845	-1.5
Maryland.....	3,216	462	-17.1	2,340	+4.3	414	3,231	-2.0	96,742	+1.2
Massachusetts.....	4,971	1,083	+12.7	2,815	+14.9	1,073	7,513	-12.6	312,006	+1.6
Michigan.....	13,558	2,167	+25.3	8,196	+8.5	3,195	12,907	+29.2	190,901	+5.1
Minnesota.....	15,436	4,777	-0	9,014	-14.3	1,645	8,768	-6.8	139,262	+4.9
Mississippi.....	5,302	3	-95.4	3,825	-6	1,474	6,468	+35.4	105,830	+7
Missouri.....	11,676	1,807	-14.5	8,875	-7.9	994	11,743	+22.6	246,591	+4.7
Montana.....	7,202	836	-61.8	5,783	-15.4	583	3,792	+32.4	30,768	+6.4
Nebraska.....	8,098	1,461	+7.3	6,418	-1.9	219	4,537	+22.1	42,238	+8.7
Nevada.....	1,843	185	-1.1	1,490	+11.4	168	694	-14.4	5,145	+0
New Hampshire.....	1,695	365	+65.9	955	-8.4	375	1,554	+8.4	26,493	-2.1
New Jersey.....	6,058	3,368	-22.9	1,318	-37.0	1,372	11,419	+6.0	249,050	+2.7
New Mexico.....	4,246	1,330	+7.0	2,007	-23.9	909	1,881	-1.2	52,331	+4.3
New York.....	29,362	11,432	-10.4	13,366	-12.7	4,564	24,717	+7.6	545,516	-1.9
North Carolina.....	9,491	2,428	-43.3	6,439	-14.2	624	9,480	-6.7	109,798	+6.3
North Dakota.....	4,872	1,288	+77.7	2,541	-20.0	1,043	6,882	+69.4	46,859	+38.5
Ohio.....	24,296	9,371	+2.3	11,913	+6.3	3,012	24,545	+3.7	347,185	+5.0
Oklahoma.....	5,901	1,439	-20.8	3,854	-4.0	608	5,315	+4.3	157,763	+4.5
Oregon.....	5,913	1,267	-5.9	4,112	-1.8	534	4,457	-7	75,094	+5.1
Pennsylvania.....	22,749	3,767	-14.7	11,662	-13.7	7,320	26,854	-14.8	965,219	-7.4
Rhode Island.....	967	397	+44.9	475	+35.3	95	1,119	+1.0	52,492	-14.1
South Carolina.....	5,546	643	-15.2	4,519	+35.7	384	4,530	+20.0	90,069	+3.8
South Dakota.....	4,575	664	-9.4	3,359	-19.0	552	3,471	+28.1	35,989	+25.3
Tennessee.....	6,153	895	+6.2	4,753	-5.5	505	8,485	+34.8	178,350	+4.9
Texas.....	27,634	4,999	-3.7	20,582	+9.7	2,053	15,953	+18.9	217,941	+9.2
Utah.....	4,556	1,503	-1.5	2,732	+7.8	321	1,954	+11.2	27,513	+15.2
Vermont.....	1,990	352	+5.7	1,504	-6.4	134	1,140	-14.5	11,035	+5.5
Virginia.....	8,054	1,549	-3.1	6,157	-8.3	348	5,606	-12.7	84,482	+1.9
Washington.....	9,510	1,107	+31.2	6,381	+18.3	2,022	5,010	+7	94,096	+4.7
West Virginia.....	4,417	1,038	+16.0	3,258	-15.6	121	5,298	-4.0	114,503	+7.5
Wisconsin.....	12,901	4,304	-2.4	7,334	-1.2	1,263	13,307	+21.5	129,099	+6.4
Wyoming.....	3,127	565	+9.7	1,754	-23.9	808	1,871	-4.1	9,878	+10.1
Dist. of Columbia.....	3,170	1,868	-3.6	887	-6.5	415	3,567	+11.4	32,637	+16.5

<sup>1</sup> Includes only security-wage placements on work-relief projects.

Table 3.—Operations of Offices of State Employment Services, July 1936

State	Placements					New applica- tions		Active file		
	Total	Private		Public		Relief <sup>1</sup>	Number	Percent of change from June	July 31	Percent of change from June 30
		Number	Percent of change from June	Number	Percent of change from June					
All States.....	216,877	81,994	±5.3	106,769	±3.3	28,114	215,876	±1.5	3,321,395	±2.3
Arizona.....	1,186	613	+33.8	478	-28.7	95	867	+28.1	14,039	+7.4
California.....	31,610	12,846	+6.3	12,766	+58.0	5,998	23,898	-2	179,579	-7.5
Colorado.....	1,834	792	+8.2	638	-20.5	404	2,563	-13.0	44,274	+5.5
Connecticut.....	3,217	1,304	-1.6	1,582	-12.4	331	3,745	-1	41,633	+7.1
Delaware.....	1,546	615	-20.3	835	-24.6	96	660	-26.8	10,997	-3
Florida.....	5,543	1,042	+1.3	3,702	-6	799	4,864	+7.6	68,853	+9.1
Idaho.....	3,167	418	-16.6	1,438	+38.3	1,311	1,803	-20.9	10,586	-15.2
Illinois.....	18,632	10,852	-4.5	6,210	-13.9	1,570	19,121	-15.7	281,140	+6.9
Indiana.....	11,492	4,262	( <sup>3</sup> )	7,142	( <sup>3</sup> )	88	11,998	( <sup>3</sup> )	186,958	( <sup>3</sup> )
Iowa.....	11,295	3,409	( <sup>3</sup> )	7,678	( <sup>3</sup> )	208	8,072	( <sup>3</sup> )	64,548	( <sup>3</sup> )
Kansas (unaffili- ated).....	2,462	713	-26.5	1,606	-5	143	1,219	+21.5	22,661	+2.8
Louisiana.....	3,543	489	+5.8	3,010	-35.3	44	9,095	+47.4	88,332	+11.6
Massachusetts.....	2,868	934	+8.4	1,242	+25.1	692	4,335	-12.1	145,769	+4
Minnesota.....	5,396	2,916	-2.2	2,196	+18.8	284	3,803	-10.8	75,998	+2.1
Missouri.....	3,341	1,439	-3.6	1,487	-24.5	415	5,383	+2.6	93,261	+8.0
Nevada.....	1,138	145	-2.0	919	+21.7	74	509	+17.3	3,493	+1.2
New Hampshire.....	685	177	+45.1	346	+11.6	162	969	+37.4	14,820	+8.6
New Jersey.....	6,058	3,368	( <sup>3</sup> )	1,318	( <sup>3</sup> )	1,372	11,419	( <sup>3</sup> )	249,050	( <sup>3</sup> )
New Mexico.....	1,962	507	-14.8	1,118	-22.1	337	1,163	+9.5	25,681	+8.9
New York.....	18,120	10,101	-10.1	6,284	-22.6	1,735	16,644	+4.0	290,200	-2.2
North Carolina.....	9,491	2,428	-43.3	6,439	-14.2	624	9,480	-6.7	109,798	+6.3
North Dakota.....	941	517	+53.4	309	-1.9	115	1,022	+27.1	5,524	+18.0
Ohio.....	15,429	7,070	-2.1	5,669	+13.0	2,690	17,714	+9.7	230,763	+4.7
Oklahoma.....	2,459	1,171	-21.4	1,076	+52.0	212	1,321	-14.5	27,572	+1.4
Oregon.....	2,727	759	-13.1	1,740	+1.5	228	1,976	+5.3	49,051	+5.8
Pennsylvania.....	12,704	2,868	-12.9	5,424	-14.1	4,412	17,835	-16.1	550,000	0
Rhode Island.....	832	362	+50.8	383	+41.9	87	992	-2.8	47,181	-13.5
South Dakota.....	4,080	445	-28.6	3,154	-19.1	481	3,259	+28.7	33,169	+25.9
Tennessee.....	3,499	648	+28.1	2,610	-10.2	241	3,808	+11.5	62,628	+7.5
Texas.....	7,710	891	( <sup>4</sup> )	6,253	( <sup>4</sup> )	566	5,660	( <sup>4</sup> )	81,592	( <sup>4</sup> )
Vermont.....	1,990	352	+5.7	1,504	-6.4	134	1,140	-14.5	11,035	+5.5
Virginia.....	1,263	688	+8.6	550	+14.3	45	726	-10.5	11,112	+2.0
West Virginia.....	980	320	+4.2	636	-42.0	24	966	-28.8	23,910	+2.8
Wisconsin.....	12,901	4,304	( <sup>3</sup> )	7,334	( <sup>3</sup> )	1,263	13,307	( <sup>3</sup> )	129,099	( <sup>3</sup> )
Wyoming.....	1,606	381	+30.5	806	+2.4	419	973	-4.1	4,452	-2.5
Dist. of Columbia	3,170	1,868	-3.6	887	-6.5	415	3,567	+11.4	32,637	+16.5

<sup>1</sup> Includes only security-wage placements on work-relief projects.<sup>2</sup> Computed from comparable reports only.<sup>3</sup> Coverage S. E. S. extended to entire State, July 1, 1936.<sup>4</sup> Not comparable due to transfer of 14 counties from N. R. S. to S. E. S.

Table 4.—Operations of Offices of the National Reemployment Service, July 1936

State	Placements					Relief <sup>1</sup>	New applications		Active file	
	Total	Private		Public			Number	Per- cent of change from June	July 31	Per- cent of change from June 30
		Number	Per- cent of change from June	Number	Per- cent of change from June					
All States.....	218,568	34,065	2-1.7	154,427	2-1.3	30,076	174,963	2+15.0	3,283,030	2+1.5
Alabama.....	5,771	255	-8.6	4,463	-19.7	1,053	6,763	+27.6	100,881	+2.2
Arizona.....	2,087	408	+13.6	1,537	-14.7	142	1,043	-19.4	17,735	+2.4
Arkansas.....	6,670	929	+52.5	3,253	+32.1	2,488	6,279	+37.6	84,421	+9.4
California.....	9,296	2,886	-3	5,615	-4.1	795	5,965	+19.2	50,445	+5.9
Colorado.....	2,762	918	-41.9	1,456	-8.5	388	2,303	+4.9	31,295	+12.3
Connecticut.....	1,263	325	-27.5	822	+11.2	116	939	+5	14,808	+5.7
Georgia.....	6,721	1,093	-2.4	4,846	+29.8	782	10,304	+55.0	111,443	+12.9
Idaho.....	1,705	255	-9.3	1,180	-7.4	270	1,203	-25.1	10,906	+3.2
Illinois.....	7,713	1,341	+36.0	6,066	+9	306	7,681	-10.9	114,479	+6.0
Indiana.....	(2)	(2)		(2)		(2)	(2)		(2)	
Iowa.....	(2)	(2)		(2)		(2)	(2)		(2)	
Kansas.....	9,204	581	+27.7	8,156	+50.7	467	6,306	+94.0	63,082	+8.0
Kentucky.....	5,370	931	-4.7	4,152	-5.2	287	5,533	+31.1	139,602	+5.7
Maine.....	2,871	62	-46.1	1,947	-23.9	862	1,557	-31.9	28,845	-1.5
Maryland.....	3,216	462	-17.1	2,340	+4.3	414	3,231	-2.0	96,742	+1.2
Massachusetts.....	2,103	149	+50.5	1,573	+7.9	381	3,178	-13.2	166,237	+2.7
Michigan.....	13,558	2,167	+25.3	8,196	+8.5	3,195	12,907	+29.0	190,901	+5.1
Minnesota.....	10,040	1,861	+3.6	6,818	-21.3	1,361	4,965	-3.5	63,264	+8.5
Mississippi.....	5,302	3	-95.4	3,825	-6	1,474	6,458	+35.4	105,830	+7
Missouri.....	8,335	368	-40.6	7,388	-3.6	579	6,360	+46.9	153,330	+2.8
Montana.....	7,202	836	-61.8	5,783	-15.4	583	3,792	+32.4	30,768	+6.4
Nebraska.....	8,098	1,461	+7.3	6,418	-1.9	219	4,537	+22.1	42,238	+8.7
Nevada.....	705	40	+2.6	571	-2.1	94	185	-60.9	1,652	-2.2
New Hampshire.....	1,010	188	+91.8	609	+6.7	213	585	-19.8	11,673	-13.0
New Jersey.....	(2)	(2)		(2)		(2)	(2)		(2)	
New Mexico.....	2,284	823	+27.0	889	-26.2	572	718	-14.6	26,650	+2
New York.....	11,242	1,331	-12.5	7,082	-1.6	2,829	8,073	-16.1	255,316	-1.5
North Dakota.....	3,931	771	+98.7	2,232	-22.0	928	5,860	+79.8	41,335	+41.8
Ohio.....	8,867	2,301	+18.5	6,244	+9	322	6,831	-9.1	116,422	+5.5
Oklahoma.....	3,442	268	-18.5	2,778	-16.0	396	3,994	+12.5	130,191	+5.2
Oregon.....	3,186	508	+7.4	2,372	-4.1	306	1,481	-7.7	26,043	+3.9
Pennsylvania.....	10,045	899	-20.2	6,238	-13.3	2,908	9,019	-12.1	415,219	-15.6
Rhode Island.....	135	35	+2.9	92	+13.6	8	127	+46.0	5,311	-18.6
South Carolina.....	5,546	643	-15.2	4,519	+35.7	384	4,530	+20.0	90,069	+3.8
South Dakota.....	495	219	+99.1	205	-18.0	71	212	+19.1	2,820	+18.8
Tennessee.....	2,654	247	-26.7	2,143	+1.1	264	4,677	+62.3	115,722	+3.5
Texas.....	19,924	4,108	(4)	14,329	(4)	1,487	10,293	(4)	136,349	(4)
Utah.....	4,556	1,503	-1.5	2,732	+7.8	321	1,954	+11.2	27,518	+15.2
Virginia.....	6,791	881	-10.5	5,607	-10.0	303	4,880	-13.0	73,370	+1.9
Washington.....	9,510	1,107	+31.2	6,381	+18.3	2,022	5,010	+7	94,096	+4.7
West Virginia.....	3,437	718	+22.1	2,622	-5.2	97	4,332	+4.0	90,593	+8.8
Wisconsin.....	(2)	(2)		(2)		(2)	(2)		(2)	
Wyoming.....	1,521	184	-17.5	948	-37.6	389	898	-4.0	5,426	+23.2

<sup>1</sup> Includes only security-wage placements on work-relief projects.<sup>2</sup> Computed from comparable reports only.<sup>3</sup> Discontinued as N. R. S. July 1, 1936.<sup>4</sup> Not comparable due to transfer of 14 counties from N. R. S. to S. E. S.

Table 5.—Veterans' Activities of Offices of Combined State Employment Services and National Reemployment Service, July 1936

State	Placements					New applica- tions		Active file		
	Total	Private		Public		Relief <sup>1</sup>	Number	Percent of change from June	July 31	Percent of change from June 30
		Number	Percent of change from June	Number	Percent of change from June					
United States.....	26,003	4,341	-8.4	18,794	-4.9	2,868	11,381	+67.7	382,910	+4.3
Alabama.....	363	22	+144.4	308	-16.8	33	147	+40.0	4,506	-2.3
Arizona.....	198	34	+3.0	155	-2.5	9	95	+115.9	1,557	+2.3
Arkansas.....	271	41	+28.1	163	+17.3	67	139	+131.7	3,243	+6.2
California.....	3,410	739	-7.0	2,009	+32.7	662	1,465	+57.0	17,181	-5.1
Colorado.....	302	54	-16.9	215	+12.6	33	174	+102.3	3,901	+5.8
Connecticut.....	257	51	+10.9	186	-8.4	20	164	+76.3	3,651	+1.1
Delaware.....	78	22	-24.1	46	-30.3	10	11	+22.2	499	-5.0
Florida.....	232	45	-22.4	162	-4.7	25	115	+94.9	2,879	+7.8
Georgia.....	240	46	+7.0	172	-9.5	22	145	+116.4	4,739	+7.1
Idaho.....	215	27	-27.0	150	-18.0	38	110	+71.9	908	-32.0
Illinois.....	1,460	457	+9	923	-11.8	80	786	+35.1	25,437	+3.7
Indiana.....	124	138	-7	578	-2	9	351	+81.9	11,641	-1.2
Iowa.....	870	223	+8.3	630	-26.9	17	253	+60.1	3,982	+9.2
Kansas.....	750	57	-44.1	671	+36.7	22	215	+133.7	4,705	-1
Kentucky.....	375	46	-31.3	313	-20.2	16	142	+47.9	7,326	+4.3
Louisiana.....	179	18	-14.3	161	-36.6	0	231	+92.5	5,290	+5.3
Maine.....	208	2	-80.0	143	-18.3	63	61	-17.6	1,894	-4.1
Maryland.....	219	24	-17.2	167	+1.8	28	109	+45.3	6,173	+1
Massachusetts.....	365	46	+142.1	272	+12.9	47	338	+24.3	19,046	-6.7
Michigan.....	693	77	+30.5	489	+11.1	127	423	+87.2	10,192	+1.1
Minnesota.....	1,004	168	+1.2	752	-17.1	84	240	+19.4	10,068	+3.1
Mississippi.....	127	0	-100.0	97	-21.8	30	87	+81.3	3,931	-4
Missouri.....	764	68	-18.1	644	-9.9	52	397	+125.6	16,161	+12.7
Montana.....	486	70	-64.5	389	-24.0	27	132	+103.1	1,384	+4
Nebraska.....	426	65	+32.7	348	-13.9	13	116	+52.6	2,574	-1.2
Nevada.....	123	10	-28.6	109	+9.0	4	30	+50.0	297	+1.7
New Hampshire.....	107	7	+16.7	80	+5.3	20	56	+30.2	1,733	-1.5
New Jersey.....	235	78	-35.5	101	-39.5	56	265	+55.9	15,186	+7
New Mexico.....	240	52	-24.6	161	+18.3	27	60	+46.3	2,967	+5.7
New York.....	1,494	292	-6.1	984	-15.8	218	540	+61.7	32,460	-3.1
North Carolina.....	352	59	-41.6	272	-24.7	21	183	+71.0	3,890	+3.5
North Dakota.....	213	31	0	151	-10.7	31	160	+122.2	1,796	+28.9
Ohio.....	1,504	351	+10.4	1,054	+9.1	99	619	+92.2	19,535	+1.7
Oklahoma.....	389	66	-35.3	292	-9.3	31	129	+118.6	8,340	+1.5
Oregon.....	439	59	-10.6	347	-15.8	33	185	+134.2	6,843	+4.5
Pennsylvania.....	1,367	105	-30.5	891	-14.1	371	623	+29.5	63,032	+21.5
Rhode Island.....	71	9	0	54	+58.8	8	30	+11.1	3,308	-10.5
South Carolina.....	227	21	-40.0	186	+8.8	20	63	+34.0	3,360	-1.4
South Dakota.....	340	47	+6.8	263	-17.3	30	114	+171.4	1,955	+24.9
Tennessee.....	310	28	-3.4	268	-1.5	14	191	+89.1	7,588	+1.7
Texas.....	1,372	169	-10.6	1,147	+1.6	56	367	+92.1	9,271	+6.9
Utah.....	351	57	+42.5	267	+15.1	27	46	+91.7	1,576	+8.7
Vermont.....	85	8	+60.0	74	+17.5	3	28	+40.0	404	+5.2
Virginia.....	362	42	-32.3	310	-6.6	10	113	+23.0	3,106	+1.8
Washington.....	596	55	+17.0	466	+12.6	75	134	+106.2	6,408	+2.7
West Virginia.....	267	26	0	234	-13.7	7	130	+51.2	6,000	+3.8
Wisconsin.....	937	155	+9.2	678	+4.8	104	516	+136.7	8,248	+2.0
Wyoming.....	219	16	+33.3	168	-17.6	35	111	+152.3	529	+11.8
District of Columbia.....	186	58	0	94	-54.6	34	242	+100.0	2,270	+38.2

<sup>1</sup> Includes only security-wage placements on work-relief projects.

# TREND OF EMPLOYMENT AND PAY ROLLS

## Summary of Employment Reports for July 1936

**E**MPLOYMENT gains from June to July in 52 of the 90 manufacturing industries surveyed and 9 of the 16 nonmanufacturing industries offset the declines in the remaining industries sufficiently to result in a net contra-seasonal gain of 2,500 workers.

Pay-roll gains in 40 manufacturing industries and 6 nonmanufacturing industries were not sufficient, however, to prevent a decline of approximately \$2,200,000 in weekly wage disbursements. The net pay-roll decline was due largely to inventory taking, repairs, and vacations, but was less than the usual sharp recessions in July.

Class I railroads also had more employees on their pay rolls in July than in June according to preliminary reports of the Interstate Commerce Commission.

Public employment reports for July showed substantial gains in employment on construction projects financed from regular governmental appropriations and by the Reconstruction Finance Corporation. A moderate increase in the number of workers employed in July compared with the previous month occurred on the emergency conservation program.

### Industrial and Business Employment

A SLIGHT increase in employment from June to July was shown in the combined manufacturing and nonmanufacturing industries surveyed, but weekly pay rolls showed a decline of approximately \$2,200,000, due largely to inventory taking, repairs, and vacations.

Although the employment gain amounted to only 2,500 workers, it was significant because it was a continuation of the expansion that had been shown each month since March and was in contrast to the sharp recessions usually shown in July. The pay-roll decline was also significant in that it was much smaller than the decreases usually reported at this season of the year. A comparison with July 1935 shows nearly 1,000,000 more workers on the pay rolls of these industries in the current month and approximately \$42,000,000 more in weekly wage disbursements.

Factory employment showed a contra-seasonal increase of 0.9 percent from June to July, continuing the succession of gains which had

been shown each month since January. The July employment index (86.8) is higher than that for any month since October 1930. Factory pay rolls fell 1.1 percent, due primarily to inventory taking, repairs, vacations, and the July 4 holiday. During the preceding 17 years, 1919 to 1935, for which information is available, decreases in employment and pay rolls from June to July have predominated, gains in employment having been shown in only 3 years (1919, 1929, and 1933), and in pay rolls in only 2 (1919 and 1933). It may be added that the pay-roll decrease this year was smaller than the decline in July of any of these preceding years, due in part to the spread in the practice of granting of vacations with pay. With the exception of the 2 months immediately preceding, the index of factory pay rolls for July (77.8) was higher than that of any month since October 1930.

Employment in the nondurable-goods group of manufacturing industries advanced 1.9 percent to 94.4 percent of the 1923-25 level, but the durable-goods group showed a decline of 0.3 percent, the employment index standing at 79.7 compared with 100 for the 3-year period 1923-25. With the exception of June 1936, the durable-goods employment index was higher than that of any month since September 1930.

Fifty-two of the 90 manufacturing industries surveyed showed gains in employment and 40 showed increased pay rolls. The increases in employment in July in several of the industries raised the employment levels to the highest points recorded in any month since 1930. Blast furnaces, steel works, and rolling mills reported more workers in July than in any month since July 1930 and employment in foundries and machine shops exceeded all levels since August 1930. Employment in the machine-tool industry was above the level of any month since December 1930. In the petroleum-refining industry, employment was higher in July than in any month since October 1930 and in the electrical machinery, apparatus, and supplies industry above the level of any month since June 1931. The cast-iron pipe, steam fittings, structural metalwork, brick, and aluminum, industries employed the largest number of workers since the latter months of 1931.

The most pronounced employment gains between June and July were seasonal in character. Canning and preserving firms reported an increase of 37.7 percent over the month interval. The beverage industry showed a gain of 10.5 percent and beet-sugar establishments an increase of 9.2 percent. Employment in the cottonseed-oil-cake-meal industry showed a gain of 8.7 percent and the flour industry increased the number of its workers by 7.4 percent. The typewriter industry showed a gain of 14.7 percent in employment, and the slaughtering and meat packing and the locomotive industries reported gains of 5.9 percent. A gain of 4.7 percent was shown by reports received

from establishments in the ice-cream industry and an increase of 4.6 percent was reported by rubber boot and shoe firms.

Other increases in employment in industries of major importance were 6.7 percent in boots and shoes; 4.4 percent in furniture; 4.0 percent in silk and rayon; 3.7 percent in structural metalwork; 3.1 percent in petroleum refining; 3.3 percent in chemicals; 3.1 percent in blast furnaces, steel works, and rolling mills; 3.0 percent in cotton goods; 2.4 percent in men's clothing; 2.3 percent in electrical machinery; 1.2 percent in woolen and worsted goods; 1.3 percent in book and job printing; and 1.3 percent in foundries and machine shops. The gain of 2 percent in the machine-tool industry continued the succession of increases which had been shown each month since October 1934.

Seasonal influences caused sharp recessions in employment between June and July in a number of industries. The silverware and plated ware industry reported a decrease in employment of 14.2 percent; millinery, 12.6 percent; agricultural implements, 10.7 percent; women's clothing, 8.3 percent; confectionery, 2.5 percent; and stoves, 3.5 percent. The automobile industry showed a decline of 4.1 percent in employment coupled with a decrease of 7.1 percent in pay rolls. Other industries in which substantial declines were reported were engines-tractors-turbines, 5.4 percent; electric and steam car building, 5.2 percent; lighting equipment, 4.0 percent; and cutlery and edge tools, 3.8 percent.

Nine of the 16 nonmanufacturing industries had more employees on their pay rolls in July than in June and 6 showed larger pay rolls. The gain of 1 percent in employment in wholesale trade represented the return to work of approximately 13,000 persons and increases of 1.4 percent in telephone and telegraphs, 1.5 percent in light and power, and 0.9 percent in electric-railroad and motor-bus operation and maintenance were equivalent to an estimated gain of 11,000 workers. The 3.7 percent advance in laundry employment indicated the addition of over 7,500 workers to laundry pay rolls and the remaining four nonmanufacturing industries which showed gains in employment (quarrying, crude-petroleum producing, insurance, and private building construction) added approximately 7,000 workers to their rolls. These gains, however, were not sufficient to offset the declines in the remaining industries. The 2.7 percent shrinkage in number of workers in retail trade was seasonal and indicated 90,000 less employees in retail stores. Anthracite mining showed a decline in employment of 5.6 percent or 4,000 workers, and the remaining five nonmanufacturing industries accounted for an additional decrease of 4,500 in number of workers.

Preliminary reports of the Interstate Commerce Commission showed 1,072,780 workers (exclusive of executives and officials) employed by class I railroads in July, as compared with 1,065,548 in June. This indicated a gain of 0.7 percent. Corresponding pay-roll data for July were not available at the time this report was prepared. The total compensation of all employees except executives and officials was \$145,726,645 in June and \$144,819,909 in May, the gain over the month interval being 0.6 percent. The Commission's preliminary indexes of employment based on the 3-year average 1923-25 as 100, were 60.7 for July and 60.3 for June. The final May index was 59.8.

*Hours and earnings.*—Average hours worked per week in the manufacturing industries surveyed were 1.7 percent lower in July than in June, the July figure standing at 38.5. Average hourly earnings fell 0.4 percent to 57.2 cents and average weekly earnings dropped 2.1 percent to \$22.39.

Only 4 of the 14 nonmanufacturing industries for which man-hour data are compiled showed gains in average hours worked per week and 7 showed increased hourly rates. Six of the 16 nonmanufacturing industries covered showed increased average weekly earnings.

Table 1 presents a summary of employment and pay-roll indexes and average weekly earnings in July 1936 for all manufacturing industries combined, for selected nonmanufacturing industries, and for class I railroads, with percentage changes over the month and year intervals except in the few industries for which certain items cannot be computed. The indexes of employment and pay rolls for the manufacturing industries are based on the 3-year average 1923-25 as 100, and for the nonmanufacturing industries on the 12-month average for 1929 as 100.



Table 1.—Employment, Pay Rolls, and Weekly Earnings in All Manufacturing Industries Combined and in Manufacturing Industries, July 1936 (Preliminary figures)

Industry	Employment			Pay roll			Average weekly earnings		
	Index July 1936	Percentage change from—		Index July 1936	Percentage change from—		Average in July 1936	Percentage change from—	
		June 1936	July 1935		June 1936	July 1935		June 1936	July 1935
All manufacturing industries combined.....	(1923-25=100) 86.8	+0.9	+8.9	(1923-25=100) 77.8	-1.1	+20.1	\$22.40	-2.1	+10.2
Class I steam railroads <sup>1</sup> .....	60.7	+7	+6.5	(2)	(2)	(2)	(2)	(2)	(2)
Coal mining:	(1929=100)			(1929=100)					
Anthracite.....	48.4	-5.6	-2.1	37.2	-11.4	-9	22.37	-6.1	+1.3
Bituminous.....	75.5	-4	+7.8	62.6	+1.9	+74.4	21.02	+2.2	+61.8
Metalliferous mining.....	61.3	-1.1	+35.5	46.1	-4.5	+48.0	23.38	-3.4	+9.3
Quarrying and nonmetallic mining.....	54.4	+1.8	+6.9	43.9	-4	+27.5	20.24	-2.1	+19.2
Crude-petroleum producing <sup>2</sup> .....	75.4	+2.4	-2.5	60.7	+3.0	+1.2	29.26	+6	+3.9
Public utilities:									
Telephone and telegraph.....	73.1	+1.4	+4.0	79.9	+3.3	+5.6	29.18	+1.8	+1.5
Electric light and power and manufactured gas.....	91.7	+1.5	+8.2	89.8	+1.8	+10.1	31.74	+4	+1.9
Electric-railroad and motor-bus operation and maintenance.....	72.4	+9	+1.4	66.5	-5	+4.8	29.88	-1.4	+3.5
Trade:									
Wholesale.....	85.4	+1.0	+4.0	69.0	+8	+6.8	28.74	-1	+2.7
Retail.....	83.2	-2.7	+4.9	65.1	-1.9	+7.6	21.43	+8	+2.6
General merchandising.....	90.7	-5.9	+6.1	77.3	-4.9	+7.4	18.48	+9	+1.1
Other than general merchandising.....	81.2	-1.7	+4.6	62.6	-1.2	+7.7	23.57	+5	+3.0
Hotels (year-round) <sup>4</sup> .....	83.3	-8	+3.7	66.0	-9	+6.3	13.96	-1	+2.6
Laundries.....	90.5	+3.7	+7.2	79.0	+4.2	+11.5	16.26	+5	+3.9
Dyeing and cleaning.....	85.5	-2.3	+4.6	64.8	-6.4	+5.4	18.62	-4.2	+8
Brokerage.....	(2)	(2)	+21.1	(2)	(2)	+28.9	37.45	-4	+6.4
Insurance.....	(2)	+1.3	+4	(2)	-2	+1.2	37.99	-4	+8
Building construction.....	(2)	+8	+20.7	(2)	-2	+34.8	27.04	-1.0	+12.0

<sup>1</sup> Preliminary; source—Interstate Commerce Commission.

<sup>2</sup> Not available.

<sup>3</sup> Data for March, April, May, and June 1936, revised as follows:

March employment index, 70.9; percentage change from February +0.1; from March 1935, -4.2; pay-roll index, 56.0; percentage change from February, +0.5; from March 1935, -0.1; average weekly earnings, \$29.79; percentage change from February, +0.4; from March 1935, +4.4.

April employment index, 71.3; percentage change from March, +0.6; from April 1935, -4.7; pay-roll index, 57.1; percentage change from March, +1.9; from April 1935, +0.7; average weekly earnings, \$29.98; percentage change from March, +1.3; from April 1935, +5.7.

May employment index, 72.7; percentage change from April, +2.0; from May 1935, -4.4; pay-roll index, 58.0; percentage change from April, +1.6; from May 1935, +0.3; average weekly earnings, \$29.53; percentage change from April, -0.4; from May 1935, +4.7.

June employment index, 73.7; percentage change from May, +1.3; from June 1935, -3.9; pay-roll index, 58.9; percentage change from May, +1.6; from June 1935, -0.4; average weekly earnings, \$29.65; percentage change from May, +0.3; from June 1935, +3.5.

<sup>4</sup> Cash payments only; the additional value of board, room, and tips cannot be computed.

<sup>5</sup> Less than  $\frac{1}{10}$  of 1 percent.

## Public Employment

MORE than 347,000 workers were employed on construction projects financed from Public Works Administration funds in July, a decrease of 0.6 percent compared with the 350,000 employed in June. The gain of over 11,000 in the number of employees working on non-Federal construction projects financed from funds provided by the Emergency Relief Appropriation Act of 1935 was offset by losses in employment on Federal and non-Federal projects financed from

funds provided by the National Industrial Recovery Act. Total pay-roll disbursements for July, however, amounted to \$25,969,000, an increase of 0.5 percent over June.

Employment on projects financed from regular governmental appropriations registered a substantial gain in July as compared with the previous month. The 126,000 employees in July represented an increase of 23.2 percent over June. The most marked gains occurred in the construction of naval vessels, public roads, and river, harbor, and flood control. Pay-roll disbursements for the month amounted to \$12,425,000, an increase of 44 percent over June.

Construction projects financed by the Reconstruction Finance Corporation employed 9,843 workers in July, an increase of 16 percent over the 8,501 employed in June. All types of projects showed gains in the number of persons employed. Total pay-roll disbursements of \$1,064,000 were 13 percent greater than in June.

In July employment on projects financed by The Works Program was somewhat below the level of the previous month. The number of workers engaged on this program in July was 150,000 less than in June.

On Federal projects employment totaled 452,000, a decrease of 0.3 percent compared with June. Employment on projects operated by the Works Progress Administration decreased from 2,561,000 in June to 2,412,000 in July. Total pay-roll disbursements of \$145,474,000 were \$5,406,000 less than in June.

Increases were reported in the number of persons employed in the executive, legislative, and military branches of the Federal Government, but a decrease occurred in the judicial service. In the executive service, employment increased less than 1 percent in July compared with the previous month. The level of employment, however, was 12.9 percent higher in July 1936 than in July 1935. Of the 831,000 employees in the executive service in July, 116,000 were employed in the District of Columbia and 715,000 outside the District. The most pronounced increase in employment in the executive branch of the Federal Government in July occurred in the War Department. Substantial gains were also reported in the Post Office Department, the Treasury Department, the Interior Department, and the Tennessee Valley Authority. On the other hand, there were appreciable decreases in the number of employees in the Resettlement Administration, the Veterans' Administration, and the Department of Commerce.

Employment in emergency conservation work (Civilian Conservation Camps) in July totaled over 404,000, an increase of 21,000 compared with June. Employment gains were shown for all groups of employees with the exception of supervisory and technical workers. Pay-roll

disbursements for the month increased \$449,000, compared with June pay-roll disbursements.

During the month 186,700 workers, the highest level of employment recorded since October 1935, were employed on the construction and maintenance of State roads. Of the 186,700 workers employed in July, 12 percent were working on the construction of new roads and 88 percent on maintenance work. Total pay-roll disbursements amounted to \$11,839,000 in July, compared with \$11,488,000 in the previous month.

A summary of Federal employment and pay-roll statistics for July is presented in table 2.

Table 2.—Summary of Federal Employment and Pay Rolls, July 1936  
(Preliminary figures)

Class	Employment		Per-centage change	Pay roll		Per-centage change
	July 1936	June 1936		July 1936	June 1936	
Federal service:						
Executive <sup>1</sup> .....	<sup>2</sup> 830,861	824,626	+0.8	\$129,066,193	<sup>3</sup> \$129,467,175	-0.3
Judicial.....	1,867	1,947	-4.1	494,414	469,743	+5.3
Legislative.....	5,137	5,043	+1.9	1,202,281	1,187,815	+1.2
Military.....	299,314	297,433	+6	23,464,766	22,041,326	+6.5
Construction projects:						
Financed by P. W. A.....	<sup>4</sup> 347,346	<sup>5</sup> 349,572	-6	<sup>4</sup> 25,968,991	<sup>5</sup> 25,840,926	+5
Financed by R. F. C.....	<sup>6</sup> 9,843	<sup>7</sup> 8,501	+15.8	<sup>6</sup> 1,063,728	<sup>7</sup> 941,680	+13.0
Financed by regular govern- mental appropriations.....	126,176	102,376	+23.2	12,424,667	8,631,104	+44.0
The Works Program: <sup>8</sup>						
Federal projects.....	451,570	453,012	-3	22,699,760	22,657,507	+2
Projects operated by W. P. A.....	2,412,462	2,561,307	-5.8	122,774,427	128,222,740	-4.2
Relief work:						
Emergency conservation work...	<sup>9</sup> 404,422	<sup>10</sup> 383,279	+5.5	<sup>9</sup> 18,417,986	<sup>11</sup> 17,969,256	+2.5

<sup>1</sup> Data concerning number of wage earners refer to employment on last day of month specified. Includes employees of Columbia Institution for the Deaf and Howard University.

<sup>2</sup> Includes 919 employees by transfer previously reported as separations by transfer not actual additions for July.

<sup>3</sup> Revised.

<sup>4</sup> Includes 188,076 wage earners and \$12,277,476 pay roll covering P. W. A. projects financed from E. R. A. A. 1935 funds.

<sup>5</sup> Includes 176,184 wage earners and \$11,435,825 pay roll covering P. W. A. projects financed from E. R. A. A. 1935 funds.

<sup>6</sup> Includes 280 employees and pay roll of \$19,663 on projects financed by R. F. C. Mortgage Co.

<sup>7</sup> Includes 157 employees and pay roll of \$13,265 on projects financed by R. F. C. Mortgage Co.

<sup>8</sup> Data covering P. W. A. projects financed from E. R. A. A. 1935 funds are not included in The Works Program and shown only under P. W. A.

<sup>9</sup> 41,507 employees and pay roll of \$5,676,556 included in executive service.

<sup>10</sup> 42,035 employees and pay roll of \$5,877,050 included in executive service.

<sup>11</sup> Revised; 42,035 employees and pay roll of \$5,877,050 included in executive service.

## Detailed Reports for June 1936

THIS article presents the detailed figures on volume of employment, as compiled by the Bureau of Labor Statistics, for the month of June 1936. The tabular data are the same as those published in the Employment and Pay Rolls pamphlet for June, except for certain minor revisions and corrections.

### Industrial and Business Employment

MONTHLY reports on employment and pay rolls in industrial and business industries are now available for the following groups: 90 manufacturing industries; 16 nonmanufacturing industries, including building construction; and class I steam railroads. The reports for the first two of these groups—manufacturing and non-manufacturing—are based on sample surveys by the Bureau of Labor Statistics, and in virtually all industries the samples are sufficiently large to be entirely representative. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.

#### Employment, Pay Rolls, Hours, and Earnings in June 1936

THE indexes of employment and pay rolls, average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries in June 1936 are shown in table 1. Percentage changes from May 1936 and June 1935 are also given.

Table 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, June 1936

Industry	Employment			Pay rolls			Average weekly earnings <sup>1</sup>			Average hours worked per week <sup>1</sup>			Average hourly earnings <sup>1</sup>		
	Index, June 1936	Percentage change from—		Index, June 1936	Percentage change from—		June 1936	Percentage change from—		June 1936	Percentage change from—		June 1936	Percentage change from—	
		May 1936	June 1935		May 1936	June 1935		May 1936	June 1935		May 1936	June 1935		May 1936	June 1935
<i>Manufacturing (indexes are based on 3-year average 1923-1925=100)</i>															
<b>All manufacturing industries.....</b>	<b>86.0</b>	<b>+0.4</b>	<b>+7.9</b>	<b>79.6</b>	<b>+0.4</b>	<b>+19.9</b>	<b>\$22.92</b>	<b>+0.1</b>	<b>+11.2</b>	<b>39.2</b>	<b>-0.1</b>	<b>+10.6</b>	<i>Cents</i> <b>57.5</b>	<b>+0.1</b>	<b>-0.2</b>
<b>Durable goods.....</b>	<b>79.9</b>	<b>+ .9</b>	<b>+14.6</b>	<b>76.5</b>	<b>+ .5</b>	<b>+32.8</b>	<b>25.82</b>	<b>- .4</b>	<b>+15.9</b>	<b>41.1</b>	<b>- .4</b>	<b>+14.2</b>	<b>61.8</b>	<b>+ .2</b>	<b>+ .7</b>
<b>Nondurable goods.....</b>	<b>92.6</b>	<b>- .1</b>	<b>+2.2</b>	<b>83.5</b>	<b>+ .1</b>	<b>+7.6</b>	<b>19.88</b>	<b>+2</b>	<b>+5.3</b>	<b>37.2</b>	<b>+ .3</b>	<b>+5.9</b>	<b>53.1</b>	<b>-0</b>	<b>-1.5</b>
<i>Durable goods</i>															
<b>Iron and steel and their products, not including machinery.....</b>	<b>82.4</b>	<b>+1.6</b>	<b>+14.8</b>	<b>78.5</b>	<b>+2.1</b>	<b>+40.9</b>	<b>26.17</b>	<b>+ .5</b>	<b>+22.8</b>	<b>41.6</b>	<b>+ .1</b>	<b>+21.1</b>	<b>61.9</b>	<b>+ .5</b>	<b>+1.1</b>
Blast furnaces, steel works, and rolling mills.....	83.2	+1.3	+14.9	84.0	+1.8	+47.8	27.86	+ .5	+28.7	41.7	- .3	+27.6	66.7	+ .9	+1.2
Bolts, nuts, washers, and rivets.....	87.7	+ .4	+13.5	79.0	-3.6	+37.7	23.24	-4.0	+21.2	41.0	-4.0	+22.8	56.6	+ .5	- .9
Cast-iron pipe.....	60.2	+3.4	+18.3	41.9	+2.9	+44.8	19.26	- .5	+22.3	39.4	- .1	+23.4	48.4	+ .3	-1.6
Cutlery (not including silver and plated cutlery) and edge tools.....	76.9	+ .4	- .7	65.8	+5.2	+10.9	21.23	+4.7	+11.7	40.4	+4.1	+11.7	53.0	+ .1	+ .8
Forgings, iron and steel.....	69.0	+ .5	+19.8	54.7	-2.4	+31.8	25.30	-2.8	+10.0	41.1	-2.4	+10.3	61.5	- .6	- .2
Hardware.....	54.6	- .3	+6.2	53.1	-1.2	+23.6	22.94	- .9	+16.3	40.5	-1.0	+14.0	57.2	+ .4	+1.2
Plumbers' supplies.....	95.3	+ .5	+15.8	65.5	+ .9	+30.1	22.81	+ .4	+12.3	40.3	+1.5	+10.6	56.6	-1.2	+1.2
Steam and hot-water heating apparatus and steam fittings.....	62.5	+1.2	+21.4	48.1	+3.8	+39.1	24.67	+2.6	+14.5	42.0	+2.4	+14.3	58.6	+ .1	- .5
Stoves.....	110.7	+4.2	+12.4	93.4	+6.8	+27.2	24.03	+2.4	+13.0	41.9	+1.4	+12.2	57.6	+ .9	+ .4
Structural and ornamental metalwork.....	72.6	+5.0	+29.7	65.1	+7.3	+60.0	25.03	+2.1	+23.5	43.1	+1.7	+25.3	58.2	+ .6	-1.0
Tin cans and other tinware.....	102.7	+4.1	+6.9	102.1	+3.5	+8.8	21.90	- .6	+1.8	40.4	+ .9	+ .5	54.1	-1.1	+ <sup>(2)</sup>
Tools (not including edge tools, machine tools, files, and saws).....	73.8	+1.9	+15.4	75.5	+2.1	+27.0	23.30	+ .3	+10.2	43.3	- .2	+10.9	53.8	+ .4	- .3
Wirework.....	144.3	-2.2	+17.9	143.3	-3.9	+34.3	22.73	-1.8	+13.7	41.2	-2.7	+15.7	55.1	+ .9	- .9

See footnotes at end of table.

Table 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, June 1936—Continued

Industry	Employment			Pay rolls			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Index, June 1936	Percentage change from—		Index, June 1936	Percentage change from—		Index, June 1936	Percentage change from—		June 1936	Percentage change from—		June 1936	Percentage change from—	
		May 1936	June 1935		May 1936	June 1935		May 1936	June 1935		May 1936	June 1935		May 1936	June 1935
<i>Manufacturing (indexes are based on 3-year average 1923-1925=100)—Continued</i>															
<i>Durable goods—Continued</i>															
<b>Machinery, not including transportation equipment</b>	<b>100.3</b>	<b>+1.2</b>	<b>+19.1</b>	<b>90.6</b>	<b>+1.1</b>	<b>+35.4</b>	<b>\$25.55</b>	<b>-0.1</b>	<b>+13.6</b>	<b>41.7</b>	<b>-0.4</b>	<b>+13.2</b>	<i>Cents</i>		
Agricultural implements	132.6	-4.2	+19.8	156.5	-7.3	+22.8	24.14	-3.2	+2.7	39.8	-2.6	+ .8	61.0	+0.2	+0.4
Cash registers, adding machines, and calculating machines	113.2	-6.6	+10.6	102.0	-5.3	+20.9	29.56	+1.3	+9.3	42.3	+ .6	+7.3	70.7	+1.0	+2.2
Electrical machinery, apparatus, and supplies	79.1	+2.6	+13.6	73.0	+2.7	+30.0	25.34	+ .1	+14.2	41.0	-(?)	+15.2	61.4	- .1	- .3
Engines, turbines, tractors, and water wheels	120.4	- .1	+17.2	92.0	+ .3	+23.4	27.80	+ .4	+5.3	40.4	+ .6	+1.7	69.0	- .1	+3.6
Foundry and machine-shop products	87.0	+1.0	+19.6	79.6	+1.5	+41.5	25.84	+ .5	+18.3	43.0	- .6	+17.5	59.8	+ .9	+ .8
Machine tools	109.8	+1.9	+29.0	104.2	+2.5	+45.2	28.45	+ .6	+12.4	44.7	+ .1	+10.9	63.6	+ .5	+1.5
Radios and phonographs	242.5	+12.6	+46.6	162.0	+14.2	+60.6	20.69	+1.4	+9.8	38.7	+2.3	+14.7	53.5	- .8	-4.7
Textile machinery and parts	70.8	+ .6	+10.8	61.4	-3.5	+17.5	23.70	-4.0	+6.2	39.7	-4.5	+6.4	59.7	+ .5	- .3
Typewriters and parts	78.0	-26.8	-19.0	69.8	-28.2	-10.2	22.84	-1.9	+11.0	39.9	-1.7	+10.1	57.3	- .2	+1.0
<b>Transportation equipment</b>	<b>104.5</b>	<b>- .9</b>	<b>+11.5</b>	<b>105.9</b>	<b>-2.9</b>	<b>+32.2</b>	<b>29.79</b>	<b>-2.0</b>	<b>+18.5</b>	<b>39.5</b>	<b>-2.4</b>	<b>+16.8</b>	<b>75.3</b>	<b>+ .5</b>	<b>+1.6</b>
Aircraft	537.1	-1.3	+29.1	439.4	+1.3	+29.1	26.55	+2.6	0	42.9	+1.9	+5.1	64.5	+ .7	-2.5
Automobiles	114.3	-1.2	+6.6	119.6	-3.6	+28.0	30.58	-2.5	+20.1	39.7	-3.2	+17.8	77.1	+ .7	+2.6
Cars, electric- and steam-railroad	64.6	+3.9	+34.1	71.9	+4.9	+54.4	23.28	+1.0	+15.0	38.6	+1.9	+18.9	60.3	- .9	-2.9
Locomotives	36.8	+5.9	+29.4	18.2	+6.5	+43.6	25.42	+ .5	+11.1	39.4	+ .1	+13.9	64.5	+ .5	-2.8
Shipbuilding	95.8	-2.9	+44.8	91.8	-4.0	+65.3	27.65	-1.1	+13.9	36.7	+ .5	+14.2	75.4	- .3	+1.6
<b>Railroad repair shops</b>	<b>60.6</b>	<b>+ .8</b>	<b>+12.6</b>	<b>62.3</b>	<b>+1.1</b>	<b>+22.2</b>	<b>28.79</b>	<b>+ .3</b>	<b>+8.4</b>	<b>42.5</b>	<b>+ .2</b>	<b>+7.4</b>	<b>67.8</b>	<b>+ .1</b>	<b>+(?)</b>
Electric railroad	65.6	- .5	-(?)	61.9	-1.3	+4.8	28.47	- .7	+4.9	44.3	-1.2	+2.4	62.5	+ .3	+ .8
Steam railroad	60.2	+ .8	+13.8	62.4	+1.2	+23.5	28.85	+ .4	+8.7	42.4	+ .3	+8.5	68.2	+ .1	- .1
<b>Nonferrous metals and their products</b>	<b>89.7</b>	<b>+ .8</b>	<b>+9.7</b>	<b>76.1</b>	<b>+1.2</b>	<b>+21.0</b>	<b>22.60</b>	<b>+ .4</b>	<b>+10.3</b>	<b>40.4</b>	<b>+ .2</b>	<b>+10.5</b>	<b>55.7</b>	<b>+ .2</b>	<b>+ .6</b>
Aluminum manufactures	87.5	+3.5	+14.8	80.9	+2.7	+25.3	22.79	- .7	+9.0	40.3	- .2	+4.3	56.5	- .4	+4.1
Brass, bronze, and copper products	87.9	+ .3	+11.5	73.2	- .2	+22.1	24.04	- .4	+9.6	40.9	- .6	+8.9	58.6	+(?)	+ .3
Clocks and watches and time-recording devices	91.7	+ .4	+13.6	81.7	+2.3	+21.5	20.76	+1.9	+6.9	40.4	+2.1	+4.0	51.4	- .2	+2.6
Jewelry	68.8	+1.6	+5.0	54.1	+2.5	+9.4	21.16	+1.0	+4.2	37.0	+1.3	+9.7	56.1	+ .5	-1.4
Lighting equipment	82.7	+ .4	+20.0	80.9	+ .6	+35.3	22.93	+ .2	+12.6	41.2	- .2	+14.5	56.1	+ .5	-1.9

Silverware and plated ware	64.0	-1.8	-12.8	47.3	-3.3	-17.1	20.94	-1.6	-5.1	36.0	-2.2	-6.4	57.7	+6	+8
Smelting and refining—copper, lead, and zinc	89.4	+1.6	+9.3	66.8	+3.0	+25.6	23.99	+1.4	+15.3	42.3	+1.7	+12.6	56.7	-3	+2.7
Stamped and enameled ware	112.3	+1.3	+9.5	98.8	+1.6	+27.3	20.92	+3	+16.2	40.8	-5	+15.8	51.4	+8	+6
<b>Lumber and allied products</b>	<b>57.5</b>	<b>+1.4</b>	<b>+17.6</b>	<b>49.4</b>	<b>-2.7</b>	<b>+36.1</b>	<b>19.45</b>	<b>+1.3</b>	<b>+15.8</b>	<b>42.1</b>	<b>+1.0</b>	<b>+10.5</b>	<b>45.7</b>	<b>+(2)</b>	<b>+3.7</b>
Furniture	74.4	+2.0	+10.9	59.3	+4.6	+22.3	19.01	+2.5	+10.0	42.0	+3.1	+11.4	45.2	+(2)	-3
Lumber:															
Millwork	51.7	+3.9	+23.4	45.9	+4.7	+45.6	20.49	+8	+18.1	44.5	+1.3	+17.0	46.0	-6	+5
Sawmills	38.5	+2	+24.5	31.4	+5	+50.2	19.64	+4	+20.9	41.9	-1	+11.4	47.2	+3	+8.9
Turpentine and rosin	99.0	+1.2	+2	58.6	+7	-2.2	13.67	-4	-2.2						
<b>Stone, clay, and glass products</b>	<b>60.7</b>	<b>+1.5</b>	<b>+9.0</b>	<b>49.5</b>	<b>+4</b>	<b>+22.2</b>	<b>21.21</b>	<b>-1.1</b>	<b>+12.1</b>	<b>38.9</b>	<b>-5</b>	<b>+13.9</b>	<b>55.7</b>	<b>-4</b>	<b>+8</b>
Brick, tile, and terra cotta	42.3	+5.9	+31.7	31.4	+6.5	+62.8	19.17	+6	+23.6	42.9	-3	+24.9	44.8	+5	-1.2
Cement	58.9	+9	-1.9	45.5	+3.3	+13.5	22.47	+2.4	+15.4	39.4	+1.1	+14.5	57.1	+1.2	+1.2
Glass	97.3	-(2)	+2.2	91.9	-1.2	+12.0	22.11	-1.2	+9.7	36.6	-8	+5.0	60.6	-6	+4.6
Marble, granite, slate, and other products	33.1	+6.8	+20.1	26.7	-2.5	+39.9	24.73	-8.7	+16.6	38.0	-7.6	+19.7	65.2	-1.5	-9
Pottery	68.2	-2.9	+2.1	50.0	-5.4	+8.4	19.62	-2.6	+6.0	38.5	+8	+13.4	54.9	-5	-4
<i>Nondurable goods</i>															
<b>Textiles and their products</b>	<b>93.2</b>	<b>-1.1</b>	<b>+3.1</b>	<b>75.7</b>	<b>-1.7</b>	<b>+6.8</b>	<b>15.95</b>	<b>-6</b>	<b>+3.6</b>	<b>35.2</b>	<b>+1</b>	<b>+10.0</b>	<b>45.3</b>	<b>-4</b>	<b>-4.6</b>
Fabrics	90.6	-1	+1.3	76.5	+1	+6.3	15.64	+2	+4.8	36.0	+3	+9.2	43.6	-3	-2.9
Carpets and rugs	80.4	+6	-1.0	68.2	-9	-11.1	18.77	-1.5	-10.2	33.7	-1.3	-7.4	55.7	-2	+(2)
Cotton goods	90.7	+4	+6.6	77.9	+8	+18.8	13.53	+4	+11.5	36.9	+4	+16.0	36.7	+(2)	-3.0
Cotton smallwares	82.8	-2.1	+2.0	71.9	-2.6	+9.1	16.71	-5	+7.1	37.3	-6	+7.2	44.9	+2	-5
Dyeing and finishing textiles	104.1	-2.8	-3.0	83.5	-4.7	+5.9	18.82	-2.0	+8.8	36.6	-8	+9.7	51.0	-1.5	-1.1
Hats, fur-felt	84.0	+(2)	+12.5	83.3	+7.0	+23.4	23.24	+7.0	+9.7	34.8	+11.8	+11.3	67.2	-1.2	-1.0
Knit goods	112.3	-9	+3.9	104.1	-1.3	+11.1	15.98	-4	+7.0	34.8	-6	+11.1	46.8	-3	-3.4
Silk and rayon goods	61.5	+1.6	-2.6	51.0	+3.1	-1.1	15.17	+1.5	+1.6	35.2	+1.3	+8.9	43.0	+1	-6.4
Woolen and worsted goods	87.0	+3	-10.1	67.7	+7	-12.0	17.84	+4	-2.2	35.8	+6	+3.6	50.0	-2	+1.3
Wearing apparel	95.2	-2.8	+7.4	69.6	-5.7	+7.7	16.86	-3.1	+3	33.2	-3	+12.8	49.1	-4	-9.6
Clothing, men's	91.5	+3.6	+5.7	70.2	+10.9	+10.3	18.27	+7.0	+4.3	32.1	+4.8	+12.9	56.2	+1.6	-5.9
Clothing, women's	119.7	-9.7	+10.4	77.0	-19.1	-8.0	17.01	-10.3	-2.0	33.6	-3.3	+14.7	47.8	-3.6	-13.6
Corsets and allied garments	83.6	-1.3	-4.4	79.1	-3.8	+5.3	15.12	-2.5	+10.1	34.3	-8	+11.9	43.1	-2.6	-2.4
Men's furnishings	113.4	-7	+13.0	73.8	+1.0	+16.7	13.51	+1.7	+3.1	38.2	+5.1	+29.0	34.2	-4	-18.3
Millinery	55.0	-12.5	-3	43.3	-20.2	-8.2	19.14	-8.7	-8.2						
Shirts and collars	105.9	+9	+7.6	99.7	-2.2	+5.2	12.45	-3.0	-2.4	34.2	-2.3	+10.5	37.1	+7	-11.9
<b>Leather and its manufactures</b>	<b>82.4</b>	<b>-1.8</b>	<b>-7</b>	<b>66.7</b>	<b>+1.2</b>	<b>-5.9</b>	<b>17.40</b>	<b>+3.1</b>	<b>-5.3</b>	<b>34.3</b>	<b>+5.5</b>	<b>-5.6</b>	<b>51.3</b>	<b>-1</b>	<b>-1.5</b>
Boots and shoes	79.7	-2.1	-1.1	58.2	+2.4	-10.0	16.11	+4.6	-9.1	33.0	+7.7	-7.7	50.0	-1	-2.3
Leather	93.5	-8	+7	94.6	-1.4	+3.9	21.63	-6	+3.3	38.6	-6	+1.9	55.6	-3	+1.0
<b>Food and kindred products</b>	<b>100.4</b>	<b>+4.3</b>	<b>+1.5</b>	<b>95.8</b>	<b>+3.3</b>	<b>+5.4</b>	<b>21.94</b>	<b>-9</b>	<b>+3.8</b>	<b>41.1</b>	<b>+6</b>	<b>+3.2</b>	<b>53.6</b>	<b>-1.3</b>	<b>-1.3</b>
Baking	115.9	+9	+1.4	106.0	+1.9	+6.5	23.09	+1.0	+5.0	42.7	+7	+5.5	54.0	+4	+1.1
Beverages	184.9	+3.3	+8.8	198.6	+3.0	+14.5	32.37	-3	+5.2	41.7	+(2)	+4.7	78.2	-4	+1.1
Butter	79.6	+6.3	+3.2	65.0	+6.6	+6.8	21.56	+2	+3.5						
Canning and preserving	91.3	+34.1	+2.0	100.3	+17.8	-2.3	13.28	-12.1	-4.3	33.7	-7.6	-3.1	39.5	-5.0	+1.4
Confectionery	67.5	-2.3	-6.8	58.6	-2.3	-7.5	15.86	0	-6	37.1	-3	+1.7	43.3	+8	-2.4
Flour	70.8	+5	-4.1	65.5	+4	+4.1	23.57	-1	+8.5	43.8	+1.9	+12.4	53.5	-7	+2.5
Ice cream	86.4	+5.3	+2.1	71.7	+3.3	+4.8	25.54	-1.9	+2.5	48.2	-6	+3.7	52.5	-1.3	-2.1
Slaughtering and meat packing	84.2	+1.7	+3.5	80.2	+3.4	+7.2	23.70	+1.7	+3.5	42.4	+2.2	+5.0	56.0	-6	-4.5
Sugar, beet	43.4	+10.7	+1	43.3	+9.8	+6.3	23.63	-9	+6.0	39.8	+2	+10.3	60.7	-1.9	+1.1
Sugar refining, cane	80.8	-1.1	-3.0	71.8	-2.9	-2.4	22.52	-1.8	+8	38.0	-2.8	-5.3	58.7	+1.8	+4.8

See footnotes at end of table.

Table 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, June 1936—Continued

Industry	Employment			Pay rolls			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Index, June 1936	Percentage change from—		Index, June 1936	Percentage change from—		June 1936	Percentage change from—		June 1936	Percentage change from—		June 1936	Percentage change from—	
		May 1936	June 1935		May 1936	June 1935		May 1936	June 1935		May 1936	June 1935		May 1936	June 1935
<i>Manufacturing (indexes are based on 3-year average 1923-1925=100)</i>															
<i>Nondurable goods—Continued</i>															
<b>Tobacco manufactures</b> .....	<b>56.9</b>	<b>+0.4</b>	<b>-1.6</b>	<b>48.3</b>	<b>+3.2</b>	<b>+3.2</b>	<b>\$15.15</b>	<b>+2.9</b>	<b>+4.8</b>	<b>36.7</b>	<b>+1.8</b>	<b>+4.0</b>	<b>40.9</b>	<b>+0.2</b>	<b>-0.1</b>
Chewing and smoking tobacco and snuff.....	64.3	-4	-3.5	63.1	-6.2	-6.1	15.14	-5.8	-2.8	34.2	-4.1	-4.8	44.4	-1.9	+2.7
Cigars and cigarettes.....	55.9	+5	-1.4	46.4	+4.9	+5.0	15.15	+4.5	+6.4	37.1	+2.7	+5.4	40.4	+5	-(2)
<b>Paper and printing</b> .....	<b>98.3</b>	<b>-7</b>	<b>+2.8</b>	<b>90.5</b>	<b>-1.5</b>	<b>-8.5</b>	<b>26.04</b>	<b>-8</b>	<b>+5.6</b>	<b>38.8</b>	<b>-1.2</b>	<b>+4.3</b>	<b>70.0</b>	<b>+3</b>	<b>+1.0</b>
Boxes, paper.....	84.8	-3	+2.0	79.8	-5	+7.2	19.21	-2	+5.0	39.5	-(2)	+7.2	48.9	-1	-1.6
Paper and pulp.....	110.3	-6	+1.1	95.8	-1.2	+9.7	22.06	-6	+8.3	40.9	-1.8	+7.6	53.9	+1.0	+1.1
Printing and publishing:															
Book and job.....	88.8	-1.2	+4.3	80.4	-3.2	+6.3	28.17	-2.1	+1.6	38.1	-1.4	+2.6	74.2	-7	-1.7
Newspapers and periodicals.....	102.5	-5	+3.5	98.1	-8	+9.8	35.16	-3	+5.7	36.9	-7	+9	92.3	+7	+2.4
<b>Chemicals and allied products, and petroleum refining</b> .....	<b>108.3</b>	<b>-1.5</b>	<b>+1.0</b>	<b>102.6</b>	<b>-3</b>	<b>+8.0</b>	<b>24.86</b>	<b>+1.3</b>	<b>+6.9</b>	<b>39.2</b>	<b>-7</b>	<b>+5.5</b>	<b>63.9</b>	<b>+2.5</b>	<b>+2.2</b>
Other than petroleum refining.....	107.8	-2.1	+1.3	101.7	-1.0	+8.5	22.88	+1.1	+7.0	40.3	-7	+5.0	57.3	+2.7	+2.9
Chemicals.....	111.7	+1.2	+3.3	108.9	+1.8	+11.1	26.56	+6	+7.5	40.7	-7	+5.1	65.3	+1.3	+2.7
Cottonseed—oil, cake, and meal.....	34.4	-14.1	-20.6	35.2	-11.8	-16.2	10.22	+2.6	+5.5	43.5	-5	+13.4	23.6	+4.2	-7.7
Druggists' preparations.....	96.5	-3	+7	93.3	-2.7	-4	21.65	-2.3	-1.1	39.0	+2.8	+2	56.1	+1.0	+1.5
Explosives.....	88.4	+6.4	+2.2	87.6	+8.9	+20.6	27.81	+2.4	+18.1	39.1	+1.2	+13.8	71.1	+1.2	+2.4
Fertilizers.....	68.1	-38.5	-14.0	67.1	-41.0	-3.0	15.25	-4.1	+12.5	39.0	-8.5	+11.0	39.0	+5.7	+1.4
Paints and varnishes.....	115.3	+7	+2.5	106.6	+6	+13.4	25.67	-1	+10.7	43.3	-5	+7.5	59.3	+4	+3.2
Rayon and allied products.....	342.0	+2	+4.9	262.4	+1.3	+9.1	20.28	+1.1	+4.1	38.8	+8	+2.5	52.2	+3	+1.8
Soap.....	98.0	+5	-1.6	96.7	+1.0	+9	23.81	+5	+2.6	39.3	+1.0	+2.6	60.8	-5	-3
Petroleum refining.....	110.7	+1.2	+1	105.6	+2.1	+6.3	29.43	+9	+6.3	36.2	-2	+5.6	81.8	+1.1	+1.3
<b>Rubber products</b> .....	<b>83.7</b>	<b>+8</b>	<b>+3.5</b>	<b>79.0</b>	<b>+2.9</b>	<b>+21.7</b>	<b>26.86</b>	<b>+2.1</b>	<b>+17.7</b>	<b>38.1</b>	<b>+1.0</b>	<b>+15.3</b>	<b>70.5</b>	<b>+1.6</b>	<b>+1.5</b>
Rubber boots and shoes.....	57.4	-2.6	+8.6	53.2	+4.4	+27.3	20.51	+7.3	+17.2	39.4	+6.3	+17.8	52.0	+9	-6
Rubber goods, other than boots, shoes, tires, and inner tubes.....	129.1	-1.4	+7.1	119.1	+(2)	+21.9	21.24	+1.4	+13.9	40.5	+1.9	+14.2	53.2	+7	+6
Rubber tires and inner tubes.....	72.6	+3.7	-4	70.9	+4.0	+20.3	31.86	+3	+20.7	35.9	-9	+16.1	88.9	+1.0	+3.9



Nonmanufacturing (indexes are based on 12-month average 1929=100)

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Coal mining:															
Anthracite.....	51.2	-6.7	-9.7	42.0	-25.4	-36.4	\$23.81	-20.1	-29.5	29.2	-16.9	-29.5	83.2	-0.8	+0.5
Bituminous.....	75.7	-7	-2.7	61.5	-1.1	-5.0	20.47	-4	-2.3	25.5	-2	-12.5	80.2	-1	+11.0
Metalliferous mining.....	61.9	+1.8	+34.8	48.2	+1.1	+53.2	24.43	-7	+13.7	40.9	-1.5	+16.3	59.2	+9	-7
Quarrying and nonmetallic mining.....	53.5	+2.7	+6.0	44.0	+4.4	+30.2	20.46	+1.6	+22.7	43.5	+1.2	+24.3	47.2	+5	-1.6
Crude-petroleum producing.....	72.9	+6	-4.9	58.5	+1.0	-1.1	29.05	+4	+3.9	38.6	+4	+6.8	75.3	-2	-4.0
Public utilities:															
Telephone and telegraph.....	72.1	+7	+2.7	77.4	-1.5	+4.0	28.79	-2.1	+1.2	38.3	-3.2	-2.3	77.9	+1.0	+3.8
Electric light and power and manufactured gas <sup>3</sup> .....	90.4	+1.6	+7.8	88.1	+1.3	+10.4	31.61	-3	+2.5	40.6	+( <sup>2</sup> )	+4.5	77.8	-2	-1.2
Electric-railroad and motorbus operation and maintenance.....	71.7	+3	+( <sup>2</sup> )	66.8	+1.0	+4.5	30.15	+7	+4.5	46.8	-2	+3.6	63.6	+1.1	+1.8
Trade:															
Wholesale.....	84.6	-1	+3.0	68.4	+2	+5.9	28.81	+3	+2.8	42.9	+1	+3.1	67.1	+4	-1.0
Retail.....	85.5	+5	+4.0	66.4	+9	+6.2	20.71	+4	+2.2	43.5	+3	+3.9	52.1	+2	-1.3
General merchandising.....	96.4	+9	+5.6	81.3	+6	+6.0	17.43	-3	+3	40.7	+9	+7.3	46.0	-5	-5.3
Other than general merchandising.....	82.6	+4	+3.5	63.3	+1.0	+6.5	23.43	+6	+2.9	44.4	+2	+2.9	53.9	+4	-5
Hotels (year-round) <sup>4</sup> .....	83.9	-2	+3.3	66.6	-5	+4.8	13.90	-3	+1.7	47.9	-4	+1.1	28.8	+3	+1.4
Laundries.....	87.2	+2.0	+6.0	75.8	+3	+11.1	16.13	-1.7	+4.8	42.7	-1.2	+4.4	37.3	-4	+7
Dyeing and cleaning.....	87.5	+2	+4.7	69.2	-4.0	+5.4	19.23	-4.2	+8	43.9	-2.4	+1.8	44.5	-1.9	+2
Brokerage.....	( <sup>5</sup> )	-1.9	+23.0	( <sup>5</sup> )	-1.8	+31.2	37.59	+1	+6.7	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Insurance.....	( <sup>5</sup> )	+4	+1.0	( <sup>5</sup> )	+1.1	+4.4	38.26	+7	+3.4	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Building construction.....	( <sup>5</sup> )	+4.3	+21.3	( <sup>5</sup> )	+5.5	+38.5	27.26	+1.2	+14.5	33.2	-2	+11.6	81.9	+1.2	+2.6

<sup>1</sup> Average weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments as all reporting firms do not furnish man-hours. Percentage changes over year are computed from indexes. Percentage changes over month in average weekly earnings for the manufacturing groups, for all manufacturing industries combined, and for retail trade are also computed from indexes.

<sup>2</sup> Less than 1/10 of 1 percent.

<sup>3</sup> May data revised as follows:

Employment index, 89.0; percentage change from April 1936, +1.1; from May 1935, +6.8.

Average weekly earnings, \$31.67; percentage change from April 1936, -0.1.

<sup>4</sup> Cash payments only; the additional value of board, room, and tips cannot be computed.

<sup>5</sup> Not available.

## Indexes of Employment and Pay Rolls, January 1935 to June 1936

Indexes of employment and pay rolls are given in tables 2 and 3 for all manufacturing industries combined, for the durable- and nondurable-goods groups of manufacturing industries separately, and for 13 nonmanufacturing industries including 2 subgroups under retail trade, by months, January 1935 to June 1936, inclusive. The accompanying diagram indicates the trend of factory employment and pay rolls from January 1919 to June 1936.

The indexes of factory employment and pay rolls are computed from returns supplied by representative establishments in 90 manufacturing industries. The base used in computing these indexes is the 3-year average 1923-25 taken as 100. In June 1936 reports were received from 24,870 establishments employing 4,227,007 workers, whose weekly earnings were \$96,877,320. The employment reports received from these establishments cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 90 industries included in the monthly survey of the Bureau of Labor Statistics.

The indexes for nonmanufacturing industries are also computed from data supplied by reporting establishments, but the base is the 12-month average for 1929 as 100.

Table 2.—Indexes of Employment and Pay Rolls in all Manufacturing Industries Combined and in the Durable- and Nondurable-Goods Groups, January 1935 to June 1936<sup>1</sup>

[3-year average 1923-25=100]

Month	Manufacturing											
	Total				Durable goods				Nondurable goods			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January.....	78.8	82.9	64.3	72.7	66.2	74.4	52.5	65.1	92.4	92.1	79.3	82.4
February.....	81.4	83.1	69.1	72.7	69.4	74.4	58.6	64.7	94.2	92.6	82.6	82.8
March.....	82.5	84.1	70.8	76.3	71.0	75.7	60.5	69.7	95.0	93.2	83.9	84.9
April.....	82.6	85.1	70.8	77.9	71.8	77.6	61.8	73.8	94.2	93.1	82.4	83.3
May.....	81.2	85.7	68.5	79.3	71.4	79.2	60.1	76.1	91.8	92.7	79.2	83.4
June.....	79.7	86.0	66.4	79.5	69.7	79.9	57.6	76.5	90.6	92.6	77.6	83.3
July.....	79.7	-----	65.4	-----	69.4	-----	55.6	-----	90.8	-----	77.9	-----
August.....	82.0	-----	69.7	-----	70.5	-----	58.9	-----	94.3	-----	83.4	-----
September.....	83.7	-----	72.2	-----	71.2	-----	60.6	-----	97.1	-----	87.1	-----
October.....	85.3	-----	75.0	-----	74.9	-----	66.3	-----	96.4	-----	86.2	-----
November.....	85.0	-----	74.5	-----	76.1	-----	68.1	-----	94.6	-----	82.7	-----
December.....	84.6	-----	76.4	-----	75.7	-----	69.7	-----	94.2	-----	85.0	-----
Average.....	82.2	-----	70.3	-----	71.4	-----	60.9	-----	93.8	-----	82.3	-----

<sup>1</sup> Comparable indexes for earlier years will be found in the February 1935 and subsequent issues of the Monthly Labor Review.

Table 3.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1935 to June 1936<sup>1</sup>

[12-month average 1929=100]

Month	Anthracite mining				Bituminous-coal mining				Metalliferous mining				Quarrying and non-metallic mining			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January	62.9	59.1	57.5	54.4	80.0	79.8	59.6	70.6	44.3	54.2	30.1	41.7	36.9	39.4	20.8	25.5
February	64.4	61.2	64.3	76.7	81.1	80.2	66.1	78.4	44.3	55.5	29.9	42.8	37.3	36.9	22.2	23.9
March	51.4	52.5	38.9	42.6	81.6	80.4	67.5	70.2	45.0	55.9	30.9	45.1	40.5	42.2	24.9	30.9
April	52.6	49.8	49.9	28.6	74.3	77.5	45.0	62.6	46.0	57.5	31.8	45.5	45.3	48.4	28.9	36.1
May	53.5	54.9	49.5	56.3	75.3	76.2	49.1	62.2	44.4	60.8	31.4	47.7	49.5	52.0	32.8	42.1
June	56.8	51.2	66.0	42.0	77.9	75.7	64.7	61.5	46.0	61.9	31.5	48.2	50.4	53.5	33.8	44.0
July	49.4	-----	37.5	-----	70.0	-----	35.9	-----	45.2	-----	31.1	-----	50.9	-----	34.4	-----
August	38.7	-----	28.3	-----	73.4	-----	45.8	-----	46.3	-----	33.4	-----	51.0	-----	36.3	-----
September	46.0	-----	38.2	-----	77.1	-----	60.1	-----	48.9	-----	35.4	-----	50.0	-----	35.4	-----
October	53.8	-----	55.9	-----	74.3	-----	69.8	-----	51.6	-----	38.7	-----	50.0	-----	36.5	-----
November	46.6	-----	28.4	-----	76.1	-----	65.5	-----	52.6	-----	39.6	-----	46.7	-----	32.1	-----
December	57.3	-----	55.4	-----	79.1	-----	69.5	-----	53.5	-----	43.2	-----	43.1	-----	29.7	-----
Average	53.2	-----	47.5	-----	76.7	-----	58.2	-----	47.3	-----	33.9	-----	46.0	-----	30.7	-----

Month	Crude-petroleum producing				Telephone and telegraph				Electric light and power, and manufactured gas				Electric-railroad and motorbus operation and maintenance <sup>2</sup>			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January	74.9	71.1	55.5	55.7	70.5	70.1	73.9	75.0	82.7	86.1	78.0	84.8	71.2	70.7	62.9	65.0
February	74.2	70.8	64.9	55.7	70.0	69.9	72.9	76.2	82.2	86.1	78.3	84.7	71.0	71.7	63.1	68.3
March	74.0	70.7	56.0	55.9	69.8	70.2	75.3	77.2	82.3	86.8	79.4	85.9	71.3	71.2	63.4	67.8
April	74.9	71.2	56.7	56.9	69.7	70.8	73.1	76.0	82.6	88.0	79.0	86.2	71.4	71.3	63.3	65.9
May	76.0	72.5	67.8	58.0	70.0	71.6	73.7	78.5	83.3	89.0	79.8	87.0	71.6	71.5	63.6	66.1
June	76.7	72.9	69.2	58.5	70.2	72.1	74.4	77.4	83.9	90.4	79.8	88.1	71.7	71.7	63.9	66.8
July	77.4	-----	59.9	-----	70.3	-----	75.7	-----	84.8	-----	81.5	-----	71.5	-----	63.4	-----
August	76.3	-----	58.9	-----	70.5	-----	75.5	-----	86.8	-----	82.8	-----	71.2	-----	63.3	-----
September	75.1	-----	60.9	-----	70.4	-----	73.8	-----	86.9	-----	84.5	-----	71.0	-----	64.0	-----
October	74.7	-----	57.9	-----	70.0	-----	74.9	-----	87.4	-----	84.4	-----	71.1	-----	64.1	-----
November	73.0	-----	57.2	-----	69.8	-----	74.9	-----	87.6	-----	83.4	-----	71.1	-----	63.8	-----
December	71.9	-----	59.9	-----	69.6	-----	75.6	-----	86.8	-----	86.0	-----	70.5	-----	66.1	-----
Average	74.9	-----	57.9	-----	70.1	-----	74.5	-----	84.8	-----	81.4	-----	71.2	-----	63.7	-----

<sup>1</sup> Comparable indexes for earlier years for all of these industries, except year-round hotels, will be found in the February 1935 and subsequent issues of the Monthly Labor Review. Comparable indexes for year-round hotels will be found in the September 1935 issue of the Monthly Labor Review.

<sup>2</sup> Not including electric-railroad car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 3.

<sup>3</sup> Revised.

Table 3.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1935 to June 1936—Continued

[12-month average 1929=100]

Month	Wholesale trade				Total retail trade				Retail trade—general merchandising				Retail trade—other than general merchandising			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January.....	84.2	85.6	63.9	66.6	79.5	80.4	59.7	62.1	87.3	88.2	73.5	76.4	77.4	78.4	56.9	59.1
February.....	84.6	85.0	64.6	66.6	79.2	79.7	59.3	61.6	86.2	85.1	72.3	73.9	77.3	78.3	56.6	59.1
March.....	84.0	85.6	65.2	69.0	80.2	81.9	60.4	63.5	88.6	90.9	74.1	77.3	78.0	79.5	57.6	60.7
April.....	83.2	85.7	64.8	67.9	83.5	85.2	62.5	65.3	94.4	97.4	77.5	81.0	80.7	82.0	59.4	62.1
May.....	82.5	84.6	64.6	68.2	82.2	85.0	62.0	65.8	91.3	95.5	76.3	80.8	79.8	82.3	59.0	62.7
June.....	82.1	84.6	64.6	68.4	82.2	85.5	62.5	66.4	91.2	96.4	76.7	81.3	79.8	82.6	59.5	63.3
July.....	82.1	-----	64.6	-----	79.3	-----	60.5	-----	85.5	-----	72.0	-----	77.7	-----	58.1	-----
August.....	82.7	-----	64.8	-----	78.0	-----	59.3	-----	83.1	-----	69.5	-----	76.7	-----	57.2	-----
September.....	83.7	-----	67.2	-----	81.8	-----	62.5	-----	92.2	-----	77.2	-----	79.1	-----	59.4	-----
October.....	85.7	-----	66.8	-----	83.8	-----	63.2	-----	97.1	-----	79.8	-----	80.3	-----	59.8	-----
November.....	86.4	-----	66.9	-----	84.6	-----	63.4	-----	101.6	-----	82.0	-----	80.1	-----	59.6	-----
December.....	86.8	-----	68.6	-----	92.9	-----	69.3	-----	131.7	-----	104.5	-----	82.7	-----	62.0	-----
Average.....	84.0	-----	65.6	-----	82.3	-----	62.1	-----	94.2	-----	78.0	-----	79.1	-----	58.8	-----

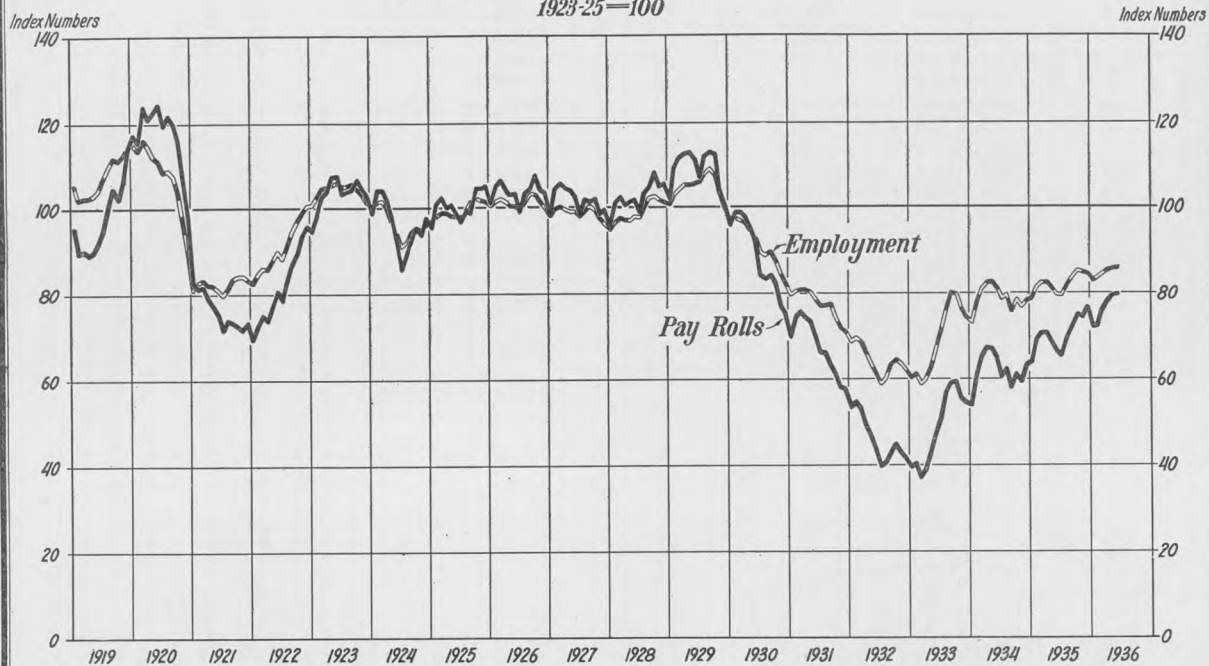
Month	Year-round hotels				Laundries				Dyeing and cleaning			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January.....	80.3	81.9	62.2	64.9	79.6	81.5	63.9	68.3	70.3	71.5	50.4	51.6
February.....	81.1	82.8	63.5	66.5	79.6	81.2	64.1	67.8	69.6	70.3	49.8	49.0
March.....	80.8	82.8	63.9	66.0	79.7	82.1	64.6	69.9	72.5	74.7	53.5	56.4
April.....	81.1	83.2	63.6	66.3	80.0	83.2	65.5	70.9	79.9	81.8	61.9	64.1
May.....	81.6	84.1	63.7	67.0	81.1	85.5	66.6	75.6	80.9	87.3	61.7	72.2
June.....	81.3	83.9	63.5	66.6	82.3	87.2	68.2	75.8	83.6	87.5	65.7	69.2
July.....	80.3	-----	62.1	-----	84.4	-----	70.9	-----	81.7	-----	61.5	-----
August.....	80.7	-----	62.0	-----	84.2	-----	69.2	-----	79.4	-----	58.2	-----
September.....	81.1	-----	63.1	-----	83.0	-----	67.9	-----	82.1	-----	63.1	-----
October.....	81.6	-----	64.3	-----	81.9	-----	67.1	-----	80.4	-----	61.1	-----
November.....	81.5	-----	64.8	-----	81.3	-----	66.7	-----	76.3	-----	55.4	-----
December.....	80.8	-----	64.2	-----	81.1	-----	67.5	-----	73.4	-----	52.9	-----
Average.....	81.0	-----	63.4	-----	81.5	-----	66.9	-----	77.5	-----	57.9	-----

## Trend of Industrial and Business Employment, by States

A COMPARISON of employment and pay rolls, by States and geographic divisions, in May and June 1936 is shown in table 4 for all groups combined, except building construction and class I railroads, and for all manufacturing industries combined, based on data supplied by reporting establishments. The percentage changes shown, unless otherwise noted, are unweighted—that is, the industries included in the manufacturing group and in the grand total have not been weighted according to their relative importance.

# EMPLOYMENT & PAY ROLLS

*All Manufacturing Industries*  
1923-25=100



UNITED STATES BUREAU OF LABOR STATISTICS

Table 4.—Comparison of Employment and Pay Rolls in Identical Establishments, May-June 1936, by Geographic Divisions and by States

(Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations)

Geographic division and State	Total—All groups					Manufacturing				
	Number of establishments	Number on pay roll June 1936	Percentage change from May 1936	Amount of pay roll (1 week) June 1936	Percentage change from May 1936	Number of establishments	Number on pay roll June 1936	Percentage change from May 1936	Amount of pay roll (1 week) June 1936	Percentage change from May 1936
				<i>Dollars</i>					<i>Dollars</i>	
<b>New England</b> .....	<b>13,835</b>	<b>824,245</b>	<b>-0.5</b>	<b>17,867,274</b>	<b>-1.2</b>	<b>3,327</b>	<b>549,844</b>	<b>-0.8</b>	<b>11,133,845</b>	<b>-1.7</b>
Maine.....	782	53,565	+1.1	1,016,963	-1.7	266	43,047	+4	772,043	-2.6
New Hampshire.....	625	34,289	+3.0	672,205	+1.1	192	27,293	+2.8	507,983	+9
Vermont.....	466	16,635	+1.0	350,650	-1.4	128	10,200	-1.1	207,827	-3.8
Massachusetts.....	<sup>2</sup> 8,614	<i>457,539</i>	-4	<i>10,179,673</i>	-1.5	<i>1,633</i>	<i>259,174</i>	-8	<i>5,319,226</i>	-2.2
Rhode Island.....	1,217	83,747	-1.3	1,677,004	-8	398	65,051	-1.5	1,220,743	-1.1
Connecticut.....	2,131	178,500	-1.4	3,970,779	-1.2	710	145,079	-1.5	3,106,023	-1.2
<b>Middle Atlantic</b> .....	<b>34,160</b>	<b>1,927,094</b>	<b>+3</b>	<b>47,494,500</b>	<b>-8</b>	<b>4,960</b>	<b>1,111,082</b>	<b>+8</b>	<b>26,399,926</b>	<b>+1.1</b>
New York.....	22,587	874,799	-5	22,492,633	-6	<sup>3</sup> 1,909	<i>404,123</i>	-9	<i>10,104,372</i>	-4
New Jersey.....	3,263	270,099	+2.1	6,628,499	+1.7	<sup>4</sup> 755	<i>232,446</i>	+2.1	<i>5,477,950</i>	+1.7
Pennsylvania.....	8,310	782,196	+6	18,373,368	-1.8	<i>2,316</i>	<i>474,513</i>	+1.6	<i>10,817,624</i>	+2.2
<b>East North Central</b> .....	<b>19,832</b>	<b>2,013,331</b>	<b>+5</b>	<b>51,374,027</b>	<b>+3</b>	<b>7,148</b>	<b>1,543,609</b>	<b>+4</b>	<b>40,197,161</b>	<b>+1</b>
Ohio.....	8,182	563,637	-3	14,333,586	+3	2,307	405,031	-8	10,610,005	+4
Indiana.....	<i>2,326</i>	<i>227,412</i>	+3.1	<i>5,379,791</i>	+2.3	908	<i>189,026</i>	+3.6	<i>4,505,216</i>	+2.5
Illinois.....	<sup>5</sup> 4,675	<i>540,431</i>	+9	<i>13,104,166</i>	+1.9	<sup>2</sup> 2,232	<i>355,152</i>	+1.6	<i>8,559,952</i>	+2.6
Michigan.....	3,656	504,134	-4	14,398,319	-2.4	962	<i>451,685</i>	-8	<i>13,152,062</i>	-3.6
Wisconsin.....	<sup>6</sup> 993	<i>177,687</i>	+1.2	<i>4,158,165</i>	+1.6	739	<i>142,715</i>	+1.4	<i>3,369,926</i>	+1.4
<b>West North Central</b> .....	<b>11,659</b>	<b>398,063</b>	<b>+8</b>	<b>9,120,887</b>	<b>+1.6</b>	<b>2,202</b>	<b>190,427</b>	<b>+1.1</b>	<b>4,295,271</b>	<b>+2.1</b>
Minnesota.....	2,162	83,090	+2.3	1,982,314	+2.4	366	36,277	+3.2	855,540	+2.5
Iowa.....	1,763	58,051	+1.2	1,274,874	+2.0	382	30,942	+1.4	691,139	+2.4
Missouri.....	3,073	156,150	-3	3,561,320	+7	749	81,039	-2	1,752,041	+1.4
North Dakota.....	508	5,837	+1.8	132,333	+2.8	42	693	+4.1	17,838	+3.3
South Dakota.....	514	7,590	+2.4	193,853	+3.2	33	1,734	+5.9	41,342	+9.0
Nebraska.....	1,568	32,241	+1.1	730,990	+1.7	155	11,188	+1.7	259,240	+3.9
Kansas.....	<sup>8</sup> 2,071	<i>55,104</i>	+1.0	<i>1,245,203</i>	+2.2	475	<i>28,554</i>	+1.6	<i>678,151</i>	+1.3
<b>South Atlantic</b> .....	<b>11,075</b>	<b>759,549</b>	<b>-4</b>	<b>14,290,176</b>	<b>+7</b>	<b>2,649</b>	<b>492,863</b>	<b>+2</b>	<b>8,456,179</b>	<b>+1.3</b>
Delaware.....	222	13,730	+3.6	317,278	+3.6	77	9,357	+5.8	206,702	+5.5
Maryland.....	1,689	<i>113,945</i>	+3	<i>2,537,872</i>	+1.5	555	<i>74,720</i>	-3	<i>1,641,761</i>	+1.2
District of Columbia.....	1,072	40,922	-2	1,018,377	-2	41	3,826	+3.6	126,278	+2.6
Virginia.....	2,213	97,653	+2	1,852,497	+1.6	435	64,113	-1	1,188,941	+2.5
West Virginia.....	1,277	146,605	+6	3,310,512	+1.7	240	55,479	+7	1,268,836	+4
North Carolina.....	1,416	144,374	-1	2,077,457	+9	579	132,910	+1	1,875,879	+1.1
South Carolina.....	769	66,956	+1.0	936,630	+8	201	59,478	+2	795,660	+1.0
Georgia.....	1,440	101,012	-4	1,590,258	-1.0	361	76,956	-1.0	1,085,264	+2
Florida.....	1,097	34,322	-10.5	649,295	-7.4	180	16,024	-2.9	266,868	+2
<b>East South Central</b> .....	<b>4,615</b>	<b>264,892</b>	<b>+1.0</b>	<b>4,653,058</b>	<b>+2</b>	<b>914</b>	<b>159,345</b>	<b>+2.0</b>	<b>2,662,196</b>	<b>+1.9</b>
Kentucky.....	1,521	81,456	+8	1,613,331	-1.2	261	31,600	+2.9	642,656	+2.8
Tennessee.....	1,296	90,039	+1.1	1,555,831	+1.3	334	66,259	+1.4	1,108,362	+1.8
Alabama.....	1,235	77,845	+1.0	1,254,012	+5	227	52,258	+2.2	795,002	+1.2
Mississippi.....	563	15,552	+1.8	229,884	+1.0	92	9,228	+2.2	116,176	+2.3
<b>West South Central</b> .....	<b>4,389</b>	<b>172,819</b>	<b>+3</b>	<b>3,631,330</b>	<b>+1.2</b>	<b>982</b>	<b>86,820</b>	<b>+3</b>	<b>1,729,946</b>	<b>+3</b>
Arkansas.....	<sup>9</sup> 531	<i>23,241</i>	-1.5	<i>387,134</i>	-5	209	<i>16,639</i>	-7	<i>259,816</i>	+3
Louisiana.....	1,013	42,302	-1.0	801,805	-1.1	211	20,731	-1.9	344,144	-2.2
Oklahoma.....	1,393	40,644	+9	933,347	+1.3	138	10,977	+2.2	241,118	+2.3
Texas.....	<i>1,452</i>	<i>66,632</i>	+1.5	<i>1,509,044</i>	+2.8	<i>424</i>	<i>38,473</i>	+1.3	<i>884,868</i>	-2.0

See footnotes at end of table.

Table 4.—Comparison of Employment and Pay Rolls in Identical Establishments, May-June 1936, by Geographic Divisions and by States—Continued

Geographic division and State	Total—All groups					Manufacturing				
	Number of establishments	Number on pay roll June 1936	Percent age change from May 1936	Amount of pay roll (1 week) June 1936	Percent age change from May 1936	Number of establishments	Number on pay roll June 1936	Percent age change from May 1936	Amount of pay roll (1 week) June 1936	Percent age change from May 1936
				<i>Dollars</i>					<i>Dollars</i>	
<b>Mountain</b> .....	<b>4,436</b>	<b>122,049</b>	<b>+1.6</b>	<b>2,935,750</b>	<b>+1.4</b>	<b>556</b>	<b>35,193</b>	<b>+4.4</b>	<b>856,928</b>	<b>+3.3</b>
Montana.....	722	19,551	- .8	517,817	-1.6	82	4,924	+4.0	129,647	+4.6
Idaho.....	457	9,248	+3.3	219,616	+7.7	52	3,120	+6.8	75,551	+15.2
Wyoming.....	331	8,365	+1.0	219,292	+1.8	40	1,742	+1.5	50,205	+4.6
Colorado.....	1,243	40,435	+1.7	957,401	+1.3	183	14,320	+2.0	353,446	- .1
New Mexico.....	324	6,518	+1.2	133,608	+2.5	29	651	+2.7	12,382	- .4
Arizona.....	527	14,792	+2.8	355,103	+2.2	40	2,778	+7.9	64,055	+5.4
Utah.....	619	20,024	+2.9	447,703	+2.7	102	6,791	+8.8	146,886	+3.9
Nevada.....	213	3,116	+1.2	85,210	+2.3	28	867	+3.3	24,756	+4.2
<b>Pacific</b> .....	<b>6,466</b>	<b>422,940</b>	<b>+2.1</b>	<b>10,795,179</b>	<b>+1.4</b>	<b>1,990</b>	<b>229,215</b>	<b>+2.6</b>	<b>5,873,312</b>	<b>+1.6</b>
Washington.....	3,037	94,582	+3.4	2,342,755	+2.9	477	50,879	+2.3	1,252,263	+2.8
Oregon.....	1,340	47,950	+3.3	1,144,839	- .1	255	26,809	+4.7	608,861	- .7
California.....	<sup>10</sup> 2,089	280,408	+1.4	7,307,585	+1.1	1,258	151,527	+2.3	4,012,188	+1.6

<sup>1</sup> Less than  $\frac{1}{10}$  of 1 percent.

<sup>2</sup> Includes banks and trust companies, construction, municipal, agricultural, and office employment, amusement and recreation, professional services, and trucking and handling.

<sup>3</sup> Includes laundering and cleaning, water, light, and power.

<sup>4</sup> Includes laundries.

<sup>5</sup> Includes automobile and miscellaneous services, restaurants, and building and contracting.

<sup>6</sup> Includes construction, but does not include hotels, restaurants, or public works.

<sup>7</sup> Weighted percentage change.

<sup>8</sup> Includes financial institutions, construction, miscellaneous services, and restaurants.

<sup>9</sup> Includes automobile dealers and garages, and sand, gravel, and building stone.

<sup>10</sup> Includes banks, insurance, and office employment.

### Industrial and Business Employment and Pay Rolls in Principal Cities

A COMPARISON of June employment and pay rolls with the May totals in 13 cities of the United States having a population of 500,000 or over is made in table 5. The changes are computed from reports received from identical establishments in both months.

In addition to reports included in the several industrial groups regularly covered in the survey of the Bureau, reports have also been secured from establishments in other industries for inclusion in these city totals. As information concerning employment in building construction is not available for all cities at this time, figures for this industry have not been included in these city totals.

Table 5.—Comparison of Employment and Pay Rolls in Identical Establishments in May and June 1936, by Principal Cities

City	Number of establishments	Number on pay roll June 1936	Percentage change from May 1936	Amount of pay roll (1 week) June 1936	Percentage change from May 1936
New York, N. Y.-----	17, 777	700, 541	-0. 7	\$18, 426, 934	-1. 2
Chicago, Ill.-----	4, 232	397, 074	+ 6	10, 365, 861	+1. 1
Philadelphia, Pa.-----	2, 006	214, 170	+ 8	5, 271, 630	+ 8
Detroit, Mich.-----	1, 572	342, 308	-1. 0	10, 243, 437	-2. 4
Los Angeles, Calif.-----	2, 808	133, 052	+2. 1	3, 358, 511	+2. 0
Cleveland, Ohio.-----	1, 809	134, 516	- 3	3, 517, 547	+ 8
St. Louis, Mo.-----	1, 596	126, 293	+ 4	2, 950, 427	+1. 2
Baltimore, Md.-----	1, 324	88, 290	-( <sup>1</sup> )	2, 022, 367	- 2
Boston, Mass.-----	4, 928	170, 237	- 2	4, 036, 356	- 9
Pittsburgh, Pa.-----	1, 480	200, 355	+2. 4	5, 228, 055	+2. 5
San Francisco, Calif.-----	1, 443	77, 967	+2. 0	2, 051, 742	+ 9
Buffalo, N. Y.-----	1, 112	79, 529	+ 6	1, 954, 826	-( <sup>1</sup> )
Milwaukee, Wis.-----	705	73, 194	+1. 4	1, 826, 179	+3. 0

<sup>1</sup> Less than  $\frac{1}{10}$  of 1 per cent.

### Public Employment

EMPLOYMENT created by the Federal Government includes employment in the regular agencies of the Government, employment on the various construction programs wholly or partially financed by Federal funds, and employment on relief-work projects.

Construction projects financed by the Public Works Administration are those projects authorized by Title II of the National Industrial Recovery Act of June 16, 1933. This program of public works was extended to June 30, 1937, by the Emergency Relief Appropriation Act of 1935.

The Works Program was inaugurated by the President in a series of Executive orders by authority of Public Resolution No. 11, approved April 8, 1935. Employment created by this program includes employment on Federal projects and employment on projects operated by the Works Progress Administration. Federal projects are those conducted by Federal agencies which have received allotments from The Works Program fund. Projects operated by the Works Progress Administration are those projects conducted under the supervision of the W. P. A.

The emergency conservation program (Civilian Conservation Corps) created in April 1933 has been further extended under authority of the Emergency Relief Appropriation Act of 1935.



## Executive Service of the Federal Government

STATISTICS of employment in the executive branches of the Federal Government in June 1935, May and June 1936 are given in table 6.

Table 6.—Employees in the Executive Service of the United States Government, June 1935, May and June 1936 <sup>1</sup>

[Subject to revision]

Item	District of Columbia <sup>2</sup>			Outside District of Columbia			Entire service <sup>2</sup>		
	Perma- nent	Tempo- rary	Total	Perma- nent	Tempo- rary <sup>3</sup>	Total	Perma- nent	Tempo- rary <sup>3</sup>	Total
Number of employees:									
June 1935.....	92,727	11,250	103,977	516,166	98,093	614,259	608,893	109,343	718,236
May 1936.....	107,812	9,417	117,229	600,274	100,725	700,999	708,086	110,142	818,228
June 1936.....	107,913	9,557	117,470	604,503	102,653	707,156	712,416	112,210	824,626
Percentage change:									
June 1935 to June 1936..	+16.38	-15.05	+12.98	+17.11	+ 4.65	+15.12	+17.00	+2.62	+14.81
May to June 1936.....	+ .10	+1.49	+ .21	+ .70	+1.91	+ .88	+ .61	+1.88	+ .78
Labor turn-over, June 1936:									
Additions <sup>4</sup> .....	1,639	1,385	3,024	11,973	21,976	33,949	13,612	23,361	36,973
Separations <sup>5</sup> .....	1,561	1,107	2,668	8,964	18,377	27,341	10,525	19,484	30,009
Turn-over rate per 100.....	1.45	11.67	2.27	1.49	18.07	3.88	1.48	17.53	3.65

<sup>1</sup> This table shows employment on last day of month specified.

<sup>2</sup> Includes employees of Columbia Institution for the Deaf and Howard University.

<sup>3</sup> Not including field employees of Post Office Department or 24,178 employees hired under letters of authorization by the Department of Agriculture with a pay roll of \$1,173,469.

<sup>4</sup> Not including 566 employees transferred but not reported by department to which they were assigned.

<sup>5</sup> Not including employees transferred within the Government service, as such transfers should not be regarded as labor turn-over.

The monthly record of employment in the executive departments of the United States Government from June 1935 to June 1936, inclusive, is shown in table 7.

Table 7.—Employment in the Executive Departments of the United States Government by Months, June 1935 to June 1936

[Subject to revision]

Month	District of Columbia	Outside District of Columbia	Total	Month	District of Columbia	Outside District of Columbia	Total
<i>1935</i>				<i>1936</i>			
June.....	103,977	614,259	718,236	January.....	111,800	689,499	801,299
July.....	104,747	631,134	735,881	February.....	112,708	687,626	800,334
August.....	107,037	663,086	770,123	March.....	112,739	693,665	806,404
September.....	109,197	678,229	787,426	April.....	115,422	695,345	810,767
October.....	110,585	687,115	797,700	May.....	117,229	700,999	818,228
November.....	111,199	690,202	801,401	June.....	117,470	707,156	824,626
December.....	112,091	704,135	816,226				

## Construction Projects Financed by the Public Works Administration

DETAILS concerning employment, pay rolls, and man-hours worked during June <sup>1</sup> on construction projects financed by Public Works Administration funds are given in table 8, by type of project.

<sup>1</sup> Data concerning projects financed by Public Works Administration funds are based on month ending June 15.

Table 8.—Employment and Pay Rolls on Projects Financed from Public Works Funds, Month Ending June 15, 1936

[Subject to revision]

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum <sup>1</sup> number employed	Weekly average				
Federal projects—Financed from N. I. R. A. funds						
All projects <sup>2</sup> .....	<sup>3</sup> 108,609	101,927	\$9,578,180	12,903,359	\$0.742	\$9,829,016
Building construction <sup>2</sup> .....	19,176	16,021	1,550,227	1,829,549	.847	1,875,986
Forestry.....	9	9	1,194	1,032	1.157	81
Naval vessels.....	26,406	25,863	3,309,959	4,042,159	.819	2,509,281
Public roads <sup>4</sup> .....	(6)	27,789	1,394,231	2,567,010	.543	2,300,000
Reclamation.....	12,826	12,251	1,288,010	1,811,587	.711	1,328,195
River, harbor, and flood control.....	19,087	17,002	1,861,101	2,327,631	.800	1,662,793
Streets and roads.....	2,125	1,875	95,310	216,353	.441	106,552
Water and sewerage.....	153	134	8,546	15,671	.545	18,130
Miscellaneous.....	1,038	983	69,602	92,367	.754	27,998
Non-Federal projects—Financed from N. I. R. A. funds						
All projects.....	63,300	53,050	\$4,883,891	5,495,026	\$0.889	\$8,285,985
Building construction.....	30,306	25,118	2,445,383	2,506,730	.976	3,748,804
Streets and roads.....	9,826	7,885	607,445	797,433	.762	1,186,047
Water and sewerage.....	20,122	17,386	1,627,015	1,852,859	.878	2,227,217
Miscellaneous.....	3,046	2,661	204,048	338,004	.604	1,123,917
Non-Federal "Transportation Loan" projects—Financed from N. I. R. A. funds						
All projects.....	8,559	(6)	\$513,181	917,810	\$0.559	(6)
Railroad construction.....	6,307	5,987	248,407	546,616	.455	224,979
Railroad-car and locomotive shops.....	2,252	(6)	264,774	371,294	.713	(6)
Operated by railroads.....	1,763	1,729	148,857	215,091	.692	46,458
Operated by commercial firms.....	489	(6)	115,917	156,203	.742	(6)
Non-Federal projects—Financed from E. R. A. A. 1935 funds <sup>7</sup>						
All projects.....	169,104	139,552	\$10,865,674	15,101,842	\$0.719	\$19,978,981
Building construction.....	109,789	90,481	7,212,071	9,520,075	.758	13,237,814
Electrification.....	685	572	44,989	61,552	.731	159,618
Heavy engineering.....	1,043	885	90,001	121,580	.740	447,960
Reclamation.....	816	693	54,723	94,727	.578	98,448
River, harbor, and flood control.....	455	402	32,679	39,438	.829	109,958
Streets and roads.....	16,911	13,241	919,676	1,475,253	.623	1,634,408
Water and sewerage.....	38,133	32,265	2,440,990	3,687,969	.662	4,184,348
Miscellaneous.....	1,272	1,013	70,545	101,248	.697	106,427

<sup>1</sup> Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.

<sup>2</sup> Includes a maximum of 7,080 and an average of 5,830 employees working on low-cost housing projects financed from E. R. A. A. funds, who were paid \$570,151 for 741,923 man-hours of labor. Material orders in the amount of \$475,233 were placed for these projects. These data are also included in separate tables covering projects financed from The Works Program.

<sup>3</sup> Includes weekly average for public roads.

<sup>4</sup> Estimated by the Bureau of Public Roads.

<sup>5</sup> Not available; average included in total.

<sup>6</sup> Data not available.

<sup>7</sup> These data are also included in separate tables covering projects financed by The Works Program.

Federal construction projects are financed by allotments made by the Public Works Administration to the various agencies and departments of the Federal Government from funds provided under the National Industrial Recovery Act. The major portion of the lowest-cost housing program now under way, however, is financed by funds provided under the Emergency Relief Appropriation Act of 1935. The work is performed either by commercial firms, which have been awarded contracts, or by day labor hired directly by the Federal agencies.

Non-Federal projects are financed by allotments made by the Public Works Administration from funds available under either the National Industrial Recovery Act or the Emergency Relief Appropriation Act of 1935. Most of the allotments have been made to the States and their political subdivisions, but occasionally allotments have been made to commercial firms. In financing projects for the States or their political subdivisions from funds appropriated under the National Industrial Recovery Act, the Public Works Administration makes a direct grant of not more than 30 percent of the total labor and material cost. When funds provided under the Emergency Relief Appropriation Act of 1935 are used to finance a non-Federal project, as much as 45 percent of the total labor and material cost may be furnished in the form of a grant. The remaining 55 percent or more of the cost is financed by the recipient. When circumstances justify such action, the Public Works Administration may provide the grantee with the additional funds by means of a loan. Allotments to commercial enterprises are made only as loans. All loans made by the Public Works Administration carry interest charges and have a definite date of maturity. Collateral posted with the Public Works Administration to secure loans may be offered for sale to the public. In this way a revolving fund is provided which enlarges the scope of the activities of the Public Works Administration.

Commercial loans have been made, for the most part, to railroads. Railroad work financed by loans made by the Public Works Administration falls under three headings: First, construction work in the form of electrification, the laying of rails and ties, repairs to buildings, bridges, etc.; second, the building and repairing of locomotive and passenger and freight cars in shops operated by the railroads; and third, locomotive and passenger- and freight-car building in commercial shops.

#### Monthly Trend

A summary of employment, pay rolls, and man-hours worked on projects financed from public-works funds from July 1933 to June 1936 is given in table 9.

Table 9.—Employment and Pay Rolls, July 1933 to June 1936, on Projects Financed from Public Works Funds

(Subject to revision)

Year and month	Maximum number of wage earners <sup>1</sup>	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
July 1933 to June 1936, inclusive <sup>2</sup> -----	-----	\$703,377,099	1,100,752,000	\$0.639	\$1,288,754,991
July to December 1933, inclusive-----	-----	32,941,335	61,718,911	.534	\$75,453,114
January to December 1934, inclusive-----	-----	308,311,143	523,561,666	.589	\$610,051,090
January to December 1935, inclusive <sup>2</sup> -----	-----	254,176,118	371,352,552	.684	\$417,321,441
<i>1936</i>					
January <sup>2</sup> -----	197,820	14,399,381	19,195,535	.750	22,796,818
February <sup>2</sup> -----	176,764	12,220,479	16,404,771	.745	23,460,743
March <sup>2</sup> -----	202,236	13,981,176	18,519,649	.755	29,068,402
April <sup>2</sup> -----	264,427	18,915,663	25,203,010	.751	32,459,393
May <sup>2</sup> -----	315,393	22,590,878	30,377,869	.744	\$39,778,571
June <sup>2</sup> -----	349,572	25,840,926	34,418,037	.751	38,365,419

<sup>1</sup> Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work. Includes weekly average for public-road projects.

<sup>2</sup> Includes wage earners employed on projects under the jurisdiction of P. W. A. which are financed from E. R. A. A. funds. These data are also included in tables covering projects financed by The Works Program.

<sup>3</sup> Includes orders placed by railroads for new equipment.

<sup>4</sup> Revised.

## The Works Program

A DETAILED record of employment, pay rolls, and man-hours worked on projects financed by The Works Program in June<sup>1</sup> is shown in table 10, by type of project.

Table 10.—Employment and Pay Rolls on Projects Financed by The Works Program, June 1936

(Subject to revision)

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed <sup>1</sup>	Weekly average				
Federal projects						
All projects-----	453,012	399,851	\$22,657,507	50,680,511	\$0.447	\$14,431,802
Building construction-----	38,772	34,037	2,210,571	3,774,926	.586	1,759,930
Electrification-----	1,083	962	66,944	111,258	.602	163,990
Forestry-----	20,910	19,765	1,030,745	2,509,136	.411	389,333
Grade-crossing elimination-----	28,777	23,352	1,601,280	2,784,909	.575	2,338,366
Heavy engineering-----	225	202	15,330	25,917	.592	33,933
Hydroelectric power plants-----	2,233	2,065	51,126	211,864	.241	85,326
Plant, crop, and livestock conservation-----	51,310	44,123	1,568,204	6,179,873	.254	67,928
Professional, technical, and clerical-----	26,620	26,600	2,007,896	3,320,787	.605	107,039
Public roads-----	129,874	106,017	6,077,080	13,136,805	.463	4,082,104
Reclamation-----	89,017	83,934	3,627,713	8,936,696	.406	1,347,965
River, harbor, and flood control-----	44,567	41,298	3,411,623	7,510,979	.454	3,533,594
Streets and roads-----	8,746	7,822	429,511	963,709	.446	201,440
Water and sewerage-----	683	544	39,782	81,636	.487	2,989
Miscellaneous-----	10,195	9,130	519,702	1,132,016	.459	317,865

See footnote at end of table.

<sup>1</sup> Data concerning projects financed by The Works Program are based on month ending June 15.

10.—Employment and Pay Rolls on Projects Financed by The Works Program, June 1936—Continued

the

(Subject to revision)

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed	Weekly average				
P. W. A. projects financed from E. R. A. A. 1935 funds <sup>2</sup>						
All projects <sup>3</sup> .....	176, 184	145, 382	\$11, 435, 825	15, 843, 765	\$0. 722	\$20, 454, 214
Building construction <sup>3</sup> .....	116, 869	96, 311	7, 782, 222	10, 261, 998	. 758	13, 713, 047
Electrification.....	685	572	44, 989	61, 552	. 731	159, 618
Heavy engineering.....	1, 043	885	90, 001	121, 580	. 740	447, 960
Reclamation.....	816	693	54, 723	94, 727	. 578	98, 448
River, harbor, and flood control.....	455	402	32, 679	39, 438	. 829	109, 958
Streets and roads.....	16, 911	13, 241	919, 676	1, 475, 253	. 623	1, 634, 408
Water and sewerage.....	38, 133	32, 265	2, 440, 990	3, 687, 969	. 662	4, 184, 348
Miscellaneous.....	1, 272	1, 013	70, 545	101, 248	. 697	106, 427
Projects operated by Works Progress Administration						
All projects <sup>3 4</sup> .....	2, 561, 307	-----	\$128, 222, 740	281, 504, 372	\$0. 455	<sup>5</sup> \$22, 674, 265
Conservation.....	124, 475	-----	5, 675, 546	14, 608, 733	. 389	493, 783
Highway, road, and street.....	818, 223	-----	38, 371, 224	93, 479, 938	. 410	7, 750, 101
Public buildings.....	5, 902	-----	382, 656	663, 504	. 577	5, 066
Youth Administration <sup>6</sup> .....	174, 298	-----	2, 807, 543	7, 269, 943	. 386	126, 105
Industrial, technical, and clerical.....	262, 885	-----	18, 730, 836	31, 109, 190	. 602	667, 892
Public buildings.....	224, 337	-----	13, 083, 855	23, 993, 977	. 545	4, 967, 891
Publicly owned or operated utilities.....	217, 063	-----	11, 349, 167	24, 444, 708	. 464	3, 411, 237
Recreational facilities <sup>7</sup> .....	254, 434	-----	15, 190, 565	28, 757, 603	. 528	2, 429, 685
Sanitation and health.....	73, 695	-----	3, 268, 233	8, 674, 939	. 377	780, 620
Sewing, canning, gardening, etc.....	298, 849	-----	13, 756, 805	36, 194, 314	. 380	569, 825
Transportation.....	51, 755	-----	2, 847, 329	5, 957, 656	. 478	757, 624
Not elsewhere classified.....	55, 391	-----	2, 758, 981	6, 349, 867	. 434	714, 436

<sup>1</sup> Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.

<sup>2</sup> These data are also included in separate tables covering projects under the jurisdiction of the Public Works Administration.

<sup>3</sup> Data for a maximum of 44 and an average of 44 employees who were paid \$798 for 2,105 man-hours on construction work at site of low-cost housing projects are included both under P. W. A. projects financed from E. R. A. A. 1935 funds and under projects operated by W. P. A.

<sup>4</sup> Includes data for 22,653 transient camp workers who were paid \$542,165 and subsistence for 2,696,217 man-hours on conservation work, etc.

<sup>5</sup> The value of material orders placed, excluding those for National Youth Administration projects, is for the month ended June 30, 1936.

<sup>6</sup> These data are for the month ended May 31, 1936, and exclude student-aid projects.

<sup>7</sup> Exclusive of buildings.

## Monthly Trend

Employment, pay rolls, and man-hours worked on projects financed by The Works Program from the beginning of the program in July 1935 to June 1936 are given in table 11.

Table 11.—Employment and Pay Rolls, July 1935 to June 1936, on Projects Financed by The Works Program

[Subject to revision]

Month and year	Maximum number employed <sup>1</sup>	Monthly payroll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
Federal projects					
July 1935 to June 1936, inclusive.....		\$126,600,182	288,800,477	\$0.438	\$98,822,198
July to December, 1935.....		30,077,743	65,915,609	.456	32,116,942
1936					
January.....	248,929	11,179,541	25,955,820	.431	8,988,622
February.....	298,589	12,529,207	29,173,914	.429	9,684,578
March.....	325,505	14,431,789	35,243,886	.409	8,028,299
April.....	375,865	16,563,885	38,563,300	.430	12,903,903
May.....	401,298	19,160,510	43,267,437	.443	12,668,052
June.....	453,012	22,657,507	50,680,511	.447	14,431,802
P. W. A. projects financed from E. R. A. A. 1935 funds <sup>2</sup>					
September 1935 to June 1936, inclusive.....		\$33,501,024	47,819,374	\$0.701	\$80,110,204
September to December, 1935.....		661,283	996,091	.664	2,025,494
1936					
January.....	23,740	1,128,635	1,621,349	.696	3,632,378
February.....	39,848	1,794,866	2,609,270	.688	8,611,717
March.....	64,223	3,032,280	4,525,546	.670	10,548,343
April.....	112,345	6,346,433	9,211,679	.689	14,726,726
May.....	149,334	9,101,702	13,011,674	.700	20,112,332
June.....	176,184	11,435,825	15,843,765	.722	20,454,214
Projects operated by Works Progress Administration					
August 1935 to June 1936, inclusive.....		\$980,320,084	2,225,588,429	\$0.440	\$165,714,142
August to December, 1935.....		170,911,331	367,589,041	.465	46,042,303
1936					
January.....	2,755,802	127,054,184	310,755,226	.409	19,860,772
February.....	2,900,645	136,276,680	331,916,478	.411	17,896,597
March.....	3,044,685	142,827,306	338,477,216	.422	17,592,687
April.....	2,856,508	143,492,350	330,771,776	.434	19,586,594
May.....	2,563,185	131,535,493	294,574,320	.447	22,060,924
June.....	2,561,307	128,222,740	281,504,372	.455	22,674,265

<sup>1</sup> Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.

<sup>2</sup> These data are also included in tables covering projects under the jurisdiction of P. W. A.

<sup>3</sup> Revised.

### Emergency Conservation Work

STATISTICS concerning employment and pay rolls in emergency conservation work in May and June 1936 are presented in table 12.

Table 12.—Employment and Pay Rolls in Emergency Conservation Work, May and June 1936

[Subject to revision]

Group	Number of employees		Amount of pay rolls	
	June	May	June	May
All groups.....	383, 279	407, 621	\$17, 947, 251	\$18, 610, 245
Enrolled personnel.....	332, 041	357, 022	10, 341, 860	11, 121, 242
Reserve officers.....	7, 666	7, 762	1, 579, 639	1, 620, 971
Educational advisers <sup>1</sup> .....	1, 974	1, 975	340, 037	340, 067
Supervisory and technical <sup>2</sup> .....	<sup>3</sup> 41, 598	<sup>4</sup> 40, 862	<sup>3</sup> 5, 685, 715	<sup>4</sup> 5, 527, 965

<sup>1</sup> Included in executive service table.<sup>2</sup> Includes carpenters, electricians, and laborers.<sup>3</sup> 40,061 employees and pay roll of \$5,537,013 included in executive service table.<sup>4</sup> 39,535 employees and pay roll of \$5,410,283 included in executive service table.

Employment and pay-roll data for emergency conservation workers are collected by the Bureau of Labor Statistics from the War Department, the Department of Agriculture, the Department of Commerce, the Treasury Department, and the Department of the Interior. The monthly pay of the enrolled personnel is distributed as follows: 5 percent are paid \$45; 8 percent, \$36; and the remaining 87 percent, \$30. The enrolled men, in addition to their pay, are provided with board, clothing, and medical services.

Monthly statistics of employment and pay rolls on the emergency conservation program from June 1935 to June 1936, inclusive, are given in table 13.

Table 13.—Monthly Totals of Employees and Pay Rolls in Emergency Conservation Work, June 1935 to June 1936

[Subject to revision]

Month	Number of employees	Monthly pay-roll disbursements	Month	Number of employees	Monthly pay-roll disbursements
<i>1935</i>			<i>1936</i>		
June.....	430, 226	\$19, 816, 204	January.....	478, 751	\$21, 427, 065
July.....	483, 329	22, 133, 513	February.....	454, 231	20, 484, 379
August.....	593, 311	26, 293, 526	March.....	356, 273	17, 251, 772
September.....	536, 752	24, 455, 343	April.....	391, 002	18, 058, 235
October.....	554, 143	24, 886, 623	May.....	407, 621	18, 610, 245
November.....	546, 683	24, 009, 372	June.....	383, 279	17, 947, 251
December.....	509, 126	21, 949, 480			

## Construction Projects Financed by the Reconstruction Finance Corporation

STATISTICS of employment, pay rolls, and man-hours worked on construction projects financed by the Reconstruction Finance Corporation in June<sup>1</sup> are presented in table 14, by type of project.

<sup>1</sup> Data concerning projects financed by the Reconstruction Finance Corporation refer to the month ending June 15.

Table 14.—Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, by Type of Project, June 1936

[Subject to revision]

Type of project	Number of wage earners	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
All projects.....	8,501	\$941,680	1,252,193	\$0.752	\$2,527,262
Bridges.....	986	155,021	133,139	1.164	13,162
Building construction <sup>1</sup> .....	805	50,467	92,767	.544	1,434,803
Reclamation.....	22	1,572	3,039	.517	163
Water and sewerage.....	5,754	651,037	898,469	.725	1,050,603
Miscellaneous.....	934	83,583	124,779	.670	28,631

<sup>1</sup> Includes 157 employees; pay-roll disbursements of \$13,265; 11,991 man-hours worked; and material orders placed during the month amounting to \$5,856 on projects financed by R. F. C. Mortgage Co.

A monthly summary of employment, pay rolls, and man-hours worked on construction projects financed by the Reconstruction Finance Corporation from June 1935 to June 1936, inclusive, is given in table 15.

Table 15.—Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, June 1935 to June 1936

[Subject to revision]

Month	Number of wage earners	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
<i>1935</i>					
June.....	11,901	\$1,191,336	1,592,744	\$0.748	\$3,998,576
July.....	9,581	1,001,653	1,349,064	.742	1,495,108
August.....	9,415	1,020,208	1,367,071	.746	965,174
September.....	9,301	957,846	1,271,475	.753	1,016,202
October <sup>1</sup> .....	9,204	953,383	1,269,897	.751	1,238,053
November <sup>1</sup> .....	9,802	1,002,151	1,344,959	.745	1,411,729
December <sup>1</sup> .....	7,792	870,129	1,161,473	.749	1,383,330
<i>1936</i>					
January.....	7,560	850,271	1,093,350	.778	1,355,520
February.....	7,961	905,455	1,179,431	.768	1,436,119
March.....	8,134	916,059	1,193,145	.768	1,385,640
April.....	10,021	1,133,880	1,479,182	.767	1,292,063
May.....	10,988	962,280	1,244,097	.773	1,441,248
June.....	8,501	941,680	1,252,193	.752	2,527,262

<sup>1</sup> Revised.

### Construction Projects Financed from Regular Governmental Appropriations

WHENEVER a construction contract is awarded or force-account work is started by a department or agency of the Federal Government, the Bureau of Labor Statistics is immediately notified on forms supplied by the Bureau, of the name and address of the contractor, the amount of the contract, and the type of work to be performed. Blanks are then mailed by the Bureau to the contractor or Government agency doing the work. These reports are returned to the Bureau and show the number of men on pay rolls, the amounts disbursed for pay, the number of man-hours worked on the project, and the value of the



different types of materials for which orders were placed during the month.

The following tables present data concerning construction projects for which contracts have been awarded since July 1, 1934. The Bureau does not have statistics covering projects, the contracts of which were awarded previous to that date.

Data concerning employment, pay rolls, and man-hours worked on construction projects financed from regular governmental appropriations during June <sup>1</sup> are given in table 16, by type of project.

Table 16.—Employment on Construction Projects Financed from Regular Governmental Appropriations, by Type of Project, June 1936

[Subject to revision]

Type of project	Number of wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed <sup>1</sup>	Weekly average				
All projects.....	<sup>2</sup> 102,376	98,622	\$8,631,104	13,692,884	\$0.630	\$12,347,453
Building construction.....	9,679	8,157	734,224	1,068,697	.687	1,342,702
Electrification.....	3	3	169	216	.782	14
Naval vessels.....	21,634	21,100	2,774,504	3,260,856	.851	3,549,315
Public roads <sup>3</sup> .....	( <sup>4</sup> )	53,693	3,732,400	6,842,168	.545	6,157,172
Reclamation.....	1,197	1,130	169,967	227,458	.747	301
River, harbor, and flood control..	12,963	11,701	1,086,820	2,011,660	.540	967,171
Streets and roads.....	1,875	1,677	81,955	196,589	.417	72,636
Water and sewerage.....	95	82	4,315	7,252	.595	52,664
Miscellaneous.....	1,237	1,079	46,750	77,988	.599	205,478

<sup>1</sup> Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.

<sup>2</sup> Includes weekly average for public roads.

<sup>3</sup> Estimated by the Bureau of Public Roads.

<sup>4</sup> Not available; average number included in total.

Employment, pay rolls, and man-hours worked on construction projects financed from regular governmental appropriations from June 1935 to June 1936 are shown, by months, in table 17.

<sup>1</sup> Data concerning projects financed by regular governmental appropriations are based on month ending June 15.

Table 17.—Employment on Construction Projects Financed from Regular Governmental Appropriations, June 1935 to June 1936

[Subject to revision]

Month	Number of wage earners	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
<i>1935</i>					
June.....	26, 191	\$1, 904, 454	2, 842, 470	\$0. 670	\$2, 960, 270
July.....	25, 788	1, 890, 209	2, 752, 801	. 687	3, 079, 618
August.....	36, 491	2, 694, 822	4, 137, 008	. 651	4, 459, 551
September.....	45, 592	3, 199, 785	5, 066, 873	. 632	5, 801, 445
October.....	59, 091	4, 193, 129	6, 716, 798	. 624	7, 181, 155
November.....	63, 912	4, 077, 395	6, 559, 065	. 622	6, 690, 405
December.....	56, 780	3, 707, 963	5, 980, 118	. 620	6, 155, 840
<i>1936</i>					
January.....	46, 895	3, 990, 725	6, 246, 418	. 639	5, 584, 611
February.....	43, 915	3, 619, 025	5, 545, 115	. 653	6, 689, 016
March.....	47, 538	3, 674, 896	5, 814, 569	. 632	7, 185, 019
April.....	60, 107	5, 205, 353	8, 375, 190	. 622	9, 861, 378
May.....	79, 789	6, 242, 763	10, 262, 637	. 608	12, 559, 367
June.....	102, 376	8, 631, 104	13, 692, 884	. 630	12, 347, 453

## State Road Projects

A RECORD of employment and pay-roll disbursements in the construction and maintenance of State roads from June 1935 to June 1936, inclusive, is presented in table 18.

Table 18.—Employment on Construction and Maintenance of State Roads, June 1935 to June 1936<sup>1</sup>

[Subject to revision]

Month	Number of employees working on—			Total pay roll
	New roads	Maintenance	Total	
<i>1935</i>				
June.....	30, 823	138, 253	169, 076	\$7, 079, 793
July.....	35, 826	148, 575	184, 401	8, 232, 589
August.....	40, 130	163, 960	204, 090	9, 063, 104
September.....	40, 431	156, 187	196, 618	8, 435, 225
October.....	40, 390	147, 324	187, 714	8, 150, 299
November.....	32, 487	139, 138	171, 625	7, 156, 025
December.....	27, 046	121, 690	148, 736	6, 139, 581
<i>1936</i>				
January.....	14, 358	105, 795	120, 153	7, 481, 502
February.....	10, 256	119, 777	130, 033	7, 572, 614
March.....	8, 150	133, 386	141, 536	7, 689, 770
April.....	11, 339	143, 305	154, 644	8, 918, 024
May.....	16, 566	164, 356	180, 922	10, 560, 866
June.....	20, 773	165, 363	186, 136	11, 488, 253

<sup>1</sup> Excluding employment furnished by projects financed from Public Works Administration funds.

## BUILDING OPERATIONS

### Summary of Building-Construction Reports for July 1936

**B**UILDING construction activity declined moderately in July 1936 as compared with June. The estimated value of building construction for which permits were issued in July was \$156,328,000, a decrease of 1.8 percent from June 1936. New residential buildings and additions, alterations, and repairs registered considerable gains in July, but the sharp decrease in the value of building permits issued for new nonresidential buildings was sufficiently great to bring the total for all building construction slightly below the June 1936 level.

Compared with July 1935, however, the value of building construction for which permits were issued was substantially higher. The value of construction permits in July 1936 was 89.1 percent greater than in the corresponding month of 1935. All classes of construction showed decided improvement.

Data comparing June and July 1936 are based on reports received by the Bureau of Labor Statistics from 1,469 identical cities with a population of 2,500 or over. Data comparing July 1936 and July 1935 are based on reports received by the Bureau from 759 identical cities with a population of 10,000 or over.

#### Comparisons, July with June 1936

A SUMMARY of building construction in 1,469 identical cities, for June and July 1936, is given in table 1.

**Table 1.—Summary of Building Construction in 1,469 Identical Cities, June and July 1936**

Class of construction	Number of buildings			Estimated cost		
	July 1936	June 1936	Per-centage change	July 1936	June 1936	Per-centage change
All construction.....	57, 559	58, 989	-2. 4	\$156, 327, 916	\$159, 181, 990	-1. 8
New residential buildings.....	11, 426	11, 143	+2. 5	87, 737, 483	77, 133, 828	+13. 7
New nonresidential buildings.....	10, 068	10, 842	-7. 1	38, 043, 199	51, 868, 431	-26. 7
Additions, alterations, and repairs.....	36, 065	37, 004	-2. 5	30, 574, 234	30, 179, 731	+1. 2

The number of buildings for which permits were issued in July 1936 decreased 2.4 percent compared with the previous month. New residential building was the only class of construction to register an increase in the number of buildings for which permits were issued. A moderate curtailment in number was apparent from the permits issued for new nonresidential buildings and for additions, alterations, and repairs. The estimated cost of building construction as measured by the value of permits issued was \$2,854,000 less in July than in June. Although new residential buildings and additions, alterations, and repairs registered increases of \$10,604,000 and \$395,000, respectively, the decrease of 26.7 percent in new nonresidential buildings was sufficiently large to cause a reduction of 1.8 percent in all classes of construction for which permits were issued in July.

A summary of the estimated cost of housekeeping dwellings and the number of families provided for in dwellings for which permits were issued in June and July 1936 is presented in table 2.

Table 2.—Summary of Estimated Cost of Housekeeping Dwellings and of the Number of Families Provided for in 1,469 Identical Cities, June and July 1936

Kind of dwelling	Estimated cost of housekeeping dwellings			Number of families provided for in new dwellings		
	July 1936	June 1936	Per-centage change	July 1936	June 1936	Per-centage change
All types.....	\$86,334,473	\$76,704,144	+12.6	21,015	19,487	+7.8
1-family.....	44,265,113	45,810,321	-3.4	10,204	10,324	-1.2
2-family <sup>1</sup> .....	2,687,085	2,458,216	+9.3	917	813	+12.8
Multifamily <sup>2</sup> .....	39,382,275	28,435,607	+38.5	9,894	8,350	+18.5

<sup>1</sup> Includes 1- and 2-family dwellings with stores.

<sup>2</sup> Includes multifamily dwellings with stores.

Measured by the value of permits issued, the estimated cost of housekeeping dwellings in July increased 12.6 percent over June. There was a pronounced gain, 38.5 percent, in multifamily dwellings and a more moderate increase in two-family dwellings. The estimated cost of one-family dwellings for which permits were issued in July, however, showed a decrease of 3.4 percent. An increase of more than 7 percent occurred in the number of families provided for by all types of dwellings in July as compared with June. Marked percentage increases took place in the number of families provided for by two-family and multifamily dwelling units. One-family dwellings, however, provided for 1.2 percent fewer families in July than in the previous month.

## Comparisons, July 1936 with July 1935

A SUMMARY of building construction in 759 identical cities in July 1935 and July 1936 is shown in table 3.

Table 3.—Summary of Building Construction in 759 Identical Cities, July 1935 and July 1936

Class of construction	Number of buildings			Estimated cost		
	July 1936	July 1935	Per-centage change	July 1936	July 1935	Per-centage change
All construction.....	52,565	41,090	+27.9	\$141,812,185	\$74,995,810	+89.1
New residential buildings.....	9,856	5,188	+90.0	78,257,417	27,736,057	+182.2
New nonresidential buildings.....	9,029	6,838	+32.0	34,386,158	24,882,491	+38.2
Additions, alterations, and repairs.....	33,680	29,064	+15.9	29,168,610	22,376,262	+30.4

Significant gains occurred in all classes of building construction for which permits were issued in July 1936 compared with the corresponding month of 1935. The most pronounced gain, a percentage increase of 90.0, occurred in new residential buildings. The estimated cost of new residential buildings in July 1936, measured by the value of permits issued was over \$50,521,000 greater than in July 1935. New nonresidential building increased \$9,504,000 over the same period; and additions, alterations and repairs, \$6,792,000.

Table 4 presents, in summary form, the estimated cost of new housekeeping dwellings and the number of families provided for in such dwellings, for the months of July 1935 and July 1936.

Table 4.—Summary of Estimated Cost of Housekeeping Dwellings and of the Number of Families Provided for in 759 Identical Cities, July 1935 and July 1936

Kind of dwelling	Estimated cost of housekeeping dwellings			Number of families provided for in new dwellings		
	July 1936	July 1935	Per-centage change	July 1936	July 1935	Per-centage change
All types.....	\$77,920,917	\$27,005,332	+188.5	19,158	7,289	+162.8
1-family.....	37,092,338	20,333,270	+82.4	8,724	4,843	+80.1
2-family <sup>1</sup> .....	2,482,624	1,294,616	+91.8	838	450	+86.2
Multifamily <sup>2</sup> .....	38,345,955	5,377,446	+613.1	9,596	1,996	+380.8

<sup>1</sup> Includes 1- and 2-family dwellings with stores.

<sup>2</sup> Includes multifamily dwellings with stores.

Measured by the value of permits issued, the estimated cost of all kinds of housekeeping dwellings increased 188.5 percent in July 1936 compared with July 1935. Pronounced increases in expenditures were indicated for all types of dwellings. Over 162 percent more families were provided with dwellings in July 1936 than in the corresponding month of 1935. Multifamily dwellings provided for 7,600 more families, an increase of more than 380 percent over July 1935.

## Important Building Projects

PERMITS were issued during July for the following important building projects: In Binghamton, N. Y., for a school building to cost nearly \$500,000; in New York City—in the Borough of The Bronx for apartment houses to cost over \$5,000,000, in the Borough of Brooklyn for apartment houses to cost nearly \$2,000,000 and for factory buildings to cost nearly \$600,000, in the Borough of Queens for apartment houses to cost over \$2,000,000; in River Forest, Ill., for a mercantile building to cost over \$600,000; in Columbus, Ohio, for factory buildings to cost nearly \$500,000; in Washington, D. C., for apartment houses to cost over \$400,000 and for warehouses to cost \$880,000; in Miami Beach, Fla., for apartment houses to cost over \$400,000 and for hotels to cost over \$800,000; in Galveston, Tex., for an institutional building to cost nearly \$500,000; in Boulder, Colo., for a school building to cost nearly \$500,000; in Los Angeles, Calif., for school buildings to cost over \$1,400,000; and in San Francisco, Calif., for amusement buildings to cost over \$1,000,000. Contracts were awarded by the Public Works Administration for the following low-cost housing projects: In Boston, Mass., to cost over \$5,000,000; in the Borough of Manhattan to cost nearly \$3,000,000; in Chicago, Ill., to cost over \$4,000,000; in Jacksonville, Fla., to cost nearly \$900,000; in Columbia, S. C., to cost nearly \$600,000; in Louisville, Ky., to cost over \$1,000,000; in Nashville, Tenn., to cost over \$1,500,000; and in Oklahoma City, Okla., to cost over \$1,700,000. A contract was awarded by the Procurement Division of the United States Treasury Department for a post office and Federal court house in Fort Smith, Ark., to cost nearly \$300,000.

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**Detailed Reports for June 1936**

**D**ETAILED figures on building construction, as compiled by the Bureau of Labor Statistics, for the month of June 1936, are presented in this article. The data are the same as published in the Building Construction pamphlet for June, except for certain minor revisions or corrections.

## Building Construction in Principal Cities

BUILDING activity as measured by permits issued showed a decided increase in June. The aggregate value of all building construction for which permits were issued during June was 34.0 percent greater than during May.

The increase in June of this year was widespread, eight of the nine geographic divisions showing gains. The gain in residential buildings was especially pronounced. Reports from 1,362 identical cities show an increase of 45.0 percent in the value of residential buildings, of 41.0 percent in the value of nonresidential buildings, and of 7.0 percent in the value of additions, alterations, and repairs to existing structures. (See table 1.)

Compared with a year ago, June building activity showed an even more pronounced increase. The value of residential buildings as measured by permits issued in June 1936 showed a gain of \$39,800,000, or 142.0 percent, over the corresponding month of 1935. Indicated expenditures for new nonresidential buildings increased \$21,000,000, or 81.0 percent, and the value of additions, alterations, and repairs to existing structures increased more than \$9,000,000, or 51.0 percent. The increase in total construction amounted to approximately \$71,000,000, or 97.0 percent.

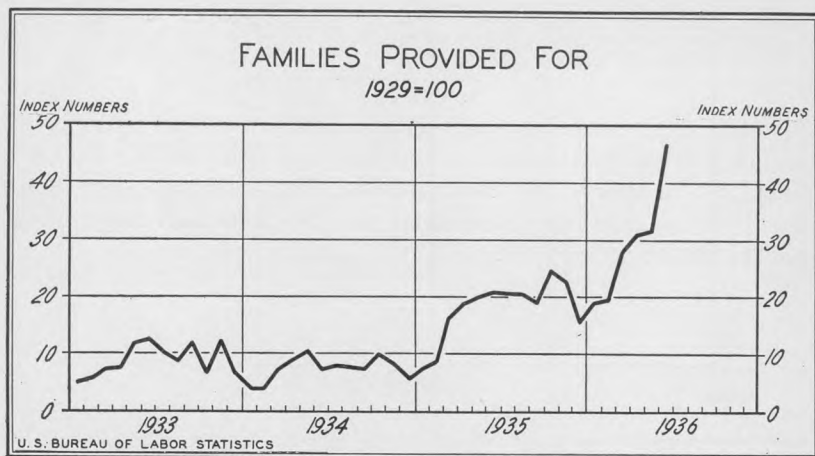
Table 1.—Summary of Building Construction in 1,362 Identical Cities, May and June 1936

Class of construction	Number of buildings			Estimated cost		
	June 1936	May 1936	Percentage change	June 1936	May 1936	Percentage change
All construction.....	57,416	56,366	+1.9	\$155,598,042	\$115,762,883	+34.4
New residential buildings.....	10,787	9,893	+9.0	75,268,266	51,825,363	+45.2
New nonresidential buildings.....	10,409	10,302	+1.0	50,422,323	35,854,631	+40.6
Additions, alterations, and repairs..	36,220	36,171	+0.1	29,907,453	28,082,889	+6.5

The figures for building construction activity for May and June are based on reports received from 1,362 identical cities having a population of 2,500 or over. The comparisons with the corresponding month of 1935 are based on reports received from 708 identical cities having a population of 10,000 or over.

The information concerning permits issued is collected by the Bureau of Labor Statistics direct from local building officials, except in the States of Illinois, Massachusetts, New Jersey, New York, North Carolina, and Pennsylvania, where the State departments of labor collect and forward the data to the Bureau. The cost figures shown in this report are estimates made by prospective builders on applying for permits to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are included in the Bureau's tabulation. The data, however, do include the value of contracts awarded for Federal and State buildings in the cities covered. This information is collected by the Bureau from the various Federal and State agencies which have the power to award contracts for building construction. The data on public building are then added to the information concerning private construction received from local officials. In June 1936 the value of Federal and State buildings for which contracts were awarded in these 1,362 cities amounted to \$10,084,000; in May 1936, to \$3,250,000; and in the 708 cities which reported for June 1935 the value of public buildings for which contracts were awarded amounted to \$16,158,000.

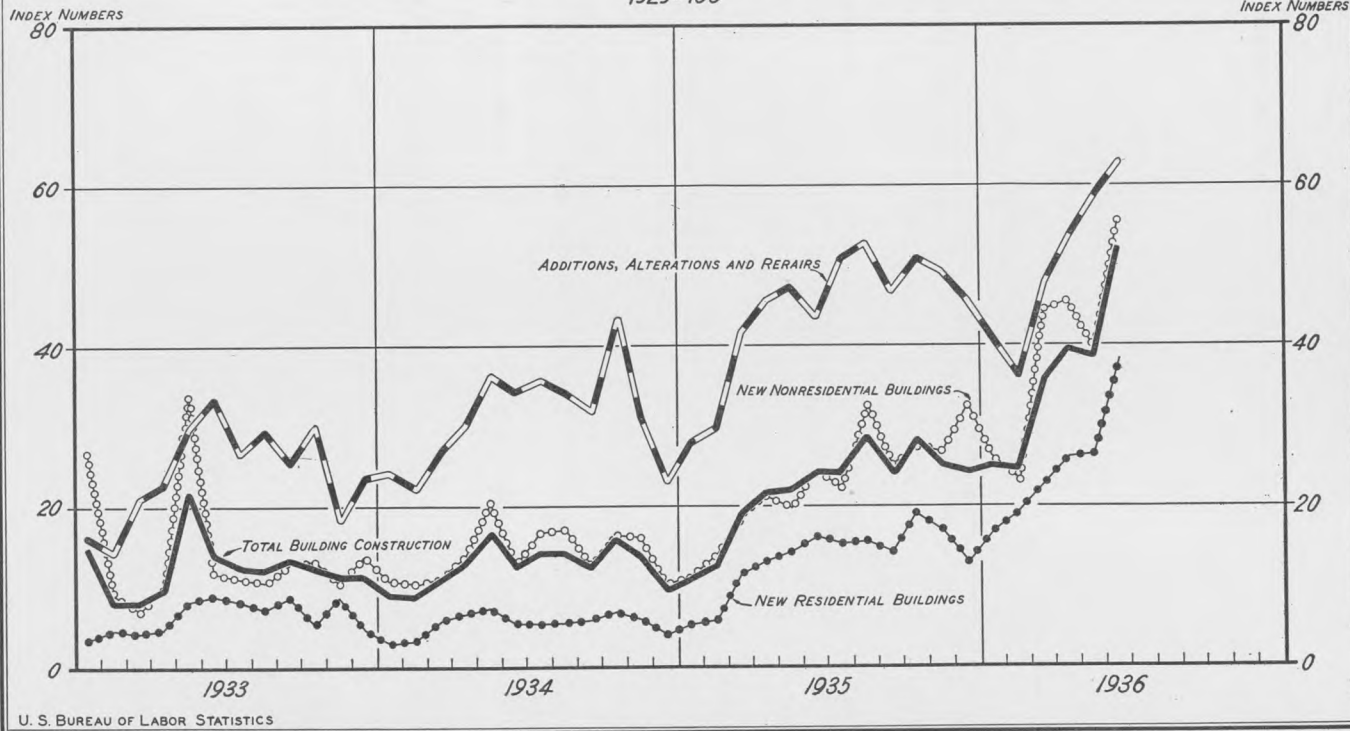
Index numbers of indicated expenditures for each of the different types of building construction and for the number of family-dwelling units provided in new housekeeping dwellings are shown in table 2. The monthly trends for these major classes of construction and for the number of family-dwelling units provided during the period January 1933 to June 1936 are shown graphically in the accompanying charts. The index number of total building construction is higher than for any month since April 1931, and it is the first time since that month that the index number based on the monthly average of 1929 has reached 50.





# VALUE OF BUILDING CONSTRUCTION

1929=100



U. S. BUREAU OF LABOR STATISTICS

Table 2.—Index Numbers of Families Provided for and of Indicated Expenditures for Building Construction

[Monthly average 1929=100]

Month	Families provided for	Indicated expenditures for—			
		New residential buildings	New non-residential buildings	Additions, alterations, and repairs	Total construction
<i>1930</i>					
May.....	59.6	48.5	90.7	84.5	69.3
June.....	54.4	45.1	82.5	74.6	63.3
<i>1931</i>					
May.....	51.7	39.8	58.5	53.0	48.8
June.....	43.4	33.4	41.7	56.5	39.4
<i>1932</i>					
May.....	11.3	7.9	39.3	27.3	23.3
June.....	10.6	7.9	24.6	28.2	17.3
<i>1933</i>					
May.....	11.9	8.1	33.8	29.8	21.7
June.....	12.3	8.8	11.5	33.3	13.8
<i>1934</i>					
May.....	10.2	7.3	20.4	36.4	16.7
June.....	7.2	5.3	12.6	34.4	12.4
<i>1935</i>					
May.....	20.0	14.2	19.9	47.2	22.0
June.....	20.8	16.1	24.4	43.6	24.3
<i>1936</i>					
January.....	19.0	16.6	26.2	41.0	24.9
February.....	19.6	19.1	23.1	36.2	24.5
March.....	28.1	22.7	44.4	47.9	36.0
April.....	30.9	26.2	45.5	53.9	39.6
May.....	31.6	26.4	39.5	59.1	38.7
June.....	46.8	38.3	55.5	62.9	52.0

During the first 6 months of 1936 permits were issued for buildings valued at nearly \$610,000,000, a gain of 76.0 percent as compared with the corresponding period of 1935. (See table 3.) Over the same period the value of new residential buildings showed a pick-up of 121.0 percent, the value of new nonresidential buildings a gain of 69.0 percent, and the value of additions, alterations, and repairs an increase of 34.0 percent.

Table 3.—Estimated Cost of Building Construction, First Half of 1935 and of 1936, by Class of Construction

Class of construction	Estimated cost of building construction—First half of—		Percentage change
	1936	1935	
All construction.....	\$609,714,689	\$346,173,501	+76.1
New residential.....	256,781,551	116,233,832	+120.9
New nonresidential.....	216,198,175	127,982,291	+68.9
Additions, alterations, and repairs.....	136,734,963	101,957,378	+34.1

## Comparison With Previous Month

THE June increase in building construction was widespread, eight of the nine geographic divisions showing increases ranging from 4.0 percent in the Pacific States to over 61.0 percent in the Middle Atlantic States. (See table 4.) Eight of the nine geographic divisions also showed gains in residential construction. In the Middle Atlantic States the pickup amounted to 130.0 percent. This was accounted for largely by the issuance of a large number of permits for apartment houses in New York City. It is expected that within the near future a new building code will be adopted for New York, and this may have been a factor in the rush for building permits during June.

New nonresidential buildings were higher in seven of the nine divisions, the gains being especially pronounced in the South Atlantic and East South Central States. Contracts awarded for an addition to the Bureau of Engraving and Printing and a new building for the Bureau of Economics, Department of Agriculture, in Washington, D. C., to cost approximately \$5,000,000, were a determining factor in the large increase in the South Atlantic Division.

Indicated expenditures for additions, alterations, and repairs were greater in six of the nine divisions.

Table 4.—Estimated Cost of Building Construction in 1,362 Identical Cities, May and June 1936

Geographic division	New residential buildings (estimated cost)			New nonresidential buildings (estimated cost)		
	June 1936	May 1936	Percentage change	June 1936	May 1936	Percentage change
All divisions.....	\$75,268,266	\$51,825,363	+45.2	\$50,422,323	\$35,854,631	+40.6
New England.....	2,469,345	2,250,925	+9.7	2,033,404	2,122,705	-4.2
Middle Atlantic.....	33,194,259	14,444,100	+129.8	14,253,328	12,448,346	+14.5
East North Central.....	13,191,704	10,608,227	+24.4	10,820,448	6,691,639	+61.7
West North Central.....	3,757,248	3,404,765	+10.4	1,395,529	1,905,192	-26.8
South Atlantic.....	8,558,680	7,377,249	+16.0	8,567,023	2,320,585	+269.2
East South Central.....	928,397	1,089,687	-14.8	1,680,001	839,863	+100.0
West South Central.....	3,057,956	2,932,536	+4.3	3,930,203	2,692,866	+45.9
Mountain.....	1,316,941	1,277,595	+3.1	1,069,288	686,976	+55.7
Pacific.....	8,793,736	8,440,279	+4.2	6,673,099	6,146,459	+8.6

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction			Number of cities
	June 1936	May 1936	Percentage change	June 1936	May 1936	Percentage change	
All divisions.....	\$29,907,453	\$28,082,889	+6.5	\$155,598,042	\$115,762,883	+34.4	1,362
New England.....	2,328,684	1,943,156	+19.8	6,831,433	6,316,786	+8.1	90
Middle Atlantic.....	9,886,790	8,593,445	+15.1	57,334,377	35,485,891	+61.6	333
East North Central.....	6,475,023	5,294,169	+22.3	30,487,175	22,594,035	+34.9	302
West North Central.....	1,643,447	1,728,019	-4.9	6,796,224	7,037,976	-3.4	128
South Atlantic.....	3,791,414	4,754,050	-20.2	20,917,117	14,451,884	+44.7	162
East South Central.....	682,086	565,569	+20.6	3,290,484	2,495,119	+31.9	57
West South Central.....	1,204,004	1,157,160	+4.0	8,192,163	6,782,562	+20.8	96
Mountain.....	624,062	607,932	+2.7	3,010,291	2,572,503	+17.0	54
Pacific.....	3,271,943	3,439,389	-4.9	18,738,778	18,026,127	+4.0	140

Living quarters will be provided for 19,128 families in the new housekeeping dwellings for which permits were issued during June. This is a gain of 48.0 percent over the previous month. Increases in the number of family-dwelling units provided occurred in one-family, two-family, and multifamily dwellings, the most pronounced gain being in multifamily dwellings. (See table 5.)

Table 5.—Estimated Cost and Number of Family-Dwelling Units Provided in 1,362 Identical Cities, May and June 1936

Type of dwelling	Number of families provided for in new dwellings			Estimated cost		
	June 1936	May 1936	Percentage change	June 1936	May 1936	Percentage change
All types.....	19, 128	12, 916	+48. 1	\$74, 593, 470	\$50, 567, 230	+47. 5
1-family.....	9, 942	9, 233	+7. 7	43, 937, 677	40, 216, 699	+9. 3
2-family <sup>1</sup> .....	873	727	+20. 1	2, 542, 311	2, 014, 570	+26. 2
Multifamily <sup>2</sup> .....	8, 313	2, 956	+181. 2	28, 113, 482	8, 335, 961	+237. 3

<sup>1</sup> Includes one- and two-family dwellings with stores.

<sup>2</sup> Includes multifamily dwellings with stores.

#### Analysis by Size of City, May and June 1936

THE small cities as well as the large ones shared in the June increase in building activity. While the largest gain occurred in the cities having a population of 500,000 or over, the next largest pick-up was registered in the group including cities between 2,500 and 5,000. Only two groups registered decreases in the value of new nonresidential buildings and only one in the value of additions, alterations and repairs.

The estimated cost of building construction in 1,362 identical cities having a population of 2,500 and over, by size of city, is shown in table 6, for the months of May and June 1936.

Table 6.—Estimated Cost of Building Construction, by Size of City, May and June 1936

Population group	Number of cities	Total construction			New residential buildings		
		June 1936	May 1936	Percentage change	June 1936	May 1936	Percentage change
Total, all groups.....	1, 362	\$155, 598, 042	\$115, 762, 883	+34. 4	\$75, 268, 266	\$51, 825, 363	+45. 2
500,000 and over.....	14	71, 975, 110	43, 395, 452	+65. 9	39, 148, 186	18, 317, 940	+113. 7
100,000 and under 500,000.....	78	31, 778, 350	25, 526, 354	+24. 5	10, 886, 469	9, 945, 200	+9. 5
50,000 and under 100,000.....	89	12, 661, 094	9, 667, 397	+31. 0	4, 793, 226	4, 010, 319	+19. 5
25,000 and under 50,000.....	145	11, 693, 354	12, 025, 637	-2. 8	4, 796, 377	4, 709, 578	+1. 8
10,000 and under 25,000.....	388	15, 504, 510	13, 828, 520	+12. 1	8, 359, 980	7, 693, 645	+8. 7
5,000 and under 10,000.....	296	7, 339, 944	7, 857, 755	-6. 6	4, 816, 401	4, 869, 673	-1. 1
2,500 and under 5,000.....	352	4, 645, 680	3, 461, 768	+34. 2	2, 467, 627	2, 279, 008	+8. 3

Table 6.—Estimated Cost of Building Construction, by Size of City, May and June 1936—Continued

Population group	New nonresidential buildings			Additions, alterations, and repairs		
	June 1936	May 1936	Percentage change	June 1936	May 1936	Percentage change
Total, all groups.....	\$50,422,323	\$35,854,631	+40.6	\$29,907,453	\$28,082,889	+6.5
500,000 and over.....	21,330,541	13,560,928	+57.3	11,496,383	11,516,584	-0.2
100,000 and under 500,000.....	13,535,517	9,344,616	+44.8	7,356,364	6,236,538	+18.0
50,000 and under 100,000.....	4,563,173	2,561,962	+78.1	3,304,695	3,095,116	+6.8
25,000 and under 50,000.....	4,142,963	4,585,399	-9.7	2,754,014	2,730,660	+0.9
10,000 and under 25,000.....	3,823,370	3,057,274	+25.1	3,321,160	3,077,601	+7.9
5,000 and under 10,000.....	1,327,331	1,945,222	-31.8	1,196,212	1,042,860	+14.7
2,500 and under 5,000.....	1,699,428	799,230	+112.6	478,625	383,530	+24.8

The number of family-dwelling units provided in the 1,362 identical cities having a population of 2,500 and over, by size of city, is shown in table 7 for the months of May and June 1936.

Table 7.—Number of Families Provided for in New Dwellings in 1,362 Identical Cities, May and June 1936, by Size of City

Population group	Number of cities	Total number families provided for		1-family dwellings		2-family dwellings <sup>1</sup>		Multifamily dwellings <sup>2</sup>	
		June 1936	May 1936	June 1936	May 1936	June 1936	May 1936	June 1936	May 1936
		Total, all groups.....	1,362	19,128	12,916	9,942	9,233	873	727
500,000 and over.....	14	10,136	4,838	2,576	2,511	249	222	7,311	2,105
100,000 and under 500,000.....	78	2,829	2,483	2,221	1,921	238	163	370	399
50,000 and under 100,000.....	89	1,209	1,018	900	857	101	90	208	71
25,000 and under 50,000.....	145	1,243	1,151	1,089	992	78	68	76	91
10,000 and under 25,000.....	388	2,018	1,843	1,792	1,668	84	107	142	68
5,000 and under 10,000.....	296	1,115	1,018	831	758	106	56	178	204
2,500 and under 5,000.....	352	578	565	533	526	17	21	28	18

<sup>1</sup> Includes 1- and 2-family dwellings with stores.

<sup>2</sup> Includes multifamily dwellings with stores.

All seven groups showed increases in the number of family-dwelling units provided, the most pronounced gain being in the cities having a population of 500,000 or over. While the greatest increases occurred for the most part in apartment houses, there were also decided gains in units provided in one-family dwellings.

#### Comparison With a Year Ago

THE value of new residential buildings as recorded by permits issued in June 1936 was 142.0 percent greater than during June of the previous year. This increase was spread over eight of the nine geographic divisions. In three geographic divisions the gain amounted to more than 100 percent. There was a pick-up of nearly 81 percent in the value of new nonresidential buildings comparing these 2 months, all nine geographic divisions registering increases. The estimated valuation of additions, alterations, and repairs to existing structures also showed gains in each of the nine geographic divisions, the highest increase occurring in the East North Central States. The permit valuation of total construction increased 97.0

percent, two geographic divisions showing gains of more than 100 percent. (See table 8.)

Table 8.—Estimated Cost of Building Construction in 708 Identical Cities, June 1935 and June 1936

Geographic division	New residential buildings (estimated cost)			New nonresidential buildings (estimated cost)		
	June 1936	June 1935	Percentage change	June 1936	June 1935	Percentage change
All divisions.....	\$67,820,564	\$28,034,023	+141.9	\$47,391,864	\$26,161,916	+80.8
New England.....	2,385,245	1,717,735	+38.9	1,863,819	1,448,669	+28.7
Middle Atlantic.....	31,426,081	8,597,574	+265.5	13,654,067	6,240,568	+118.8
East North Central.....	11,191,427	6,534,594	+71.3	10,178,650	2,735,618	+272.1
West North Central.....	3,259,516	1,960,465	+66.3	1,313,935	790,824	+64.9
South Atlantic.....	7,079,222	3,452,569	+105.0	8,023,235	7,904,747	+1.5
East South Central.....	725,281	772,299	-6.1	1,638,393	426,350	+284.3
West South Central.....	2,661,136	1,458,551	+82.5	3,365,327	2,169,983	+55.1
Mountain.....	1,139,091	649,420	+75.4	977,283	309,969	+215.3
Pacific.....	7,953,565	2,890,816	+175.1	6,287,155	4,129,188	+52.3

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction			Number of cities
	June 1936	June 1935	Percentage change	June 1936	June 1935	Percentage change	
All divisions.....	\$28,151,281	\$18,594,850	+51.4	\$143,273,709	\$72,790,789	+96.8	708
New England.....	2,315,149	1,743,214	+32.8	6,564,213	4,909,618	+33.7	78
Middle Atlantic.....	9,463,016	6,117,122	+54.7	54,543,164	20,955,264	+160.3	166
East North Central.....	6,223,187	3,582,390	+73.7	27,593,264	12,852,602	+114.7	170
West North Central.....	1,519,287	1,128,490	+34.6	6,092,738	3,885,779	+56.8	68
South Atlantic.....	3,374,737	2,046,976	+64.9	18,477,194	13,404,292	+37.8	75
East South Central.....	624,602	393,259	+58.8	2,988,276	1,591,908	+87.7	26
West South Central.....	1,089,800	938,406	+16.1	7,116,263	4,566,940	+55.8	45
Mountain.....	536,495	476,212	+12.7	2,652,869	1,435,601	+84.8	22
Pacific.....	3,005,008	2,168,781	+38.6	17,245,728	9,188,785	+87.7	58

The total number of family-dwelling units and the estimated cost of the various types of housekeeping dwellings for which permits were issued in June 1935 and June 1936 are given in table 9.

Table 9.—Estimated Cost and Number of Family-Dwelling Units Provided in 708 Identical Cities, June 1935 and June 1936

Type of dwelling	Number of families provided for in new dwellings			Estimated cost		
	June 1936	June 1935	Percentage change	June 1936	June 1935	Percentage change
All types.....	17,431	7,186	+142.6	\$67,545,718	\$27,616,473	+144.6
1-family.....	8,539	4,406	+93.8	37,426,505	18,708,888	+100.0
2-family <sup>1</sup> .....	754	442	+70.6	2,333,281	1,263,545	+84.7
Multifamily <sup>2</sup> .....	8,138	2,338	+248.1	27,785,932	7,644,040	+263.5

<sup>1</sup> Includes 1- and 2-family dwellings with stores.

<sup>2</sup> Includes multifamily dwellings with stores.

Decided gains are shown in the number of family-dwelling units provided in one-family dwellings, two-family dwellings, and multifamily dwellings, comparing June 1936 with the corresponding month of 1935. The gain in multifamily dwellings was especially pronounced, amounting to nearly 250 percent.

Construction from Public Funds

INFORMATION concerning the value of contracts awarded and force-account work started during May and June 1936 on projects financed from the Public Works Administration fund, from The Works Program fund, and from regular governmental appropriations is shown in table 10.

Table 10.—Value of Contracts Awarded and Force-Account Work Started on Projects Financed from Federal Funds, May and June 1936<sup>1</sup>

Type of project	Total		The Works Program <sup>2</sup>		Regular governmental appropriations	
	June 1936	May 1936	June 1936	May 1936	June 1936	May 1936
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
All types.....	\$ 131,601,592	\$ 104,850,982	26,329,269	\$ 31,804,721	54,328,544	\$ 22,107,542
Building.....	42,448,824	33,896,793	920,977	\$ 1,597,808	17,290,518	\$ 5,942,486
Electrification.....	778,673	2,996,427	673,400	2,686,080	33,983	783
Heavy engineering.....	3,798,169	2,458,647	0	0	0	0
Hydroelectric power plants.....	0	10,859	0	0	0	0
Naval vessels.....	2,076,793	401,700	-----	-----	2,058,200	401,700
Plant, crop, and livestock control.....	40,000	0	40,000	0	-----	-----
Professional, technical, and clerical projects.....	21,011	19,397	21,011	\$ 19,397	-----	-----
Public roads:						
Grade-crossing elimination.....	12,595,994	13,311,037	12,460,703	\$ 13,311,037	-----	-----
Roads.....	28,203,408	28,982,183	11,464,078	\$ 13,386,265	15,220,962	\$ 14,242,157
Railroad construction and repair.....	0	2,274,074	-----	-----	-----	-----
Reclamation.....	917,692	861,625	576,802	\$ 516,464	164,539	155,600
River, harbor, and flood-control.....	17,935,188	1,113,344	135,899	\$ 28,250	17,795,828	\$ 994,197
Streets and roads <sup>6</sup> .....	5,585,553	4,089,726	0	0	221,027	37,244
Water and sewerage systems.....	13,824,223	12,823,718	3,560	0	449,984	9,884
Miscellaneous.....	3,376,064	1,611,452	32,839	\$ 259,420	1,093,503	323,491

Type of project	Public Works Administration					
	Federal		Non-Federal			
			N. I. R. A.		E. R. A. A. 1935 <sup>7</sup>	
	June 1936	May 1936	June 1936	May 1936	June 1936	May 1936
All types.....	Dollars 5,323,847	Dollars \$ 2,003,885	Dollars 10,877,742	Dollars \$ 16,185,558	Dollars \$ 34,742,190	Dollars \$ 32,749,276
Building.....	2,980,497	\$ 410,899	4,612,064	\$ 7,073,003	\$ 16,644,768	\$ 18,872,597
Electrification.....	-----	-----	-----	-----	71,290	309,564
Heavy engineering.....	-----	-----	-----	-----	3,798,169	\$ 2,458,647
Hydroelectric power plants.....	-----	-----	-----	-----	0	\$ 10,859
Naval vessels.....	18,593	0	-----	-----	-----	-----
Public roads:						
Grade-crossing elimination.....	-----	-----	-----	-----	135,291	0
Roads.....	1,518,368	\$ 1,353,761	0	-----	-----	-----
Railroad construction and repair.....	-----	-----	0	\$ 2,274,074	-----	-----
Reclamation.....	176,351	\$ 170,374	-----	-----	0	19,187
River, harbor, and flood control.....	3,461	21,020	-----	-----	0	69,877
Streets and roads <sup>6</sup> .....	366,900	47,001	598,100	\$ 534,886	4,399,526	\$ 3,470,595
Water and sewerage systems.....	150,000	0	3,916,695	\$ 5,958,653	9,303,984	\$ 6,855,181
Miscellaneous.....	109,677	830	1,750,883	\$ 344,942	389,162	682,769

<sup>1</sup> Preliminary, subject to revision.

<sup>2</sup> Does not include data for that part of The Works Program operated by the Works Progress Administration.

<sup>3</sup> Includes \$17,615 low-cost housing projects (housing division, P. W. A.).

<sup>4</sup> Includes \$521,145 low-cost housing projects (housing division, P. W. A.).

<sup>5</sup> Revised.

<sup>6</sup> Other than those reported by the Bureau of Public Roads.

<sup>7</sup> Not included in The Works Program.

The value of contracts awarded to be financed from Federal funds rose appreciably, comparing June with May. The increases were more pronounced in building construction; heavy engineering; naval vessels; river, harbor, and flood-control work; and water and sewerage work.

Among the more important construction projects to be financed wholly or partially from Federal funds during June were: Sewerage projects in Buffalo, N. Y., to cost over \$4,600,000; airport improvements in Allegheny County, Pa., to cost over \$600,000; dock terminal, dredging, and bulkhead construction near Bayonne, N. J., to cost over \$3,500,000; county road work in Mississippi, to cost over \$2,500,000; sewer work in the sanitary district of Chicago to cost over \$2,800,000; water and sewerage work in Little Rock, Ark., to cost over \$1,500,000; and irrigation and power project in Maverick County, Tex., to cost nearly \$1,500,000.

The value of public-building and highway-construction awards financed wholly from appropriations from State funds, as reported by the various State governments for June 1935 and May and June 1936 is shown by geographic divisions in table 11.

Table 11.—Value of Public-Building and Highway-Construction Awards Financed Wholly by State Funds

Geographic division	Value of awards for public buildings			Value of awards for highway construction		
	June 1936	May 1936	June 1935	June 1936	May 1936	June 1935
All divisions.....	\$4,361,733	\$986,580	\$1,263,868	\$3,896,811	\$6,273,456	\$1,799,341
New England.....	4,000	7,867	28,200	134,810	736,204	29,986
Middle Atlantic.....	129,681	167,111	227,782	347,436	1,806,316	18,914
East North Central.....	59,892	189,941	710,283	1,414,303	351,362	283,908
West North Central.....	68,000	18,387	127,525	84,659	10,859	135,955
South Atlantic.....	965,533	189,250	52,672	911,487	219,261	242,098
East South Central.....		15,000		0	0	89,035
West South Central.....	3,126,755	222,360	56,052	83,612	621,301	234,525
Mountain.....	0	31,800	21,693	136,139	88,012	219,522
Pacific.....	7,872	144,864	39,661	784,365	2,440,141	545,338

The value of public buildings financed wholly from State funds for which contracts were awarded in June 1936 was more than three times greater than the value of such awards during either June 1935 or May 1936. The value of highway-construction work undertaken during June 1936, while greater than for June 1935, was considerably less than during May 1936.



## RETAIL PRICES

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### Food Prices in July 1936

RETAIL food costs in the larger cities of the United States were 0.3 percent lower on July 14 than on June 30. This decline was caused by an increase of 13.5 percent in the cost of potatoes, which has been showing marked increases since March. If potatoes had been omitted from the index, food costs would have been 1.1 percent higher on July 14 than on June 30.

The costs of fresh fruits and vegetables and of beverages and chocolate declined during the 2-week interval while all other food groups advanced. The prices of 53 of the 84 foods included in the index were higher than on June 30, prices of 29 foods were lower, and for 2 they were unchanged.

The composite index was 84.0 percent of the 1923-25 average on July 14. This is 4.8 percent above the level for the corresponding date of a year ago. Comparable indexes of food costs for July of earlier years are 80.2 in 1935, 68.3 in 1932, and 106.5 in 1929.

The group index for cereals and bakery products, which remained unchanged from June 16 to June 30, advanced 0.3 percent from June 30 to July 14. Wheat flour, with a gain of 2.1 percent, showed the most significant price change in the group. Increases for this item were reported from 30 of the 51 cities and were most pronounced in cities of the New England area. White bread, the most heavily weighted food in the group, declined 0.1 percent as a result of lower prices or increased weights of the loaf in four cities. Prices of both corn meal and macaroni were higher on July 14 than on June 30, the gains amounting to 1.0 and 0.7 percent, respectively.

Meat costs advanced 0.5 percent, due in large part to continued increases for pork. The advances for the pork items ranged from 0.4 percent for chops and salt pork to 2.0 percent for whole ham, and 2.4 percent for sliced ham. Beef costs were also higher, averaging 0.6 percent above the level for June 14. The largest gain in the subgroup, 1.3 percent, was reported for both round steak and plate beef. Prices for all the lamb items were lower. The smallest decrease was 1.9 percent, reported for rib chops and chuck, and the largest was 2.7 percent for leg of lamb.

Higher prices for all of the items in the dairy-products group resulted in a 2.6-percent rise in the group index. The average price of butter advanced 7.0 percent. Increases, which were reported from every city, amounted to more than 5.0 percent in 45 of the 51

cities. The price of fresh milk rose 0.3 percent, largely due to an advance of 1 cent a quart by most of the reporting dairies and stores in Cleveland. Cream was also 0.5 percent higher. Higher prices for cheese were reported in 49 cities and the average increase was 2.9 percent. Evaporated milk was up 1.7 percent.

Egg prices continued the seasonal advance. From June 30 to July 14, the average price per dozen rose 4.3 percent. Prices were higher in all but one of the 51 cities. In Scranton, egg prices were 0.6 percent lower.

The combined index for fruits and vegetables declined 5.1 percent. The most significant price change during the period, from the standpoint of its effect on the index, was the 13.5-percent decline in potato prices. Decreases for this item were reported from 42 of the 51 cities. If potatoes had been omitted, the group index would have shown an advance of 1.0 percent. Lemon prices rose sharply and were 21.6 percent above the level of June 30. Advances were reported from all but 2 of the 51 cities. Lower prices for apples in 24 cities resulted in an average decline of 3.4 percent. Price changes for other items in the fresh fruits and vegetables subgroup ranged from a decrease of 8.5 percent for celery to an increase of 15.2 percent for sweetpotatoes. The cost of canned fruits and vegetables advanced 0.6 percent. Increases were registered for 6 of the 10 items in the subgroup and were greatest for corn, 2.5 percent, and for tomatoes, 1.1 percent. Dried-fruit and vegetable costs also showed an advance, being 0.7 percent higher than 2 weeks ago. On July 14, prices of navy beans were higher than they have been since October 1935; between June 30 and July 14, they showed a gain of 1.7 percent. Prices of lima beans increased 1.1 percent.

The cost of the beverages and chocolate group fell off 0.2 percent. The average price of coffee had been declining steadily for some time and from June 30 to July 14 showed a further decrease of 0.1 percent. Prices of tea and chocolate were also lower, but cocoa prices were 0.5 percent higher.

Lard increased 0.6 percent, following the trend of pork prices for the period. Prices of the other shortenings, lard compound and vegetable shortening, were lower by 0.5 and 0.8 percent, respectively. Both salad oil and peanut butter were 0.8 percent higher, and oleomargarine advanced 0.5 percent. Mayonnaise prices remained unchanged.

An increase of 0.2 percent in the cost of sugar and sweets was due to a gain of 0.3 percent in sugar prices. Slight decreases were reported for the other items in the group.

Indexes of retail food costs by major commodity groups in July and June 1936, are presented in table 1. This table shows also the comparative level of costs in July 1929 and other recent years.

Table 1.—Indexes of Retail Food Costs in 51 Cities Combined,<sup>1</sup> by Commodity Groups

July and June 1936 and July 1935, 1932, and 1929

[1923-25=100]

Commodity group	1936				1935			1932	1929
	July 14	June 30	June 16	June 2	July 30	July 16	July 2	July 15	July 15
All foods.....	84.0	84.2	83.8	82.1	79.0	80.2	80.6	68.3	106.5
Cereals and bakery products.....									
Meats.....	90.7	90.4	90.4	90.7	92.2	92.1	92.0	75.6	97.9
Dairy products.....	94.9	94.4	94.0	94.4	97.8	98.1	97.3	79.3	125.9
Eggs.....	79.6	77.5	76.5	75.5	72.6	72.7	73.3	63.8	101.6
Fruits and vegetables.....	67.8	65.0	63.0	60.6	70.6	68.8	67.4	49.3	91.3
Fresh.....	80.8	85.1	85.2	78.3	57.1	62.6	65.3	62.6	107.2
Canned.....	81.9	87.0	87.1	79.3	54.5	60.6	63.7	62.4	108.3
Dried.....	78.8	78.4	78.3	78.3	84.2	84.5	84.7	72.7	98.5
Beverages and chocolate.....	59.3	58.9	58.4	58.2	62.8	63.2	63.1	55.1	103.5
Fats and oils.....	67.0	67.1	66.9	67.3	69.7	69.9	69.9	74.2	110.6
Sugar and sweets.....	73.0	72.8	73.0	73.4	82.7	82.1	82.1	49.8	93.3
	64.9	64.7	64.5	64.3	66.3	66.2	65.6	56.5	72.6

<sup>1</sup> Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined with the use of population weights.

Average prices for each of the 84 foods for 51 large cities combined are shown in table 2 for July and June 1936 and for July 1935.

Table 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined <sup>1</sup>

July and June 1936 and July 1935

[\*Indicates the 42 foods included in indexes prior to Jan. 1, 1935]

Article	1936				1935		
	July 14	June 30	June 16	June 2	July 30	July 16	July 2
Cereals and bakery products:							
Cereals:	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
*Flour, wheat.....pound..	4.6	4.5	4.5	4.6	4.9	4.9	4.9
*Macaroni.....do.....	15.1	15.0	15.1	15.0	15.6	15.7	15.7
*Wheat cereal.....28-oz. package..	24.3	24.2	24.2	24.2	24.2	24.2	24.2
*Corn flakes.....8-oz. package..	8.1	8.1	8.1	8.1	8.2	8.2	8.2
*Corn meal.....pound..	5.0	4.9	4.9	4.9	5.1	5.1	5.1
Hominy grits.....24-oz. package..	8.9	8.9	8.9	9.0	9.2	9.2	9.2
*Rice.....pound..	8.7	8.6	8.6	8.5	8.4	8.4	8.4
*Rolled oats.....do.....	7.4	7.4	7.4	7.4	7.6	7.6	7.6
Bakery products:							
*Bread, white.....do.....	8.1	8.1	8.1	8.2	8.3	8.3	8.3
Bread, whole-wheat.....do.....	9.3	9.3	9.3	9.3	9.3	9.3	9.3
Bread, rye.....do.....	9.0	8.9	8.9	8.9	8.9	8.9	8.9
Cake.....do.....	25.3	25.4	25.2	25.1	23.6	23.5	23.5
Soda crackers.....do.....	18.1	18.1	18.1	18.1	17.9	17.4	17.2
Meats:							
Beef:							
*Sirloin steak.....do.....	37.6	37.2	37.0	37.1	40.6	41.3	41.4
*Round steak.....do.....	34.0	33.6	33.5	33.4	37.0	37.5	37.5
*Rib roast.....do.....	28.9	28.7	28.8	29.0	31.3	31.8	32.1
*Chuck roast.....do.....	21.6	21.7	21.6	22.0	24.5	25.0	25.1
*Plate.....do.....	14.6	14.4	14.8	15.2	17.0	17.4	17.6
Liver.....do.....	26.0	25.9	25.9	25.6	24.9	24.8	24.8
Veal:							
Cutlets.....do.....	40.6	40.8	40.9	40.8	38.4	38.7	38.8
Pork:							
*Chops.....do.....	34.7	34.6	34.4	35.0	39.2	38.2	35.9
Loin roast.....do.....	29.2	28.7	28.5	29.2	33.0	32.3	30.0
*Bacon, sliced.....do.....	40.8	40.5	40.5	40.4	42.4	41.2	41.0
*Bacon, strip.....do.....	35.4	35.1	35.1	35.3	36.7	35.8	35.4
*Ham, sliced.....do.....	49.8	48.7	48.1	47.3	46.8	45.7	45.2
Ham, whole.....do.....	32.6	32.0	31.6	30.8	30.1	29.0	28.5
Salt pork.....do.....	23.7	23.6	23.5	23.7	26.6	25.8	25.8
Lamb:							
Breast.....do.....	13.8	14.2	14.2	14.6	12.0	12.4	12.3
Chuck.....do.....	24.4	24.9	24.7	25.0	20.6	21.0	21.3
*Leg.....do.....	30.6	31.4	31.3	32.0	25.9	27.1	27.3
Rib chops.....do.....	38.5	39.3	39.3	39.0	33.0	33.9	33.4

<sup>1</sup>Prices for individual cities are combined with the use of population weights.

Table 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined—Con.

July and June 1936 and July 1935

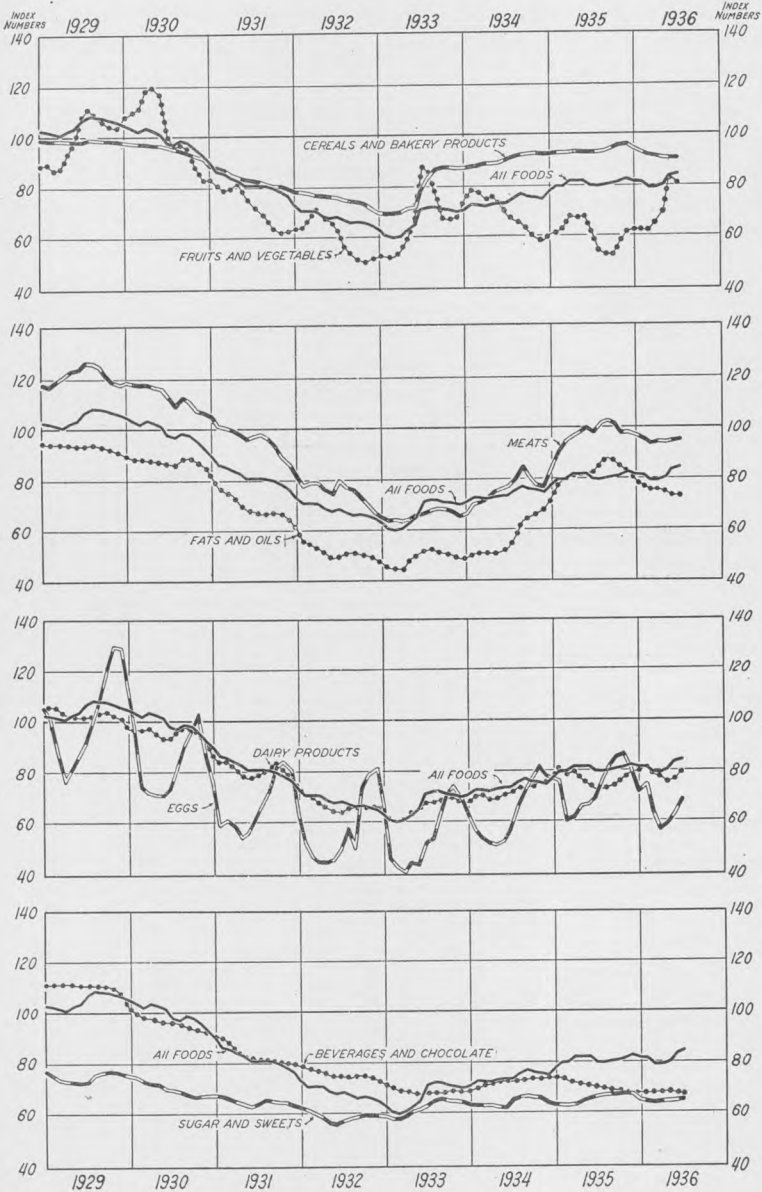
[\*Indicates the 42 foods included in indexes prior to Jan. 1, 1935]

Article	1936				1935		
	July 14	June 30	June 16	June 2	July 30	July 16	July 2
Meats—Continued.							
Poultry:							
*Roasting chickens.....pound..	Cents 33.7	Cents 33.6	Cents 31.8	Cents 32.1	Cents 29.7	Cents 29.8	Cents 29.4
Fish, canned:							
Salmon, pink.....16 oz. can..	13.1	13.1	13.1	13.1	13.1	13.1	13.1
*Salmon, red.....do.....	25.6	25.5	25.5	25.5	21.3	21.2	21.1
Dairy products:							
*Butter.....pound..	40.0	37.4	35.8	34.3	31.1	30.9	30.7
*Cheese.....do.....	27.5	26.7	26.7	26.5	26.3	26.3	26.2
Cream.....½ pint..	14.7	14.6	14.6	14.7	14.4	14.4	14.4
Milk, fresh (delivered and store) <sup>2</sup>							
quart..	11.6	11.6	11.6	11.6			
*Milk, fresh (delivered).....do.....	11.8	11.8	11.8	11.8	11.6	11.6	11.8
*Milk, evaporated.....14½-oz. can..	7.5	7.4	7.4	7.4	6.9	7.0	7.2
*Eggs.....dozen..	35.3	33.8	32.8	31.6	36.8	35.9	35.1
Fruits and vegetables:							
Fresh:							
Apples.....pound..	6.4	6.6	6.4	5.8	5.3	6.3	7.5
*Bananas.....do.....	6.4	6.2	6.3	6.3	6.2	6.1	6.1
Lemons.....dozen..	39.5	32.5	32.9	33.2	32.7	30.1	22.5
*Oranges.....do.....	35.5	34.9	34.6	34.1	32.6	31.7	31.3
Beans, green.....pound..	8.6	8.7	10.0	11.5	7.1	7.2	7.2
*Cabbage.....do.....	5.9	6.0	5.4	4.1	2.6	2.7	3.3
Carrots.....bunch..	5.0	5.2	5.5	5.5	4.3	4.8	5.1
Celery.....stalk..	8.8	9.7	10.1	9.9	7.9	8.6	11.2
Lettuce.....head..	9.2	8.3	8.5	7.8	8.8	9.6	7.7
*Onions.....pound..	4.1	4.1	4.0	4.0	4.4	4.9	5.8
*Potatoes.....do.....	4.1	4.8	4.9	4.3	1.9	2.2	2.1
Spinach.....do.....	7.1	6.5	6.0	5.8	7.6	6.1	5.4
Sweetpotatoes.....do.....	6.4	5.6	5.1	4.8	4.5	4.8	4.6
Canned:							
Peaches.....no. 2½ can..	17.7	17.7	17.7	17.6	19.4	19.4	19.3
Pears.....do.....	21.9	22.0	22.0	22.1	22.9	22.8	22.9
Pineapples.....do.....	22.3	22.2	22.3	22.3	22.6	22.5	22.5
Asparagus.....no. 2 can..	26.3	26.3	26.1	26.1	25.5	25.6	25.5
Beans, green.....do.....	11.5	11.5	11.4	11.4	11.7	11.7	11.9
*Beans with pork.....16-oz. can..	6.9	6.9	7.0	7.0	6.9	6.9	6.9
*Corn.....no. 2 can..	11.7	11.4	11.3	11.2	13.0	13.0	13.1
*Peas.....do.....	15.8	15.9	15.8	15.8	17.3	17.7	17.3
*Tomatoes.....do.....	9.3	9.2	9.2	9.2	10.4	10.4	10.4
Tomato soup.....10½-oz. can..	8.3	8.2	8.2	8.2	8.1	8.1	8.1
Dried:							
Peaches.....pound..	17.0	17.0	17.1	17.1	16.6	16.7	16.8
*Prunes.....do.....	9.7	9.7	9.6	9.5	11.4	11.4	11.5
*Raisins.....15-oz. package..	9.7	9.7	9.7	9.7	9.8	9.8	9.8
Black-eyed peas.....pound..	8.9	8.8	8.8	8.8	8.6	8.7	8.6
Lima beans.....do.....	10.9	10.7	10.7	10.7	9.9	10.0	9.9
*Navy beans.....do.....	6.0	5.9	5.7	5.7	6.3	6.4	6.3
Beverages and chocolate:							
*Coffee.....pound..	23.9	23.9	24.0	24.1	25.2	25.3	25.3
*Tea.....do.....	69.3	69.5	67.7	67.8	68.6	68.6	68.7
Cocoa.....8-oz. can..	10.7	10.6	10.6	10.6	11.0	11.0	11.0
Chocolate.....8-oz. package..	16.4	16.5	16.4	16.4	22.2	22.0	22.0
Fats and oils:							
*Lard.....pound..	15.6	15.5	15.5	15.7	19.6	19.3	19.2
Lard compound.....do.....	14.4	14.4	14.4	14.6	16.4	16.4	16.7
*Vegetable shortening.....do.....	21.2	21.3	21.3	21.4	21.8	21.7	21.8
Salad oil.....pint..	24.8	24.6	24.7	24.7	24.7	24.7	24.7
Mayonnaise.....½ pint..	16.8	16.8	17.0	17.0	17.1	17.0	16.9
*Oleomargarine.....pound..	17.5	17.4	17.6	17.7	19.1	19.0	19.1
Peanut butter.....do.....	18.6	18.4	18.5	18.6	22.6	22.5	22.5
Sugar and sweets:							
*Sugar.....do.....	5.7	5.7	5.6	5.6	5.8	5.8	5.7
Corn sirup.....24-oz. can..	13.5	13.6	13.6	13.6	13.7	13.8	13.7
Molasses.....18-oz. can..	14.3	14.4	14.3	14.4	14.2	14.3	14.4
Strawberry preserves.....pound..	20.1	20.1	20.1	20.3	20.5	20.5	20.5

<sup>2</sup> Average prices of milk delivered by dairies and sold in grocery stores, weighted according to the relative proportion distributed by each method.

RETAIL COST OF FOOD

1923-25=100



U.S. BUREAU OF LABOR STATISTICS

## Details by Regions and Cities

BETWEEN June 30 and July 14 retail food costs declined in 26 of the 51 cities included in the index. Higher costs were reported for 22 cities and 3 cities showed no change.

The largest decrease, 3.5 percent, was reported by Salt Lake City, where potato prices fell 25.8 percent. Mobile and Little Rock, with advances of 3.1 and 3.0 percent, respectively, showed the greatest increases. In these two cities fruit and vegetable costs were higher, contrary to the general movement for the group. Considerably higher prices for potatoes and cabbage were reported in both cities.

Index numbers of the retail cost of food in each of the 51 cities are given in table 3 for July and June 1936 and for July of earlier years.

Table 3.—Indexes of the Average Retail Cost of All Foods, by Cities<sup>1</sup>  
July and June 1936 and July 1935, 1934, 1933, 1932, and 1929

[1923-25=100]

Region and city	1936				1935			1934	1933	1932	1929
	July 14	June 30	June 16	June 2	July 30	July 16	July 2	July 17	July 15	July 15	July 15
<b>Average: 51 cities combined</b> .....	<b>84.0</b>	<b>84.2</b>	<b>83.8</b>	<b>82.1</b>	<b>79.0</b>	<b>80.2</b>	<b>80.6</b>	<b>73.6</b>	<b>71.0</b>	<b>68.3</b>	<b>106.5</b>
<b>New England</b> .....	<b>82.9</b>	<b>83.0</b>	<b>82.6</b>	<b>80.0</b>	<b>78.1</b>	<b>79.2</b>	<b>79.1</b>	<b>73.9</b>	<b>71.6</b>	<b>68.9</b>	<b>106.4</b>
Boston.....	81.4	81.5	81.1	78.4	76.4	77.8	77.7	72.3	70.6	67.9	106.1
Bridgeport.....	86.7	86.5	85.9	84.3	82.9	84.0	82.8	77.8	73.6	72.3	106.6
Fall River.....	83.7	83.7	83.3	80.7	78.8	79.5	78.5	74.9	71.7	66.9	106.2
Manchester.....	85.9	88.1	87.3	83.2	80.7	81.8	81.8	75.7	75.3	68.3	107.4
New Haven.....	86.8	87.2	86.5	83.7	81.7	82.0	82.8	77.9	73.7	72.2	107.2
Portland, Maine.....	84.3	84.5	84.0	80.9	79.2	80.5	80.3	75.0	74.0	70.3	110.6
Providence.....	82.1	81.4	81.8	79.5	77.5	78.4	77.7	72.9	71.7	67.8	106.3
<b>Middle Atlantic</b> .....	<b>84.2</b>	<b>84.8</b>	<b>84.6</b>	<b>83.1</b>	<b>79.6</b>	<b>80.8</b>	<b>80.8</b>	<b>75.4</b>	<b>71.0</b>	<b>70.1</b>	<b>106.2</b>
Buffalo.....	86.0	86.9	85.2	81.6	79.1	81.5	81.4	73.8	72.7	69.7	108.2
Newark.....	84.5	84.7	84.2	83.6	83.2	83.5	83.2	76.7	70.7	73.8	104.9
New York.....	83.9	84.2	84.2	83.3	80.0	80.9	80.3	76.2	71.5	72.0	105.2
Philadelphia.....	85.9	86.7	86.8	85.3	80.3	82.0	82.2	77.6	70.6	69.6	106.4
Pittsburgh.....	82.1	83.6	82.7	80.8	76.4	78.0	79.5	71.2	68.5	65.2	107.7
Rochester.....	86.4	86.9	86.8	83.1	80.3	80.8	80.3	74.8	73.5	69.0	108.2
Seranton.....	80.6	80.9	81.4	79.5	76.0	77.6	78.2	71.2	71.4	66.9	107.1
<b>East North Central</b> .....	<b>85.4</b>	<b>86.0</b>	<b>85.1</b>	<b>83.0</b>	<b>79.5</b>	<b>81.0</b>	<b>81.9</b>	<b>73.1</b>	<b>72.2</b>	<b>68.7</b>	<b>109.2</b>
Chicago.....	84.7	85.1	84.3	83.1	79.9	80.5	81.2	72.4	72.5	71.0	109.5
Cincinnati.....	90.1	90.1	88.1	88.0	83.5	83.5	84.6	74.9	73.4	69.0	111.5
Cleveland.....	84.8	85.8	84.4	81.7	78.3	80.2	82.1	72.4	71.8	67.0	107.0
Columbus, Ohio.....	89.1	90.2	89.4	83.9	82.6	83.1	84.5	75.5	73.8	68.4	106.8
Detroit.....	85.2	86.0	85.5	82.6	77.8	80.9	81.7	72.8	69.7	65.3	109.5
Indianapolis.....	86.1	87.8	86.8	83.5	77.9	78.9	78.1	72.5	74.4	69.8	110.7
Milwaukee.....	87.1	87.5	86.2	83.7	81.5	82.2	83.0	75.5	75.3	71.7	112.2
Peoria.....	86.7	86.7	88.1	84.2	80.9	82.9	84.2	75.8	73.9	67.1	104.8
Springfield, Ill.....	84.4	83.8	84.3	81.9	77.3	79.9	81.6	71.2	72.8	64.6	108.5
<b>West North Central</b> .....	<b>88.2</b>	<b>87.9</b>	<b>87.3</b>	<b>86.0</b>	<b>81.7</b>	<b>83.7</b>	<b>84.6</b>	<b>75.6</b>	<b>73.2</b>	<b>66.3</b>	<b>108.3</b>
Kansas City.....	87.5	86.6	85.4	85.9	80.4	80.2	81.5	75.1	72.1	65.4	106.2
Minneapolis.....	91.9	90.9	89.9	87.0	85.0	86.3	87.3	79.0	76.3	68.0	109.0
Omaha.....	84.6	84.2	83.9	82.4	79.7	81.5	83.4	73.0	69.1	63.0	103.3
St. Louis.....	89.0	89.2	89.3	88.4	82.0	85.8	85.8	74.6	74.1	67.2	112.2
St. Paul.....	87.3	87.7	86.2	82.6	81.3	83.6	84.8	78.8	74.8	67.9	106.5

See footnote at end of table.

Table 3.—Indexes of the Average Retail Cost of All Foods, by Cities—Continued

July and June 1936 and July 1935, 1934, 1933, 1932, and 1929

[1923-25=100]

Region and city	1936				1935			1934	1933	1932	1929
	July 14	June 30	June 15	June 2	July 30	July 16	July 2	July 17	July 15	July 15	July 15
<b>South Atlantic</b> .....	<b>83.4</b>	<b>82.7</b>	<b>82.4</b>	<b>81.0</b>	<b>79.4</b>	<b>80.3</b>	<b>80.4</b>	<b>71.9</b>	<b>68.5</b>	<b>67.0</b>	<b>104.9</b>
Atlanta.....	81.2	78.9	78.2	77.2	77.3	77.0	76.8	69.1	67.2	65.1	106.7
Baltimore.....	87.0	88.0	88.6	86.5	82.5	85.1	85.6	74.4	70.4	69.8	105.5
Charleston, S. C.....	83.4	82.2	81.1	79.6	79.0	78.3	79.2	70.5	66.2	67.6	100.0
Jacksonville.....	82.3	80.3	78.9	76.9	77.3	76.9	76.6	70.4	65.9	61.8	100.4
Norfolk.....	82.5	81.7	81.0	79.7	77.0	77.9	78.5	71.6	67.6	68.6	109.6
Richmond.....	79.2	78.1	77.9	76.2	75.0	75.2	75.7	69.5	65.5	63.5	98.8
Savannah.....	84.4	83.5	82.3	80.4	79.7	78.9	78.9	71.5	69.8	64.9	106.1
Washington, D. C.....	85.6	85.3	84.8	84.7	82.9	83.8	83.3	73.9	71.2	70.1	108.2
<b>East South Central</b> .....	<b>81.2</b>	<b>79.6</b>	<b>78.5</b>	<b>77.6</b>	<b>75.7</b>	<b>75.7</b>	<b>76.7</b>	<b>67.2</b>	<b>67.9</b>	<b>62.3</b>	<b>104.7</b>
Birmingham.....	76.8	74.7	73.6	72.7	72.1	72.1	72.6	63.1	63.6	60.1	101.9
Louisville.....	91.2	90.0	89.6	87.4	84.1	85.5	87.1	75.7	76.6	66.0	109.4
Memphis.....	81.7	81.3	79.3	80.9	78.8	76.5	78.3	71.1	68.9	63.5	107.2
Mobile.....	80.9	78.5	76.7	75.4	74.5	75.1	75.6	67.7	65.2	62.5	103.4
<b>West South Central</b> .....	<b>80.9</b>	<b>79.1</b>	<b>78.4</b>	<b>77.4</b>	<b>78.1</b>	<b>78.2</b>	<b>78.1</b>	<b>71.5</b>	<b>67.3</b>	<b>62.5</b>	<b>103.4</b>
Dallas.....	78.3	76.5	75.2	75.1	78.4	77.5	78.1	72.0	66.7	61.8	104.4
Houston.....	80.7	79.4	78.9	76.8	74.5	74.6	74.2	71.0	66.1	59.8	101.5
Little Rock.....	80.6	78.3	77.8	77.2	77.2	78.3	75.6	66.4	60.3	60.2	102.1
New Orleans.....	84.8	82.7	82.3	81.6	82.5	84.0	83.7	72.3	71.1	68.0	105.0
<b>Mountain</b> .....	<b>88.7</b>	<b>90.1</b>	<b>90.1</b>	<b>86.0</b>	<b>83.9</b>	<b>83.7</b>	<b>87.3</b>	<b>72.1</b>	<b>73.8</b>	<b>67.3</b>	<b>108.2</b>
Butte.....	84.9	83.9	85.3	80.6	77.5	79.1	79.6	70.5	69.2	65.5	109.9
Denver.....	90.7	91.5	92.4	87.5	86.6	85.6	90.0	74.1	75.5	69.8	107.6
Salt Lake City.....	86.1	89.2	87.3	84.9	81.3	81.8	85.0	69.3	72.1	63.7	109.2
<b>Pacific</b> .....	<b>79.6</b>	<b>80.0</b>	<b>80.3</b>	<b>79.3</b>	<b>75.1</b>	<b>76.3</b>	<b>77.3</b>	<b>69.7</b>	<b>69.0</b>	<b>66.4</b>	<b>102.5</b>
Los Angeles.....	74.5	74.5	75.0	74.2	70.1	72.8	73.4	65.5	65.1	61.0	99.6
Portland, Oreg.....	84.4	85.8	85.5	84.8	76.5	77.2	78.8	70.6	69.1	67.7	105.0
San Francisco.....	83.3	83.3	83.3	82.3	80.0	79.6	80.6	73.8	72.6	71.3	104.6
Seattle.....	83.0	84.5	85.6	84.1	76.9	78.1	79.8	71.4	71.3	69.6	104.5

<sup>1</sup>Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined for regions and for the United States with the use of population weights.

## Fuel and Light

### Electricity Prices in July 1936

RESIDENTIAL rates for electricity are secured quarterly from 51 cities. These rates are used for computing average prices and typical bills in each city for the quantities of electricity which most nearly approximate the consumption requirements for the usual domestic services for a five-room house, including living room, dining room, kitchen, and two bedrooms. The blocks of consumption which have been selected as representative of average conditions throughout the country are 25 and 40 kilowatt-hours for the use of electricity for lighting and small appliances alone; 100 kilowatt-hours for lighting, small appliances, and a refrigerator; and 250 kilowatt-hours for the addition of an electric range to the preceding equipment.

The technical specifications which are used as the basis for the application of these rates are:

Floor area (1,000 square feet).	
Connected load:	<i>Watts</i>
Lighting and appliances.....	700
Refrigeration.....	300
Cooking.....	6, 000
Measured demand:	
Lighting and appliances.....	600
Refrigeration.....	100
Cooking.....	2, 300

Outlets: Fourteen 50-watt.

Active room count: In accordance with schedule of rates.

Typical bills and average prices per kilowatt-hour for the various blocks of consumption in each of the 51 cities are shown in table 4.

Table 4.—Total Net Monthly Bill and Price per Kilowatt-hour for Specified Amounts of Electricity Based on Rates as of July 15, 1936, by Cities

[P=private utility, M=municipal plant]

Region and city	Total net monthly bill				Net monthly price per kilowatt-hour			
	Lighting and small appliances		Lighting, appliances, and refrigerator	Lighting, appliances, refrigerator, and range	Lighting and small appliances		Lighting, appliances, and refrigerator	Lighting, appliances, refrigerator, and range
	25 kilowatt-hours	40 kilowatt-hours	100 kilowatt-hours	250 kilowatt-hours	25 kilowatt-hours	40 kilowatt-hours	100 kilowatt-hours	250 kilowatt-hours
<b>New England:</b>					<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Boston..... P..	\$1.55	\$2.30	\$5.10	\$9.60	6.2	5.8	5.1	3.8
Bridgeport..... P..	1.31	2.05	4.87	8.90	5.3	5.1	4.9	3.6
Fall River..... P..	1.75	2.60	5.20	9.35	7.0	6.5	5.2	3.7
Manchester..... P..	2.00	2.80	5.00	8.00	8.0	7.0	5.0	3.2
New Haven..... P..	1.31	2.05	4.87	8.90	5.3	5.1	4.9	3.6
Portland, Maine..... P..	1.88	2.63	4.73	7.73	7.5	6.6	4.7	3.1
Providence..... P..	1.87	2.81	5.60	9.63	7.5	7.0	5.6	3.9
<b>Middle Atlantic:</b>								
Buffalo..... P..	1.13	1.70	3.06	5.31	4.5	4.3	3.1	2.1
Newark..... P..	1.92	2.60	4.50	8.75	7.7	6.5	4.5	3.5
<b>New York:<sup>1</sup></b>								
Bronx..... P..	1.80	2.56	4.92	8.26	7.2	6.4	4.9	3.3
Brooklyn..... P..	1.80	2.56	4.92	8.26	7.2	6.4	4.9	3.3
Manhattan..... P..	1.80	2.56	4.92	8.26	7.2	6.4	4.9	3.3
Queens..... P..	1.80	2.56	4.92	8.26	7.2	6.4	4.9	3.3
Richmond..... P..	2.17	3.26	6.38	13.01	8.7	8.2	6.4	5.2
Philadelphia..... P..	2.19	3.17	5.62	9.09	8.8	7.9	5.6	3.6
Pittsburgh..... P..	1.50	2.25	4.25	7.50	6.0	5.6	4.3	3.0
Rochester..... P..	1.25	2.00	4.00	8.50	5.0	5.0	4.0	3.4
Seranton..... P..	1.59	2.26	4.56	7.81	6.4	5.7	4.6	3.1
Scranton..... P..	1.63	2.45	4.85	9.35	6.5	6.1	4.9	3.7
<b>East North Central:</b>								
Chicago..... P..	1.51	2.04	3.75	8.02	6.0	5.1	3.8	3.2
Cincinnati..... P..	1.13	1.58	2.88	5.88	4.5	4.0	2.9	2.4
Cleveland..... P..	1.00	1.60	4.00	9.88	4.0	4.0	4.0	4.0
Columbus..... P..	1.25	1.31	3.05	7.40	3.5	3.3	3.1	3.0
Detroit..... M..	1.25	1.95	4.50	8.50	5.0	4.9	4.5	3.4
Indianapolis..... P..	1.00	1.58	3.80	8.30	4.0	4.0	3.8	3.3
Milwaukee..... P..	1.43	1.99	3.65	7.12	5.7	5.0	3.7	2.8
Peoria..... P..	1.44	2.30	4.80	8.53	5.8	5.8	4.8	3.4
Springfield, Ill..... P..	1.41	1.90	3.60	6.48	5.6	4.8	3.6	2.6
Springfield, Ill..... P..	1.50	2.01	3.57	6.32	6.0	5.0	3.6	2.5
Springfield, Ill..... P..	1.25	1.90	3.90	6.90	5.0	4.8	3.9	2.9
Springfield, Ill..... P..	1.25	1.90	3.02	4.80	5.0	4.8	3.0	1.9

See footnotes at end of table.



Table 4.—Total Net Monthly Bill and Price per Kilowatt-hour for Specified Amounts of Electricity Based on Rates as of July 15, 1936, by Cities—Con.

Region and city	Total net monthly bill				Net monthly price per kilowatt-hour			
	Lighting and small appliances		Lighting, appliances, and refrigerator	Lighting, appliances, refrigerator, and range	Lighting and small appliances		Lighting, appliances, and refrigerator	Lighting, appliances, refrigerator, and range
	25 kilowatt-hours	40 kilowatt-hours	100 kilowatt-hours	250 kilowatt-hours	25 kilowatt-hours	40 kilowatt-hours	100 kilowatt-hours	250 kilowatt-hours
<b>West North Central:</b>								
Kansas City <sup>4</sup> .....P.....	\$1.65	\$2.32	\$4.04	\$7.83	Cents 6.6	Cents 5.8	Cents 4.0	Cents 3.1
Minneapolis.....P.....	1.66	2.18	3.80	6.79	6.6	5.5	3.8	2.7
Omaha.....P.....	1.19	1.90	3.88	7.78	4.8	4.8	3.9	3.1
St. Louis <sup>2,4</sup> .....P.....	1.20	1.73	3.16	6.28	4.8	4.3	3.2	2.5
.....P.....	1.08	1.44	2.88	5.76	4.3	3.6	2.9	2.3
St. Paul.....P.....	1.60	2.15	3.85	7.00	6.4	5.4	3.9	2.8
<b>South Atlantic:</b>								
<b>Atlanta:</b>								
.....P.....	1.62	2.37	4.57	8.32	6.5	5.9	4.6	3.3
.....P.....	1.45	2.12	3.95	6.57	5.8	5.3	4.0	2.6
Baltimore.....P.....	1.13	1.80	3.90	8.20	4.5	4.5	3.9	3.3
<b>Charleston, S. C.:</b>								
.....P.....	1.60	2.50	5.35	8.85	6.4	6.3	5.4	3.5
.....P.....	1.50	2.25	4.20	6.82	6.0	5.6	4.2	2.7
Jacksonville.....M.....	1.75	2.70	4.95	7.95	7.0	6.8	5.0	3.2
Norfolk.....P.....	1.38	2.10	4.65	7.65	5.5	5.3	4.7	3.1
Richmond.....P.....	1.38	2.10	4.65	7.65	5.5	5.3	4.7	3.1
Savannah.....P.....	1.62	2.37	4.57	7.97	6.5	5.9	4.6	3.2
Washington.....P.....	.98	1.56	3.40	5.67	3.9	3.9	3.4	2.3
<b>East South Central:</b>								
<b>Birmingham:</b>								
.....P.....	1.45	2.20	3.95	7.50	5.8	5.5	4.0	3.0
.....P.....	.98	1.56	3.20	6.95	3.9	3.9	3.2	2.8
Louisville.....P.....	1.10	1.70	3.60	7.10	4.4	4.3	3.6	2.8
Memphis.....P.....	1.38	2.20	4.25	8.75	5.5	5.5	4.3	3.5
<b>Mobile:</b>								
.....P.....	1.45	2.13	3.95	6.58	5.8	5.3	4.0	2.6
.....P.....	1.20	1.80	3.50	6.13	4.8	4.5	3.5	2.5
<b>West South Central:</b>								
Dallas.....P.....	1.25	2.00	4.40	8.20	5.0	5.0	4.4	3.3
Houston.....P.....	1.20	1.80	3.83	7.08	4.8	4.5	3.8	2.8
<b>Little Rock:<sup>1</sup></b>								
.....P.....	1.99	2.88	5.20	8.67	8.0	7.2	5.2	3.5
.....P.....	1.84	2.63	5.10	8.67	7.4	6.6	5.1	3.5
New Orleans.....P.....	1.88	2.85	5.50	10.25	7.5	7.1	5.5	4.1
<b>Mountain:</b>								
Butte.....P.....	1.55	2.38	4.43	7.93	6.2	5.9	4.4	3.2
Denver <sup>1</sup> .....P.....	1.53	2.45	4.90	9.49	6.1	6.1	4.9	3.8
<b>Salt Lake City:<sup>1</sup></b>								
.....P.....	1.92	2.99	4.92	7.85	7.7	7.5	4.9	3.1
.....P.....	1.63	2.30	3.83	7.14	6.5	5.8	3.8	2.9
<b>Pacific:</b>								
<b>Los Angeles.....P.....</b>								
.....P.....	1.10	1.66	3.04	5.27	4.4	4.1	3.0	2.1
.....P.....	1.10	1.66	3.04	5.27	4.4	4.1	3.0	2.1
.....M.....	1.10	1.66	3.04	5.27	4.4	4.1	3.0	2.1
<b>Portland, Oreg.....P.....</b>								
.....P.....	1.38	1.95	3.39	6.09	5.5	4.9	3.4	2.4
.....P.....	1.38	1.95	3.39	6.09	5.5	4.9	3.4	2.4
San Francisco.....P.....	1.40	2.00	3.50	7.15	5.6	5.0	3.5	2.9
Seattle.....P.....	1.25	2.00	3.20	6.08	5.0	5.0	3.2	2.4
.....M.....	1.25	2.00	3.20	6.10	5.0	5.0	3.2	2.4

<sup>1</sup> Prices include 2-percent sales tax.

<sup>2</sup> Prices include free lamp-renewal service.

<sup>3</sup> Prices include 3-percent sales tax.

<sup>4</sup> Prices include 1-percent sales tax.

<sup>5</sup> The "inducement" rate in Atlanta, the "objective" rate in Charleston (S. C.), Birmingham, Mobile, and Salt Lake City, and the "centennial" rate in Little Rock are designed to encourage greater use of electricity.

Reductions in residential rates for electricity between April and July 1936 were reported in six southern cities. In Baltimore, customers using small amounts of electricity received the greatest benefit. The decreases in the monthly bills ranged from 6.7 percent for 100 kilowatt-hours to 10.0 percent for 40 kilowatt-hours. The reduction for Savannah affected bills for only the largest-use classification and amounted to 4.2 percent.

Substantially lower rates in Louisville resulted in decreases of 12.0 percent or more for three services. For a consumption of 100 kilowatt-hours, the decline was 5.3 percent. In Mobile, the former objective rate was established as the present rate on May 1. The adoption of a new objective rate resulted in bill reductions under this schedule, ranging from 6.8 percent for 250 kilowatt-hours to 17.2 percent for 25 kilowatt-hours.

In the West South Central area, Dallas and Houston reported lower rates. In Dallas the rate changes were graduated so as to give a proportionately greater reduction to the consumers who use lighting and small appliances alone. In Houston, the opposite was true. The rate reductions favored those consumers using electricity for cooking and refrigeration in addition to lighting and small appliances.

The percentage changes in the net monthly bills for specified amounts of electricity from April 15, 1936, to July 15, 1936, are shown in table 5. Data are given in this table for only those cities for which price changes were reported during this period.

Table 5.—Percentage Decrease in the Total Monthly Bill for Specified Amounts of Electricity, by Cities

July 15, 1936, Compared With April 15, 1936

[P=private utility, M=municipal plant]

Region and city	Percentage decrease April 15, 1936, to July 15, 1936			
	25 kilo-watt-hours	40 kilo-watt-hours	100 kilo-watt hours	250 kilo-watt hours
South Atlantic:				
Baltimore.....P..	9.6	10.0	6.7	8.7
Savannah.....P..	0	0	0	4.2
East South Central:				
Louisville.....P..	12.0	15.0	5.3	14.5
Mobile:				
Present.....P..	6.5	7.4	2.5	13.4
Objective.....P..	17.2	15.5	11.4	6.8
West South Central:				
Dallas.....P..	9.4	9.1	4.3	2.4
Houston.....P..	7.7	5.3	10.9	14.5

## Gas Prices in July 1936

RESIDENTIAL rates for gas are secured from 50 cities. These rates are used in computing average prices and typical bills for each city for quantities of gas which approximate the average residential consumption requirements for each of four combinations of services. In order to put the rate quotations upon a comparable basis it is necessary to convert the normal consumption requirements used for computing monthly bills into an equivalent heating value expressed in therms (1 therm=100,000 British thermal units). This procedure is necessary because of the wide range in the heating value of a cubic foot of gas between different cities. The equipment and blocks of consumption which have been selected as representative of average conditions throughout the country are based upon the requirements of a five-room house, including living room, dining room, kitchen, and two bedrooms.

These specifications are:

	<i>Therms</i>
Range.....	10.6
Range and manual-type water heater.....	19.6
Range and automatic-storage or instantaneous type water heater.....	30.6
Range, automatic-storage or instantaneous type water heater, and refrigerator.....	40.6

Typical net monthly bills and prices per thousand cubic feet and per therm for these services for each city are shown in table 6.

Table 6.—Total Net Monthly Bill and Prices per Thousand Cubic Feet and per Therm for Specified Amounts of Gas, Based on Rates as of July 15, 1936, by Cities

Region and city	Kind of gas <sup>1</sup>	Monthly consumption in cubic feet and net monthly bill based on specified numbers of therms <sup>2</sup>								Net monthly price based on consumption of specified numbers of therms <sup>2</sup>													
		Heating value per cubic foot in British thermal units		Range, 10.6 therms				Range and water heater of indicated type				Range, automatic <sup>3</sup> water heater, and refrigerator, 40.6 therms				Per thousand cubic feet for—				Per therm for—			
				Manual, 19.6 therms		Automatic, <sup>3</sup> 30.6 therms		Manual, 19.6 therms		Automatic, <sup>3</sup> 30.6 therms		Range, 10.6 therms		Range and water heater of indicated type		Range, automatic, <sup>3</sup> water heater, and refrigerator, 40.6 therms		Manual, 19.6 therms		Automatic, <sup>3</sup> 30.6 therms			
				Cubic feet	Bill	Cubic feet	Bill	Cubic feet	Bill	Cubic feet	Bill	Cubic feet	Bill	Range, 10.6 therms	Manual, 19.6 therms	Automatic, <sup>3</sup> 30.6 therms	Range, automatic, <sup>3</sup> water heater, and refrigerator, 40.6 therms	Range, 10.6 therms	Manual, 19.6 therms	Automatic, <sup>3</sup> 30.6 therms	Range, automatic, <sup>3</sup> water heater, and refrigerator, 40.6 therms		
New England:				<i>Dollars</i>	<i>Dollars</i>			<i>Dollars</i>	<i>Dollars</i>			<i>Dollars</i>	<i>Dollars</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>						
Boston <sup>4</sup> .....	M	535	1,980	2.48	3,660	4.16	5,720	5.70	7,590	7.19	Dollars	Dollars	Dollars	Dollars	Cents	Cents	Cents	Cents					
	M	535	1,980	2.28	3,660	4.21	5,720	5.63	7,590	7.12	1.25	1.14	1.00	0.95	23.4	21.2	18.6	17.7					
Fall River.....	M	528	2,010	2.53	3,710	4.06	5,800	5.94	7,690	7.64	1.15	1.15	.98	.94	21.5	21.5	18.4	17.5					
Manchester.....	M	525	2,020	2.85	3,730	4.82	5,830	5.67	7,730	6.92	1.26	1.09	1.02	.99	23.9	20.7	19.4	18.8					
New Haven.....	M	528	2,010	2.41	3,710	4.11	5,800	6.20	7,690	8.09	1.41	1.29	.97	.90	26.8	24.6	18.5	17.0					
Portland, Maine.....	M	525	2,020	3.03	3,730	5.16	5,830	6.51	7,730	8.03	1.20	1.11	1.07	1.05	22.7	21.0	20.3	19.9					
Providence.....	M	510	2,080	2.57	3,840	4.16	6,000	6.10	7,960	7.86	1.50	1.38	1.12	1.04	28.5	26.3	21.3	19.8					
	M	510	2,080	2.57	3,840	4.16	6,000	6.10	7,960	7.86	1.24	1.08	1.02	.99	24.3	21.2	19.9	19.4					
Middle Atlantic:																							
Buffalo.....	X	900	1,180	.77	2,180	1.42	3,400	2.21	4,510	2.93	.65	.65	.65	.65	7.2	7.2	7.2	7.2					
Newark.....	M	525	2,020	2.69	3,730	4.31	5,830	6.06	7,730	7.30	1.33	1.16	1.04	.94	25.4	22.0	19.8	18.0					
New York: <sup>4</sup>																							
Bronx.....	M	540	1,960	2.30	3,630	4.26	5,670	6.65	7,520	8.82	1.17	1.17	1.17	1.17	21.7	21.7	21.7	21.7					
Brooklyn.....	M	540	1,960	2.34	3,630	3.80	5,670	5.25	7,520	6.42	1.19	1.05	.93	.85	22.1	19.4	17.2	15.8					
	M	540	1,960	2.44	3,630	4.05	5,670	6.03	7,520	7.82	1.24	1.12	1.06	1.04	23.0	20.7	19.7	19.3					
	M	540	1,960	2.58	3,630	4.37	5,670	6.56	7,520	8.54	1.32	1.20	1.16	1.14	24.4	22.3	21.4	21.0					
Manhattan.....	M	540	1,960	2.30	3,630	4.26	5,670	6.65	7,520	8.82	1.17	1.17	1.17	1.17	21.7	21.7	21.7	21.7					
Queens.....	M	540	1,960	2.30	3,630	4.26	5,670	6.65	7,520	8.82	1.17	1.17	1.17	1.17	21.7	21.7	21.7	21.7					
Richmond.....	M	540	1,960	3.10	3,630	5.10	5,670	7.08	7,520	8.69	1.58	1.40	1.25	1.18	29.3	26.0	23.1	21.8					
Philadelphia.....	M	530	2,000	1.80	3,700	3.25	5,770	5.01	7,660	6.61	.90	.88	.87	.86	17.0	16.6	16.4	16.3					
Pittsburgh.....	N	1,130	940	7 1.00	1,730	1.04	2,710	1.63	3,590	2.15	1.06	.60	.60	.60	9.4	5.3	5.3	5.3					
	N	1,100	960	7 1.00	1,780	1.07	2,780	1.67	3,690	2.21	1.04	.60	.60	.60	9.4	5.4	5.4	5.4					
	N	1,100	960	7 1.00	1,780	1.07	2,780	1.67	3,690	2.21	1.04	.60	.60	.60	9.4	5.4	5.4	5.4					
Rochester.....	M	537	1,970	1.97	3,650	3.65	5,700	5.56	7,600	7.05	1.00	1.00	.98	.93	18.6	18.6	18.2	17.4					
Scranton.....	M	520	2,040	3.10	3,770	4.97	5,880	7.08	7,810	9.01	1.52	1.32	1.20	1.15	29.2	25.4	23.1	22.2					

East North Central:																		
Chicago	X	800	1,330	1.94	2,450	3.33	3,830	4.69	5,080	5.39	1.46	1.36	1.23	1.06	18.3	17.0	15.3	13.3
Cincinnati	X	865	1,230	.91	2,270	1.63	3,540	2.45	4,690	3.16	.74	.72	.69	.67	8.6	8.3	8.0	7.8
Cleveland	N	1,100	960	7.75	1,780	.89	2,780	1.43	3,690	1.93	.78	.50	.51	.52	7.1	4.5	4.7	4.8
Columbus <sup>4</sup>	N	1,050	1,010	7.75	1,870	1.03	2,910	1.60	3,870	2.13	.74	.55	.55	.57	7.1	5.2	5.2	5.2
	N	1,050	1,010	7.75	1,870	.90	2,910	1.40	3,870	1.86	.74	.48	.48	.48	7.1	4.6	4.6	4.6
Detroit <sup>5</sup>	M	530	2,000	1.71	3,700	3.16	5,770	4.93	7,660	6.55	.86	.86	.86	.86	16.1	16.1	16.1	16.1
Indianapolis	M	570	1,860	1.67	3,440	3.10	5,370	4.83	7,120	6.41	.90	.90	.90	.90	15.8	15.8	15.8	15.8
Milwaukee	M	520	2,040	1.73	3,770	3.03	5,880	4.61	7,810	6.02	.85	.80	.78	.77	16.3	15.4	15.1	14.8
Peoria	N	1,000	1,060	2.12	1,960	3.64	3,060	4.67	4,060	5.57	2.00	1.86	1.53	1.37	20.0	18.6	15.3	13.7
Springfield	N	1,000	1,060	1.91	1,960	3.36	3,060	4.66	4,060	5.56	1.80	1.71	1.52	1.37	18.0	17.1	15.2	13.7
West North Central:																		
Kansas City <sup>2</sup>	N	1,000	1,060	5 1.36	1,960	5 2.18	3,060	3.12	4,060	3.98	5 1.28	1.11	1.02	.98	5 12.8	11.1	10.2	9.8
Minneapolis	X	800	1,330	1.90	2,450	2.97	3,830	4.27	5,080	5.41	1.43	1.21	1.11	1.06	17.9	15.2	13.9	13.3
Omaha <sup>4</sup>	M	555	1,910	1.53	3,530	2.42	5,510	3.51	7,320	4.50	.80	.69	.64	.62	14.4	12.3	11.5	11.1
St. Louis <sup>3</sup>	X	800	1,330	2.03	2,450	3.31	3,830	5 4.87	5,080	6.17	1.53	1.35	1.27	1.21	19.2	16.9	15.9	15.2
St. Paul	M	550	1,930	1.74	3,560	3.20	5,560	5.00	7,380	6.64	.90	.90	.90	.90	16.4	16.4	16.4	16.4
South Atlantic:																		
Atlanta	N	980	1,080	1.78	2,000	2.70	3,120	3.77	4,140	4.38	1.65	1.35	1.21	1.06	16.8	13.8	12.3	10.8
Baltimore	M	500	2,120	1.80	3,920	3.33	6,120	4.78	8,120	6.08	.85	.85	.78	.75	17.0	17.0	15.6	15.0
Charleston, S. C.	M	550	1,930	2.70	3,560	4.98	5,560	5 7.19	7,380	5 9.01	1.40	1.40	1.29	1.26	25.9	25.4	23.5	22.2
Jacksonville	M	535	1,980	4.03	3,660	6.34	5,720	8.20	7,590	9.88	5 2.03	1.73	1.43	1.30	38.0	5 32.4	26.8	24.3
Norfolk	M	530	2,000	2.40	3,700	4.36	5,770	6.62	7,660	8.51	1.20	1.18	1.15	1.11	22.6	22.2	21.6	21.0
Richmond	M	525	2,020	2.63	3,730	4.78	5,830	7.43	7,730	9.82	1.30	1.28	1.27	1.27	24.8	24.4	24.3	24.2
Savannah	M	575	1,840	2.30	3,410	4.26	5,320	6.65	7,060	8.83	1.25	1.25	1.25	1.25	21.7	21.7	21.7	21.7
Washington, D. C.	X	600	1,770	1.53	3,270	2.73	5,100	4.08	6,770	5.25	.86	.83	.80	.78	14.4	13.9	13.3	12.9
East South Central:																		
Birmingham	M	534	1,990	1.59	3,670	2.94	5,730	4.58	7,600	6.08	.80	.80	.80	.80	15.0	15.0	15.0	15.0
Louisville	X	900	1,180	.89	2,180	1.39	3,400	2.00	4,510	2.56	.75	.64	.59	.57	8.4	7.1	6.5	6.3
Memphis	N	980	1,080	1.51	2,000	2.48	3,120	3.60	4,140	4.21	1.40	1.24	1.15	1.02	14.3	12.7	11.8	10.4
Mobile:																		
Present	N	960	1,100	2.25	2,040	3.43	3,190	4.75	4,230	5.43	2.05	1.68	1.49	1.28	21.2	17.5	15.5	13.4
Objective	N	960	1,100	2.05	2,040	2.99	3,190	4.06	4,230	4.69	1.86	1.47	1.27	1.11	19.3	15.3	13.3	11.5
West South Central:																		
Dallas <sup>4</sup>	N	1,050	1,010	1.26	1,870	1.84	2,910	2.54	3,870	3.19	1.25	.98	.87	.82	11.9	9.4	8.3	7.9
Houston	N	1,000	1,060	1.19	1,960	1.77	3,060	2.49	4,060	3.14	1.12	.91	.81	.77	11.2	5 9.1	8.1	7.7
Little Rock <sup>6</sup>	N	1,000	1,060	5 1.11	1,960	1.61	3,060	5 2.23	4,060	5 2.79	1.04	.82	.73	.69	10.4	8.2	7.3	6.9
New Orleans	N	950	1,120	1.26	2,060	2.10	3,220	3.15	4,270	4.09	5 1.12	1.02	.98	.96	11.9	10.7	10.3	10.1
Mountain:																		
Butte	N	850	1,250	1.11	2,310	1.59	3,600	2.17	4,780	2.70	.89	.69	.60	.57	10.5	8.1	7.1	6.7
Denver <sup>4 6</sup>	N	845	1,250	2.14	2,320	3.30	3,620	4.15	4,800	4.78	1.71	1.42	1.15	1.00	20.2	16.9	13.6	11.8
Salt Lake City <sup>6</sup>	N	865	1,230	2.12	2,270	5 3.27	3,540	5 4.16	4,690	4.86	1.72	1.44	1.17	1.04	20.0	5 16.7	13.6	12.0
Pacific:																		
Los Angeles	N	1,100	960	1.26	1,780	1.82	2,780	5 2.43	3,690	2.97	1.31	1.02	.88	.80	5 11.8	9.3	5 8.0	7.3
Portland, Oreg.	M	570	1,860	2.34	3,440	3.98	5,370	5.96	7,120	7.63	1.26	1.16	1.11	1.07	5 22.0	20.3	19.5	18.8
San Francisco	N	1,150	920	1.27	1,700	1.82	2,660	2.49	3,530	3.10	1.38	1.07	.94	.88	12.0	9.3	8.1	7.6
Seattle <sup>5</sup>	M	500	2,120	5 3.10	3,920	5 5.36	6,120	5 5.32	8,120	5 6.45	5 1.46	1.37	.87	.80	5 29.2	5 27.3	17.4	15.9

<sup>1</sup> Different kinds of gas are indicated as follows: M, manufactured; N, natural; and X, mixed manufactured and natural.

<sup>2</sup> Typical monthly consumption for each service for a 5-room house (1 therm equals 100,000 B. t. u.).

<sup>3</sup> Automatic-storage or instantaneous water heater.

<sup>4</sup> Revision affecting all prices. <sup>5</sup> Revised. <sup>6</sup> Prices include 2-percent sales tax. <sup>7</sup> Minimum charge. <sup>8</sup> Prices include 3-percent sales tax. <sup>9</sup> Prices include 1-percent sales tax.

Reductions in residential gas rates between April 15 and July 15, 1936, were reported for two cities, Indianapolis and San Francisco. The change in Indianapolis reduced the bills for each of the four services by the same proportionate amount, 5.3 percent. In San Francisco the rate changes were so graduated that a proportionately greater reduction was effective for those customers using larger amounts of gas. The decreases in the net monthly bills ranged from 7.8 percent for the range alone to 13.9 percent for the range, automatic water heater, and refrigerator.

Percentage changes in the net monthly bills for specified amounts of gas from April 15, 1936, to July 15, 1936, are shown in table 7. Data are given in this table for only those cities for which price changes were reported during this period.

Table 7.—Percentage Decrease in the Total Monthly Bill for Specified Amounts of Gas, by Cities

July 15, 1936, Compared With April 15, 1936

Region and city	Kind of gas	Heating value per cubic foot in British thermal units	Percentage of decrease from Apr. 15, 1936, to July 15, 1936			
			10.6 therms	19.6 therms	30.6 therms	40.6 therms
East North Central: Indianap- olis.....	M	570	5.3	5.3	5.3	5.3
Pacific: San Francisco.....	N	1,150	7.8	11.0	12.9	13.9

### Coal Prices in July 1936

AVERAGE retail prices of coal in the larger cities of the United States showed rather sharp decreases between April 15 and July 15, 1936. The average decline for bituminous coal in 38 cities combined was 5.1 percent. The index fell to 149.6 (1913 equals 100). This is still 0.2 percent above the level of July 1935. Prices of Pennsylvania anthracite decreased 4.3 percent for the stove size and 3.9 percent for the chestnut size. Compared with prices for the corresponding date of last year, prices of stove and chestnut sizes are higher by 4.2 and 4.8 percent, respectively.

Retail prices of coal are collected quarterly as of the 15th of the month from each of the 51 cities from which retail prices of food are obtained. Prices of bituminous coal of several kinds are received from 38 of the cities. Of these 38 cities, 12 also report on stove and chestnut sizes of Pennsylvania anthracite and 6 report on anthracite from other fields. In addition to the 38 cities there are 13 cities which report prices for Pennsylvania anthracite alone. For each city, prices are shown for those coals sold in considerable quantities for household use. Prices are for curb delivery of the kinds of coal sold to wage earners. Extra charges for handling are not included.

Table 8.—Average Retail Prices of Coal in Large Cities Combined

July and April 1936 and July 1935

Article	Average retail price per ton of 2,000 pounds			Relative retail price (1913=100)			Percentage change July 1936 compared with—	
	1936		1935	1936		1935	1936	1935
	July 15	Apr. 15	July 15	July 15	Apr. 15	July 15	Apr. 15	July 15
	Bituminous coal (38 cities).....	\$8.13	\$8.57	\$8.12	149.6	<sup>1</sup> 157.6	149.3	-5.1
Pennsylvania anthracite (25 cities):								
Stove.....	12.57	13.13	12.06	162.7	169.9	156.1	-4.3	+4.2
Chestnut.....	12.43	12.94	11.86	157.1	163.5	149.9	-3.9	+4.8

<sup>1</sup> Revised.

## Details by Regions and Cities

LOWER prices for bituminous coal were reported from 33 of the 38 cities. The decreases ranged from 0.4 percent in Charleston and Savannah to 15.0 percent in Atlanta. Cities showing increases were scattered. The largest advance, 4.9 percent, was reported for Birmingham. Average retail prices in each of the 38 cities on July 15 and April 15, 1936, and July 15, 1935, are shown in table 9.

Prices of Pennsylvania anthracite were lower in 23 of the 25 reporting cities. These lower prices reflect the usual seasonal reductions in addition to other factors affecting hard-coal prices. In Scranton, stove and chestnut sizes were both higher on July 15 than on April 15 and in Pittsburgh the stove size only was higher while the chestnut size remained unchanged. The range of price changes was from a decline of 8.6 percent in Baltimore to a 2.8-percent increase in Scranton. The only change recorded for anthracite other than Pennsylvania was in Little Rock where the price of Arkansas egg decreased 7.3 percent. Average retail prices of anthracite in each of the reporting cities on July 15 and April 15, 1936, and July 15, 1935, are shown in table 10.

Table 9.—Average Retail Prices of Bituminous Coal per Ton of 2,000 Pounds by Cities

July and April 1936 and July 1935

Region, city, and grade and size of coal	1936	1936	1935	Region, city, and grade and size of coal	1936	1936	1935
	July 15	Apr. 15	July 15		July 15	Apr. 15	July 15
Middle Atlantic:				South Atlantic—Con.			
Pittsburgh:				Charleston, S. C.:			
Prepared sizes.....	\$4.21	\$4.33	\$4.02	Prepared sizes.....	\$9.29	\$9.33	\$10.00
East North Central:				Jacksonville:			
Chicago:				Prepared sizes.....	9.81	10.25	9.56
Prepared sizes:				Norfolk:			
High volatile.....	7.94	8.29	8.12	Prepared sizes:			
Low volatile.....	10.39	11.22	10.28	High volatile.....	7.50	7.50	7.00
Run of mine:				Low volatile.....	8.93	9.50	8.50
Low volatile.....	7.91	8.20	7.86	Run of mine:			
Cincinnati:				Low volatile.....	7.50	7.50	7.00
Prepared sizes:				Richmond:			
High volatile.....	5.73	5.85	4.98	Prepared sizes:			
Low volatile.....	7.73	7.86	6.66	High volatile.....	7.50	8.08	7.53
Cleveland:				Low volatile.....	8.83	9.33	8.62
Prepared sizes:				Run of mine:			
High volatile.....	6.93	6.91	6.82	Low volatile.....	7.15	7.40	7.15
Low volatile.....	9.21	9.80	8.75	Savannah:			
Columbus:				Prepared sizes.....	19.24	19.28	18.78
Prepared sizes:				Washington, D. C.:			
High volatile.....	6.10	6.11	5.97	Prepared sizes:			
Low volatile.....	7.71	7.69	7.57	High volatile.....	28.50	28.94	28.50
Detroit:				Low volatile.....	210.37	210.87	29.72
Prepared sizes:				Run of mine:			
High volatile.....	7.12	7.40	7.06	Mixed.....	28.00	28.02	27.16
Low volatile.....	8.13	8.63	7.79	East South Central:			
Run of mine:				Birmingham:			
Low volatile.....	7.34	7.92	7.34	Prepared sizes.....	6.03	5.75	5.80
Indianapolis:				Louisville:			
Prepared sizes:				Prepared sizes:			
High volatile.....	5.82	6.21	5.91	High volatile.....	5.41	6.02	5.42
Low volatile.....	8.00	8.45	7.92	Low volatile.....	7.50	8.13	7.21
Run of mine:				Memphis:			
Low volatile.....	7.21	7.28	6.84	Prepared sizes.....	6.87	7.49	7.19
Milwaukee:				Mobile:			
Prepared sizes:				Prepared sizes.....	8.21	8.76	8.19
High volatile.....	8.30	8.42	8.21	West South Central:			
Low volatile.....	10.73	11.43	10.53	Dallas:			
Peoria:				Prepared sizes.....	10.29	10.29	10.21
Prepared sizes.....	6.98	7.34	6.98	Houston:			
Springfield, Ill.:				Prepared sizes.....	11.29	11.50	11.29
Prepared sizes.....	3.70	4.31	4.53	Little Rock:			
West North Central:				Prepared sizes.....	7.94	8.44	8.22
Kansas City:				New Orleans:			
Prepared sizes.....	5.53	5.85	5.74	Prepared sizes.....	9.60	10.60	9.60
Minneapolis:				Mountain:			
Prepared sizes:				Butte:			
High volatile.....	10.34	10.72	10.44	Prepared sizes.....	10.05	10.00	9.76
Low volatile.....	13.23	13.38	13.04	Denver:			
Omaha:				Prepared sizes.....	7.28	7.75	7.73
Prepared sizes.....	8.62	8.74	8.34	Salt Lake City:			
St. Louis:				Prepared sizes.....	6.68	7.43	7.15
Prepared sizes.....	5.19	5.76	4.95	Pacific:			
St. Paul:				Los Angeles:			
Prepared sizes:				Prepared sizes.....	16.48	16.74	16.36
High volatile.....	10.26	10.49	10.15	Portland, Oreg.:			
Low volatile.....	13.29	13.41	13.11	Prepared sizes.....	12.05	11.89	12.10
South Atlantic:				San Francisco:			
Atlanta:				Prepared sizes.....	15.28	16.38	15.11
Prepared sizes.....	6.41	7.54	6.23	Seattle:			
Baltimore:				Prepared sizes.....	9.62	10.11	9.97
Prepared sizes:							
Low volatile.....	8.56	9.19	8.50				
Run of mine:							
High volatile.....	7.11	7.29	7.18				

<sup>1</sup> All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.

<sup>2</sup> Per ton of 2,240 pounds.

<sup>3</sup> Revised.



Table 10.—Average Retail Prices of Anthracite per Ton of 2,000 Pounds, by Cities

July and April 1936, and July 1935

Region, city, and size of coal	1936	1936	1935	Region, city, and size of coal	1936	1936	1935
	July 15	Apr. 15	July 15		July 15	Apr. 15	July 15

*Pennsylvania anthracite*

<b>New England:</b>				<b>Middle Atlantic—Con.</b>			
Boston:				Scranton:			
Stove.....	\$12.55	\$12.90	\$11.90	Stove.....	\$7.85	\$7.74	\$7.78
Chestnut.....	12.55	12.90	11.90	Chestnut.....	7.89	7.49	7.53
<b>Bridgeport:</b>				<b>East North Central:</b>			
Stove.....	12.25	13.00	12.00	Chicago:			
Chestnut.....	12.25	13.00	12.00	Stove.....	14.08	14.50	13.58
<b>Fall River:</b>				Chestnut.....	13.92	14.25	13.33
Stove.....	13.00	13.75	12.75	<b>Cleveland:</b>			
Chestnut.....	12.75	13.50	12.50	Stove.....	13.33	13.65	12.36
<b>Manchester:</b>				Chestnut.....	13.07	13.39	12.10
Stove.....	14.50	14.83	14.00	<b>Detroit:</b>			
Chestnut.....	14.50	14.83	14.00	Stove.....	12.33	12.66	11.55
<b>New Haven:</b>				Chestnut.....	12.23	12.40	11.29
Stove.....	12.75	13.55	12.15	<b>Milwaukee:</b>			
Chestnut.....	12.75	13.55	12.15	Stove.....	13.46	14.25	13.17
<b>Portland, Maine:</b>				Chestnut.....	13.28	14.00	12.92
Stove.....	13.75	14.50	13.50	<b>West North Central:</b>			
Chestnut.....	13.75	14.25	13.25	Minneapolis:			
<b>Providence:</b>				Stove.....	15.46	16.20	15.23
Stove.....	13.75	14.75	13.75	Chestnut.....	15.26	15.95	15.00
Chestnut.....	13.75	14.50	13.45	<b>St. Louis:</b>			
<b>Middle Atlantic:</b>				Stove.....	13.67	14.46	13.22
Buffalo:				Chestnut.....	13.42	14.21	12.97
Stove.....	12.15	12.50	12.05	<b>St. Paul:</b>			
Chestnut.....	12.00	12.42	11.80	Stove.....	15.46	16.20	15.25
<b>Newark:</b>				Chestnut.....	15.26	15.95	15.00
Stove.....	11.30	11.45	10.00	<b>South Atlantic:</b>			
Chestnut.....	11.05	11.20	9.74	Baltimore:			
<b>New York:</b>				Stove.....	10.75	11.75	9.75
Stove.....	11.48	11.83	10.81	Chestnut.....	10.50	11.50	9.50
Chestnut.....	11.31	11.58	10.56	<b>Norfolk:</b>			
<b>Philadelphia:</b>				Stove.....	12.44	13.50	12.50
Stove.....	10.21	10.92	9.25	Chestnut.....	12.44	13.50	12.50
Chestnut.....	9.96	10.63	9.00	<b>Richmond:</b>			
<b>Pittsburgh:</b>				Stove.....	13.00	13.50	12.00
Stove.....	12.88	12.75	12.75	Chestnut.....	13.00	13.50	12.00
Chestnut.....	12.88	12.88	12.75	<b>Washington, D. C.:</b>			
<b>Rochester:</b>				Stove.....	12.45	13.50	12.05
Stove.....	11.69	12.09	11.61	Chestnut.....	12.25	13.20	11.75
Chestnut.....	11.51	11.84	11.38				

*Other anthracite*

<b>West North Central:</b>				<b>Mountain:</b>			
Kansas City:				Denver:			
Arkansas, furnace... stove.....	\$10.61	\$10.61	\$10.50	Colorado, furnace... stove.....	\$15.81	\$15.81	\$15.81
	12.12	12.12	11.75		15.81	15.81	15.81
<b>West South Central:</b>				<b>Pacific:</b>			
Dallas:				San Francisco:			
Arkansas, egg.....	13.25	13.25	13.00	New Mexico, egg.....	23.69	23.69	25.75
<b>Houston:</b>				Colorado, egg.....	23.69	23.69	25.24
Arkansas, egg.....	14.33	14.33	13.83				
<b>Little Rock:</b>							
Arkansas, egg.....	9.50	10.25	10.71				

<sup>1</sup> Per ton of 2,240 pounds.  
<sup>2</sup> Revised.

## Coal Prices, 1926 to July 1936

RETAIL prices of coal have been collected from the cities covered in the retail-food-price study. For the years 1913-19 prices were collected semiannually on January 15 and July 15. From June 1920 to July 1935 prices were collected on the 15th of each month. Beginning with July 1935 it is planned to collect these prices on the 15th of January, April, July, and October of each year.

Table 11 shows, for large cities combined, average prices of bituminous coal and of Pennsylvania white-ash anthracite, stove and chestnut sizes, on January 15 and July 15, 1926 to 1933, and quarterly from January 15, 1934, to July 15, 1936.

The accompanying chart shows the trend in retail prices of stove and chestnut sizes of Pennsylvania anthracite in 25 cities combined and of bituminous coal in 38 cities combined. The trend is shown by months from January 15, 1929, to July 15, 1935, inclusive, and quarterly to July 15, 1936.

Table 11.—Average Retail Prices of Coal in Large Cities Combined <sup>1</sup>  
January 1926 to July 1936, Inclusive

Year and month	Average price, 2,000 pounds			Relative price (1913=100.0)			Year and month	Average price, 2,000 pounds			Relative price (1913=100.0)		
	Bituminous	Pennsylvania anthracite		Bituminous	Pennsylvania anthracite			Bituminous	Pennsylvania anthracite		Bituminous	Pennsylvania anthracite	
		Stove	Chestnut		Stove	Chestnut			Stove	Chestnut			
1926: Jan.	\$9.74	(2)	(2)	179.3	(2)	(2)	1933: Jan.	\$7.46	\$13.82	\$13.61	137.3	178.9	171.9
July	8.70	\$15.43	\$15.19	160.1	199.7	191.9	July	7.64	12.47	12.26	140.7	161.3	155.0
1927: Jan.	9.96	15.66	15.42	183.3	202.7	194.8	1934: Jan.	8.24	13.44	13.25	151.6	174.0	167.4
July	8.91	15.15	14.81	163.9	196.1	187.1	Apr.	8.18	13.14	12.94	150.5	170.1	163.5
1928: Jan.	9.30	15.44	15.08	171.1	199.8	190.6	July	8.23	12.79	12.60	151.5	165.5	159.2
July	8.69	14.91	14.63	159.9	192.9	184.9	Oct.	8.35	13.32	13.11	153.6	172.4	165.7
1929: Jan.	9.09	15.38	15.06	167.2	199.1	190.3	1935: Jan.	8.37	13.21	13.01	154.0	171.0	164.4
July	8.62	14.94	14.63	158.6	193.4	184.8	Apr.	8.24	12.67	12.47	151.7	164.0	157.6
1930: Jan.	9.11	15.33	15.00	167.6	198.4	189.5	July	8.12	12.06	11.86	149.3	156.1	149.9
July	8.65	14.84	14.53	159.1	192.1	183.6	Oct.	8.41	13.04	12.83	154.7	168.8	162.1
1931: Jan.	8.87	15.12	14.88	163.2	195.8	188.1	1936: Jan.	8.58	13.17	12.96	157.8	170.4	163.8
July	8.09	14.61	14.59	148.9	189.1	184.3	Apr.	8.57	13.13	12.94	157.6	169.9	163.5
1932: Jan.	8.17	15.00	14.97	150.3	194.2	189.1	July	8.13	12.57	12.43	149.6	162.7	157.1
July	7.50	13.37	13.16	138.0	173.0	166.2							

<sup>1</sup> The prices in the table are unweighted averages of quotations from 38 cities for bituminous coal and from 25 cities for Pennsylvania anthracite.

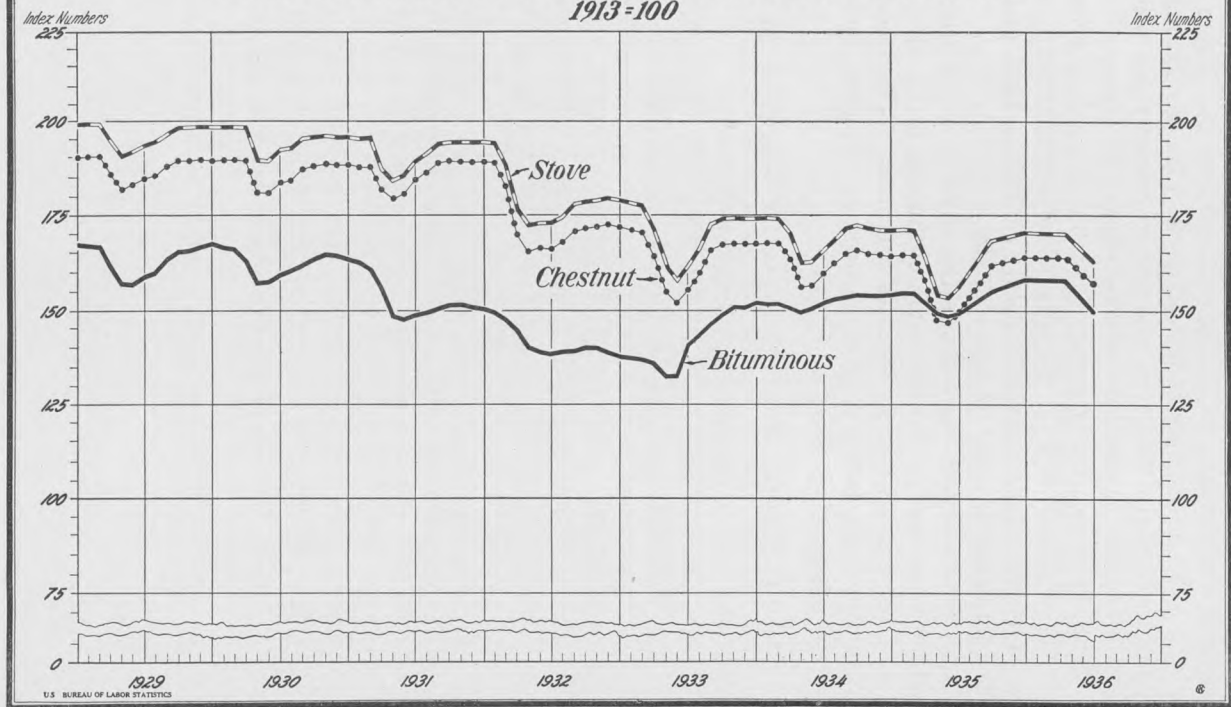
<sup>2</sup> Insufficient data.

<sup>3</sup> Revised.

# RETAIL PRICES *of* COAL

## *BITUMINOUS & PENNSYLVANIA ANTHRACITE (STOVE & CHESTNUT)*

1913 = 100



RETAIL PRICES

771

## WHOLESALE PRICES

### Wholesale Prices in July 1936

**S**HARP advances in wholesale market prices of farm products and foods were the main factors contributing to the increase of 1.6 percent in the Bureau of Labor Statistics' index of wholesale commodity prices in July. The advance brought the all-commodity index to 80.5 percent of the 1926 average, or within 0.1 percent of the high for 1936 reached during the months of January and February. By the middle of August, continued advances in these two groups forced the index to rise to 81.1, the highest point reached since November 1930. The composite for the month is 1.4 percent above that of the corresponding month of last year.

Market prices of farm products rose 4.1 percent during the month. Foods advanced 1.9 percent as did also miscellaneous commodities; chemicals and drugs increased 1.8 percent; textile products, 1.1 percent; building materials, 1.0 percent; metals and metal products, 0.8 percent; and fuel and lighting materials, 0.1 percent. Hides and leather products, on the other hand, decreased 0.4 percent and house-furnishing goods declined 0.2 percent.

With the exception of foods, all of the major commodity groups show advances over July 1935. The increases range from 0.4 percent for textile products to 5.4 percent for farm products. Food prices, on the contrary, show a decline of 0.9 percent.

Changes within the major commodity groups influencing the trend in the composite index in July are summarized in table 1.

Table 1.—Number of Commodities Changing in Price from June to July 1936

Groups	Increases	Decreases	No change
All commodities.....	243	87	454
Farm products.....	45	16	6
Foods.....	70	20	32
Hides and leather products.....	3	11	27
Textile products.....	39	15	58
Fuel and lighting materials.....	8	7	9
Metals and metal products.....	22	4	81
Building materials.....	20	5	84
Chemicals and drugs.....	16	4	69
House-furnishing goods.....	9	4	48
Miscellaneous.....	11	1	40

During the month interval, prices of raw materials rose 2.8 percent and now stand 5.3 percent above July 1935. Semimanufactured articles are 1.8 percent above the June level and finished products 1.1 percent higher. Compared with last year, semimanufactured articles have advanced 3.3 percent and finished products declined 0.5 percent.

All commodities other than farm products (nonagricultural) increased 1.1 percent and the index for this group—80.3—is 0.6 percent higher than July of last year. The large industrial group (all commodities other than farm products and foods) recorded an increase of 0.9 percent during the month and an advance of 1.9 percent during the 12-month interval.

A comparison of the July level of wholesale prices with June 1936 and July 1935 is shown in table 2.

Table 2.—Comparison of Index Numbers for July 1936, with June 1936 and July 1935

[1926=100]

Commodity groups	July 1936	June 1936	Change from a month ago (percent)	July 1935	Change from a year ago (percent)
All commodities.....	80.5	79.2	+ 1.6	79.4	+1.4
Farm products.....	81.3	78.1	+4.1	77.1	+5.4
Foods.....	81.4	79.9	+1.9	82.1	-.9
Hides and leather products.....	93.4	93.8	-.4	89.3	+4.6
Textile products.....	70.5	69.7	+1.1	70.2	+.4
Fuel and lighting materials.....	76.2	76.1	+.1	74.7	+2.0
Metals and metal products.....	86.9	86.2	+.8	86.4	+.6
Building materials.....	86.7	85.8	+1.0	85.2	+1.8
Chemicals and drugs.....	79.4	78.0	+1.8	78.7	+.9
House-furnishing goods.....	81.2	81.4	-.2	80.4	+1.0
Miscellaneous commodities.....	71.0	69.7	+1.9	67.7	+4.9
Raw materials.....	79.8	77.6	+2.8	75.8	+5.3
Semimanufactured articles.....	75.2	73.9	+1.8	72.8	+3.3
Finished products.....	81.6	80.7	+1.1	82.0	-.5
All commodities other than farm products.....	80.3	79.4	+1.1	79.8	+.6
All commodities other than farm products and foods.....	79.5	78.8	+.9	78.0	+1.9

Index numbers for the groups and subgroups of commodities for June and July 1936 and July of each of the past 7 years are shown in table 3.

Table 3.—Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities

Groups and subgroups	[1926=100]								
	July 1936	June 1936	July 1935	July 1934	July 1933	July 1932	July 1931	July 1930	July 1929
All commodities.....	80.5	79.2	79.4	74.8	68.9	64.5	72.0	84.4	96.5
Farm products.....	81.3	78.1	77.1	64.5	60.1	47.9	64.9	83.1	107.6
Grains.....	88.9	73.0	78.3	74.8	73.4	36.7	49.0	74.1	102.2
Livestock and poultry.....	82.0	83.2	82.8	48.8	47.4	54.1	63.0	81.8	114.9
Other farm products.....	78.2	75.8	72.9	70.5	63.7	48.4	71.3	86.9	104.5
Foods.....	81.4	79.9	82.1	70.6	65.5	60.9	74.0	86.8	102.9
Dairy products.....	83.8	77.6	74.0	74.8	66.1	58.2	80.6	91.8	103.2
Cereal products.....	84.4	81.6	92.7	88.9	83.3	65.7	71.5	80.6	91.2
Fruits and vegetables.....	79.7	82.0	65.1	68.2	75.6	59.7	74.2	95.2	105.8
Meats.....	84.9	85.1	93.3	63.4	50.8	62.0	73.4	91.8	116.7
Other foods.....	73.4	72.3	76.7	64.5	63.7	58.5	70.6	77.4	93.0
Hides and leather products.....	93.4	93.8	89.3	86.0	86.3	68.6	89.4	100.8	109.1
Shoes.....	99.3	99.7	97.8	98.0	88.3	84.4	93.5	102.9	106.1
Hides and skins.....	87.8	89.0	79.8	66.6	88.7	33.5	72.7	94.0	114.5
Leather.....	83.0	83.2	80.2	75.1	78.0	60.0	89.8	100.1	112.1
Other leather products.....	95.4	95.4	84.4	75.5	68.0	60.0	101.4	105.6	106.1
Textile products.....	70.5	69.7	70.2	71.5	68.0	51.5	66.5	79.7	89.6
Clothing.....	80.7	80.9	80.7	81.9	70.6	60.9	76.1	86.6	89.2
Cotton goods.....	78.7	75.4	82.0	85.1	80.2	50.0	66.8	83.9	98.2
Knit goods.....	59.3	60.3	59.9	59.5	55.2	47.8	60.0	81.3	87.9
Silk and rayon.....	30.7	29.3	27.9	24.5	37.9	26.2	43.8	54.3	78.3
Woolen and worsted goods.....	82.0	82.6	76.4	80.7	72.3	53.6	67.4	79.2	87.7
Other textile products.....	66.8	66.9	69.1	69.6	76.7	66.5	75.2	84.2	92.2
Fuel and lighting materials.....	76.2	76.1	74.7	73.9	65.3	72.3	62.9	78.0	83.3
Anthracite.....	78.5	77.0	77.0	78.6	77.9	84.5	90.8	86.5	89.1
Bituminous coal.....	96.0	96.5	96.5	95.7	81.0	81.6	83.5	88.8	89.9
Coke.....	93.7	93.7	88.6	85.6	76.0	76.3	81.5	84.0	84.7
Electricity.....	(1)	83.4	87.8	92.4	89.4	105.8	97.9	98.3	94.1
Gas.....	(1)	88.0	94.0	99.2	100.2	103.3	103.5	99.7	94.4
Petroleum products.....	58.1	57.7	52.9	51.3	41.3	49.7	30.3	61.0	73.3
Metals and metal products.....	86.9	86.2	86.4	86.8	80.6	79.2	84.3	90.8	101.0
Agricultural implements.....	94.2	94.2	93.6	92.0	83.0	84.9	94.2	94.5	99.0
Iron and steel.....	87.6	86.3	87.0	86.7	77.7	77.2	82.7	88.4	95.3
Motor vehicles.....	92.9	92.9	94.7	94.6	90.4	95.3	94.7	100.7	107.8
Nonferrous metals.....	70.4	70.0	66.1	68.8	67.6	47.0	61.4	75.4	105.7
Plumbing and heating.....	76.5	73.8	68.8	75.0	69.4	67.1	86.8	83.6	93.6
Building materials.....	86.7	85.8	85.2	87.0	79.5	69.7	76.1	88.5	95.1
Brick and tile.....	89.2	89.2	89.1	91.3	78.2	75.9	83.4	88.6	92.9
Cement.....	95.5	95.5	94.9	93.9	88.2	77.3	75.8	91.7	94.6
Lumber.....	83.7	82.1	81.7	85.3	75.9	56.9	67.2	83.6	93.3
Paint and paint materials.....	80.4	79.5	79.1	79.8	77.9	66.8	79.6	91.5	94.5
Plumbing and heating.....	76.5	73.8	68.8	75.0	69.4	67.1	86.8	83.6	93.6
Structural steel.....	97.1	92.5	92.0	92.5	81.7	81.7	84.3	84.3	99.6
Other building materials.....	90.2	90.1	89.7	90.9	83.3	77.9	83.7	91.9	97.4
Chemicals and drugs.....	79.4	78.0	78.7	75.4	73.2	73.0	78.9	88.3	93.3
Chemicals.....	85.9	84.3	84.6	78.5	80.3	78.9	67.2	92.9	98.2
Drugs and pharmaceuticals.....	73.0	73.2	74.0	73.0	56.8	57.6	62.1	68.0	70.8
Fertilizer materials.....	65.2	64.0	65.7	67.6	68.6	66.8	78.7	84.3	90.7
Mixed fertilizers.....	68.7	66.0	68.6	72.8	63.3	68.8	80.2	93.1	97.1
House-furnishing goods.....	81.2	81.4	80.4	81.6	74.8	74.0	85.7	93.1	94.3
Furnishings.....	85.1	85.2	84.0	84.8	75.1	75.1	82.8	92.4	93.3
Furniture.....	77.2	77.5	76.8	78.5	74.6	73.0	89.1	93.9	95.5
Miscellaneous.....	71.0	69.7	67.7	69.9	64.0	64.3	69.7	76.6	82.8
Automobile tires and tubes.....	47.5	47.5	45.0	44.6	41.4	40.1	46.0	50.1	54.5
Cattle feed.....	107.9	80.7	73.6	88.8	82.4	42.2	55.8	94.8	120.5
Paper and pulp.....	80.6	80.6	79.7	82.4	78.1	76.2	80.6	85.4	88.9
Rubber, crude.....	34.3	33.0	25.0	29.9	16.3	6.1	13.2	23.6	43.9
Other miscellaneous.....	80.8	80.8	80.1	82.3	76.3	84.5	88.6	94.5	98.8
Raw materials.....	79.8	77.6	75.8	68.3	61.8	54.7	64.3	81.1	99.1
Semimanufactured articles.....	75.2	73.9	72.8	72.7	69.1	55.5	69.3	79.8	93.4
Finished products.....	81.6	80.7	82.0	78.2	72.2	70.5	76.1	86.6	95.6
All commodities other than farm products.....	80.3	79.4	79.8	76.9	70.7	68.0	73.5	84.6	94.1
All commodities other than farm products and foods.....	79.5	78.8	78.0	78.4	72.2	69.7	73.9	84.5	91.7

<sup>1</sup> Data not yet available.

### Weekly Fluctuations

THE rise in prices which began the middle of May continued throughout June and July with one exception; namely, during the week ending July 18, average prices declined 0.2 percent. During the 10-week interval, the index advanced from 78.1 to 80.2, an

increase of 2.7 percent. The net advance for the month of July was 1.0 percent. Wholesale prices of raw materials followed an almost similar course to that of all commodities. From the last week in June to the first week in July there was a decline of 0.1 percent and from the second week in July to the third week in July a decline of 1.2 percent. Since the middle of May, the index for raw materials has risen from 75.1 percent of the 1926 average to 79.5, an increase of 5.9 percent. Semimanufactured articles, though not showing so great an advance as raw materials, increased more steadily, with no recessions since the first of June. The rise for the finished-products group has been less noticeable. The index for the group has risen only from 80.4 to 81.6, an advance of 1.5 percent.

The index for the large group of all commodities other than farm products (nonagricultural) has shown a steady upward movement since the first of June. The level for this group advanced the second week of July, remained steady the third week and then increased fractionally the fourth week of the month, closing at 80.0 percent of the 1926 average. The index for the large industrial group of all commodities other than farm products and foods shows a rise of 0.9 percent since the middle of May, rising from 78.8 to 79.5 for the closing week in July.

Farm products prices remained unchanged during the first week of July compared with the last week of June. For the week ended July 11, the index for the group rose 2.9 percent from 80.2 to 82.5, but virtually all of this advance was lost during the third week when the index fell to 80.8. In the fourth week, however, the index for the group rose to 81.4. For the month as a whole prices of farm products averaged 4.1 percent above the June level, due largely to an increase of 21.7 percent in grains. Livestock and poultry, on the other hand, declined 1.5 percent because of sharply falling prices for calves, cows, sheep, and live poultry. Other farm products, including cotton, eggs, lemons, oranges, hay, hops, peanuts, seeds, and dried beans advanced 3.1 percent from June to July.

Wholesale food prices declined slightly the first week of July to 80.8 percent of the 1926 average. During the second week the index for the group rose sharply, but fell slightly during the third week. A minor recession also occurred in the fourth week and the month closed with the index at 81.0. Individual food items showing marked price increases during the month were butter, cheese, milk, rye and wheat flour, hominy grits and corn meal, macaroni, canned corn and tomatoes, coffee, copra, glucose, lard, oleo oil, edible tallow, and vegetable oils. Fresh lamb and veal, dressed poultry, canned and smoked salmon, pepper, granulated sugar, and canned string beans showed a decline of 3 percent or more during the month.

The continued weakness in prices of hides and skins and leather caused the hides and leather products group to decline 0.4 percent during the month. Average prices of shoes showed minor reductions and other leather products remained unchanged.

From an index of 69.5 for July 4, textile products advanced steadily to 70.2 by July 25. The increase was largely due to higher prices of cotton goods and silk and rayon. Knit goods declined 1.6 percent and woolen and worsted goods and clothing were slightly lower at the close than at the beginning of the month.

Fuel and lighting materials showed virtually no change during July. Average prices increased slightly the second week, but declined during the third and fourth weeks of the month. This group has shown very little change for several months.

A slow but steady advance was characteristic of the metals and metal products group, the index increasing from 85.6 to 86.2 from the first to the last week of the month.

A course similar to the metals and metal products group was followed by the building materials group. The level for this group rose from 85.7 to 86.8. The increase for the group was largely due to higher prices for certain lumber items, paint materials, and other building materials. Cement and brick and tile remained steady throughout the month while plumbing materials rose sharply.

Maintaining the firmness which has been characteristic of the chemicals and drugs group, the index advanced from 78.3 to 79.1 during July. Mixed fertilizers rose 4.2 percent and fertilizer materials 2.0 percent. Drugs and pharmaceuticals, on the other hand, declined 0.3 percent. Increases of 5 percent or more were reported for inedible tallow, manure salts, muriate of potash, tankage, and sulphate of potash.

Both furniture and furnishings contributed to the 0.2 percent decline for the house-furnishing goods group. The slight decrease followed a corresponding advance during the month of June.

A sharp upturn in prices of cattle feed, showing a rise of more than 30 percent, was largely responsible for the 1.9 percent increase for the miscellaneous commodities group. Crude rubber advanced 4 percent.

Table 4 shows index numbers of wholesale prices for the main groups of commodities for each week of June and July 1936.



Table 4.—Weekly Index Numbers of Wholesale Prices by Groups of Commodities

[1926=100]

Commodity groups	July	July	July	July	June	June	June	June
	25, 1936	18, 1936	11, 1936	4, 1936	27, 1936	20, 1936	13, 1936	6, 1936
All commodities.....	80.2	80.1	80.3	79.5	79.4	78.7	78.7	78.4
Farm products.....	81.4	80.8	82.5	80.2	80.2	77.4	77.4	76.5
Foods.....	81.0	81.3	81.8	80.8	81.0	79.7	79.4	78.7
Hides and leather products.....	94.0	93.8	94.3	94.2	94.4	94.4	94.6	94.6
Textile products.....	70.2	70.1	69.6	69.5	69.5	69.4	69.3	69.1
Fuel and lighting materials.....	76.8	76.9	77.0	76.4	76.4	76.4	76.6	76.7
Metals and metal products.....	86.2	86.1	86.1	85.6	85.4	85.5	85.7	85.7
Building materials.....	86.8	86.1	86.1	85.7	85.6	85.6	85.8	85.7
Chemicals and drugs.....	79.1	79.0	78.6	78.3	78.0	77.6	77.3	77.3
House-furnishing goods.....	82.6	82.5	82.4	82.6	82.6	82.9	82.9	82.9
Miscellaneous.....	71.3	71.4	70.7	70.3	70.1	69.6	69.3	69.0
Raw materials.....	79.5	79.3	80.3	78.7	78.8	77.0	76.9	76.3
Semimanufactured articles.....	75.5	75.2	75.0	74.4	74.2	74.1	74.1	74.0
Finished products.....	81.6	81.4	81.4	80.9	80.8	80.5	80.4	80.4
All commodities other than farm products.....	80.0	79.9	79.9	79.3	79.3	79.0	78.9	78.8
All commodities other than farm products and foods.....	79.5	79.4	79.2	78.9	78.8	78.7	78.8	78.7

## Index Numbers of Wholesale Prices, by Commodity Groups

INDEX numbers of wholesale prices by commodity groups, by years from 1926 to 1935, inclusive, and by months from January 1935 to July 1936, inclusive, are shown in table 5.

Table 5.—Index Numbers of Wholesale Prices, by Groups of Commodities

[1926=100]

Period	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
By years:											
1926.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927.....	99.4	96.7	107.7	95.6	88.3	96.3	94.7	96.8	97.5	91.0	95.4
1928.....	105.9	101.0	121.4	95.5	84.3	97.0	94.1	95.6	95.1	85.4	96.7
1929.....	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.2	94.3	82.6	95.3
1930.....	88.3	90.5	100.0	80.3	78.5	92.1	89.9	89.1	92.7	77.7	86.4
1931.....	64.8	74.6	86.1	66.3	67.5	84.5	79.2	79.3	84.9	69.8	73.0
1932.....	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.5	75.1	64.4	64.8
1933.....	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.6	75.8	62.5	65.9
1934.....	65.3	70.5	86.6	72.9	73.3	86.9	86.2	75.9	81.5	69.7	74.9
1935.....	78.8	83.7	89.6	70.9	73.5	86.4	85.3	80.5	80.6	68.3	80.0
By months:											
1935											
January.....	77.6	79.9	86.2	70.3	72.9	85.8	84.9	79.3	81.2	70.7	78.8
February.....	79.1	82.7	86.0	70.1	72.5	85.8	85.0	80.4	80.7	70.1	79.5
March.....	78.3	81.9	85.4	69.4	73.0	85.7	84.9	81.5	80.7	69.2	79.4
April.....	80.4	84.5	86.3	69.2	72.8	85.9	84.6	81.0	80.7	68.7	80.1
May.....	80.6	84.1	88.3	69.4	73.1	86.6	84.8	81.2	80.6	68.7	80.2
June.....	78.3	82.8	88.9	70.1	74.2	86.9	85.3	80.7	80.5	68.4	79.8
July.....	77.1	82.1	89.3	70.2	74.7	86.4	85.2	78.7	80.4	67.7	79.4
August.....	79.3	84.9	89.6	70.9	74.1	86.6	85.4	78.6	80.5	67.3	80.5
September.....	79.5	86.1	90.9	71.8	73.0	86.6	85.9	80.2	80.5	67.1	80.7
October.....	78.2	85.0	93.6	72.9	73.4	86.5	86.1	81.1	80.6	67.5	80.5
November.....	77.5	85.1	95.0	73.4	74.5	86.9	85.8	81.2	81.0	67.4	80.6
December.....	78.3	85.7	95.4	73.2	74.6	86.8	85.5	80.6	81.0	67.5	80.9
1936:											
January.....	78.2	83.5	97.1	71.7	75.1	86.7	85.7	80.5	81.4	67.8	80.6
February.....	79.5	83.2	96.1	71.0	76.1	85.7	85.5	80.1	81.5	68.1	80.6
March.....	76.5	80.1	94.9	70.8	76.2	86.6	85.3	79.3	81.4	68.3	79.6
April.....	76.9	80.2	94.6	70.2	76.4	86.6	85.7	78.5	81.5	68.6	79.7
May.....	75.2	78.0	94.0	69.8	76.0	86.3	85.8	77.7	81.5	69.2	78.6
June.....	78.1	79.9	93.8	69.7	76.1	86.2	85.8	78.0	81.4	69.7	79.2
July.....	81.3	81.4	93.4	70.5	76.2	86.9	86.7	79.4	81.2	71.0	80.5

The price trend since 1926 is shown in table 6 for the following groups of commodities: Raw materials, semimanufactured articles, finished products, commodities other than farm products, and commodities other than those designated as farm products and foods. All commodities, with the exception of those included in the groups of farm products and foods, have been included in the group of "All commodities other than farm products and foods." The list of commodities included under the designations "Raw materials", "Semimanufactured articles", and "Finished products" was given in the October 1934 issue of the Wholesale Prices pamphlet.

Table 6.—Index Numbers of Wholesale Prices, by Special Groups of Commodities

[1926=100]

Year	Raw materials	Semimanufactured articles	Finished products	All commodities other than farm products	All commodities other than farm products and foods	Month	Raw materials	Semimanufactured articles	Finished products	All commodities other than farm products	All commodities other than farm products and foods
1926.....	100.0	100.0	100.0	100.0	100.0	1935—Continued.					
1927.....	96.5	94.3	95.0	94.6	94.0	June.....	76.4	73.9	82.2	80.0	78.0
1928.....	99.1	94.5	95.9	94.8	92.9	July.....	75.8	72.8	82.0	79.8	78.0
1929.....	97.5	93.9	94.5	93.3	91.6	August.....	77.1	73.2	83.0	80.6	77.9
1930.....	84.3	81.8	88.0	85.9	85.2	September.....	77.3	74.4	83.1	80.8	77.8
1931.....	65.6	69.0	77.0	74.6	75.0	October.....	77.1	76.3	82.7	80.9	78.3
1932.....	55.1	59.3	70.3	68.3	70.2	November.....	77.2	76.2	82.7	81.1	78.8
1933.....	56.5	65.4	70.5	69.0	71.2	December.....	77.7	75.2	83.1	81.3	78.7
1934.....	68.6	72.8	78.2	76.9	78.4	1936:					
1935.....	77.1	73.6	82.2	80.2	77.9	January.....	78.1	74.8	82.4	80.9	78.8
1935:						February.....	79.1	74.6	82.2	80.7	79.0
January.....	76.6	71.2	80.8	78.9	77.7	March.....	77.4	74.4	81.3	80.2	78.9
February.....	77.4	71.7	81.5	79.4	77.4	April.....	77.0	74.5	81.6	80.1	78.9
March.....	76.6	71.8	81.7	79.5	77.3	May.....	75.8	74.1	80.5	79.2	78.8
April.....	77.5	72.3	82.3	79.9	77.2	June.....	77.6	73.9	80.7	79.4	78.8
May.....	77.6	73.5	82.4	80.0	77.6	July.....	79.8	75.2	81.6	80.3	79.5

### Monthly Average Wholesale Prices and Index Numbers of Individual Commodities

THE table showing monthly average wholesale prices and index numbers of individual commodities formerly appearing in the monthly pamphlet is now published semiannually instead of monthly. The June 1936 issue showed the average for the year 1935 and information for the first 6 months of 1936. The monthly figures will be furnished upon request.

### Announcement of Revision

WHILE meeting current demands for wholesale price information, the Bureau in cooperation with the Central Statistical Board and other Federal agencies has mapped out a program of revision covering every phase of its wholesale-price reporting service. The purposes of the revision are to round out the list of commodities in the interest

of more balanced coverage, to establish and follow more detailed description and specification of the items included in the price index, to modify the basis of quotations in accordance with changing marketing methods, to determine methods of index construction and weighting appropriate to defined objectives, to develop methods for dealing with geographical variations in prices, to improve on the classification of commodities and industries, and to determine means of increasing the effectiveness of the published results.

The surveys for the following industries have been finished or are nearing completion: Farm machinery, underwear, lumber, box board, leather and leather products, chemicals, soap, cement, brick and tile, sand, gravel and slag, rubber manufactures, small hand tools, and paper and pulp. Work has been begun or is planned for the immediate future covering automobiles, motor trucks, textiles, and iron and steel products. The results of the farm-machinery survey were published in the August 1935 Monthly Labor Review and in reprint form. Separate reports for other industries will be issued from time to time as the surveys are finished.

The effective cooperation of the industries being covered is contributing greatly to the success of the revision program.

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## Wholesale Prices in the United States and in Foreign Countries

**I**N THE following table the index numbers of wholesale prices of the Bureau of Labor Statistics of the United States Department of Labor, and those in certain foreign countries, have been brought together in order that the trend of prices in the several countries may be compared. The base periods here shown are those appearing in the original sources from which the information has been drawn. In certain countries the base is the year 1913 or some other pre-war period. Only general comparisons can be made from these figures, since, in addition to differences in the base periods, and the kind and number of articles included, there are important differences in the composition of the index numbers themselves. Indexes are shown for the years 1926-35, inclusive, and by months from January 1934 through July 1936.

## Index Numbers of Wholesale Prices in the United States and in Foreign Countries

Country	United States	Argentina	Australia	Austria	Belgium	Bulgaria	Canada	Chile	China
Computing agency	Bureau of Labor Statistics	Bureau of Economic Research	Bureau of Census and Statistics	Federal Statistical Bureau	Ministry of Labor and Social Welfare	General Statistical Bureau	Dominion Bureau of Statistics	General Statistical Bureau	National Tariff Commission, Shanghai
Base period	1926 (100)	1926 (100)	1911 (1,000)	January-June 1914 (100)	April 1914 (100)	1926 (100)	1926 (100)	1913 (100)	1926 (100)
Commodities	784	105	92	47	(Paper) 125	(Gold) 55	567 <sup>1</sup>	(Paper)	(Silver) 155 <sup>2</sup>
1926	100.0	100.0	1,832	123	744	100.0	100.0	-----	100.0
1927	95.4	98.1	1,817	133	847	102.4	97.7	-----	104.4
1928	96.7	98.5	1,792	130	843	109.8	96.4	195.5	101.7
1929	95.3	96.4	1,803	130	851	117.0	95.6	192.4	104.5
1930	86.4	92.2	1,596	117	744	94.6	86.6	166.9	114.8
1931	73.0	89.0	1,428	108	626	79.1	72.1	152.2	126.7
1932	64.8	89.5	1,411	112	532	70.3	66.7	230.4	112.4
1933	65.9	85.6	1,409	108	501	61.8	67.1	346.0	103.8
1934	74.9	98.2	1,471	110	473	63.6	71.6	343.6	97.1
1935	80.0	-----	1,469	110	537	65.1	72.1	343.3	96.4
<i>1934</i>									
January	72.2	97.2	1,456	109	484	59.1	70.7	328.6	97.2
February	73.6	96.4	1,452	110	483	62.6	72.1	331.4	98.0
March	73.7	96.6	1,459	113	478	61.7	72.1	336.9	96.6
April	73.3	96.0	1,471	112	474	61.6	71.3	342.6	94.6
May	73.7	97.2	1,456	110	470	63.0	71.1	343.1	94.9
June	74.6	98.3	1,463	110	472	64.2	72.0	351.7	95.7
July	74.8	99.2	1,483	110	471	64.2	72.0	352.5	97.1
August	76.4	101.6	1,500	110	474	65.7	72.2	354.1	99.8
September	77.6	100.6	1,493	108	470	65.5	71.9	352.6	97.3
October	76.5	98.7	1,493	108	467	66.2	71.3	344.2	96.1
November	76.5	98.5	1,470	109	466	64.8	71.1	343.3	98.3
December	76.9	98.6	1,459	109	468	63.8	71.1	341.8	99.0
<i>1935</i>									
January	78.8	97.7	1,459	110	472	64.5	71.4	346.7	99.4
February	79.5	96.8	1,451	109	466	64.3	71.9	340.3	99.9
March	79.4	97.1	1,443	109	464	64.2	72.0	336.7	96.4
April	80.1	96.6	1,444	109	531	66.0	72.5	334.9	95.9
May	80.2	96.5	1,458	110	552	64.7	72.3	339.3	95.0
June	79.8	96.1	1,466	111	555	64.3	71.4	339.6	92.1
July	79.4	95.6	1,479	112	553	64.2	71.4	342.4	90.5
August	80.5	95.7	1,498	111	552	64.0	71.6	343.3	91.9
September	80.7	96.6	1,495	110	560	64.4	72.3	346.2	91.1
October	80.5	98.5	1,499	109	574	66.6	73.1	348.7	94.1
November	80.6	98.5	1,479	109	582	66.9	72.7	351.5	103.3
December	80.9	98.7	1,460	109	579	66.7	72.6	350.1	103.3
<i>1936</i>									
January	80.6	98.9	1,475	108	581	65.8	72.9	353.3	104.3
February	80.6	97.9	1,466	107	582	65.2	72.5	355.2	105.4
March	79.6	96.4	1,485	107	578	64.7	72.4	359.5	106.4
April	79.7	96.2	-----	108	574	66.4	72.2	359.8	107.3
May	78.6	96.0	-----	108	569	66.3	71.8	-----	105.8
June	79.2	-----	-----	109	-----	66.0	72.3	-----	106.1
July	80.5	-----	-----	110	-----	-----	74.4	-----	107.2

<sup>1</sup> Revised for commodities since January 1934.<sup>2</sup> Quotations, 154 since January 1932.

## Index Numbers of Wholesale Prices in the United States and in Foreign Countries—Continued

Country.....	Czecho- slovakia	Den- mark	Finland	France	Ger- many	India	Italy	Japan	Nether- lands
Computingagency.	Central Bureau of Statis- tics	Statisti- cal De- part- ment	Central Bureau of Statis- tics	General Statisti- cal Bu- reau	Federal Statisti- cal Bu- reau	Depart- ment, etc., <sup>3</sup> Calcutta	Riccardo Bachi	Bank of Japan, Tokio	Central Bureau of Statis- tics
Base period.....	July 1914 (100)	1931 (100)	1926 (100)	1913 (100)	1913 (100)	July 1914 (100)	1913 (100)	October 1900 (100)	1926-30 (100)
Commodities.....	(Gold) 69	161	120	(Paper) 126	400	72	(Paper) 140	56	269 (plus)
1926.....	<sup>4</sup> 944.0	143	100	695	134.4	148	602.0	236.7	105.8
1927.....	<sup>4</sup> 968.0	134	101	642	137.6	148	495.3	224.6	102.8
1928.....	<sup>4</sup> 959.0	134	102	645	140.0	145	461.6	226.1	102.2
1929.....	<sup>4</sup> 913.0	132	98	627	137.2	141	445.3	219.8	99.7
1930.....	118.6	114	90	554	124.6	116	383.0	181.0	89.6
1931.....	107.5	100	84	502	110.9	96	328.4	153.0	76.3
1932.....	99.5	103	90	427	96.5	91	303.7	161.1	64.6
1933.....	96.3	110	89	398	93.3	87	279.5	179.5	62.9
1934.....	83.9	119	90	376	98.4	89	273.0	177.6	63.0
1935.....	85.9	122	90	338	101.8	91	-----	185.5	61.5
<i>1934</i>									
January.....	94.6	117	90	404	96.3	90	275.7	175.5	-----
February.....	94.3	118	90	400	96.2	89	274.6	177.5	-----
March.....	<sup>5</sup> 81.1	118	90	394	95.9	88	275.2	176.3	-----
April.....	<sup>5</sup> 80.8	117	89	387	95.8	89	273.1	176.9	-----
May.....	<sup>5</sup> 80.2	117	89	381	96.2	90	272.6	176.2	-----
June.....	<sup>5</sup> 80.5	116	89	379	97.2	90	272.2	174.5	-----
July.....	<sup>5</sup> 85.1	117	89	373	98.9	89	269.8	174.1	-----
August.....	<sup>5</sup> 83.9	121	90	370	100.1	89	271.4	176.9	-----
September.....	<sup>5</sup> 84.0	123	90	365	100.4	89	269.9	179.2	-----
October.....	<sup>5</sup> 83.8	123	90	357	101.0	89	271.8	181.8	-----
November.....	<sup>5</sup> 84.2	123	90	356	101.2	88	274.1	181.1	-----
December.....	<sup>5</sup> 84.2	122	90	344	101.0	88	275.9	181.1	-----
<i>1935</i>									
January.....	<sup>5</sup> 84.5	122	90	350	101.1	94	277.2	181.5	61.7
February.....	<sup>5</sup> 85.1	122	90	343	100.9	90	278.4	184.1	61.6
March.....	<sup>5</sup> 85.3	119	90	335	100.7	87	288.3	183.5	60.6
April.....	<sup>5</sup> 84.9	120	90	336	100.8	88	296.1	182.3	60.9
May.....	<sup>5</sup> 85.7	120	90	340	100.8	91	302.3	182.4	60.9
June.....	<sup>5</sup> 86.1	120	90	330	101.2	91	307.8	180.2	60.9
July.....	<sup>5</sup> 88.0	120	90	322	101.8	91	310.1	180.2	60.6
August.....	<sup>5</sup> 86.0	123	90	330	102.4	89	322.9	182.9	60.8
September.....	<sup>5</sup> 85.9	124	91	332	102.3	89	329.6	188.9	61.8
October.....	<sup>5</sup> 85.6	126	92	342	102.8	93	-----	194.0	63.3
November.....	<sup>5</sup> 86.2	126	91	348	103.1	92	-----	193.6	62.7
December.....	<sup>5</sup> 86.2	126	91	354	103.4	93	-----	191.9	62.5
<i>1936</i>									
January.....	<sup>5</sup> 86.7	126	90	359	103.6	92	-----	191.8	62.4
February.....	<sup>5</sup> 85.8	126	91	372	103.6	91	-----	191.0	62.0
March.....	<sup>5</sup> 86.0	126	91	376	103.6	91	-----	190.7	61.5
April.....	<sup>5</sup> 85.6	126	90	371	103.7	92	-----	192.4	61.1
May.....	<sup>5</sup> 85.7	126	90	374	103.8	90	-----	192.4	61.0
June.....	<sup>5</sup> 85.0	125	90	-----	104.0	90	-----	193.6	61.6
July.....	<sup>5</sup> 85.3	127	-----	-----	-----	91	-----	197.4	-----

<sup>3</sup> Department of Commerical Intelligence and Statistics.<sup>4</sup> Paper revised.<sup>5</sup> New gold parity.

## Index Numbers of Wholesale Prices in the United States and in Foreign Countries—Continued

Country.....	New Zealand revised	Norway	Peru	Poland	South Africa	Sweden	Switzerland	United Kingdom	Yugoslavia
Computing agency.....	Census and Statistics Office	Central Bureau of Statistics	Central Bank of Reserve	Central Office of Statistics	Office of Census and Statistics	Board of Trade	Federal Labor Department	Board of Trade	National Bank
Base period.....	1909-13 (1,000)	1913 (100)	1913 (100)	1928 (100)	1910 (1,000)	1913 (100)	July 1914 (100)	1930 (100)	1926 (100)
Commodities.....	180	95	(Paper) 58	238	200 (variable)	160	77	* 200	55
1926.....	1,553	-----	203.2	-----	1,387	149	144.5	-----	100.0
1927.....	1,478	-----	202.6	-----	1,395	146	142.2	-----	103.4
1928.....	1,492	157	191.9	100.0	1,354	148	144.6	-----	106.2
1929.....	1,488	149	185.7	96.3	1,305	140	141.2	-----	100.6
1930.....	1,449	137	178.0	85.5	1,155	122	126.5	100.0	86.6
1931.....	1,346	122	175.1	74.6	1,119	111	109.7	87.8	72.9
1932.....	1,297	122	170.3	65.5	1,032	109	96.0	85.6	65.2
1933.....	1,308	122	180.2	59.1	1,047	107	91.0	85.7	64.4
1934.....	1,330	124	188.1	55.8	1,143	114	89.8	88.1	63.2
1935.....	1,385	127	188.8	53.1	1,066	116	89.8	88.9	65.9
<i>1934</i>									
January.....	1,336	120	186.8	57.8	1,193	112	91.8	88.8	62.9
February.....	1,339	122	186.6	57.6	-----	112	91.4	89.2	63.6
March.....	1,340	122	184.1	57.3	-----	112	90.9	88.2	63.3
April.....	1,332	123	187.4	56.8	1,171	113	89.6	87.7	63.0
May.....	1,340	123	187.8	56.0	-----	113	89.0	87.2	64.1
June.....	1,337	123	189.8	55.8	-----	114	89.0	87.9	65.6
July.....	1,336	124	188.8	55.9	1,102	114	88.9	87.3	62.8
August.....	1,342	127	191.4	55.8	-----	114	89.8	89.0	61.1
September.....	1,337	126	190.9	55.0	-----	114	89.1	88.4	63.2
October.....	1,338	127	187.9	54.4	1,109	114	89.6	87.8	63.6
November.....	1,340	126	187.0	53.6	-----	115	89.4	87.5	62.7
December.....	1,338	125	185.3	53.4	-----	115	89.0	87.8	62.3
<i>1935</i>									
January.....	1,345	125	186.3	52.7	1,074	115	88.3	88.3	64.5
February.....	1,361	125	188.2	52.2	-----	115	87.6	88.0	63.9
March.....	1,365	126	191.2	52.1	-----	115	86.4	86.9	63.0
April.....	1,367	125	190.6	52.2	1,044	115	87.1	87.5	62.9
May.....	1,365	125	190.4	52.7	-----	115	87.6	88.3	64.0
June.....	1,374	126	191.5	52.5	-----	116	88.6	88.5	63.9
July.....	1,386	127	190.7	52.8	1,069	116	89.9	88.1	63.3
August.....	1,393	128	188.6	53.5	-----	115	91.4	88.5	64.8
September.....	1,419	128	186.7	54.1	-----	115	92.2	89.6	67.8
October.....	1,434	130	188.0	54.4	1,080	117	93.3	91.2	70.0
November.....	1,419	130	188.1	54.4	-----	118	92.8	91.3	71.2
December.....	1,414	131	189.3	52.7	-----	118	92.1	91.5	71.6
<i>1936</i>									
January.....	1,405	131	191.1	52.1	1,120	118	91.1	91.8	71.1
February.....	1,384	132	191.9	52.2	-----	118	91.0	91.7	70.0
March.....	1,385	132	191.2	52.1	-----	118	90.9	91.7	70.0
April.....	1,393	132	192.5	53.0	1,122	118	91.9	91.9	69.1
May.....	1,391	132	192.1	53.7	-----	118	92.0	91.9	67.0
June.....	-----	132	191.3	53.8	-----	118	91.9	92.6	65.4
July.....	-----	134	-----	-----	-----	119	93.1	93.6	65.6

\* Revised for commodities since January 1930.

## COST OF LIVING

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### Money Disbursements of Wage Earners and Clerical Workers in Boston and Springfield, Mass.<sup>1</sup>

THE general similarity of spending among employed wage earners and lower-salaried clerical workers in large cities in different parts of the United States becomes increasingly apparent as more figures from the Bureau of Labor Statistics' study of the current expenditures of this group become available.<sup>2</sup>

Within this general similarity, however, there are significant differences in the averages from city to city. They are due in part to differences in costs from one city to another and in part to variations in average size of family and average income, in the physical situation of the cities studied, in State and municipal regulations affecting consumer purchasing, and in the traditions of their workers.

Changes in the distribution of expenditure with changes in economic level among the Boston and Springfield families studied are similar to those shown for the families in the cities for which reports have previously been published. The percentage spent for food declines rapidly with increase in consumption level. The percentage spent for clothing, housing, household operation, personal care, and community welfare, remains virtually unchanged. The percentage spent for furnishings and equipment, transportation, medical care, and gifts and contributions to persons outside the family, increases significantly with the consumption level of the family. The percentage spent for education is irregular depending on the number and age of the children in each group.

<sup>1</sup> Prepared by the Bureau's Cost of Living Division, Faith M. Williams, chief. The field work in Massachusetts was supervised by Alice C. Hanson, assistant chief of the Division, assisted in Boston by Esther C. Nelson, and in Springfield by M. Eileen Leach, both of the Bureau of Labor Statistics. The survey in Boston was made in cooperation with the Consumers' Council of Suffolk County, Margaret Wiesman, chairman; and the Boston Emergency Relief Administration, Col. T. F. Sullivan, administrator.

The following persons constituted an informal advisory committee for the purpose of assisting the Bureau in solving problems connected with the selection of the sample: Elliott Boardman, Federal Reserve Bank of Boston; Theodore Brown, Harvard University, School of Business; Mary A. Clapp, Research Bureau, Boston Council of Social Agencies; W. L. Crum, Harvard University, Department of Economics and School of Business; Elizabeth Gilboy, Harvard University, Economic Research Committee; Roswell F. Phelps, Director of Statistics, Massachusetts Department of Labor and Industries; and Sumner H. Slichter, Harvard University, Department of Economics.

The survey in Springfield was made in cooperation with the Economics Department of Mount Holyok College, Prof. Amy Hewes, chairman; the County Consumers' Council of Hampden-Hampshire Counties, Mrs. James A. Seaman, chairman; and the Springfield Emergency Relief Administration.

<sup>2</sup> Previous reports on the study of expenditures of wage earners and lower-salaried workers will be found in the following issues of the Monthly Labor Review: March 1936 (pp. 554-563); April 1936 (pp. 889-894); May 1936 (pp. 1457-1464); and June 1936 (pp. 1744-1753).

Table 1.—Annual Current Expenditures at Different Consumption Levels, White Families in Boston and Springfield, Mass., 1934-35

Item	Families with specified annual expenditures per consumption unit in—							
	Boston						Springfield	
	Under \$300	\$300 and under \$400	\$400 and under \$500	\$500 and under \$600	\$600 and under \$700	\$700 and over	Under \$450	\$450 and over
Number of families.....	95	100	117	85	51	68	117	131
Average number of members in economic family.....	6.06	4.44	3.85	3.44	2.77	2.35	4.67	2.93
Average number of consumption units per family.....	5.35	3.98	3.48	3.18	2.58	2.24	4.25	2.73
Average total current expenditure.....	\$1,323	\$1,388	\$1,559	\$1,728	\$1,661	\$1,943	\$1,393	\$1,706
	Percentage distribution							
Expenditure for—	42.9	39.0	36.9	33.8	30.8	29.0	39.4	31.9
Food.....	9.5	9.4	10.2	9.5	10.5	10.1	10.7	10.0
Clothing.....	20.1	20.5	19.4	20.7	21.0	20.8	18.1	18.3
Housing.....	12.8	13.4	12.6	13.0	12.0	12.0	12.4	12.0
Household operation.....	1.2	1.9	2.6	3.1	3.4	3.7	2.3	3.4
Furnishings and equipment.....	3.9	4.5	5.1	5.1	7.5	8.9	4.8	8.5
Transportation.....	1.7	1.7	1.8	1.5	1.6	1.7	1.9	1.9
Personal care.....	1.7	3.0	3.2	3.8	3.4	3.4	3.1	4.3
Medical care.....	3.6	4.0	4.7	4.9	5.2	5.1	4.2	5.1
Recreation.....	.5	.2	.5	.7	.4	.3	.3	.5
Education.....	.2	.3	.3	.2	.4	.5	.2	.3
Vocation.....	1.3	1.4	1.3	1.6	1.6	1.5	1.5	1.6
Community welfare.....	.5	.6	.9	1.6	1.6	2.4	.9	1.7
Gifts and contributions to persons outside the family.....	.1	.1	.5	.5	.6	.6	.2	.5
Miscellaneous items.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total current expenditure.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Average distribution of expenditures is shown in table 1 for the 516 families studied in Boston at 6 levels of consumption and for the 248 families studied in Springfield at 2 levels of consumption. In order to take account of the effect on the distribution of family expenditures of differences in the amount of the total fund available for current expenditures, and the number, age, sex, and occupation of the persons dependent on that fund, the families studied have been classified by annual expenditure per consumption unit. Classification by the total expenditures of the family without regard to the number and type of consumers sharing the goods purchased would be confusing, as economic level necessarily depends on the number of consumers in the family as well as on the total amount spent. For example, a family of 2 adults, a father in factory work and a mother at home, and 2 children, with an income of \$1,500, may save \$50 during the year, spending \$1,450 for consumers' goods, and will have relative freedom in spending, at a level of \$401 per consumption unit. On the other hand another family with an income of \$1,500, but with 8 members, including a father in factory work, a mother at home, a sister in clerical work, and 5 children, also saving \$50 in the year and spending \$1,450 for consumers' goods, will be considerably cramped



in its spending at a level of \$208 per consumption unit. The relative demand of each individual in the family is figured on a composite basis, which was described in the Monthly Labor Review for March 1936.

#### Expenditure for Transportation

THE distribution of average annual expenditures by the groups studied in the two cities, shown in table 2, brings out the fact that Boston families are devoting 5.7 percent of their total current expenditures to transportation, and Springfield families, 6.9 percent. These figures are considerably lower than the averages for the families studied in the two Michigan cities of comparable size. The Detroit families spent on the average 10.7 percent of their total expenditures for transportation, the Grand Rapids families, 11 percent.

Table 2.—Annual Current Expenditure, White Families in Boston and Springfield, Mass., 1934-35

Item	Boston	Springfield
Number of families studied.....	516	248
Average number of members in economic family.....	4.00	3.75
Average number of consumption units per family.....	3.62	3.45
Average total current expenditures.....	\$1,571	\$1,559
	Percentage distribution	
Expenditure for—		
Food.....	35.7	35.0
Clothing.....	9.9	10.3
Housing.....	20.3	18.2
Household operation.....	12.7	12.1
Furnishings and equipment.....	2.6	3.0
Transportation.....	5.7	6.9
Personal care.....	1.7	1.9
Medical care.....	3.1	3.8
Recreation.....	4.5	4.7
Education.....	.4	.4
Vocation.....	.3	.3
Community welfare.....	1.5	1.6
Gifts and contributions to persons outside the family.....	1.2	1.4
Miscellaneous items.....	.4	.4
Total current expenditure.....	100.0	100.0

The relatively low percentage spent for transportation in these two cities is immediately connected with the relatively small percentage of families owning automobiles. The average annual expenditure for transportation by families owning automobiles was \$268 in Boston and \$216 in Springfield, as compared with \$60 for the Boston families and \$43 for the Springfield families not owning automobiles. Apparently families owning automobiles actually travel a good deal more than families not owning automobiles, either to and from work, for shopping or other family business, or for pleasure. No attempt was made to secure data on the division of automobile expense among the various purposes for which the car is used. Most families do not

keep account of expenditures for the family automobile in terms of the uses to which the car is put, and it was decided that estimated figures on this subject would be of little value.

The proportion of families owning automobiles was 14.3 percent among the group studied in Boston, and 37.1 percent among those studied in Springfield (table 3). In Detroit the proportion was 68.3 percent and in Grand Rapids 75.4 percent.

Table 3.—Ownership of Automobiles by Families at Different Consumption Levels, in Boston and Springfield, Mass., 1934-35

City, and annual expenditure per consumption unit	Number of families	Families owning cars		Families purchasing cars in the year covered					
				New cars		Second-hand cars		Total	
		Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Boston:									
Under \$300.....	95	4	4.2	0	-----	1	1.0	1	1.0
\$300 and under \$400.....	100	8	8.0	0	-----	1	1.0	1	1.0
\$400 and under \$500.....	117	14	12.0	0	-----	3	2.6	3	2.6
\$500 and under \$600.....	85	11	12.9	0	-----	2	2.4	2	2.4
\$600 and under \$700.....	51	14	27.5	1	2.0	1	2.0	2	3.9
\$700 and over.....	68	23	33.8	1	1.5	6	8.8	7	10.3
Total.....	516	74	14.3	2	.4	14	2.7	16	3.1
Springfield:									
Under \$450.....	117	29	24.8	0	-----	4	3.4	4	3.4
\$450 and over.....	131	63	48.1	3	2.3	8	6.1	11	8.4
Total.....	248	92	37.1	3	1.2	12	4.8	15	6.0

There are several reasons for the relatively low proportion of families with automobiles among the group studied in the Boston area. In the first place it is an old and densely settled community. The area included in the Boston survey covered the district within the city limits, and the suburbs of Revere, Chelsea, Everett, Malden, Somerville, Medford, Arlington and Cambridge. In this entire area there is a population density of 15,593 persons per square mile as compared with 11,738 persons per square mile in the area covered by the Detroit study (the incorporated cities of Detroit, Hamtramck and Highland Park). Parking an automobile in the streets overnight is not allowed within the Boston city limits although it is legal in many other cities, and garage rents are necessarily expensive because of the high land values in the city. In addition, rates for public liability insurance are relatively high in Boston and such insurance has been compulsory in Massachusetts since 1928. Separate figures on the expense for this type of insurance are not available, as many families have policies combining automobile insurance of several types. Average expenditures for automobile insurance of all types by families having automobiles was \$54 for Boston, \$40 for Springfield, and \$6 for Detroit where public liability insurance for owners of automobiles is not required by law, and many owners do not carry such insurance.

## Expenditures for Formal Education

THE percentage of total expenditures devoted to formal education is exactly the same in the two cities, 0.4 percent, a proportion slightly smaller than the proportion spent for education by this group in all but one of the large cities for which figures are available so far, 0.6 percent in both Detroit and Grand Rapids, 0.6, 0.5, and 0.4 percent in Richmond, Birmingham, and New Orleans.

However, the percentage of families with children 18 years old and over continuing their education after high school is higher among the families studied in Boston than among those in Springfield. There were 161 families in the Boston sample, including children 18 years of age and over, and of these 29 or 18.0 percent included children continuing their education beyond high school. The number of families including children 18 years of age or over in the Springfield sample was 68, and 7 of them or 10.3 percent included children continuing education beyond high school. A similar but smaller difference between the samples studied in the two cities appears in the number and percentage of children having completed high school. The percentage of families with children 18 years of age and over, which include children having completed high school, is 65.2 percent in Boston and 50.0 percent in Springfield. The percentage of families having children 18 years of age and over in clerical workers' families having finished high school was considerably higher than the percentage of families in which a wage earner was the head of the family—75.0 percent as compared with 60.6 percent in Boston; 72.7 percent as compared with 45.6 percent in Springfield.

The percentage of families, with children over 18 years of age, who had children continuing their education beyond high school is 15.7 percent for Detroit and 15.4 percent for Grand Rapids. It would appear that children in the families of wage earners and lower-salaried clerical workers in Boston are making good use of the exceptionally large number of educational institutions in the Boston area.

## The Families Studied

THE study of the money disbursements of wage earners and lower-salaried clerical workers in these two Massachusetts cities forms a part of the nation-wide survey made by the Bureau of Labor Statistics for the purpose of revising its cost-of-living indexes. It covers average expenditures of the families of employed workers in Boston and Springfield, Mass., in the year ending February 28, 1935. The families studied were carefully selected to represent a cross section of the families of employed white wage earners and lower-salaried

clerical workers in the two cities. All the families included had one or more workers who worked a minimum of 1,008 hours in at least 36 weeks during the year.<sup>6</sup> Since the data were being obtained primarily for the purpose of providing a basis for indexes of living costs, it was important that they should not reflect the distorted spending of families whose incomes had been abnormally low or irregular. On that account no data were included from families whose incomes were under \$500 a year or from families who received relief during the year (table 4).

The number of persons in the families from which complete figures on receipts and disbursements were secured averaged 4.00 in Boston and 3.75 in Springfield, as compared with a median size for all white families of two persons or more of 3.75 persons for Boston and 3.46 for Springfield, as shown by the census of 1930. The number of workers in these families who were gainfully employed at some time during the year covered by the investigation averaged 1.36 in Boston and 1.46 in Springfield. The average size of families of two or more persons on the relief rolls in Boston in May 1934 was exactly the same as the average size of the families in the group of employed workers studied. In Springfield the size of white relief families was not available for May 1934; the average for October 1933 was somewhat higher than the average for the families of employed white workers studied for the year 1934-35. In the year covered by the data secured for the employed families, 21.5 percent of the white families in Boston and 19.2 percent of those in Springfield were on the relief rolls in February 1935, the month in the period covered when relief was at its height.

Table 4.—Annual Income and Expenditure of Families in Boston and Springfield, Mass., 1934-35

Item	Boston area <sup>1</sup>	Springfield area <sup>2</sup>
Population, 1930.....	1, 386, 654	210, 000
Number of families studied.....	516	248
Average number of members in economic family.....	4. 00	3. 75
Average number of consumption units per family.....	3. 62	3. 45
Average number of gainful workers per family.....	1. 36	1. 46
Average net income of family.....	\$1, 573	\$1, 565
Average earnings of chief earner.....	\$1, 302	\$1, 270
Average expenditure per family.....	\$1, 571	\$1, 559

<sup>1</sup> Includes the incorporated city of Boston, and the suburbs of Revere, Chelsea, Everett, Malden, Somerville, Medford, Arlington, and Cambridge.

<sup>2</sup> Includes Springfield, West Springfield, and Chicopee.

<sup>6</sup> An exception was made in the case of families in which the chief earner was employed in an industry distinctly seasonal. Such families were included if the chief earner had employment for 3½ 8-hour days in each of 30 weeks.

## Housing Facilities

AS IN the other cities for which reports are available, the figures for Boston and Springfield show a general improvement in housing facilities as current expenditures per consumption unit increase (table 5). Boston is the first city, for which the figures have been summarized thus far, to show every family from which information was secured as having a flush toilet inside the family dwelling.

The figures for home owners show more irregularity as regards housing facilities than the figures for renters, partly because of the relatively small number of cases and partly because, apparently, a family buying a home may be willing for the sake of having an investment in a home to sacrifice facilities which renters at the same economic level demand. For example, a smaller percentage of the home owners in the expenditure-per-consumption-unit group \$400 and under \$500 have running hot water inside their dwellings, electric lights, and mechanical refrigerators than the renters at the same level. On the other hand, a higher percentage of the home owners in this group have gas or electricity for cooking, telephones, and central heating than those in the corresponding group of renters.

In Springfield there is a definite tendency for the families studied to accept somewhat less complete equipment as home owners than as renters.

Table 5.—Household Facilities and Equipment of Renters and Home Owners at Different Consumption Levels, in Boston and Springfield, Mass., 1934-35

## Boston

Equipment	Renters						
	Families with annual expenditure per consumption unit of—						
	Under \$300	\$300 and under \$400	\$400 and under \$500	\$500 and under \$600	\$600 and under \$700	\$700 and over	All families
Number of families.....	80	85	93	62	43	51	414
Percent of families having—							
Inside flush toilets.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Running hot water inside dwelling.....	75.0	81.2	81.7	91.9	90.7	94.1	84.3
Electric lights.....	98.8	98.8	98.9	100.0	97.7	100.0	99.0
Gas or electric cooking fuel.....	75.0	80.0	84.9	93.5	93.0	100.0	86.0
Mechanical refrigerators.....	0	4.7	14.0	29.0	34.9	52.9	18.6
Ice refrigerators.....	96.3	94.1	86.0	72.6	65.1	47.1	80.7
No refrigerators.....	3.7	1.2	0	0	0	0	1.0
Telephone.....	10.0	9.4	17.2	38.7	37.2	62.7	25.1
Central heating.....	35.0	51.8	65.6	75.8	86.0	94.1	64.0
Inside flush toilets, running hot water inside dwelling, electric lights, and gas or electricity as kitchen fuel.....	57.5	67.1	69.9	85.5	83.7	94.1	73.7
	Home owners						
Number of families.....	15	15	24	23	8	17	102
Percent of families having—							
Inside flush toilets.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Running hot water inside dwelling.....	86.7	93.3	79.2	91.3	100.0	100.0	90.2
Electric lights.....	100.0	86.7	95.8	100.0	100.0	100.0	97.1
Gas or electric cooking fuel.....	80.0	100.0	95.8	95.7	100.0	100.0	95.1
Mechanical refrigerators.....	13.3	40.0	18.3	26.1	37.5	47.1	26.5
Ice refrigerators.....	86.7	60.0	95.8	73.9	62.5	52.9	74.5
No refrigerators.....	0	0	0	0	0	0	0
Telephone.....	33.3	33.3	58.3	43.5	75.0	88.2	53.9
Central heating.....	80.0	80.0	91.7	91.3	100.0	100.0	90.2
Inside flush toilets, running hot water inside dwelling, electric lights, and gas or electricity as kitchen fuel.....	73.3	86.7	75.0	82.6	100.0	100.0	84.3

## Springfield

Equipment	Renters		Home owners		All families	
	Expenditure per consumption unit		Expenditure per consumption unit		Renters	Home owners
	Under \$450	\$450 and over	Under \$450	\$450 and over		
Number of families.....	86	96	31	35	182	66
Percent of families having—						
Inside flush toilets.....	100.0	100.0	96.8	97.1	100.0	97.0
Running hot water inside dwelling.....	69.8	86.5	83.9	94.3	78.6	89.4
Electric lights.....	97.7	97.9	96.8	100.0	97.8	98.5
Gas or electric cooking fuel.....	91.9	92.7	64.5	91.4	92.3	78.8
Mechanical refrigerators.....	14.0	30.2	3.2	42.8	22.5	24.2
Ice refrigerators.....	82.5	67.7	93.5	54.3	74.7	72.7
No refrigerators.....	3.5	2.1	3.2	2.9	2.7	3.0
Telephone.....	17.4	36.5	19.4	77.1	27.5	50.0
Central heating.....	59.3	82.3	80.6	94.3	71.4	87.9
Inside flush toilets, running hot water inside dwelling, electric lights, and gas or electricity as kitchen fuel.....	68.6	83.3	51.6	85.7	76.4	69.7

<sup>1</sup>Includes 1 family with both electric and ice refrigerators.

## Radios

EIGHTY-SEVEN percent of the families studied in Boston and 77 percent of those studied in Springfield had radios (table 6). On the other hand, 6 percent of the Boston families purchased radios during the year, as compared with 9 percent of the Springfield families. The percentage owning and buying radios is somewhat higher at the upper expenditure levels than at the lower, but the percentages are irregular.

Table 6.—Ownership of Radios at Different Consumption Levels in Boston and Springfield, Mass., 1934-35

City and annual expenditure per consumption unit	Number of families	Families owning radios		Families purchasing radios in the year covered					
		Number	Percent	New radios		Second-hand radios		Total	
				Number	Percent	Number	Percent	Number	Percent
<b>Boston:</b>									
Under \$300.....	95	77	81.1	5	5.3	0	-----	5	5.3
\$300 and under \$400.....	100	87	87.0	8	8.0	0	-----	8	8.0
\$400 and under \$500.....	117	96	82.1	5	4.3	1	0.9	6	5.2
\$500 and under \$600.....	85	91	95.3	5	5.9	0	-----	5	5.9
\$600 and under \$700.....	51	43	84.3	1	2.0	0	-----	1	2.0
\$700 and over.....	68	63	92.6	6	8.8	0	-----	6	8.8
Total.....	516	447	86.6	30	5.8	1	.2	31	6.0
<b>Springfield:</b>									
Under \$450.....	117	86	73.5	7	6.0	1	.9	8	6.8
\$450 and over.....	131	106	80.9	12	9.2	1	.8	13	9.9
Total.....	248	192	77.4	19	7.7	2	.8	21	8.5

## Savings

INFORMATION on additions to and withdrawals from savings and on increases and decreases in liabilities was obtained from all the families interviewed. In both Boston and Springfield about one-third of the families reported net decrease in assets or net increase in liabilities or both (see table 7). It is of some interest to note that in both cities a higher percentage of the families in the upper expenditure groups reported net withdrawals from savings or net increase in liabilities.

Table 7.—Annual Savings and Deficits Among White Families in Boston and Springfield, Mass., 1934–35

City and annual expenditure per consumption unit	Number of families	Families having net decrease in assets or net increase in liabilities or both		Families having net increase in assets or net decrease in liabilities or both	
		Number	Percent	Number	Percent
<b>Boston:</b>					
Under \$300.....	95	30	31.6	59	62.1
\$300 and under \$400.....	100	23	23.0	69	69.0
\$400 and under \$500.....	117	36	30.8	79	67.5
\$500 and under \$600.....	85	32	37.6	52	61.2
\$600 and under \$700.....	51	31	41.2	30	58.8
\$700 and over.....	68	28	41.2	36	52.9
Total.....	1 516	170	32.9	325	63.0
<b>Springfield:</b>					
Under \$150.....	117	33	28.2	74	63.2
\$150 and over.....	131	44	33.6	83	63.4
Total.....	248	77	31.0	157	63.3

<sup>1</sup> For 21 families there was no change.

### Cost of Living of Federal Employees Living in Washington, D. C.

THE average cost of the goods purchased by Federal employees and their families living in Washington, D. C., increased gradually from March 1933 until January 1936 and then dropped between January and April 1936. Indexes of all items purchased by all groups of employees, based on costs in the first 6 months of 1928 as 100, increased from 82.7 in March 1933 to 88.5 on January 15, 1936, then dropped to 87.8 on April 15, 1936.

The study on which these figures are based was conducted by pricing a list of the goods most important in the spending of Federal employees and their families in the first 6 months of 1928 as determined by a study of the expenditures of 336 families of Federal employees and 123 single individuals made in the fall of 1933.<sup>1</sup>

Indexes have been prepared for four groups, as well as for all groups combined, three groups of families including those of custodial employees with basic salaries less than \$2,500, other employees with basic salaries less than \$2,500, and employees with basic salaries of \$2,500 and over, and employees living as single individuals. The following tables present these indexes for the several groups of Federal employees and for each of the major groups of items purchased by them.

<sup>1</sup> Details of this study were presented in articles which appeared in the March and July 1934 issues of the Monthly Labor Review (pp. 511 and 213).



Indexes of Cost of Goods Purchased by Federal Employees in Washington, D. C.,  
March 1933 to April 15, 1936

[First 6 months of 1928=100]

All employees

Group	March 1933	December 1933	June 1934	Nov. 15, 1934	Mar. 15, 1935	July 15, 1935	Oct. 15, 1935	Jan. 15, 1936	Apr. 15, 1936
All items.....	82.7	85.0	86.4	87.3	88.0	87.8	88.2	88.5	87.8
Food.....	70.9	72.8	75.5	78.6	81.9	82.0	82.5	82.4	79.8
Clothing.....	67.0	83.5	84.7	84.7	83.2	82.9	83.0	83.6	83.5
Housing.....	91.6	87.9	88.2	88.8	88.8	89.0	89.3	89.7	89.9
Household operation.....	87.2	88.0	86.5	88.0	86.8	84.4	86.6	86.5	85.8
Furnishings and equipment.....	71.3	87.3	91.3	91.2	91.1	91.2	92.4	93.6	94.0
Transportation.....	87.7	88.6	92.2	90.6	91.2	91.1	90.6	91.8	92.4
Personal care.....	89.9	88.5	85.2	82.9	82.6	82.4	82.0	81.3	81.3
Medical care.....	96.0	95.9	96.0	96.9	97.2	97.1	97.0	96.6	96.5
Recreation.....	91.4	91.9	94.3	92.2	91.7	91.3	91.3	91.4	91.4
Formal education.....	107.8	108.1	108.1	108.2	108.2	108.4	108.5	108.5	108.5
Life insurance.....	105.3	105.5	106.1	106.1	106.7	107.4	107.4	108.3	107.9
Retirement fund.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Employees living in family groups

Custodial employees with basic salaries of less than \$2,500									
Group	March 1933	December 1933	June 1934	Nov. 15, 1934	Mar. 15, 1935	July 15, 1935	Oct. 15, 1935	Jan. 15, 1936	Apr. 15, 1936
All items.....	78.8	82.8	84.0	85.6	87.3	87.0	87.8	87.5	86.1
Food.....	64.8	69.6	72.4	76.7	81.9	81.9	83.3	82.3	78.6
Clothing.....	65.5	85.0	88.6	87.8	87.0	86.7	86.9	87.3	86.9
Housing.....	90.4	88.1	87.5	87.2	87.2	87.9	87.9	87.9	88.0
Household operation.....	87.5	88.5	86.1	88.3	87.3	83.0	85.8	85.7	85.3
Furnishings and equipment.....	70.1	87.3	91.2	91.0	90.9	91.1	92.4	93.8	94.3
Transportation.....	93.1	94.8	96.9	97.4	99.6	99.3	98.2	99.1	99.7
Personal care.....	92.0	93.1	86.6	82.6	82.1	81.8	81.2	80.3	80.4
Medical care.....	98.4	97.9	98.2	98.4	98.4	98.4	98.2	97.5	97.5
Recreation.....	94.4	94.4	97.4	96.8	95.6	95.4	95.2	95.4	95.3
Formal education.....	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1
Life insurance.....	105.3	105.5	106.1	106.1	106.7	107.4	107.4	108.3	107.9
Retirement fund.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Other employees with basic salaries of less than \$2,500

Group	March 1933	December 1933	June 1934	Nov. 15, 1934	Mar. 15, 1935	July 15, 1935	Oct. 15, 1935	Jan. 15, 1936	Apr. 15, 1936
All items.....	82.1	84.7	86.3	87.1	87.9	87.9	88.1	88.4	87.6
Food.....	68.7	71.6	75.5	78.0	81.7	82.6	82.5	82.0	79.1
Clothing.....	66.7	83.2	84.6	84.7	83.0	82.7	82.8	83.4	83.3
Housing.....	92.1	88.4	88.6	89.0	89.1	89.2	89.6	90.4	90.7
Household operation.....	87.2	88.0	86.5	88.0	86.8	84.5	86.4	86.3	85.8
Furnishings and equipment.....	71.5	87.3	91.2	91.1	90.9	91.0	92.2	93.4	93.7
Transportation.....	86.5	88.0	91.8	90.4	91.0	90.8	90.3	91.6	92.3
Personal care.....	89.4	87.8	84.2	81.9	81.6	81.5	81.1	80.4	80.3
Medical care.....	95.7	95.8	96.0	97.0	97.3	97.2	97.1	96.7	96.7
Recreation.....	91.3	91.7	93.8	92.0	91.4	91.0	91.0	91.1	91.1
Formal education.....	108.1	108.7	108.7	108.8	108.8	109.1	109.3	109.3	109.3
Life insurance.....	105.3	105.5	106.1	106.1	106.7	107.4	107.4	108.3	107.9
Retirement fund.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Other employees with basic salaries of \$2,500 and over

Group	March 1933	December 1933	June 1934	Nov. 15, 1934	Mar. 15, 1935	July 15, 1935	Oct. 15, 1935	Jan. 15, 1936	Apr. 15, 1936
All items.....	82.0	84.7	86.1	87.4	88.1	87.5	88.2	88.7	87.8
Food.....	67.9	70.6	72.7	77.4	80.7	79.5	80.8	81.5	78.4
Clothing.....	67.3	83.9	85.1	85.2	83.8	83.5	83.6	84.1	84.0
Housing.....	91.5	88.0	88.9	89.7	89.7	90.0	90.2	90.7	91.0
Household operation.....	85.8	86.5	85.1	86.9	85.6	83.2	85.9	85.7	84.7
Furnishings and equipment.....	71.3	87.2	91.3	91.2	91.1	91.2	92.4	93.6	93.8
Transportation.....	84.4	86.4	90.7	88.1	88.7	88.6	88.1	89.6	90.1
Personal care.....	90.6	89.7	86.5	83.9	83.7	83.5	83.1	82.3	82.3
Medical care.....	95.7	95.3	95.5	96.3	96.6	96.4	96.3	95.9	95.9
Recreation.....	89.9	90.3	93.3	91.2	90.8	90.3	90.3	90.4	90.4
Formal education.....	107.1	107.1	107.1	107.2	107.2	107.2	107.3	107.3	107.3
Life insurance.....	105.3	105.5	106.1	106.1	106.7	107.4	107.4	108.3	107.9
Retirement fund.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Indexes of Cost of Goods Purchased by Federal Employees in Washington, D. C.,  
March 1933 to April 15, 1936—Continued

*Employees living as single individuals*

Group	March 1933	Decem- ber 1933	June 1934	Nov. 15, 1934	Mar. 15, 1935	July 15, 1935	Oct. 15, 1935	Jan. 15, 1936	Apr. 15, 1936
All items.....	88.3	88.0	88.6	88.8	88.9	88.9	88.9	89.0	89.0
Food.....	86.5	82.4	83.1	83.9	85.0	85.2	85.3	85.4	85.3
Clothing.....	67.9	82.6	82.4	82.4	80.9	80.6	80.7	81.5	81.5
Housing.....	90.7	85.8	85.9	86.9	86.8	86.9	86.8	86.1	86.4
Household operation.....	94.7	95.2	94.9	94.9	93.1	93.0	93.3	93.3	92.4
Furnishings and equipment.....	70.2	87.9	92.7	93.2	93.4	93.6	95.3	96.6	97.4
Transportation.....	98.4	94.6	96.3	95.7	96.0	95.8	95.6	96.1	96.5
Personal care.....	89.2	86.9	85.3	83.8	83.6	83.4	83.1	82.5	82.5
Medical care.....	96.2	96.5	96.6	97.7	98.0	97.8	97.7	97.4	97.4
Recreation.....	93.1	93.7	95.7	92.8	92.5	92.1	92.1	92.2	92.2
Formal education.....	108.1	108.1	108.7	108.8	108.8	109.1	109.3	109.3	109.3
Life insurance.....	105.3	105.5	106.1	106.1	106.7	107.4	107.4	108.3	107.9
Retirement fund.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

### Cost of Living of Working-Class Families in Mexico City

THE household account books kept by 281 working-class families in Mexico City from July 9 to September 9, 1934, revealed that the average family income was 22.42 pesos<sup>1</sup> per week, and the expenditures 21.96 pesos, leaving a surplus of 0.46 peso.

The 281 families included 1,443 persons (631 males and 812 females), of whom 868 were over 15 years of age and 575 were under that age. Of the average family income, 88.2 percent was derived from labor of members of the family and 11.8 percent from other sources, including loans and credit. Of the weekly expenditure the two largest items were 56.4 percent for food and 9.7 percent for housing. The investigation which disclosed these facts was made by the General Statistical Office of Mexico.<sup>2</sup>

#### Composition of Family

FAMILIES of from four to six persons each were selected, with the cooperation of the workers' unions and the employers, from among workers employed in 32 industrial enterprises in Mexico City; selection was made in such a way as to assure, as far as possible, the inclusion of a suitable number of skilled, semiskilled, and unskilled workers in each wage group.

The average number of persons per family was 5.14 as compared with 5.15 persons per family in the Federal District, as shown by the census of 1930. According to the American scale of adult equivalents, which was the standard adopted, there were 1,127.75 consumption units or an average of 4.01 units per family.

<sup>1</sup> Average exchange rate for Mexican peso, July-September 1934=27.74 cents.

<sup>2</sup> Mexico, Secretaria de la Economía Nacional, *Revista de Economía y Estadística*, November 1934 (pp. 20-23): *El costo de la vida de la clase obrera*, by Federico Bach; and *El Trimestre Económico*, vol. 2, no. 5 (pp. 12-49), Mexico, 1935: *Un estudio del costo de la vida*, by Federico Bach.

## Source of Income

FOR purposes of the investigation the economic head of the family was defined as the chief source of its support. Of the 281 legal heads of families 185 were also economic heads, while 96 were not. Women were found to be legal heads in 111 and economic heads in 105 families. The sources of family income are shown in table 1, from which it appears that 88.2 percent of the income was derived directly from wages and 11.8 percent from other sources, including loans and credit. The largest item, 65.4 percent, was from the wages of the economic head of the family, while the next largest was 17.3 percent from the wages of other members of the family.

Table 1.—Sources of Income of 281 Working-Class Families in Mexico City  
[Average exchange rate of peso, July-September 1934=27.74 cents]

Source of income	Families with specified source of income		Average weekly income	
	Number	Percent	Amount	Percent of total income
Total income.....	281	100.0	<i>Pesos</i> 22.42	100.0
Income from wages.....	281	100.0	19.78	88.2
Wages of economic head.....	281	100.0	15.89	70.9
Regular.....	281	100.0	14.66	65.4
Supplementary.....	86	30.6	1.24	5.5
Wages of other members of family.....	145	51.2	3.88	17.3
Income from other sources.....	139	49.5	2.64	11.8
Outside sources.....	54	19.2	.89	4.0
Loans, credit, etc.....	111	39.5	1.75	7.8

Table 2 shows for the 281 families, classified by type of work done by the economic head, the number of persons in the family working for wages. While in 60.9 percent of the skilled workers' families only one person worked, in only 37.8 percent of the unskilled workers' families was this true. On the other hand, while only 7.3 percent of the skilled workers' families had three persons working for wages, this was true in 15.5 percent of the families of unskilled workers. The semiskilled workers showed a tendency intermediate between those of the skilled and the unskilled workers.

Table 2.—Distribution of Families by Number of Wage Earners in Family and by Type of Work Done by Economic Head

Number of wage earners in family	Families		Families whose economic heads were classed as—					
	Number	Percent	Skilled workers		Semiskilled workers		Unskilled workers	
			Number	Percent	Number	Percent	Number	Percent
All families.....	281	100.0	110	100.0	126	100.0	45	100.0
1 person.....	150	53.4	67	60.9	66	52.4	17	37.8
2 persons.....	104	37.0	35	31.8	48	38.1	21	46.7
3 persons.....	27	9.6	8	7.3	12	9.5	7	15.5

A distribution of the families according to the weekly wages of the economic head of the family is shown in table 3, from which it appears that the most common income from wages for unskilled and semiskilled workers did not amount to more than 12 pesos per week but for skilled workers it was more than 15 pesos per week.

Table 3.—Distribution of Economic Heads of Families by Wage Groups and by Type of Work Done

[Average exchange rate of peso, July–September 1934=27.7 cents]

Weekly wages of economic head	Economic heads		Number of economic heads classed as—		
	Number	Percent	Skilled workers	Semi-skilled workers	Unskilled workers
All wage groups.....	281	100.0	110	126	45
Less than 9.00 pesos.....	17	6.1	-----	5	12
9.01 to 12.00 pesos.....	104	37.0	15	65	24
12.01 to 15.00 pesos.....	59	21.0	18	34	7
15.01 to 20.00 pesos.....	60	21.3	37	21	2
20.01 pesos and over.....	41	14.6	40	1	-----

### Expenditures

A GENERAL summary of expenditures is presented in table 4. Because of the brief period covered by the study, the director of the investigation considers that only the amounts used for food, culture and amusement, and personal expenses may be taken as representative of general practices among typical workers' families. Certain items, as clothing and rent, are less satisfactory than would have been the case for reports covering a longer period.

Table 4.—Weekly Expenditures of 281 Working-Class Families in Mexico City

[Average exchange rate of peso, July–September 1934=27.74 cents]

Item of expenditure	Weekly expenditure			
	Per family		Per member of family	Per unit of consumption
	Amount	Percent		
Total weekly expenditure.....	<i>Pesos</i> 21.96	100.0	<i>Pesos</i> 4.26	<i>Pesos</i> 5.47
Food.....	12.38	56.4	2.41	3.09
Clothing.....	1.46	6.6	.28	.36
Housing.....	2.13	9.7	.41	.53
Fuel and light.....	2.08	9.5	.40	.52
Culture and amusement.....	.79	3.6	.15	.19
Personal expenses.....	1.01	4.6	.20	.25
Extraordinary expenses.....	2.11	9.6	.41	.53

The International Labor Review for May 1936 (pp. 740–742) gives a further analysis of the expenditure for food. Table 5 shows for

income groups the quantities of certain foods consumed per family per week. It is noteworthy that for all the foods listed there is an absolute increase of quantity with increase in family income.

Table 5.—Quantities of Certain Foods Consumed per Family per Week, by Income Groups

Item	Unit	Quantity consumed by—					
		All families	Families having a weekly income of—				
			Under 15 pesos	15 to 20 pesos	20 to 25 pesos	25 to 30 pesos	Over 30 pesos
Bread and cereals.....	Kilograms ..	22.504	20.183	21.482	21.876	24.381	25.974
	Pounds .....	49.612	44.495	47.359	48.227	53.750	57.262
Meat.....	Kilograms ..	3.886	2.484	3.273	3.832	4.666	5.779
	Pounds .....	8.567	5.476	7.215	8.448	10.286	12.740
Milk, milk products, etc.:							
Milk.....	Liters.....	9.479	5.479	7.941	9.235	12.353	13.941
	Quarts.....	10.016	5.789	8.391	9.758	13.053	14.731
Butter.....	Kilograms ..	.888	.613	.775	.850	1.088	1.213
	Pounds .....	1.957	1.051	1.708	1.873	2.398	2.674
Eggs.....	Units.....	7.6	4.2	6.4	7.6	10.0	10.6
Vegetables, etc.:							
Vegetables.....	Kilograms...	3.440	2.320	2.960	3.440	4.320	4.720
	Pounds.....	7.583	5.114	6.525	7.583	9.523	10.405
Beans, peas, rice, etc.....	Kilograms...	4.583	.916	4.310	4.583	4.910	5.354
	Pounds.....	10.103	2.019	9.501	10.103	10.824	11.803
Sugar.....	Kilograms...	1.964	1.536	1.875	1.893	2.071	2.643
	Pounds.....	4.329	3.386	4.133	4.173	4.565	5.826

# RECENT PUBLICATIONS OF LABOR INTEREST

August 1936

## Consumer Education

*Sources of information on consumer education and organization.* Washington, U. S. Agricultural Adjustment Administration, Consumers' Counsel Division, 1936. 33 pp. (Consumers' Counsel Series, Publication No. 1.)

## Cooperative Movement

*Activities of consumers' cooperative wholesale societies in 1935.* Washington, U. S. Bureau of Labor Statistics, 1936. 10 pp. (Serial No. R. 401, reprint from June 1936 Monthly Labor Review.)

*Cooperation in agriculture: A selected and annotated bibliography with special reference to marketing, purchasing, and credit.* Compiled by Chastina Gardner. Washington, U. S. Farm Credit Administration, Cooperative Division, May 1936. 214 pp. (Bul. No. 4.)

The material is arranged according to authorship, and there is a detailed index.

*Cooperative farm-mortgage credit, 1916-1936.* By W. J. Myers. Washington, U. S. Farm Credit Administration, 1936. 24 pp., maps, charts, illus. (Circular A-8.)

*Statistics of farmers' cooperative business organizations, 1920-1935.* By R. H. Elsworth. Washington, U. S. Farm Credit Administration, Cooperative Division, 1936. 129 pp., maps, charts. (Bul. No. 6.)

Data on cooperative purchasing and business services provided by farmers' cooperative organizations, taken from this publication, are given in this issue of the Monthly Labor Review.

*Accounting principles for cooperative cotton gin associations.* By Otis T. Weaver. Washington, U. S. Farm Credit Administration, Cooperative Division, 1935. 92 pp. (Bul. No. 2.)

*Organization and operation of the Illinois Livestock Marketing Association.* By H. H. Hulbert. Washington, U. S. Farm Credit Administration, Cooperative Division, 1936. 140 pp., maps, charts. (Bul. No. 5.)

*Statistique des sociétés coopératives, 1934.* Sofia, Bulgaria, Direction Générale de la Statistique, 1936. 87 pp. (In Bulgarian and French.)

*Finland, the new nation.* By Agnes Rothery. New York, Viking Press, 1936. 257 pp., map, illus.

Contains fragmentary data on various types of cooperative societies, mentioned in discussion of Finnish social and economic development.

*Sweden, the middle way.* By Marquis W. Childs. New Haven, Yale University Press, 1936. 171 pp.

A description of the Swedish cooperative movement and its accomplishments, in relation to the whole Swedish economy.

*Savings plans and credit unions in industry.* New York, National Industrial Conference Board, Inc., 247 Park Avenue, 1936. 72 pp. (Study No. 225.)

Discusses various types of employee thrift plans. One chapter is devoted to credit unions formed among employees of industrial firms, and gives data on the experience of 157 such unions.

## Economic and Social Problems

*The decline of competition: A study of the evolution of American industry.* By Arthur Robert Burns. New York, McGraw-Hill Book Co., Inc., 1936. 619 pp., charts.

A detailed factual study of the decline of competition in American business enterprise, a description of public policies from the Sherman anti-trust law to the National Recovery Administration, and a discussion of objectives and available methods of social control in the field of enterprise.

*Deficits and depressions.* By Dan Throop Smith. New York, John Wiley & Sons, Inc., 1936. 234 pp.

This book analyzes public finance, largely in a theoretical manner, as one of many factors in the study of depressions. The author holds that what is needed is "a revival of balanced spending and production", with production developed along the lines of most efficient productive facilities and spending directed to meeting "continuing effective demand."

*Economic welfare: A plan for economic security for every family.* By Oscar Newfang. New York, Barnes & Noble, Inc., 1936. 187 pp.

A plan which includes compulsory amortization of farm and home markets through publicly controlled rentals; a partnership system in industry with limited dividends to capital and distribution of surplus to labor under a system of auditing by workers' representatives; and a more rigorous limitation of inheritance.

*The modern economy in action.* By Caroline F. Ware and Gardiner C. Means. New York, Harcourt, Brace & Co., 1936. 244 pp.

Analyzes the modern economic system with its distinctive characteristics of the factory and the corporation, and contrasts it with the earlier economy. The changing basis of the relation of government to economic life is emphasized. The status of labor and labor's role in making industrial policy are discussed in chapters 2, 7, and 9.

*The fate of the middle classes.* By Alec Brown. London, Victor Gollancz, Ltd., 1936. 288 pp.

The author holds that the interests of the middle classes, whose income is not primarily from investments, are similar to those of the wage-earning classes and are such as to call for collaboration between the two groups.

*State interests in American treaties.* By Nicholas Pendleton Mitchell. Richmond, Va., Garrett and Massie, 1936. 220 pp.

A study of the treaty-making powers of the Federal Government in relation to matters affecting the jurisdiction of the States. Few treaties and conventions in the past have involved questions directly concerned with labor, but the author's discussion has a bearing on various proposed agreements of this nature.

*A century of municipal progress—the last hundred years.* Edited by Harold J. Laski and others. Published under the auspices of The National Association of Local Government Officers. London, George Allen & Unwin, Ltd., 1935. 511 pp.

This survey of the development of municipal government in England contains chapters on the health of the people, housing, and civic planning, and relief of the poor.

*Atti del Congresso della Previdenza Sociale, Bologna, Italy, October 1-3, 1935.* [Rome?], Istituto Nazionale Fascista della Previdenza Sociale, 1936. 307 pp., illus.

Proceedings of the Social Welfare Congress held at Bologna, October 1-3, 1935. Subjects discussed were invalidity, tuberculosis, and social welfare of the mother and child.

## Education and Training

*Adult education.* By Lyman Bryson. New York, American Book Co., 1936. 208 pp.

Answers the question "Why go on learning?", describes the functions and processes of adult education, and discusses the public schools, national public programs, Federal emergency programs, university extension, and other avenues through which the work is being carried on.

*Educational qualifications in the engineering profession.* Washington, U. S. Bureau of Labor Statistics, 1936. 16 pp. (Serial No. R. 400, reprint from June 1936 Monthly Labor Review.)

*Report of proceedings of a training course for State factory inspectors.* Washington, U. S. Division of Labor Standards, 1936. 78 pp. (Bul. No. 6.)

The training course was conducted by the Division of Labor Standards of the U. S. Department of Labor, in cooperation with the School of Hygiene and Public Health of Johns Hopkins University, in Baltimore, Md., February 10–20, 1936.

*The colored situation.* By Faye P. Everett and others. Boston, Meador Publishing Co., 1936. 312 pp.

Written in the hope of meeting the needs of Negro high-school and college teachers who are concerned with the problem of improving the vocational status of their race. The volume includes considerable occupational information and outlines various measures to be taken in making an intelligent approach to a vocation.

*Kul'turnoe stroitel'stvo S. S. S. R. (U. S. S. R.) v. tsyfrakh, 1930–1934.* Moscow, Central Office of the People's Economic Accountancy, 1935. 163 pp. (In Russian.)

Deals with the cultural development of the Soviet Union during the period 1930 to 1934, including elementary education, training of laborers, factory schools, various technical courses, etc.

### Employment and Unemployment

*Employment and earnings in commercial milk distribution, 1929–34.* By C. Lawrence Christenson. Washington, U. S. Bureau of Labor Statistics, 1936. 11 pp. (Serial No. R. 416, reprint from July 1936 Monthly Labor Review.)

*Der Einfluss der Maschine auf die Arbeitslosigkeit. Ein Beitrag zur Wirtschafts- und Sozialreform.* By Hermann Hagen. Stuttgart, Boorberg-Verlag, 1935. 303 pp.

A study of the connection between labor-saving techniques and volume of employment, with a discussion of proposals such as prohibiting the use of machines and imposing taxes on machines for the purpose of preventing an increase of unemployment resulting from technological changes.

*Reports of the operations of the Employment Research Committee, New South Wales.* Sydney, Ministry of Labor and Industry, 1936. 117 pp., chart.

Contains reports on subjects related to the employment situation, and recommendations, including proposed proposals for reduction of hours of labor.

### Employment Offices

*Employment services in Wisconsin, January 1934–December 1935.* Madison, Wisconsin Industrial Commission, 1936. 36 pp., map, charts.

Summarizes the activities of public employment offices in Wisconsin and presents statistics on sex, age, education, marital status, occupation, and period of unemployment of new applicants. Data on relief-project and agricultural placements and registration and placement of veterans are included, and some figures are furnished which show, by age groups, the average number of dependents of applicants for the last 6 months of 1933.

### Family Allowances

*Les allocations familiales—origines, régime légal.* By Jean Pinte. Paris, Librairie du Recueil Sirey, 1935. 286 pp.

After an analysis of the social and economic bases for the granting of family allowances, the author traces the origin and development of these grants. Six of the 12 chapters of the volume deal with the French Compulsory Allowance Act of 1932 and its application.

### Housing

*City planning—housing: Vol. I, Historical and sociological.* By Werner Hege-  
mann. New York, Architectural Book Publishing Co., Inc., 1936. 257 pp.,  
maps, plans, illus.

The thesis is developed that the United States had its start as a planned country and that the tradition of planning established by Washington, Hamilton, and Jefferson should be continued in order that slum conditions may be abolished.



*Housing management, its history and relation to present-day housing problems.* By Beatrice Greenfield Rosahn. New York, National Municipal League, Inc., 309 East 34th Street, 1935. 32 pp.

The experience of Octavia Hill in managing houses for those of low incomes in England is cited, as well as the adaptation of her methods in the United States. The importance of management is discussed and methods used in a few outstanding projects at present are described.

### Income

*The distribution of income in relation to economic progress.* Washington, Brookings Institution, Institute of Economics, 1936. Various paging, maps, charts.

An abridged class-room edition of the four volumes constituting the results of a study of "the distribution of wealth and income in relation to economic progress"—America's Capacity to Produce, America's Capacity to Consume, The Formation of Capital, and Income and Economic Progress.

*Statistics of incomes and income tax, New Zealand, tax year 1934-35.* Wellington, Census and Statistics Office, 1936. 21 pp.

Income statistics are shown by class and source, and a break-down is made for earned income as differentiated from other income.

### Industrial Accidents and Health

*Transactions of the Twenty-fourth Annual Safety Congress, National Safety Council, Louisville, Ky., October 14-18, 1935.* Chicago, 20 North Wacker Drive, 1936. 2 vols., 544 and 124 pp.

Contains records of the proceedings. Volume 1 covers the general sessions, the special subject sessions, and the industrial section sessions, and includes a list of officers and directors. Volume 2 deals with street and highway traffic, child education, and home safety.

*Recherches expérimentales sur les causes psychologiques des accidents du travail.* By J. M. Lahy and S. Korngold. (In *Le Travail Humain, Revue trimestrielle*, Conservatoire National des Arts et Métiers, Paris, March 1936, pp. 1-64; charts.)

*Statistique des accidents du travail, 1934.* Sofia, Bulgaria, Direction Générale de la Statistique, 1936. 50 pp. (In Bulgarian and French.)

Contains data regarding accidents in Bulgaria in 1934, classified by industry, and giving causes, kind of injury, number of working days lost, and extent of disability.

*Proceedings of the Annual Conference of the National Society for the Prevention of Blindness, December 1935.* New York, 50 West 50th Street, [1936?]. 173 pp.

The subjects covered included sight-saving activities of various official and volunteer agencies, the problem of fireworks accidents, sight-conservation work of public-health nurses, and the Social Security Act as it will affect public-health nursing.

*The size distribution of industrial dusts.* By J. J. Bloomfield. Washington, U. S. Public Health Service, 1935. 9 pp., chart. (Supplement No. 115 to Public Health Reports.)

Shows that the method used in enumerating dust particles provides a valuable and practical index of the hazard of dust inhalation.

*Report of the Medical Research Council for the year 1934-35.* London, 1936. 183 pp. (Cmd. 5079.)

The work of the Council in the industrial field during the year covered by the report included studies of industrial pulmonary disease and the toxicity of industrial solvents.

*Sixteenth annual report of the Industrial Health Research Board, to June 30, 1936.* London, 1936. 34 pp.

During the year the studies of the Board covered environmental conditions, including lighting, noise, dust, toxic solvents, and heating and ventilation; physiology and psychology of work; sickness absence, labor wastage, and occupational sickness; vocational suitability; and accident proneness.

*Sickness absence and labor wastage.* London, Industrial Health Research Board, 1936. 62 pp., diagrams. (Report No. 75.)

The first part of the report, on a study of absenteeism from sickness among different occupational groups, shows that influenza and colds accounted for between 30 and 40 percent of the lost time. The second part deals with the labor wastage resulting from sickness and death, and the waste resulting from a high labor turn-over.

*The warmth factor in comfort at work—a physiological study of heating and ventilation.* By T. Bedford. London, Industrial Health Research Board, 1936. 102 pp., diagrams. (Report No. 76.)

The study was carried out in 12 factories having different types of heating and ventilation. An equivalent temperature of 62.3° F. was found to give maximum comfort and to be the degree of warmth most suitable for workrooms in which the occupants are engaged in sedentary or very light work.

### Industrial and Labor Conditions

*Reports of committees and resolutions adopted March 12, 1936, by Council for Industrial Progress.* Washington, U. S. Coordinator for Industrial Cooperation, 1936. 53 pp.

Contains final, progress, and minority reports of the seven committees making up the Council.

*Regional shifts in the bituminous coal industry—a summary.* By Wilbert G. Fritz and Theodore A. Veenstra. Pittsburgh, University of Pittsburgh, Bureau of Business Research, 1936. 40 pp., maps, charts.

Traces the extent, causes, and effects of regional shifts in the bituminous-coal industry, and discusses the governmental measures for control that have been introduced in recent years. The pamphlet summarizes the detailed report published in 1935 by the same agency.

*Review of the American machinery industries.* By R. E. W. Harrison and Charles O. Thompson. Washington, U. S. Bureau of Foreign and Domestic Commerce, 1936. 54 pp., map, charts. (Domestic Commerce Series No. 93.)

Analyzes the economic position of an industry that employs approximately half a million workers and pays roughly 500 million dollars annually in wages. A bibliography is included.

*Textile industries in the first half of 1935: Part I, The cotton textile industry including thread, cordage, and twine; Part II, The woolen and worsted textile industry.* Washington, Federal Trade Commission, 1936. Various paging.

Statistics are presented to show the effects upon total operating costs of an increase in labor costs if not accompanied by a commensurate rise in productivity.

*Les conditions du travail des employés en Italie.* Rome, Confédération Fasciste de Travailleurs de Commerce, [1936?]. 48 pp. (In French.)

A comparison of conditions secured through legislation and collective agreements in behalf of office workers in Italy with those in other countries, especially with regard to social insurance, sick and dismissal benefits, paid vacations, employment service, hours of work, and minimum wage.

### Industrial Relations

*Awards 1 to 400 of First Division of National Railroad Adjustment Board, Chicago.* Washington, U. S. National Railroad Adjustment Board, 1936. 2 vols.

*Union-management relations in the women's clothing industry, New York industrial area, 1936.* Washington, U. S. Bureau of Labor Statistics, 1936. 10 pp. (Serial No. R. 410, reprint from July 1936 Monthly Labor Review.)

### International Labor Relations

*Conferencia del trabajo de los Estados de América miembros de la Organización Internacional del Trabajo, Santiago de Chile, 2 al 14 de enero de 1936—actas de las sesiones.* Geneva, International Labor Office, 1936. 410 pp. (In Spanish.)

Proceedings of the Labor Conference of the American States, members of the International Labor Organization, held at Santiago, Chile, January 2 to 14, 1936. An account of this conference was published in the March 1936 Monthly Labor Review (p. 690).

## Labor Day

*Origin and significance of Labor Day.* Washington, U. S. Bureau of Labor Statistics, 1936. 6 pp. (Serial No. R. 408, reprint from August 1936 Monthly Labor Review.)

## Labor Legislation

*Interstate compacts on labor legislation in the United States.* By Ethel M. Johnson. Geneva, Switzerland, International Labor Office, 1936. 28 pp. (Reprinted from International Labor Review, June 1936.)

*Report of the New York State Interstate Industrial Compacts Commission.* Albany, 1936. 48 pp. Legislative Document (1936) No. 68.

Describes the need for and the nature of interstate cooperation in the field of industrial legislation, and outlines its history. Also discusses the advantages and disadvantages of participation in interstate labor compacts, and suggests that the value of achieving uniformity in labor legislation justifies continued cooperation with the representatives of other States through the Interstate Conference on Labor Compacts. The text of the New York act creating the commission is given.

*Decisions of the Supreme Court, 1935-36.* By Richard E. Groettum. Washington, Editorial Research Reports, 1013 Thirteenth Street NW., 1936. 18 pp. (Vol. 1, 1936, No. 21.)

Among the decisions covered in the pamphlet are those concerning the Guffey Coal Act and the New York minimum-wage law.

*Congress, the Constitution, and the Supreme Court.* By Charles Warren. Boston, Little, Brown & Co., 1935. 346 pp.

The author presents a revised and enlarged edition of his work on the Constitution and the Supreme Court which is intended to make possible a clear understanding of the Constitution of the United States and the functions which the Supreme Court was designed to exercise in relation to it. The book describes the historical origin of the power of the Court, including a detailed discussion of the views of members of the Constitutional Convention and of the early Congresses on the subject. Proposals to modify or abolish the power of the Court are considered, the author giving in detail his reasons for opposing any change. Of special importance is the description of the cases affecting labor which have been decided by the Supreme Court.

*Apuntes acerca de la legislación social de Puerto Rico.* By Vicente Géigel Planaco. San Juan, Departamento del Trabajo, 1936. 28 pp.

A well documented historical account of social legislation in Puerto Rico through May 15, 1936.

## Labor Organizations

*European trade unionism and politics.* By Franz Neumann. (In New Frontiers, New York, League for Industrial Democracy, 112 East 19th Street, June 1936, pp. 4-61.)

An analysis of the function of trade-unions within the State, and a review from the author's viewpoint of the absorption of those functions under fascism. A bibliography is included.

*Labor plans—Czechoslovakia, Great Britain, Holland, Luxemburg.* Paris, International Federation of Trade Unions, 1936. 40 pp.

Economic programs and demands of the Joint National Trade Union Center of Czechoslovakia, the British Trade Union Congress (plan for socialization of the cotton industry), the Joint Congress of the Dutch National Trade-Union Center and the Social-Democratic Labor Party, and the Luxemburg National Trade-Union Center. This compilation is supplementary to a previous publication of the International Federation of Trade Unions, "Economic Planning and Labor Plans," which covered plans of the International Federation of Trade Unions and the central labor organizations of Belgium, France, Great Britain, and Switzerland.

## Leisure

*The challenge of leisure.* Edited by William Boyd. London, New Education Fellowship, 29 Tavistock Square, W. C. 1, 1936. 229 pp.

A compendium of speeches and discussions at a conference of educators and social workers in Great Britain and Northern Ireland, attended by visitors from a number of other countries. The common question was, according to the editorial foreword of the book, "What contribution can education make to the tentative effort being put forth everywhere to make the world's ever increasing leisure a blessing and not a curse to mankind?"

The material is classified under the problem of leisure from different angles, the foundations of leisure, and the organization of leisure. A bibliography is appended.

## Migration

*Human migration: A study of international movements.* By Donald R. Taft. New York, Ronald Press Co., 1936. 590 pp. (Sociology Series, Roderick D. McKenzie, editor.)

Considers immigration problems from various angles, with special emphasis on recent immigration to the United States, as the book was prepared primarily for American students. Discusses the background of modern migration—growth of population, population quality, influence of nationalism; the effects of migration—economic, pathological and biological, assimilation and cultural contributions; regulation and control of migration; and agencies dealing with migrants.

*Migration of industry to South America.* By Dudley Maynard Phelps. New York, McGraw-Hill Book Co., Inc., 1936. 335 pp.

Includes a factual and theoretical discussion of the supply and efficiency of labor employed by foreign companies, characteristic labor disturbances, and social legislation enacted, in Argentina, Brazil, Chile, and Uruguay.

## Nutrition

*Diets of low-income families surveyed in 1933.* By Dorothy G. Wiehl. Washington, U. S. Public Health Service, 1936. 21 pp. (Health and Depression Studies No. 3; reprint No. 1727 from Public Health Reports, Jan 24, 1936.) Reviewed in this issue.

*Nutritive value of diets of families of wage earners and clerical workers in North Atlantic cities, 1934-35.* By Hazel K. Stiebeling. Washington, U. S. Bureau of Labor Statistics, 1936. 10 pp. (Serial No. R. 409, reprint from July 1936 Monthly Labor Review.)

*A food budget for Vermont farm families.* By Dorothy Emery. Burlington, Vt., Agricultural Experiment Station, 1935. 24 pp. (Bul. 393.)

*Nutrition and food supplies and women in offices.* Reports of Standing Joint Committee of Industrial Women's Organizations to National Conference of Labor Women, Swansea, May 1936. London, Labor Party, Transport House, Smith Square, S. W. 1, 1936. 46 pp.

Discusses the state of nutrition among workmen's families and the unemployed, cost of a proper diet, the effect of Government action on food consumption, and the policy of the Labor Party for long-term planning of food production and imports. The second section of the report covers the employment of women in offices, salaries in different industries, health conditions, and insecurity of employment.

*Poverty and public health.* By G. C. M. M'Gonigle and J. Kirby. London, Victor Gollancz, Ltd., 1936. 278 pp., charts.

The wide extent of malnutrition among men, women, and children in Great Britain is pointed out. A detailed study of family budgets at different income levels shows a positive ratio between income and diet and also that the death rate of a community is related to its income level.

*Workers' nutrition and social policy.* Geneva, International Labor Office, 1936. 249 pp., charts. (Studies and Reports, Series B, No. 23.)

A comprehensive review of the results of available studies in the United States and foreign countries on nutrition and occupation, workers' diets, and agricultural production and food consumption. It also contains chapters on the social-economic aspects of nutrition, social legislation and nutrition, and agencies and methods to improve nutrition. An appendix gives a series of tables showing the characteristics of food consumption in a number of countries.

## Occupations

*Occupations: A textbook for the educational, civic, and vocational guidance of boys and girls.* By John M. Brewer. Boston, etc., Ginn and Co., 1936. 622 pp., illus.

*La femme dans les professions libérales et les carrières sociales; La femme dans les professions industrielles et commerciales; La femme fonctionnaire.* By Marcel Schulz. Paris, Le Musée Social, 1935. 3 pamphlets; 55, 47, 46 pp.

These three pamphlets discuss the qualifications, preparation, and training for work, and the advantages, disadvantages, and opportunities for woman workers in the fields specified. The first deals with the professions of law, medicine, journalism, and social work (in which factory inspection is included). The second covers industrial and chemical engineering, architecture and industrial arts, and various commercial activities, including banking, salesmanship, and stenography, and gives a list of training schools in industrial arts in France. The third takes up public administration and teaching.

## Old-Age Pensions

*Company annuity plans and the Federal old age benefit plan.* By M. B. Folsom. (In Harvard Business Review, Vol. 14, No. 4, summer number, Boston, 1936, pp. 414-424.)

*Private pension systems.* Joint hearings, March and May 1936, before a subcommittee of the Committee on Finance, United States Senate, and a subcommittee of the Committee on Ways and Means, House of Representatives, 74th Congress, 2d session. Washington, 1936. In 2 parts; 57 pp.

*Old-age pension plans and organizations.* Hearings before the Select Committee Investigating Old-Age Pension Organizations, House of Representatives, 74th Congress, 2d session, pursuant to H. Res. 443, authorizing the appointment of a select committee to inquire into old-age pension plans with respect to pending legislation. Washington, 1936. In 5 parts; 980 pp.

*The Townsend crusade: An impartial review of the Townsend movement and the probable effects of the Townsend Plan.* New York, Twentieth Century Fund, Inc., Committee on Old Age Security, 330 West 42d Street, 1936. 93 pp.

Presents a brief description of the Townsend Plan, an analysis of the probable effects should it be put into operation, and the conclusions of the committee as to the wisdom and practicability of the proposals.

*Will the Townsend Plan work?* Findings of the Committee on Old-Age Security of the Twentieth Century Fund, Inc. New York, 330 West 42d Street, 1936. 9 pp.

## Personnel Management

*Personnel policies in the cotton-textile industry.* Washington, U. S. Bureau of Labor Statistics, 1936. 19 pp. (Serial No. R. 398, reprint from June 1936 Monthly Labor Review.)

*The psychology of dealing with people.* By Wendell White. New York, Macmillan Co., 1936. 256 pp.

This book is designed for people in general, but it contains suggestions that may be of especial interest to those engaged in promoting harmonious industrial relations.

*Revitalizing the working force.* By Everard Stubbs and others. New York, American Management Association, 330 W. 42d St., 1936. 43 pp. (Production Series 101.)

A collection of papers presented at a meeting in Cleveland in April 1936 of the Production Division of the American Management Association. The problems discussed are those involved in changing plant operations from a depression to a production basis.

## Prices

*Minimum prices under the N. R. A.* By Herbert F. Taggart. Ann Arbor, University of Michigan, Bureau of Business Research, 1936. 307 pp.

Deals with the development of N. R. A. policy regarding minimum prices and the methods of application under the codes. A bibliography of pertinent material is included.

## Relief Measures and Statistics

*This business of relief: Proceedings of the Delegate Conference, American Association of Social Workers, Washington, D. C., February 14-16, 1936.* New York, American Association of Social Workers, 130 East 22d Street, 1936. 179 pp.

Includes papers on: The myth of work refusals; The Social Security Act as a relief measure; The need for a permanent program for national relief statistics; The Works Progress Administration; Major problems of a medical-care program; Absorbing the transient. Appendixes give an outline for a Federal-assistance program, and statistics on the current relief situation.

*W. P. A. projects selected for operation, through April 15, 1936.* Washington, U. S. Works Progress Administration, 1936. 122 pp., maps, charts.

*Activities of the Iowa Emergency Relief Administration, 1935.* Des Moines, 1936. 164 pp., charts, maps.

In addition to reports on the regular activities in connection with unemployment relief, there are brief accounts of such special programs as service for transients, student aid, leisure-time activities, emergency education, self-help cooperatives, etc.

*Persons in receipt of poor relief (England and Wales) on January 1, 1936.* London, Ministry of Health, 1936. 37 pp., chart.

The total number of persons on poor relief in England and Wales on the night of January 1, 1936, was 1,387,720—421,729 men, 505,961 women, and 460,030 children. This is a decrease of 5.8 percent from the number on relief on the same day in 1935. Of the total number, 180,295 were receiving institutional relief and 1,207,425, domiciliary relief.

## Rest Periods in Industry

*The human factor in industry.* By Eric Palmer. London, Chapman & Hall, Ltd., 1936. 37 pp.

Concerns largely the value of rest periods in industry.

## Social Security

*Interim report of the Social Security Board.* Washington, 1936. 6 pp., mimeographed.

Outlines the functions of the Board and gives a brief review of its activities for the period between August 23 and December 31, 1935.

*The organization and some of the administrative problems of the Social Security Board.* Address by Henry P. Seidemann. Washington, Social Security Board, 1936. 19 pp., mimeographed.

*Social insurance.* Hearings, April 14-17, 1936, before the Committee on Education and Labor, U. S. Senate, 74th Congress, 2d session, on S. 3475, a bill to provide for the establishment of a nation-wide system of social insurance. Washington, 1936. 177 pp.

This bill, which is called the "Worker's Social Insurance Act", would provide generally higher benefits than those established by the Federal Social Security Act passed in August 1935.

*Social security: Selected list of references on unemployment, old age, and health insurance (preliminary).* Prepared by Helen Baker. Princeton, N. J., Princeton University, Department of Economics and Social Institutions, June 20, 1936. 25 pp., mimeographed.

*What will social security mean to you?* By Bion H. Francis and Donald G. Ferguson. Cambridge, Mass., American Institute for Economic Research, 1936. 64 pp., charts.

*Report of Georgia State Department of Public Welfare, for the years 1932 to 1935.* Atlanta, 1936. 102 pp.

Includes data on homes for the aged (including almshouses), Federal relief program in the State, and a discussion of measures to put into effect the social-security program.

*Compte rendu des opérations et de la situation de la Caisse Générale d'Épargne et de Retraite, 1935.* Bruxelles, 1936. 92 pp., charts.

This report of the Belgian General Savings and Retirement Fund for the year 1935 covers savings, workers' pensions, life insurance, workmen's compensation, and veterans' pensions.

*Verslag omtrent den staat der Rijkswerkerkeringsbank en hare werkzaamheden in het Jaar 1934.* The Hague, 1936. 259 pp.

Annual report of the State Insurance Bank in the Netherlands for the fiscal year 1934, including information on insurance against accidents, disability, and old age, and on pertinent legislation.

### Subsistence Homesteads

*Subsistence homesteads.* Frankfort on the Main, International Housing Association, [1936?]. 113 pp., maps, plans. In English, French, and German.

Descriptions of the subsistence homesteads programs in various countries, supplied for the consideration of the International Housing Congress in Prague in 1935, in compliance with a questionnaire issued by the International Housing Association.

*Nebenberufssiedlung—wirtschaftliche Grundlagen und Finanzierung.* By Alexander Mahr. Vienna-Leipzig, Reinhold Verlag, 1935. 88 pp.

A discussion of the problem of subsistence homesteads and their importance in meeting depression conditions, with attention to general economic and financial questions.

### Unemployment Insurance

[*Factual background of New York State unemployment insurance law.*] Presented by New York Attorney General in the form of an "Economic brief for respondents" in New York Court of Appeals March 19, 1936. Albany, 1936. 140 pp., charts.

In addition to the arguments upholding the validity of the law, the volume contains a résumé of the operation of the British unemployment-insurance system, a summary of unemployment-insurance laws in the United States and foreign countries, a statement of the administrative costs of unemployment insurance in the State of New York, and statements by American business men in favor of the insurance. A bibliography is included containing references to works on unemployment insurance and related subjects.

### Wages and Hours of Labor

*Earnings of fishermen and of fishing craft.* By John R. Arnold. Washington, Office of National Recovery Administration, Division of Review, 1936. 170 pp., mimeographed. Work materials No. 31 (appendix).

Data from this report are given in a special article in this issue of the Monthly Labor Review.

*Earnings and hours in blooming, rail, structural, plate, and billet mills, iron and steel industry, 1933 and 1935.* Washington, U. S. Bureau of Labor Statistics, 1936. 24 pp. (Serial No. R. 403, reprint from June 1936 Monthly Labor Review.)

*Employment and earnings in commercial milk distribution, 1929-34.* By C. Lawrence Christenson. Washington, U. S. Bureau of Labor Statistics, 1936. 11 pp. (Serial No. R. 416, reprint from July 1936 Monthly Labor Review.)

*Hours and earnings in Connecticut laundries, fall, 1935.* Hartford, Department of Labor and Factory Inspection, Minimum Wage Division, 1936. 20 pp., mimeographed.

Reviewed in this issue.

*Special study of wages paid to women and minors in Ohio industries prior and subsequent to the Ohio minimum wage law for women and minors.* Washington, U. S. Women's Bureau, 1936. 83 pp., charts. (Bul. No. 145.)

Presented as a brief in support of minimum-wage legislation, with detailed statistical data treated as an appendix to the main report. Comparisons are made with wage rates and earnings in other States, particularly New York.

Data dealing with the laundry and cleaning and dyeing industries in Ohio, as presented in the bulletin, are summarized in this issue of the Monthly Labor Review.

*Le variazioni dei salari agricoli in Italia dalla fondazione del Regno al 1933.* By Paola Maria Arcari. Rome, Istituto Centrale di Statistica del Regno d'Italia, 1936. 754 pp. (Annali di Statistica, Serie VI, Vol. XXXVI.)

A detailed examination of the sources of information concerning agricultural wages in Italy from the beginning of the kingdom up to 1933, an explanation of the

statistical methods used in the preparation of tables of index numbers and rates of wages, and statistics of wages of agricultural labor (men, women, and children) from 1905 through 1933, classified by locality and agricultural process.

### Workmen's Compensation

*Administration of workmen's compensation.* By Walter F. Dodd. New York, Commonwealth Fund, 41 East 57th Street, 1936. 845 pp.

The results of a study carried on over a period of six years, bringing together findings, both published and unpublished, of various students in this field, to which the author adds his own analyses and conclusions. Developments in both common law and workmen's compensation are traced historically, particular attention being directed to administrative practices and court decisions.

*Rapport relatif a la execution de la loi sur la réparation des dommages résultant des accidents du travail pendant les années 1930-1931-1932.* Bruxelles, Ministère du Travail et de la Prévoyance Sociale, 1935. 277 pp.

Report of the operation of the workmen's compensation law in Belgium for the years 1930 to 1932. The law covers all workers under a labor contract, including house and farm servants.

*Les maladies professionnelles, leur législation.* By Léon Pollet. Paris, Société Anonyme d'Éditions Médicales et Scientifiques, 27, Rue de l'École de Médecine, 1935. 334 pp.

A critical medical-juridical study of the French law on workmen's compensation for occupational diseases. A brief survey of similar laws in Great Britain, Germany, Italy, Belgium, and Switzerland is included.

### Youth Problems

*American youth act.* Hearings, March 1936, before the Committee on Education and Labor, United States Senate, 74th Congress, 2d session, on S. 3658, a bill to provide vocational training and employment for youth between the ages of 16 and 25; to provide for full educational opportunities for high-school, college, and postgraduate students; and for other purposes. Washington, 1936. 279 pp.

*Youth—Vocational guidance for those out of school.* By Harry D. Kitson. Washington, U. S. Office of Education. Committee on Youth Problems, 1936. 81 pp. (Bulletin, 1936, No. 18-IV.)

The fourth of a series of brief bulletins on the occupational problems of youth, which are designed to help communities, with the assistance of the young people themselves, to work out the best possible programs.

### General Reports

*Labor fact book III.* Prepared by Labor Research Association. New York, International Publishers Co., Inc., 1936. 223 pp.

The general heads under which the material is classified include: Some "New Deal" legislation; Workers' conditions; Strikes and labor boards; Trends in the labor movement; Professional workers; Farmers and farm workers.

*Annual report of the Department of Labor of Rhode Island, for the year 1935.* Providence, 1936. 207 pp., charts.

This first annual report of the new Department of Labor of Rhode Island, created by an act of May 1935, brings together the reports of the Department's various branches—the divisions of labor relationships, industrial inspection, and personnel and State employment, and the bureaus of boiler inspection, coal and coke inspection, firemen's relief, weights and measures, and census.

*Annual report on the working of the Factories Act, 1934, in Burma for the year 1935.* Rangoon, Chief Inspector of Factories, 1936. 30 pp.

Data are given on wages and hours of labor; employment of women, adolescents, and children; housing; sanitation and health; safety provisions; and industrial accidents.

*Contribución al estudio de las realidades entre las clases obreras y campesinas.* By Pablo Arturo Suarez. Quito, Ecuador, Tip. L. I. Fernandez, 1934. 109 pp., illus.

A study of the wages, cost of living, and health of certain urban and rural workers in Ecuador.



*Conseil Supérieur du Travail, trente-neuvième session, novembre 1935.* Paris, Ministère du Travail, 1936. 304 pp.

The proceedings of the 39th session of the French Superior Labor Council. The questions considered included fines and penalties imposed by the labor laws, vacation with pay, and the need of legislation with regard to non-payment of wages when the labor contract is dissolved.

*Statistische Jahresübersichten der Stadt Frankfurt a. Main für das Jahr 1934-35.* Frankfurt on the Main, Statistisches Amt, 1936. 67 pp.

A municipal annual for the fiscal year 1934-35, including data on employment service, unemployment relief, housing, and social welfare work.

*The statistical abstract of the Ministry of Agriculture and Forestry, Japan, 1934-35.* Tokyo, 1936. 217 pp., chart.

Includes statistics covering cooperative societies for the years 1925 to 1934; wages, by sex, of workers on farms, in sericulture, and in raw-silk production, 1923 to 1933; and employment and wages in the fishing industry, 1926 to 1933.

*Lietuvos statistikos metraštis, 1935.* Kaunas, Lithuania, Finansų Ministerija, Centralinis Statistikos Biuras, 1936. 302 pp. (In Lithuanian and French.)

General statistical annual for Lithuania, covering population movements, production, prices and cost of living, unemployment, wages, cooperative societies, construction, and many other matters, in 1935 and earlier years.

*Annual report of the Labor Department, Malaya, for the year 1935.* Kuala Lumpur, 1936. 120 pp.

The report contains wage rates paid on rice, rubber, and coconut estates; employment statistics, by race, for estates, mines, and factories, and for government departments; and data on industrial disputes, workmen's compensation, and legal action by and against employers and laborers.

*The official year book of New South Wales, 1933-34.* Sydney, Bureau of Statistics and Economics, 1936. 906 pp., map.

Information is given on employment, industrial arbitration, wages, labor conditions in mines, cost of living, and general social conditions.

*Aperçu sur l'inspection du travail en Pologne en 1934.* Warsaw, Ministère de l'Assistance Sociale, 1935. 69 pp. (In French.)

Report on factory inspection in Poland during 1934, including pertinent legislation and information on protection of women and children in industry, employment, wages, industrial disputes, and industrial accidents and diseases and their prevention.

*A B C of Queensland statistics, 1936.* Brisbane, Bureau of Industry, 1936. 281 pp.

Industrial accidents, industrial disputes, number and membership of trade-unions, employment and unemployment, unemployment insurance, wages, retail and wholesale prices, and rents, in 1935 and earlier years, are among the topics covered.

*Annual report of the Government Mining Engineer, Union of South Africa, for year ended December 31, 1935.* Pretoria, Department of Mines, 1936. Various paging, charts.

The report contains data on wages and industrial accidents and a section on miners' phthisis.

*Forty-sixth annual report of the Transvaal Chamber of Mines, 1935.* Johannesburg, 1936. 186 pp.

Statistics of employment, wages, and industrial accidents are included.



