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In this Issue . . . Factory wages . . . Women in two wars
Labor conditions in Bulgaria . . . Work-
men's compensation provisions

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

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MONTHLY LABOR REVIEW

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

♦♦♦♦♦♦♦♦♦♦ + HUGH S. HANNA, EDITOR + ♦♦♦♦♦♦♦♦♦♦

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This Issue in Brief

Food costs and subsidies in Great Britain.

The British Government, in its attempt to keep down living costs, has made use of subsidies for certain important items in the worker's budget—bread, flour, meat, potatoes, eggs, and milk. As a result of these subsidies, the cost of food fell from 23 percent above the pre-war level in April 1941 to 20 percent above that level in April 1943. Page 817.

Recommended optimum hours in Australia.

After study to ascertain what hours would yield the best output over a period of 6 months or more, the Department of Labor and National Service of Australia recommended 40–48 hours per week for mental work, 44–45 hours for heavy muscular work, 48 for nonautomatic machine work requiring physical exertion, 48–52 for work requiring constant attention but little muscular exertion, and, for work requiring only intermittent attention and no physical exertion, 52 for women and 56 for men. Page 792.

Wartime employment of women in manufacturing.

The total number of woman wage earners in June 1943 was over 4¼ million. At this time women comprised more than 30 percent of all wage earners. Between April 1942 and June 1943 more than four-fifths of the net addition to the working force in manufacturing industries were women. Page 723.

Level of factory wage rates in wartime.

In June 1943 over 4,000,000 factory workers, or about 31 percent of the total employees in factories, were earning \$1 or more per hour. In January 1941, there were 12 percent in this class. Only 10 percent were being paid less than 50 cents an hour in June 1943 and about 2 percent less than 40 cents; 30 months earlier, the respective proportions were 31 and 17 percent. The war industries were paying higher rates than the nonwar industries; 41 percent of the war workers, as compared with only 15 percent of the nonwar group, were receiving \$1 or more per hour in June 1943. Page 637.

Labor conditions in Bulgaria.

Although Bulgaria is an almost entirely pastoral country in which about 80 percent of the gainfully employed population is engaged in agriculture, the holdings are very small and only about 38 percent of the land is arable. Industry has been developed only during about the last 45 years, but has made considerable strides in some lines; the quality of the textiles, for instance, rivals that of western countries. Living conditions are substandard, as wages are low, but the latter are supplemented by family allowances and there are various social-insurance measures such as sick benefits, medical care, and insurance against industrial accidents, old age and invalidity, and unemployment. Page 672.

Cost of living in Puerto Rico.

Living costs of wage-earner families advanced twice as rapidly in Puerto Rico as in continental United States during the period, March 1941 to December 1942—39.3 percent as compared with 19.0 percent. A further advance of 1.7 percent occurred between December 1942 and July 1943. The findings of a study of cost of living in six municipalities in Puerto Rico, made by the Bureau of Labor Statistics, are given on page 806.

Provisions of workmen's compensation laws, 1943.

With one exception, all of the States as well as the District of Columbia, Alaska, Hawaii, and Puerto Rico, now have workmen's compensation laws. In addition, Government employees and longshoremen and harbor workers are protected by special Federal legislation. The degree of protection afforded by such laws depends on a number of factors, such as coverage of the law, security of payments, and amount and period of benefits. The principal provisions of the various laws, including the above points, are discussed in an article on page 729.

New dwelling units, first half of 1943.

Housing accommodations for some 200,000 families in nonfarm areas were put under construction in the first 6 months of 1943. Of these, over 55 percent were provided for out of public funds; most of them were of temporary types and all were reserved for war workers or persons in military service. In addition, accommodations for 25,685 families were provided in trailers and converted quarters and for 31,004 persons in dormitories. Page 749.

Labor conditions in Chile, 1942.

From September 1939 to December 1942 the cost of living in Chile rose about 77 percent; in about the same period wages rose less than 70 percent. Some attempt was made by the Government to control the price level, by imposing ceilings on certain articles selected as being "articles of prime necessity"; among these were rents. The lag between prices and wages caused labor to be restive, but there were no prolonged labor disputes and very little unemployment. Page 716.

Injuries from falls in shipyards.

A major cause of accidents in shipyards is falls. During the first 4 months of 1943 one of every five disabling injuries was caused by falls. Analysis of the accidents indicates that at least three-fourths could have been prevented—some by measures taken by the management and some by the cooperation of the workers. Page 766.

Woman workers in two wars.

It appears that at least twice as many women will be employed during the course of the present war as in the war of 1914-18. By June 1943 women constituted 31.3 percent of all gainfully employed persons in the United States and their services were being utilized in rapidly broadening numbers and types of operations. The ways and extent to which women are being employed in individual industries—both war and nonwar—are described in the article on page 650.

MONTHLY LABOR REVIEW

FOR OCTOBER 1943

The Level of Factory Wage Rates in Wartime

By ROBERT J. MYERS and HERMAN D. BLOCH, *U. S. Bureau of Labor Statistics*

Summary

OVER 8 million factory wage earners, or about 60 percent of the total, received from 50 cents to \$1 per hour in June 1943. About 370,000, or 3 percent, earned \$1.50 or more. Ten percent were paid less than 50 cents and about 2 percent less than 40 cents. Thirty months earlier, in January 1941, only 12 percent of all factory workers were paid \$1 per hour or more, while 17 percent received less than 40 cents, and 31 percent received less than 50 cents. It should be noted that these estimates apply only to wage earners in manufacturing industries and do not include those in nonmanufacturing pursuits.

As would be expected, workers in the war industries (which are types of industries that normally pay better than average rates) were concentrated at higher wage levels in the summer of 1943 than were the workers in nonwar industries. Forty-one percent of the war workers, but only 15 percent of the nonwar group, were paid \$1 per hour or more. Only 4 percent of the former group but 17 percent of the latter received less than 50 cents. Workers paid \$1 per hour or more were relatively most numerous in the war transportation-equipment industries, rubber, machinery, and printing and publishing. Workers receiving less than 40 cents per hour were relatively most numerous in lumber and timber, the food industries, tobacco, and leather.

For the most part, the highest wage rates in manufacturing industry are paid for supervisory ability, unusual skill, or high productivity under an incentive-payment plan. The highest-paid workers are almost exclusively men, and many of them are employed in establishments with union agreements. Although most numerous in northern cities, the highest-paid workers are represented in all parts of the United States.

The lowest-paid workers—those receiving less than 40 cents per hour—include many women. They are concentrated largely in the South and few of them are union members. They are engaged primarily in simple, routine jobs that can be mastered by an inexperienced worker in a few days. The wage status of the lowest paid, however, reflects not only the unskilled nature of the operations performed, but other important factors, including the lack of legal or trade-union protection, the isolation and immobility of the workers, and, in some cases, low levels of productive efficiency.

Purpose and Nature of Analysis

A review of the economic scene as of the summer of 1943 reveals much evidence of high wages. The "help wanted" columns of metropolitan newspapers list scores of jobs paying more than \$1 per hour. The service trades and other low-paid industries are losing many of their workers. Factory towns that have been stagnating since the 'twenties are suddenly prosperous. Employers and union officials appear together before the War Labor Board to request authority for further wage increases.

The story of high wages is well known. The earnings of workers in the shipyards and munitions plants are discussed widely, often with gross exaggeration. Not all American workers are in the high-wage class, however. For one reason or another, millions of employees in stores and factories receive scarcely half the pay scales of the growing war industries. Their wages have risen since the outbreak of the war, but are still moderate or low, even by pre-war standards.

The wide dispersion that characterizes American wage structure is of considerable significance in the determination of public policy. In the control of price levels, for example, it is essential to take account of the incomes of the lowest- as well as the highest-paid workers. Wage differences aggravate the manpower problem. They must be considered in planning a tax program or launching a campaign of Government borrowing. They are of enormous importance in the field of post-war planning, because they may obstruct the necessary transfer of millions from wartime to peacetime jobs.

The extent of the variation in the wage rates of American workers is apparent from scores of surveys of wages in single localities and industries.¹ In the interest of valid perspective, however, it is desirable from time to time to turn away from such limited studies and review in broad outline the structure of wages in the economy as a whole. Unfortunately, this goal is not wholly attainable at the present time. Little is known regarding the nature of parts of that structure. As a first step, however, it is possible to describe with reasonable accuracy the distribution of wages in the important segment comprising manufacturing industry.

The composite figures presented in later sections of this article are based on detailed studies by the Bureau of Labor Statistics covering 58 manufacturing industries. Although many of these studies are now out of date, they have been corrected and extended, on an estimated basis, by means of the Bureau's monthly reports on average hourly earnings.² Voluminous current material regarding wage rates in individual occupations has been used in checking and interpreting the estimated distributions and in describing the jobs of the highest- and lowest-paid workers.

Although believed to be dependable as a basis for general conclusions, the estimated distributions presented here are subject to a considerable margin of error and should be used with caution. They are, of course, representative only of manufacturing industries.

¹ Many of the studies of the Bureau of Labor Statistics have been summarized in the pages of the *Monthly Labor Review*. Others have been presented in unpublished form for the administrative use of the War Labor Board.

² For a brief description of the methods involved in the preparation of the estimates see "Distribution of Factory Workers by Hourly and Weekly Earnings," *Monthly Labor Review*, June 1942. Joseph M. Sherman of the Bureau's Division of Wage Analysis gave special assistance in preparing the estimates for June 1943.

Wages of nonmanufacturing workers are, with important exceptions, lower than those of manufacturing workers, and have risen considerably less since the outbreak of the war. In the summer of 1943 more than two-fifths of all nonagricultural employees were engaged in manufacturing.

It is important to note that the wages referred to in this article are *wage rates* or their equivalent, rather than average hourly earnings or other gross measures. As far as possible, premium payments for overtime and for late-shift³ work have been excluded, together with non-production bonus payments. Production bonuses and other incentive earnings, however, are included. The figures used for workers paid on an incentive basis consequently represent straight-time average hourly earnings.

Distribution of Factory Workers by Hourly Rates

The range of factory wage rates in June 1943 is apparent from table 1, in which the nearly 14,000,000 workers employed at that time are distributed by 10-cent wage classes. An estimated 370,000 workers, representing the highest-paid manufacturing wage earners in the Nation, earned \$1.50 per hour or more. Even in this high-wage period, however, approximately 220,000 workers, or about 1 out of 50, earned less than 40 cents. The largest concentration of workers, only 1,820,000, received 80 to 90 cents per hour, while no fewer than 7 of the 10-cent wage classes included a million or more workers each. Wage rates of \$1 or more per hour were received by about one-third of the workers.

TABLE 1.—Estimated Distribution of Workers in Manufacturing Industries by Hourly Wage Rates, January 1941 and June 1943

Hourly rate	June 1943		January 1941	
	Number of workers	Percent	Number of workers	Percent
Under 40 cents.....	220,000	2	1,580,000	17
40 and under 50 cents.....	1,050,000	8	1,390,000	14
50 and under 60 cents.....	1,640,000	12	1,450,000	15
60 and under 70 cents.....	1,530,000	11	1,460,000	15
70 and under 80 cents.....	1,704,000	12	1,140,000	12
80 and under 90 cents.....	1,820,000	13	870,000	9
90 and under 100 cents.....	1,580,000	11	620,000	6
100 and under 110 cents.....	1,230,000	9	460,000	5
110 and under 120 cents.....	960,000	7	280,000	3
120 and under 130 cents.....	930,000	7	330,000	4
130 and under 140 cents.....	470,000	3	(1)	(1)
140 and under 150 cents.....	320,000	2	(1)	(1)
150 cents and over.....	370,000	3	(1)	(1)
Total.....	13,820,000	100	9,580,000	100

¹ Included in "120 and under 130 cents" class; the number of workers receiving 120 cents or more was too small to permit further subdivision.

It is apparent from these figures that the much-discussed \$100 weekly wage is extremely rare among American factory workers. A first-shift⁴ worker putting in a 50-hour week at \$1.50 per hour, and

³ Actually, adjustments to offset shift premiums have been practicable only in the war transportation-equipment, machinery, and electrical-equipment industry groups. It is unlikely that the level of average earnings in other groups is appreciably influenced by shift premiums.

⁴ Long hours of overtime are uncommon for second- or third-shift workers.

with time and one-half for all hours in excess of 40, earns only \$82.50. Workers employed at \$1 per hour during a 50-hour week earn only \$55. Toward the other end of the scale are substantial numbers of workers who put in 40 hours at 40 cents per hour and earn only \$16.

Table 1 also presents striking evidence of the shift in wage rates since January 1941, the base month for the "Little Steel" formula. In that month approximately one-sixth of all factory workers received less than 40 cents per hour, many of them being paid exactly 30 cents, the statutory minimum under the Fair Labor Standards Act. One-third of the workers in January 1941, but only one-tenth in June 1943, earned less than 50 cents. Only one-eighth of the workers in the earlier period had rates of \$1 or more per hour, as compared with about one-third in the later period.

It is not the purpose of this article to discuss the wartime trend of factory wages or the causes underlying that trend. It is appropriate, however, to call attention to two factors that have greatly influenced the distribution of wage rates since the outbreak of the war. One of these is the extension of the 40-cent minimum wage by administrative action, as authorized by the Fair Labor Standards Act. In early 1941 the 40-cent minimum applied to only a few industries, but by June 1943 this minimum had been established in the bulk of the low-wage industries. Because of the general upward movement of wages, to be sure, the minimum wage probably determined the rates of fewer workers in the latter period than in the former.

The other factor is the movement of millions of workers, new and old, into the highly paid war industries. This trend, which has been facilitated by drastic changes in the technology of the war industries, has permitted the wage level to move upward independently of any actual increases in wage rates. This shift has consequently been greater than can be accounted for by wage increases alone.

Wage Rates by Industry Group

The wide variation in wage rates revealed in table 1 does not, of course, reflect differences in pay for the same type of work in similar localities. Wage rates in the same industry and locality show much greater concentration, and workers in the same occupation in a given city often receive identical rates. It is of interest, therefore, to segregate various groups of factory workers for further examination.

The material at hand, unfortunately, does not lend itself to segregation by geographic region. It is known, of course, from various wage studies that many establishments in the South and in parts of New England pay relatively low wages, while the highest wages are generally found on the Pacific Coast and in the vicinity of the Great Lakes. The detail presented in tables 2 and 3 permits a comparison of the wage structures of broad industry groups.

In table 2 the war industries are segregated from the nonwar industries. This segregation is made on the basis of major industry groups and is admittedly somewhat arbitrary. Some products of the machinery industry, classified here as a "war industry," are used for purely peaceful and domestic purposes, while clothing manufacture, a "nonwar industry", includes the production of uniforms. In general, however, the war industries are those that are largely engaged in the direct production of fighting equipment or war transportation equipment or of their basic materials.

TABLE 2.—Estimated Distribution of Workers in War and Nonwar Industries by Hourly Wage Rates, June 1943

Hourly rate	War industries ¹		Nonwar industries	
	Number of workers	Percent	Number of workers	Percent
Under 40 cents.....	120,000	1	100,000	2
40 and under 50 cents.....	280,000	3	770,000	15
50 and under 60 cents.....	440,000	5	1,200,000	23
60 and under 70 cents.....	720,000	8	810,000	16
70 and under 80 cents.....	1,090,000	13	610,000	12
80 and under 90 cents.....	1,290,000	15	530,000	10
90 and under 100 cents.....	1,200,000	14	380,000	7
100 and under 110 cents.....	950,000	11	280,000	5
110 and under 120 cents.....	790,000	9	170,000	3
120 and under 130 cents.....	810,000	10	120,000	2
130 and under 140 cents.....	390,000	5	80,000	2
140 and under 150 cents.....	250,000	3	70,000	1
150 cents and over.....	270,000	3	100,000	2
Total.....	8,600,000	100	5,220,000	100

¹ Includes the following major industry groups: Iron and steel, electrical equipment, machinery other than electrical, war transportation equipment, nonferrous metals, lumber and timber, chemicals and rubber. All other industry groups, including "miscellaneous industries," are classified as nonwar.

It is apparent that wage earners in the war industries are concentrated at considerably higher wage levels than those in nonwar industries. This is not surprising, since the war industries are primarily the heavy industries and customarily pay the higher wages even in peacetime. Forty-one percent of the "war workers" received \$1 or more per hour, while the largest proportion in any 10-cent wage class, 15 percent, earned 80 to 90 cents per hour; only 1 worker out of 25 was paid less than 50 cents per hour. Among the nonwar workers only 15 percent earned \$1 or more per hour, while 17 percent earned less than 50 cents; almost one-quarter were concentrated in the 50- to 60-cent class.

Estimates for individual industry groups are less dependable than those for all manufactures or for the war and nonwar industries combined. The summary figures presented in table 3, however, although not permitting precise comparisons, are of considerable interest. It is notable that many of these groups, unlike manufacturing as a whole, show a marked concentration of workers at one level or another in the wage structure. The contrast among the individual wage patterns is pronounced.

Table 3 brings out the great importance of the "war transportation equipment" group, which includes shipbuilding, airframes and engines, the converted automobile industry, locomotives, and railway cars. Thirty percent of the workers in this group earned \$1.20 or more per hour. In war transportation equipment alone, more than half (57 percent) of the workers received \$1 or more. Among war industry groups, only lumber and timber employed a substantial proportion of its working force at less than 40 cents per hour. Most of these workers were in the South, whereas much higher wages prevailed on the Pacific Coast.

Printing and publishing, a relatively small group, paid by far the highest wages in the nonwar category. Nearly one-third of the workers in this group earned \$1.20 or more, as compared with only 7 percent in the next highest nonwar group. All of the nonwar industry groups showed substantial concentrations below 60 cents per hour,

but none showed as many as 1 worker out of 20 receiving less than 40 cents. The highest proportions in this low-wage class were in the tobacco (4 percent) and food (4 percent) industries.

TABLE 3.—*Estimated Percentage Distribution of Workers in Major Industry Groups, by Hourly Wage Rates, June 1943*

Industry group	Approximate number of workers ¹	Percent of workers earning—						
		Total	Under 40 cents	40 and under 60 cents	60 and under 80 cents	80 cents and under \$1.00	\$1.00 and under \$1.20	\$1.20 and over
War industries:								
War transportation equipment.....	2,970,000	100	(2)	1	13	29	27	30
Rubber.....	190,000	100	(2)	17	21	22	14	26
Machinery.....	1,250,000	100	(2)	9	22	29	24	16
Iron and steel.....	1,720,000	100	(2)	5	29	35	15	16
Electrical equipment.....	700,000	100	1	21	28	22	12	16
Nonferrous metals.....	420,000	100	(2)	7	28	36	16	13
Chemical, petroleum, and coal products.....	870,000	100	2	12	26	29	18	13
Lumber and timber.....	480,000	100	18	40	10	15	9	8
Nonwar industries:								
Printing and publishing.....	330,000	100	2	20	15	18	13	32
Leather.....	330,000	100	3	33	32	16	9	7
Apparel.....	850,000	100	2	51	21	12	7	7
Paper.....	320,000	100	1	34	35	20	6	4
Food.....	950,000	100	4	27	33	24	8	4
Furniture.....	360,000	100	1	45	28	16	6	4
Textiles.....	1,230,000	100	1	54	30	8	4	3
Tobacco.....	90,000	100	4	55	17	13	8	3
Stone, clay, and glass.....	360,000	100	1	27	22	29	19	2

¹ Excludes approximately 400,000 workers in miscellaneous minor industries for which information is not available by industry group.

² Less than five-tenths of 1 percent.

The Highest-Paid Workers

The wide differences in wage rates which prevail even within the same industry groups could be explained in large part if it were possible to analyze the material at hand in terms of location and size of factory, skill, sex, and race of worker, and certain other factors. Unfortunately this material does not permit further analysis. It is enlightening, however, to examine the occupational characteristics of the highest- and lowest-paid workers. The contrast between these groups can be expected to be relatively sharp, and their small size facilitates analysis. As a basis for this examination, current occupational wage rates are available from representative manufacturing establishments in all parts of the United States.

For present purposes, the highest-paid factory workers are considered to be represented by the nearly 700,000 wage earners estimated to have earned \$1.40 or more per hour in June 1943. Most of these workers, as has been seen, are in the war industries. A review of current occupational rates from many thousands of manufacturing plants indicates that they fall largely into four major classes: (1) Working supervisors, (2) craftsmen of high and unusual skills, (3) workers paid on an incentive basis, and (4) workers in dangerous or unpleasant occupations. These classes, it will be noted, involve some overlapping. For example, some jobs require skill and involve danger, in addition to being paid on an incentive basis. The number of

highest-paid workers who are not included in one or more of these groups, however, is negligible.

SUPERVISORY WORKERS

Supervisory workers, as discussed here, include working foremen, set-up men, leaders, lay-out men, and similar groups (but not full-time supervising foremen, who are customarily salaried employees and not considered as wage earners). These workers assign work, specify tools or methods, instruct beginners, prepare machines for new tasks, and perform similar functions. Many of them spend most of their time setting up machines for less experienced workers and perform a minimum of supervisory work. Generally, however, they are experienced workers who, in addition to mastering their own jobs, have demonstrated qualities of leadership and the ability to instruct others.

Supervisors very generally receive higher wages than the workers they train and direct, but thousands of supervisors in low-wage industries are poorly paid. A majority of the supervisors in manufacturing industry receive considerably less than \$1.40 per hour. Highly paid supervisors are numerous in certain war industries, however, where the accession of thousands of new workers has enormously enlarged the task of training and directing. Working supervisors consequently account for an appreciable proportion of the highest-paid factory workers.

Supervisory workers in shipbuilding comprise approximately 7 percent of all wage earners, although not all of these supervisors receive as much as \$1.40 per hour. Working foremen in shipyards are sometimes paid in excess of \$2. In a recent pay-roll period, however, the average wage for such workers in Atlantic Coast construction yards was only \$1.64 and the averages for the other zones were somewhat lower.

Highly paid supervisors are rather numerous in the manufacture of airframes and engines, in rubber tires and tubes, and in most of the metal-working industries. On the whole, however, this group of highly paid workers probably shows less concentration by industry than those discussed below. At least a few of these workers are to be found among the largest establishments of the majority of industries.

HIGHLY SKILLED CRAFTSMEN

A substantial majority of the highest-paid workers consists of skilled craftsmen or "specialists," whose occupational preeminence has required many years of training and experience. Practically all of these workers are men, and a large proportion are union members. There are hundreds of skilled jobs in each of which a few highly paid workers may be found. Those in which rates of \$1.40 or more are typical or common are more limited in number, but still too numerous to permit discussion in full. The nature of these jobs may be indicated, however, by the presentation of several examples.

The loftman in the shipbuilding industry provides an excellent example of a highly skilled craftsman in a war job. This workman lays out to full scale on the floor of his "loft" the lines of a ship planned for construction. He develops patterns or molds—often of paper or of wood—to guide the efforts of other workers. He not only must possess judgment, imagination, and a knowledge of geometric construction, but must also be expert in the use of many tools

and machines. Like others of the skilled workers mentioned below, loftsman rank high on the War Manpower Commission's list of critical jobs. First-class loftsman in ship-construction yards on the Atlantic Coast, however, have recently averaged about \$1.40 per hour, and in some zones their average has been less.⁵

The rollers of the iron and steel industry (rolling mills) have long been among the highest paid of all American wage earners. While the number of rollers in the basic iron and steel industry is not large, their earnings frequently average \$3 per hour or more. There are several varieties of rollers, but their work typically involves the operation of stands of rolls, which level and reduce heavy steel stock into rods, bars, sheets, and other products. The roller's expert knowledge must enable him to control the amount and speed of reduction, to estimate the gage of the material, and to recognize defects by inspection. Rollers direct their assistants and other workers, but are not primarily supervisors. Rollers' assistants, themselves, deserve to be listed among the highest-paid workers. Other iron and steel workers in this class include the melters, steel pourers, vesselmen, heaters, straighteners, and roughers.

Somewhat lower than rollers in the wage scale, but more important numerically, are the tool and die makers, prominent in the manufacture of aircraft and in many other of the metal-working industries. These workers do not ordinarily engage in production but specialize in the construction and repair of tools, jigs, and fixtures and the preparation of dies for forging, forming, and stamping. Their work requires the utmost precision, tolerances of $\frac{1}{10,000}$ of an inch or less being specified frequently. They must be expert in the use of many types of machinery. The average wage rate in job shops in Detroit, probably the greatest center of tool and die work in the world, is about \$1.77 per hour. Tool and die makers in most other localities are paid lower rates than this, but the majority undoubtedly earn more than \$1.40 per hour.

Patternmakers also rank high among the skilled workers in the metal trades. Working either with wood or with metal, and responsible for adhering rigidly to the specifications of a blueprint, these craftsmen prepare the master patterns or forms from which molds are made for the manufacture of parts. Obviously, their work has much in common with that of the loftsman, mentioned above. Patternmakers usually serve a long and strict apprenticeship. Their work requires a practical knowledge of mathematics and other scientific fields; for example, a patternmaker must be able to make appropriate allowance for the contraction of cooling metal. So costly and so vital to his work are the patternmaker's tools that the Pattern Makers' League of North America has established a mutual insurance system to provide protection against their destruction or loss. Patternmakers' wage rates average a little less than those of tool and die makers; substantial numbers, however, receive more than \$1.40.

Among other high-wage occupations in the metal trades are those of lead burners, in nonferrous smelting and other industries, and various precision inspectors—for example, tool inspectors and service and flight inspectors (aircraft).

⁵ Somewhat below the level of the highest-paid workers under discussion, but deserving of mention because of their number, are the "first-class skilled mechanics" of the shipyards. These workers, who number about a quarter of a million, include carpenters, electricians, machinists, riveters, welders, and a score or more of other craftsmen of comparable skill. Under the terms of the shipbuilding stabilization agreements they receive a base rate of \$1.20 per hour, but a few crafts, such as the anglesmiths, commonly receive higher rates of pay.

The rubber industry includes a number of skilled and highly paid jobs, of which the most important numerically is that of tire builder. This worker builds up tire casings by hand on a mechanically rotated drumlike form. A considerable amount of skill and great physical endurance are required to assure the strength and durability of the tire and to guard against defects. Although the tire builder's job can be mastered more quickly than most of the other jobs discussed in this section, his earnings are generally raised by incentive payments. Tire builders in Akron average approximately \$1.50 per hour.

Mention should also be made of the stillmen in the petroleum-refining industry. These workers operate the units in which crude or other oils are broken down by distillation to obtain gasoline and other products. Rates of \$1.40 or more per hour are not uncommon, even in the Southwest, where general wage levels are lower than in the Nation as a whole.

Among the highest-skilled and highest-paid workers in nonwar industries are the cutters in the men's clothing industry, who cut one or more layers of cloth to be tailored into finished garments. Most cutters also lay out the cloth and mark it for cutting; great pains must be taken with patterned cloth, particularly plaids, to assure that the various pieces will match when they are assembled. The cutters are known as the aristocrats of the industry, and in the early years arrived at their workrooms in frock coats. The standard rate for cutters in New York City is \$1.81 per hour; somewhat lower rates prevail in most of the other centers.

Several skilled crafts in the printing trades commonly carry earnings of \$1.40 an hour or more; these include the pressmen, compositors, electrotypers, engravers, and finishers. Cloth-printing-machine operators in the dyeing and finishing industry are outstanding because of their high rates among the relatively low rates paid in the industry in general. Brushers, pushers, and machine stakers are highly paid jobs in tanneries.

INCENTIVE WORKERS

Appreciable numbers of workers attain the highest-wage brackets not because of supervisory ability or extraordinary skill, but as a result of high productivity under an incentive-payment system. Incentive workers quite generally earn more than time workers,⁶ but, because of differences in the systems of payment, the efficiency and energy of the workers, the efficiency of management, and other factors, the extent of the difference varies widely.

Incentive-wage payment is in itself no guaranty of high wages. Indeed, the sweatshops of earlier years usually employed a piece-payment system, and even today many thousands of low-paid workers in textiles, clothing, and other industries are paid piece rates or other incentive wages.

Many skilled and a few semiskilled workers, however, who might earn 90 cents to \$1.20 per hour at straight-time rates, average \$1.50 or more as a result of incentive payment. Thus, first-class molders and first-class riveters, who in other shipyards receive the standard \$1.20 rate, have recently averaged \$1.56 and \$1.77, respectively, in the Atlantic Coast yards, where incentive payment is common. Large numbers of high-wage incentive workers are found in steel works and rolling mills. Incentive payment accounts in part for the relatively high

⁶ See "Effect of Incentive Payments on Hourly Earnings" in the Monthly Labor Review for May 1943.

wages in the rubber industry, electrical equipment, machinery manufacture, and the primary fabrication of nonferrous metals.

WORKERS IN DANGEROUS AND UNPLEASANT JOBS

As a result of union agreements or in order to attract workers, dangerous jobs and those involving unusual fatigue or unpleasantness sometimes carry a wage premium. Such premiums may also be paid for outside work and irregular work. A few of the highest-paid workers in manufacturing industry owe their wage advantage in part to such factors.

It is doubtful whether a numerically important job can be found in manufacturing in which wages of \$1.40 or more per hour are paid for semiskilled or unskilled work solely because of accompanying danger or unpleasantness. A number of relatively skilled jobs, however, fall in the highest-wage class partly as a result of such factors. One of these is the occupation of rougher in the steel industry. The rougher guides heated steel bars, rods, or sheets into the roughing mill. In addition to being somewhat dangerous, this work involves strenuous exertion under conditions of intense heat. Roughers frequently average more than \$1.50 per hour. The wet wheelers of the leather industry are highly paid workers whose jobs are extremely unpleasant. They grind and smooth on a wheel the flesh side of green hides. In certain nonferrous-metal foundries noxious gases, noise, and dirt undoubtedly account in part for the relatively high wages.

Most workers in dangerous or unpleasant jobs, however, appear to receive moderate or low rates of pay. In chemical and explosives plants the workers handling acids and explosives typically receive lower rates than the skilled maintenance men, whose jobs are much safer. Truck drivers often receive a premium of only 5 to 10 cents per hour when hauling high explosives.

The Lowest-Paid Workers

For present purposes, the lowest-paid workers are defined as those receiving less than 40 cents per hour. It has been seen that such workers numbered about a quarter of a million in June 1943, or included approximately 1 manufacturing wage earner out of 50. They are found in substantial proportions in manufacturing only in certain branches of the lumber, food, chemical, textile, clothing, and tobacco industry groups. Many of the lowest-paid workers are women, and relatively few are employed in plants with union agreements. Large proportions are employed in the South.

TYPICAL JOBS

There is little romance in the lowest-paid jobs. With few exceptions, they are simple, repetitive, and monotonous. Typically they involve no supervision of other workers, and can be mastered immediately or after a few days' experience. Many of the jobs are paid on a piece basis—with or without a minimum guaranty. The working conditions of some of the jobs are dangerous, or extremely unpleasant.

It is significant to note that the lowest-paid jobs usually involve specialized operations, and by no means consist entirely of "common

labor." Relatively few common laborers, in fact, receive wages lower than 40 cents per hour, and these are often found in establishments that pay even lower wages to certain other employees. On the other hand, the standard entrance rate for common labor in most of the steel industry is 78 cents per hour, and entrance rates of \$1 or more are not unknown.

Many of the lowest-paid workers are found in the logging camps and sawmills of the South, which cut and process light, second-growth timber. These workers are exclusively men, and include large numbers of Negroes. One of the numerous low-paid jobs is that of the swamper, who with various hand tools clears the ground of underbrush and other obstructions in preparation for the construction of a logging road. Fallers and buckers cut down trees with an axe or a hand crosscut saw (men usually working in pairs) and cut felled trees into logs of the desired length. The lumber piler stacks lumber by hand in a yard or shed for storing or drying. Both in logging camps and in sawmills there is frequent shifting from one job to another.

A number of the food industries are also represented among the lowest-paid workers—particularly the canning, drying and preserving of fruits and vegetables and of sea foods. In these industries, wages as low as 25 cents an hour are sometimes encountered. Thousands of low-paid women work in these industries as washers, sorters, peelers, boners, slicers, packers, and so forth. These women usually take their work from a table or moving belt before them and, after performing their simple operation, place the product on another table or belt or in special receptacles. They are often paid by the piece or by the pound. Their working conditions are sometimes unpleasant, owing to the sloppiness of floors and tables and to the pressure of their seasonal work. Numerous low-paid workers are also found in the poultry industry and the manufacture of nonalcoholic beverages, artificial ice, and cottonseed products.⁷

Of the various industries included in the chemical group, only the fertilizer industry employs numerous workers at less than 40 cents per hour. Many of these are laborers, who shovel and haul in wheelbarrows the chemicals, bone, manure, and other ingredients to be mixed. Even lower paid than the laborers, on the average, are the den diggers, who work in a damp and fume-laden atmosphere and whose job it is to shovel superphosphate out of the den room to be conveyed to trucks. The fertilizer industry employs large numbers of Negro workers.

The lowest-paid workers also include numerous girls and women in the apparel industries—many of them classified as "learners." Most of these workers are stitchers, performing simple sewing-machine operations, and paid by the piece.

Among the remaining lowest-paid workers are the brick tossers and other unskilled workers in brickyards and the strippers (leaf stemmers) employed in the processing of cigar tobaccos. A thin sprinkling of errand boys and girls, sweepers, janitors and similar workers are employed in many industries at less than 40 cents.

⁷ The 40-cent minimum became effective in the cottonseed and peanut-crushing industry on August 16, 1943. Other industries in which the 40-cent minimum was applied between June 30 and September 30, 1943, include vegetable fats and oils; metal, plastics, machinery, instruments and allied industries; embroideries; mattresses, bedding, and related products; and miscellaneous textile, leather, fur, straw, and related products.

COMMON CHARACTERISTICS

It will be apparent from the preceding discussion that the lowest-paid jobs involve, for the most part, simple, repetitive work, capable of being performed by inexperienced workers with little or no training. There is little in the nature of these jobs, however, to explain their low level of pay. Hundreds of jobs of no greater skill pay wages considerably higher. It is necessary, therefore, to look beyond the nature of their jobs and to examine certain characteristics of the industries, of the workers, and of the areas in which the workers live.

In the first place, it should be noted that nearly all of these workers are in industries with limited or no legal protection of the wage rate. The minimum-wage laws of many of the States give only partial protection and may be inoperative. Some of the low-wage industries, such as the preparation of seafoods, do not appear to be subject to the minimum-wage provisions of the Federal Fair Labor Standards Act. Others—for example, the ice industry—include large numbers of local establishments which are exempt because they do not engage in interstate commerce. In a few of the industries that are generally covered by the Federal act the minimum has not yet been raised to 40 cents; prominent examples are the lumber industry, fertilizer, brick and tile, poultry, and canning and preserving.⁸ "Learners" and handicapped workers in a number of industries are permitted to earn less than the established minimum. Learners are most numerous in the apparel industries in which during the first 6 months of 1943 certificates were issued covering over 12,000 learners and a small number of handicapped workers.

It is also significant that many of these industries draw upon isolated and immobile labor supplies that are insensitive to the bids of higher-wage trades. Some of the industries are seasonal and depend on housewives and other part-time or irregular workers who cannot accept year-round jobs. Many are in small towns where there are few competitors for the local labor supply and where the higher rates outside may not be known. The lumber camps and sawmills draw heavily on the farming population. Thus, many of the lowest-paid workers in manufacturing industries are unfamiliar with the favorable employment opportunities elsewhere, or are unable to take advantage of them.

Finally, in addition to those whose low wages result from limited opportunities, the lowest-paid group includes a substantial proportion of the least efficient and the least productive workers. Among these are the learners and handicapped workers, who in most industries must be officially certified if they are to receive less than the minimum wage. Some of the lowest-paid workers enter the labor market only sporadically and with no intention of learning a trade or becoming proficient at their jobs. Some are continually in the labor market but are marginal workers—persons of limited capacity who cannot get a job at all except in periods of great industrial activity.

The availability of labor at low wages, it should be noted, has permitted many firms to operate with obsolete equipment in competition with firms using modern equipment with higher-paid labor. For example, the hand stemming of tobacco survived for a considerable

⁸ The industry committees for all of the remaining manufacturing industries with a minimum wage lower than 40 cents have recommended establishment of the 40-cent minimum.

period in many plants because low wages offset the advantage of machine stemming. Similarly, because the level of wages was low, a number of seamless-hosiery mills operated nonautomatic equipment that required large amounts of labor.⁹

Low wages, therefore, do not necessarily imply low labor cost. The advantage to the employer may be more than offset by low labor productivity. This fact, together with the inefficiency of management found in many of the lowest-wage establishments, explains why competing establishments are able to stay in business while paying much higher wages.

⁹ Both of these situations have been changed in some degree by the Fair Labor Standards Act. Today a 40-cent minimum prevails in the hosiery industry.

Woman Workers in Two Wars

By MARY ROBINSON, *U. S. Women's Bureau*

THE present war has revived an interest in the number of woman workers and their importance in the First World War. No exact comparison of the extent of women's employment in the two wars can be given, owing to lack of comprehensive data for 1917-18. However, it is known that there were over 8½ million woman workers at the time of the January 1920 decennial census—a little more than a year after the close of the war and after curtailment in war industries, general demobilization of the troops, and some leveling off of the emergency peak employment of women.

In view of the 18 million woman workers envisioned by authorities as a likely total to be attained in this country by July 1944, it seems safe to assume that the number of women in employment during the present war will be double that in the first, when the armistice was signed after 19 months of war with a total of over 4 million men under arms. Against this can be set the 9.3 million men in the armed forces in July 1943 (19 months after the present conflict began) and the anticipated number of 11.3 million if the war continues until July 1944.

In discussing the current employment of women, table 1, presenting the number and proportion of woman wage earners according to the decennial censuses from 1870 to 1940, serves as a helpful background, indicating the tide of women's employment in this highly industrialized country.

TABLE 1.—*Trend in Woman Labor Force, 1870 to 1940*

Year	Women in the labor force ¹		
	Number	Percent of all persons in the labor force	Percent of all women of working age
1870.....	1,836,288	14.7	13.1
1880.....	2,647,157	15.2	14.7
1890.....	4,005,532	17.2	17.4
1900.....	5,319,397	18.3	18.8
1910.....	7,444,787	19.9	21.5
1920.....	8,636,512	20.4	21.4
1930 ²	10,752,116	22.0	22.0
1930 ³	10,679,048	22.0	24.3
1940.....	12,845,259	24.3	25.4

¹ Gainfully occupied women 1870 to 1930, women in the labor force (employed, seeking work, or on public emergency work) in 1940. Figures before 1940 are for persons 10 years old and over; figures for 1940 are for persons 14 years old and over; both these age groups are shown for 1930. Data for 1890 to 1930 are corrected figures from the Census release "Age Composition of the Nation's Labor Force: 1890 to 1930," October 1933.

² 10 years old and over.
³ 14 years old and over.

At the 1940 census—taken the last week in March, 2 months before the United States launched the defense program—there were not far from 13 million women in the labor force (including almost 2 million unemployed women seeking work), and these formed a little less than a fourth of the total labor force and a little more than a fourth of the woman population.

The data in table 2, taken from the month-by-month statistical estimates of the labor force prepared by the Bureau of the Census, reflect the effect on the Nation's womanpower of the increasing demands of war. It will be noted that whereas in June 1940 (immediately after the beginning of the defense program) women constituted only 23.5 percent of all persons employed, this proportion had risen to 31.3 percent 3 years later.

TABLE 2.—Estimates of Civilian Woman Labor Force,¹ June 1940-43

Month	Civilian woman labor force ²		Employment						Unemployment	
			Total		Nonagricultural		Agricultural			
	Number (mil-lions)	Percent of total labor force	Number (mil-lions)	Percent of total employ-ment	Number (mil-lions)	Percent of total nonagri-cultural	Number (mil-lions)	Percent of total agri-cultural	Number (mil-lions)	Percent of total unem-ployment
June 1940	13.9	24.7	11.2	23.5	9.7	26.5	1.5	13.6	2.7	31.4
June 1941	13.9	24.7	11.9	23.7	10.4	26.5	1.5	13.8	2.0	33.3
June 1942	15.0	26.7	13.9	26.1	11.8	28.2	2.1	18.3	1.1	39.3
June 1943	17.3	31.7	16.7	31.3	14.4	34.7	2.3	19.3	.6	50.0
July 1943 ³	17.7	31.9	17.1	31.5	14.8	35.1	2.3	19.0	.6	50.0

¹ 14 years of age and over.

² Excludes persons in institutions.

³ Latest data available.

In June 1940, it was estimated, there were 11.2 million employed women as against 2.7 million unemployed and seeking work.

During the months following, despite the speeding up of the production of defense materials, influenced to considerable degree by the Lend-Lease program, there was no appreciable advance in women's employment. In 9 of the 12 months from June 1940 through May 1941 the number of woman workers dropped even below the 11-million mark. In June 1941 the total climbed to 11.9 million. In this whole period, as well as in the next 6 months preceding the attack on Pearl Harbor, comparatively few women were hired by defense plants, primarily because of the large backlog of unemployed men on which the expanding munitions industries could draw—a total of 5.9 million in June 1940, which went up to 6.3 million by July, and in June 1941 had still not fallen below the 4-million level. Moreover, there was encountered in many quarters a definite discrimination against women as munitions workers, based on traditional prejudice and fear that they lacked mechanical ability despite their proved skills along such lines in the manufacture of armament in 1917-18. In January 1942, a month after the attack on Pearl Harbor, there were 11.9 million employed women, the same total as in the preceding June. The number of unemployed women, however, had dropped by 0.7 million, indicating the more-than-seasonal absorption of a substantial proportion of the new June workers as well as other woman job applicants. June totals are weighted with new young workers coming into the labor market for the first time or for vacation jobs.

After January 1942 came the sudden and rapid rise in women's employment. Compared to June 1940 there were 2.7 million more by June 1942, and 5.5 million more by June 1943 when the total number of employed women had soared to 16.7 million. This was a net

increase in the 3-year period, of 50 percent. Thus, with the sudden impact of war and its simultaneous speeding up of the draft and war-material production, barriers to women began to fall, in some quarters rapidly, in others only as an inevitable necessity. A few intransigents still maintain a hold-the-line policy against woman labor.

The significance of this 5.5-million increase in employed women is reduced considerably by two facts: (1) The women in agriculture in June 1943 constituted a larger proportion of all agricultural workers (19.3 percent) than in June 1940 (13.6 percent), and a large number of these farm workers are seasonal. For example, June 1943 showed a half million more women at work on farms than in May, and a million and a half more than in January. In nonagricultural employment the increase of women between the two Junes was 4.7 million. (2) The absorption as wage earners of some 2 million unemployed women into the ranks of the employed meant that the actual rise of women in the "labor force" from June 1940 to June 1943 was just 3.4 million. (In June 1940 there were 2.7 million jobless women, whereas the corresponding number for June 1943 was 0.6 million.) For men the 3-year period showed a net gain in employment of 0.3 million, or an increase of 0.8 percent. During these years, however, the taking up of the unemployment slack for men was most striking; the June 1940 total of 5.9 million jobless men had fallen to 0.6 million in June 1943.

What proportion of the 3.4-million increase among women in the labor force consists of homemakers who have sought employment for the duration it is impossible to say. According to a War Manpower Commission estimate, during 1942 half a million housewives joined the wage-earning ranks. All told, in June 1943, about a third of the woman population was employed—3 in 5 of the single women, 1 in 6 of the married, and 1 in 2 of the widowed, separated, and divorced women.

In any survey of the greater use of womanpower, as a result of the war, and of the scaling down in their employment with the coming of peace, account should be taken of the spectacular increase among women in the executive branch of the Federal Government, from a little over 186,000 at the end of June 1940 to nearly a million at the end of June 1943. The new recruits are almost entirely at work in the War and Navy Departments and new war agencies, and many of them will be dropped when the emergency is over.

In addition to women in the civilian labor force in June 1943 were the 36,121 nurses on duty with the armed forces and the 100,000 women who were WACs, WAVES, SPARS, Marines, and WAFS. The sizable number of woman Red Cross workers, though on duty with the military services, is included in the civilian labor force and not with the armed forces.

Because of the many uncertainties of war, forecasting for the next year as to further induction of women in the combined labor and armed forces is difficult. However, if by July 1944 the personnel of the armed forces is stepped up to the estimated 11.3 million (a 2-million increase over this past July), and the work force in the munitions industries is increased to a prospective 11.6 million employees (in accordance with the War Manpower Commission estimate), obviously many more women must be recruited. It is estimated that of the 2 million additional workers in munitions, 1.3 million will be women. Over 200,000 more women are wanted for the armed

forces by the Army and the Navy; and the need of the essential civilian industries for many additional women cannot be overlooked, as evidenced by the active recruitment campaign sponsored by the War Manpower Commission.

All indications are that the recruitment of the required number of women for each of these several main classifications will be much more difficult in the coming months than in the past, and that the patriotic motive will have to constitute the chief appeal.

Women's Employment in Manufacture of Munitions in Two Wars

There are striking parallels between the war of 1914-18 and the present one as regards the war industries and occupations giving employment to women.

WORLD WAR I

In the first years following the armistice, the Women's Bureau of the U. S. Department of Labor published several reports analyzing the position and achievements of women. Many of the statements in those bulletins read like pages from today's chronicles, though on a much smaller scale.

Women in steadily increasing numbers, then as now, entered fields which prior to the war had been regarded as men's exclusive province, while many other thousands of women carried on in the traditionally feminine food and fabric industries. Not only were the experienced women already in manufacturing at the outbreak of hostilities utilized largely for munitions making, but such groups as school teachers joined their ranks and large numbers of inexperienced women never before in the labor force were inducted into the work.

A list of 19 "war agent and implement industries" was drawn up to show how growing numbers of women were hired.¹ The most significant of these were iron and steel, lumber, transportation equipment, chemicals, metal and metal products, automobiles, electrical machinery and equipment, rubber goods, optical goods, and scientific and professional instruments.

As the months passed and the second draft drew off more and more men into combat services, the more urgent became the demand for woman labor. This was true in the vast majority of occupations that made definite contribution to the winning of the war—not only in manufacturing but in railway transportation, telegraph and telephone operation, farm work, and service trades.

They operated the lathe, the miller, the drill, the planer, the grinder, and other machine tools; they became proficient in handling the file, the wrench, the hammer, and other hand tools; they read blueprints and used micrometers, calipers, and gages; they used rules and compasses to lay out work for machine cutters. Their employment in these capacities extended into every branch of machine-shop manufacture.²

The list in table 3 (page 656) reveals the similarity of the occupational performances of women in the two wars.

Other parallels are shown by the following excerpts from a Women's Bureau publication:²

¹ Women's Bureau Bulletin No. 12: *The New Position of Women in American Industry*, Washington, 1920.

² Women's Bureau Bulletin No. 13: *Industrial Opportunities and Training for Women and Girls*, Washington, 1922 (p. 11).

Naturally the largest number went into factories manufacturing shells, pistols, guns, and cannon, but in these factories women operated and handled the same kinds of machines and tools as did the smaller, but yet appreciably large, group of women who made parts for engines and pumps; for machines and machinery; for automobiles, motorcycles, and airplanes; for agricultural implements; or who worked on tools, saws, hardware, electrical apparatus, instruments, and clocks.

The kind and extent of experience secured by women in these shops differed greatly. In a few it was sufficiently varied to have in time made them "machinists." * * * In the larger number of shops it was the policy to make "specialists" of women as it is of men. Such shops taught a woman the underlying principles and methods of setting up and operating just one machine, together with the varying characteristics of different metals and tools used in the shop in order to enable her to cut each piece of metal and grind each tool without waste of metal or tool. In other shops where the work was of a repetitive character—which was especially true in munition factories—time was not taken usually to give the women employees general instruction in machine-shop fundamentals. The woman was taught just enough to enable her to turn out, assemble, or inspect duplicated parts at great speed. * * *

* * * their employment was extended during this period in the old occupations and to new occupations on sheet iron, tin, aluminum, brass, and copper sheets. * * * they operated blanking, shearing, and drawing presses to cut or shape these sheets, they soldered and riveted, welded, and assembled; dipped, buffed, and finished. They worked on oil and gas stoves, hoods, radiators, tanks, and fenders of automobiles, on agricultural implements, on tin and aluminum containers and utensils, on brass and bronze fabrications, on cartridges, and on airplanes. The machines operated were largely automatic or required little skill to manipulate. Some women learned how to set up punch presses, but few set up automatic machines. * * *

A smaller number of women * * * went into the foundries * * * While a few were employed at molding * * * sorting, grinding, and filing castings, and laboring, the larger number worked in the core-making branch of the industry, a branch in which women had been used for some years before the war. * * *

In the instrument and optical industries women were employed not only on the metal parts of the instruments but in grinding and polishing lenses, mounting and inspecting, and in assembling the entire instrument. Women were peculiarly adapted to this work because of the smallness of the parts and the delicate fashioning required. * * *

Turning to the woodworking industries, the largest group of women substituted for men during 1917 and 1918 went into furniture and veneer factories, there to work on peacetime products or to make airplane parts or munition and tool boxes or wheels for artillery trucks. * * *

In the chemical industries, exclusive of explosive manufacture, the tasks turned over to women were largely of a laboring character or involved the feeding or tending of automatic machines.

That women were highly satisfactory as workers in the 1917-18 war industries is evidenced by the following statement by the President of an Ohio metal-goods plant:

In reference to the occupations in which women have replaced men the following may give you some idea of the diversity of the work. In the machine department women became expert and got out much greater production in running turret lathes, punch presses, bench lathes, milling machines, drill presses, grinding machines, and engraving machines, and in addition to the operation of these machines we taught them to grind their tools, to act as job setters, and to superintend some of the departments. In the inspection department practically every inspector was a woman. In the assembly departments * * * all were women, and they did better work and got out more production than men whom we tried on the job at various times without success. We found, too, that we could place as much, if not more, dependence in women in coming to their work and remaining on the job, which accounts for our having the lowest turnover in help in any factory ever heard of, which was less than 4 percent per year. We taught women to inspect tools and check them over according to the drawings after they came from the tool shop, in which department women became expert. In the optical department most of the employees grinding lenses were women,

who were remarkably successful in the work. In the assembling of lenses we had none but women on the job, and you will find by inquiring at the Ordnance Department that our lenses and prisms were as fine as any in the world.³

The Assistant Secretary of War, acting as the Director of Munitions at that time, gave the following report:

For the successful carrying out of our program for the production of vast quantities of explosives and propellants, as well as shell loading, the women of America must be given credit on account of the highly important part they took in this phase of helping to win the war. Fully 50 percent of the number of employees in our explosive plants were women, who braved the dangers connected with this line of work, to which they had been, of course, entirely unaccustomed, but whose perils were not unknown to them.⁴

WORLD WAR II

If space permitted, similar successful achievements of women as war workers in other lines of endeavor could be cited. Yet as already noted and as definitely revealed by surveys of the Women's Bureau, carried on in the latter half of 1940 and the whole of 1941, employers in defense plants either were ignorant of, or disregarded, the convincing facts concerning women as war workers a quarter of a century ago.

Now the tide has definitely turned and women form a vital and growing force in many of the key war industries. The trends in specific industries indicate that womanpower is even more indispensable in winning the present war than in winning the first one. In general women are being utilized extensively in three broad categories of jobs: Those that women have always done, now multiplied by the demands of war; those where they have been used as substitutes for men, either as replacements or in expanding industries; and those that are new processes never performed by either sex (some of these are the result of subdivision of skilled operations to facilitate mass production, while others are the result of the manufacture of new kinds of equipment).

To assist employers confronted with the need to hire women for the first time or to utilize them on a much more extensive scale, the Women's Bureau has made occupational analyses of a number of key war industries, indicating in which occupations women can be most readily adjusted and in which they can be substituted for men.

As women in the various war industries are performing in general more or less similar jobs, the accompanying list (table 3) cuts across the industries and classifies the occupations according to whether they are using women extensively, to some extent, or to only a slight extent. It should be noted, in this connection, that although woman machine operators frequently do repetitive work, to an increasing degree they are setting up their own machines and performing skilled operations.

Though men are still found in most of the top and highly skilled industrial jobs, women to increasing degree are doing the more skilled, difficult, and disagreeable jobs as well as certain dangerous and sometimes inappropriate types of work. At many processes women are as good as men, while at others they surpass men, especially in jobs requiring patience and painstaking finger sensitivity and dexterity. They soon learn to work to tolerances as fine as ten-thousandths of an inch.

³ U. S. Women's Bureau, Bulletin No. 12: *The New Position of Women in American Industry*, Washington, 1920 (pp. 18, 19).

⁴ *Idem.* p. 19.

TABLE 3.—Typical Operations on Which Women Were Employed in War Production in June 1943

[Code: A—Women now used extensively; B—Women now used to some extent; C—Women now used to only a slight extent]

Occupation	Code
Manipulative skills:	
Operation of machines:	
Drill presses, single and multiple spindle	A
Milling machines, light and medium, and micro machines	A
Light turret lathes and hand screw machines	B
Bench and watchmakers' lathes	A
Grinding machines (surface, cylindrical, and internal)	B
Gear shaping, cutting and hobbing machines	B
Light punch and forming presses	A
Miscellaneous machines: Profilers, shavers, nibblers, shapers, routers	B
Automatic screw machines	B
Woodworking machines: Saws, sanders, shapers, profilers	B
Nailing machines	C
Power sewing machines	A
Optical and ophthalmic glass grinding and polishing	B
Burring, polishing, lapping, buffing, etc., on lathes, drill presses, polishing jacks, and other machines	A
Hand finishing machined parts by filing, burring, lapping	A
Hand gluing (for example, of plywood parts)	B
Sheet-metal forming and riveting	A
Welding:	
Acetylene and torch welding	B
Electric arc welding	A
Spot welding	B
Soldering	A
Electrical work—wiring and assembling parts, winding coils and armatures, soldering, taping, etc.	A
Assembly—all types of light sub-assembly and final assembly (often requiring the use of hand tools as pliers, mallets, screw drivers, files, electric drills, bench assembly machines, and riveting presses)	A
Artillery ammunition, loading (bag and shell loading, fuzes, primers, etc.)	A
Operations on bullets, cartridge cases, and primers in small arms ammunition	A
Servicing and repairing of planes at air depots (ground mechanics)	A
Painting:	
Spray-painting small parts and products	B
Touch-up work and hand finishing	A
Radium	A
Stenciling, masking before painting, racking and unranking	A
Shipfitters and loftsmen	C
Helpers	A
Inspection:	
Visual	A
Gage, micrometer or caliper (sometimes with blueprint reading)	A
Calibrating	B
Checking and testing raw materials, stock, and salvage parts	B
Packing, labeling, etc.	A
Factory service:	
Production planning, routing, and control	B
Draftsmen and tracers	A
Factory clerks (timekeepers, stock-record clerks, etc.)	A
Tool-crib and stockroom attendants and dispatchers	A
Crane operators	B
Guards	B
Electric-truck drivers, intraplant loading and hauling	B
Supervising (forewomen, leadwomen, group leaders)	B
Training (in plant)	C
Personnel relations:	
Personnel administration (director, assistant director, assistant)	B
Employment—interviewing and hiring	B
Nursing	A
Welfare	A

Women's successful performance in the manufacture of most kinds of war material in the present war is common knowledge and is attested by many statements of industrial authorities. Managements in war plants today which not so many months ago scoffed at the idea of woman employees are now equally articulate in their praise of women's ability and dependability in the matter of technical skills.

The Undersecretary of War, in a congratulatory message sent recently to Army's woman employees, said:

The women of America have responded ably and gallantly to the call to service the war has made upon them. Nowhere is this more evident than in the plants operated by the War Department. They have supplanted men at the bench and the lathe; they are doing civilian work in the nine Service Commands efficiently and in increasing numbers.

In the arsenals, in the ports of embarkation, in the motor centers, in all the War Department installations, their skills are invaluable and their devotion to duty is proven. They are testing guns, making ammunition, fixing motors, sewing uniforms, inspecting ordnance, driving trucks, doing many of the thousand and one jobs that are necessary to keep the machinery of war moving.

I salute them for their faithfulness, their cheerful courage, and their patriotism.

Employment of Women in Various Industries in Present War

AMMUNITION MANUFACTURE

Of the key industries in the present war, the one which opened its doors most readily to women, prior to the United States' entrance into the war, was the manufacture of ammunition for small arms and artillery. One reason for this was that such employment did not run wholly counter to tradition, in view of the peacetime use of about 2,000 women on production in the United States Government arsenals. Thus, with the expansion of such establishments for war purposes, increased hiring of women was a logical procedure. Moreover, as many of the steps that go into the making of bullets, cartridges, and shells are simple, requiring training of not more than a week (designed primarily to instill in the worker the proper precautionary habits for handling explosives), women could be easily utilized.

As the Government during the defense period undertook to build many ammunition plants (particularly for bag and shell loading) to be operated by private management, countless numbers of new jobs were created which had no sex traditions and which could be done by women, often as well as, and sometimes better than, by men. In fact, these plants were erected in many rural areas—chiefly in the Southern, Middlewestern, and Mountain States—with the expectation of recruiting thousands of women.

Within the span of the defense and war activities both the number and proportion of women in these loading plants have mounted steadily until the total runs into many thousands, and constituted in March 1943 over two-fifths of all the factory employees. In the bag-loading plants some processes are given over entirely to women, who are handling not only the smokeless powder but the more hazardous black powder. Though women were not at first employed in the manufacture of explosives, reports show that, in the months since the war started, this field also has opened up to them.

It is impossible to gage fully the amount of womanpower utilized at present for ammunition manufacture, as data are not available for many of the contracting and subcontracting plants.

The types of work done by women in shell-loading plants vary from plant to plant. There is possibility for increased use of women for loading the larger shells, even those of 105 mm. or more, if men are provided to do the heavy lifting. According to the War Manpower Commission, recruiting for replacement needs will become a real problem by the end of 1943 in bag-, shell-, and bomb-loading establishments, and it seems likely that women will be called on more extensively, especially if discrimination against Negro women is eliminated.

In 34 ammunition plants surveyed by the Women's Bureau in 1942-43 the beginning minimum hourly rates for women ranged from less than 40 cents in 2 plants to 70 or 78 cents in 3. The beginning rate in 15 plants was less than 50 cents, 3 paid 50 cents, and the rest 55 to 78 cents. Earnings of factory women in a large representative ammunition plant in the Middle West averaged about \$35 for a 48-hour week.

AIRCRAFT MANUFACTURE

The aircraft industry has expanded into a stupendous mass production in an incredibly short time. The spectacular development of aircraft production would have been impossible without the aid of women.

The Women's Bureau survey (in the spring of 1941) of 7 typical aircraft-assembly plants disclosed that only a fraction of 1 percent of the force were women. Among some 100,000 workers on the production lines there was only an occasional woman. Three plants had none. Those employed were engaged chiefly in such work as sewing covers for ailerons, rudders, wing tabs; others were on minor jobs connected with electrical assemblies. The Bureau's occupational analysis revealed that though women were able to perform many of the jobs in the aircraft plants, they definitely were not wanted there. This was true even as late as the fall of 1941, when the War Department was urging the employment of women in airplane manufacture. In fact, only a little over 4,000 women were so engaged a week before the attack on Pearl Harbor.

Then, as the industry realized the task ahead in meeting the President's blueprints for aerial warfare, and the prospective male labor shortage resulting from the draft, the barriers to women were dropped. In June 1943 more than 310,000 women were reported as factory workers in the industry, including airframe, engine, and propeller plants. More than another 100,000 were reported in office and other nonfactory jobs. This industry too has an additional woman force of undetermined number, similar to that in ammunition manufacture, helping to make airplane parts in plants working on a contract or sub-contract basis.

The total number of women in this whole field of plane manufacture probably exceeds that in any other war industry, with the possible exception of the electrical industry. The ratio of women in the factory labor force has been steadily increasing, but for military reasons cannot be given in conjunction with the number of women. The proportion varies from factory to factory, the highest in any one plant being almost three-fifths.

Women are helping to make all kinds of planes, from Lightnings and Thunderbolts to Flying Fortresses and Liberators. They are employed on production of autogyros, helicopters, gliders, and the sky "locomotives" for transporting freight. Women are performing with intelligence and dexterity not only all the jobs the Women's Bureau pointed out as readily within their capabilities, but others besides.

The minimum entrance-pay rates for women are very generally the same as for men, 60 cents an hour being the most usual for the day shift, and throughout the industry the policy of equal pay prevails also for the more skilled occupations.

As to typical weekly earnings for women in aircraft, a survey by the National Industrial Conference Board revealed for May 1943 average earnings of a little over \$39. The expert woman welder in one plant, reported as receiving a journeyman's rate of \$1.32 an hour, and almost \$70 in 48 hours, is phenomenal and not usual.

ELECTRICAL-PRODUCTS INDUSTRY

Of all industries that have converted largely to war production, the manufacture of electrical products probably employed the largest proportion of women before the war. The industry has grown considerably, but the relative importance of women has increased even more rapidly. In March 1943 there were nearly 300,000 woman wage earners. In the employment of women this industry probably equals aircraft manufacture, and rises conspicuously above aircraft in the ratio of women to men. For example, it is estimated that in April 1943 women comprised three-fifths of the force in the manufacture of radio and communications equipment. Much of the great growth in women's employment in peacetime, as well as in the war period, is attributed to the development and use of radios.

A special study by the Women's Bureau of war-industry plants in New Jersey, made in the summer of 1942, gives some detail as to women's work on various electrical products. Data for 37 plants employing over 25,000 factory women indicate that substitution of women for men was not extensive. A little over nine-tenths of the women were on the same occupations as before the war, and not quite 7 percent were on jobs formerly done only by men, the rest being on operations new to the particular plants. Of all workers then on processes formerly done only by men, almost a fourth were women. The type of such jobs varied from plant to plant.

Beginning hourly rates reported for women in this study ranged from 40 to 50 cents in more than two-thirds of the plants. As to weekly earnings, if the data of the National Industrial Conference Board are taken as a criterion, the average for May was a little above \$34.50; figures compiled by the Illinois Department of Labor for the same date show an average of about \$31.00.

WAR-INSTRUMENTS MANUFACTURE

A type of production highly essential to meet many war needs and eminently suitable for large-scale employment of women is the manufacture of sighting, fire-control, scientific, and professional instruments. A striking example is the air pilot's instrument board.

The survey of the war-instruments industry by the Women's Bureau was in the fall of 1941, when the highly skilled processes in instrument making were still regarded in some plants as predominantly male, and before the industry was expanded to its present large-scale production to supply the essential instruments for the wartime Army and Navy, particularly in connection with the airplane and shipbuilding program.

The expansion of the industry and the decrease in the male force available for the instrument field, as for others, have opened up opportunities for thousands of women; almost two-fifths of the factory workers in the spring of 1943 were women. The subdivision of some

of the old, more highly skilled jobs into new and simpler processes has led to more rapid absorption of women.

In the 17 plants included in the Bureau's survey in the fall of 1941, the proportions of women varied greatly, ranging from 3 to 50 percent. It was clear that women constituted a great potential labor force for this type of manufacture, with its small, light, intricate products. Statistics issued by the War Manpower Commission, which included other than factory employees, showed the woman labor force in the industry to have increased from 26 percent of the total in May 1942 to 43 percent in May 1943.

No recent data on rates in this industry are available. In the fall of 1941, women's minimum hourly rates ranged from 35 to 55 cents, 40 cents being the most frequently reported; for men the range was from 40 to 61 cents, and 55 cents was the most common rate. In the 2-year period since then there has probably been some increase, particularly in view of the rising cost of living.

CANNON AND SMALL-ARMS MANUFACTURE

In the manufacture of cannon and small arms, almost no women were employed prior to the attack on Pearl Harbor, but their number has been mounting conspicuously since then. An investigation made in the summer of 1942 of four Government arsenals and four private enterprises disclosed 11,000 women among the 75,000 employees, or 15 percent of the total.

The small-arms branch was employing women to a much greater extent and on a wide variety of machines—in fact, on more different types of machine tools than were reported in any other of the war industries studied by the Women's Bureau. More women were operating milling machines than any other one kind. An April 1943 estimate placed the proportion of women in this branch of industry at about 31 percent.

In cannon manufacture, characterized by much heavy work, women were found on many different kinds of operations but none were then running heavy-duty machines in the big-gun shops. In April 1943 almost 16 percent of the employees on cannon were women.

The Bureau's study revealed not only striking variations from plant to plant in the utilization of women but many jobs where they could replace men and release them to fields having more acute need of male labor. Men and women interchanged on the same job or carried on comparable work on the same shift; or women performed, on the day shift, operations done by men at night. Again, a certain type of work performed extensively by women in one plant might be done entirely by men in another; for example, one arsenal had no women on even the simplest or lightest machine operations in making small-arms components, but had them driving electric trucks, making large wooden packing boxes, operating band saws, and so on. Other firms had no women on such jobs as these but in certain machining departments 60 percent were women. Many men, whom women could easily replace, were also found in clerical jobs; in fact, 40 to 82 percent of the office workers in the small-arms plants were men.

Women could have been utilized to a much fuller extent in this field than they were, since much "worrying away of the metal" was necessary and women are particularly good at this. An indication of the

amount of metal that must be removed by gradual machining is gained from the fact that for one type of machine gun the raw stock and forgings weigh 101 pounds and the finished steel parts 18 pounds.

With the influx of women to these industrial establishments after the United States, entrance into the war, the basing of rates on occupation rather than on sex became a pressing issue, because there had previously been an almost entirely male force and the hiring of women brought few or no changes in the physical characteristics of the jobs.

Three of the eight plants visited in the Women's Bureau survey had adopted the equal-pay principle. Where wage differentials existed, the problem had become increasingly acute both for the women hired and for the men inducted into the armed forces, whose wage levels thus were lowered on the jobs to which they hoped to return. That this problem still needs solution in some cases is indicated by the fact that, even in 1943, of three plants making guns, howitzers, and mortars, none paid women the same minimum entrance rates as men.

In four of the gun plants reporting in 1942-43 on women's beginning minimum hourly rates, the range was from 50 to 60 or 65 cents, while in eight small-arms establishments such rates ran from less than 40 cents to 60 cents.

PRODUCTION OF MACHINE TOOLS

In the highly skilled machine-tool manufacture some women gained a slight foothold after the country's involvement in hostilities, their first opportunity since World War I. The rapidity with which women have recently been hired, however, may be judged from the fact that by April 1943 there were nearly four times as many wage-earning women in the industry as in August 1942. It is not at all uncommon today to find that in plants with 2,500 or more workers, from 12 to 20 percent are women.

A special study of 15 well-known machine-tool shops, made by the Women's Bureau in the summer of 1942, revealed that about 4 of every 5 women in factory work were in productive occupations such as machining, assembling, and inspecting. The others were primarily in various shop clerical jobs, such as timekeeping, stock chasing, production control, and the like, in service work, in the toolroom and tool crib. The data showed, furthermore, that in spite of the great size and complexity of the average machine tool and many of its parts, substantial numbers of women could be employed without extensive training in plants making only the machine tools proper as well as in those where smaller and less-complicated accessories and other products are also made.

Curiously enough, the amount of experience the management has had with women in factory work shows no discernible correlation with the degree to which the scope of women's employment has broadened as a result of the war emergency. Three of the firms that were most progressive in their employment policies in regard to women, opening to them a variety of productive jobs under liberal conditions for the gaining of skills, had no women on production prior to the spring of 1942.

At the time of the study one firm was planning eventually to place women on almost every type of work, except where heavy lifting was required. This included the operation of a variety of machine tools.

Women were to be hired in this firm as replacements for men and not to expand the labor force.

Data on minimum entrance rates for women in 11 firms visited in 1942-43 show a range of from 40 cents an hour in 2 plants to 60 cents an hour in 1; 7 of the plants paid from 45 to 55 cents. Four of 10 firms reporting paid the same minimum entrance rates to women as to men. In May 1943 the average weekly earnings, as reported by the National Industrial Conference Board, were a little over \$36.

SHIPBUILDING INDUSTRY

The necessity to produce in record-breaking time the ship tonnage needed for war, has led to a tremendously expanded work force and to the revolutionary procedure of active recruitment and widespread utilization of women in this former stronghold of male labor. In 1917-18, few women were employed in shipyards and most of these were in the yards which attempted substitution of women for men. Further, women had no place in the industry in peacetime; the 1939 Census of Manufactures revealed only 36 women so employed.

It was not until the summer of 1942 that the need to draft women's services became acute, simultaneously with the growing scarcity in male labor for this vital industry. As many inexperienced men had been quickly trained and adapted to shipyard jobs and as women were successfully performing more or less similar operations elsewhere, it was decided that womanpower must be the answer to enable the shipbuilding program to be carried out on schedule time.

In June 1942, only 0.4 percent of the wage earners in commercial yards were women, but by June 1943, the proportion had risen to about 7 percent. The extent of women's employment varies from yard to yard.

In a number of yards the prejudice against women on the part of both management and labor, though still lingering in some sections, is rapidly disappearing under the stress of necessity. The attitude of one official is typical. When questioned over a year ago in the Women's Bureau survey of shipbuilding as to what jobs would be most suitable for women if and when needed, he replied "None." Today that yard employs several thousand women who are proving themselves satisfactory at numerous occupations.

At present, thousands of women are at work in shipyards on all coasts. They are helping to build and repair all types of vessels—Liberty ships, destroyers, cruisers, and submarines—and everywhere are proving their ability to do the job whether difficult, disagreeable, or dangerous. They are found in the shops, and outside in the yards or in the ways in summer heat or below-zero temperatures. In some cases they can be seen walking on the narrow planks high up on the scaffolding, going up and down ladders, or crawling with their welding equipment through small openings within the hull of the ship. They may even be seen cleaning out the bilge, or doing sandblasting on the outside of a ship in drydock.

Although there are various shipbuilding jobs beyond women's strength or endurance which they should not be called on to do, the end of their possible utilization is not yet in sight.

This industry deserves honorable mention for having employed women on the equal-pay basis with men, in regard to both minimum

entrance rates and wages for the various occupations and degrees of skill. However, to some extent women's advance in the industry is blocked, when in the course of progression are found heavy jobs they can neither perform nor bypass under union or plant regulations.

Shipbuilding in general leads all the other war industries in regard to average wages for woman employees. The National Industrial Conference Board figures for May 1943, show an average weekly wage somewhat in excess of \$44.

STEEL MILLS

The iron and steel industry is another which, under the exigencies of war, is capitulating to woman labor. Vital as the steel mills are for the Nation's war effort, they have not been exempt from the comb-out for servicemen, and reports from various sources disclose a steady infiltration of women to an increasing number of operations in manufacture of this critical material.

To be sure, for many years some girls and women have been employed in the industry. In recent months, however, virtually all the large steel companies have substituted women for men on a substantial and increasing number of jobs. This is particularly true in the Middle West, where acute shortages of male workers have developed.

In general, women are employed at work that is not too heavy or on which sheer muscle is not essential. They are doing jobs in the unskilled-labor class as well as a number calling for a considerable degree of skill. They may be "hot chain men," crane operators, core makers, chemists, or factory clerks, or they may be engaged in nail and wire drawing, or running various kinds of machines in the maintenance shops. Women are even employed in some mills to finish heavy plate for tanks, landing mats, deck plates, and steel for cartridge cases. At one of the Gary (Ind.) mills, women are working in many departments. They have been admitted to the open-hearth and blast-furnace works for the first time in history, operating cars for transfer of materials, serving as test carriers, delay clerks, and ingot shippers. At the Gary armor plant operated for the Army, some time ago women comprised a third of the force and it was believed that eventually the proportion might be increased to a half.

OTHER ESSENTIAL WAR INDUSTRIES

Women's share in war production is too extensive and varied a story to treat in satisfactory detail in this résumé. Bare mention must suffice of the introduction of women into certain fields, their increased employment in others, and their useful services in various kinds of enterprises, not usually identified with their labors, that are concerned with both war and civilian needs.

Combat vehicles.—Even plants producing heavy items of combat material, such as tanks or large artillery pieces, are not only employing more and more women but placing them on types of work usually done by men. By March 1943, women formed 7 percent of the workers in tank and combat-vehicle factories.

Rubber.—In the rubber industry, which employs large numbers of women in peacetime, many women have for months been doing such jobs on military equipment as machine-sewing on barrage balloons,

making flotation bags, applying rubber cement where fixtures are attached to assault boats, finishing rubber rafts, testing inflation of gas bags, and storing and inspecting life belts. This industry is now training women for the previously masculine operation of tire building. An Ohio plant, using 100 women on tire building, reports the experiment as eminently successful, with the women doing even the heavier part of removing the tire from the drum and tossing it on the hook of the conveyor system that carries it away for curing and vulcanization. Women in the rubber industry are a growing part of the force, comprising 27 percent in May 1942, and 39 percent in May 1943 (including all women in this field, office as well as factory workers).

Lumber.—A few illustrations will help to depict the new position of women where only men have been employed. A West Coast lumber company last year charted no fewer than 135 jobs that women might do in its factory work. Other lumber mills in the Northwest have hired so many women that they now constitute a fifth of the work force. Even the logging camps have been invaded by a woman contingent, on such outdoor jobs as running logs on the river or inspecting floating logs for loose timbers. Women are even reported as responsible for the felling of trees. Nearer the mills they are employed in sorting, stacking, painting ends of lumber, or loading box cars with the smaller material.

Mining.—A decided innovation is the employment of women in certain above-ground jobs in the mining industry—for mines producing coal, copper, iron, silver, and gold. For example, the coal mines have begun to employ women in the mine shops and for picking slate on mine tipples. In connection with iron ore, women are found as laboratory technicians testing samples. In the nonferrous-metal mining industry some women are being hired to tend conveyors from the mill crushers, or to operate trippers (the small ore cars which shuttle back and forth distributing ore to the bins). Other women are being used to regrade ore and some are serving in mine-lamp houses, repairing and maintaining miners' electric lamps.

Pulp.—In the pulp mills women have stepped into men's jobs sliding slabs of paraffin into vats of coating solutions, operating the special presses that roll off tons of waxed paper every hour, or acting as testers in the bleach plant.

Oil refining.—Oil refineries on both the East and the West Coasts, have taken on women for various processes formerly done exclusively by men, such as operating control valves on turbines which clean carbon from pipes or doing various kinds of laboratory work.

Beet-sugar refining.—Women have gone into beet-sugar refineries to operate machines such as juice evaporators, to run first and second carbonation, third saturation, centrifugals, granulators, and melters; and some have learned to boil sugar, a job that is exacting and somewhat of an art.

Flour milling.—To some extent, with possibilities for increased numbers, women have entered the flour-milling industry to take over some of the jobs formerly done by men. These range from packaging and loading sacks up to 24 pounds in weight to laboratory testing. Women are also operating sewing closure machines.

Consumer goods.—Any roll call of essential war industries must include those producing such important consumer-goods manufactures as fabric, food, gloves, shoes, and many other articles of equipment

for troops and cantonments—industries which normally are large employers of women and which during the present emergency are relying on them even more extensively. In May 1943, women constituted about 49 percent of the textile workers and 77 percent of the clothing workers. The food industry is one of vital importance to the armed forces and civilian population as well as to our allies through the Lend-Lease program. The extent to which it relies on women's labor is indicated by the fact that in May 1943, women formed 34 percent of the force. However, in some branches, notably canneries, women constitute a conspicuously large part of the workers.

Earnings in the textile, food, and apparel branches fall materially below those in the key war industries. Recent Illinois data show that in all three the average weekly pay for women ranged from \$24 to \$26. New York figures tell a similar story except that for apparel factories, a \$30 average was reported. The National Industrial Conference Board reveals averages in the several fabric branches ranging from \$24 to just below \$31.

Occupations requiring scientific training.—One field in which women have forged farther ahead in this war than in the last, and which cuts across practically all the industries discussed to this point, is that of laboratory work or operations requiring scientific training. In 1917-18 women had few if any opportunities along these lines, but today women as technicians, draftsmen, cartographers, chemists, physicists, radio operators, metallurgists, meteorologists, geologists, engineering aides, and even as full-fledged engineers, have been in great demand.

Along lines of industrial relations, personnel administration, and supervisory work, women in considerable numbers are rendering valuable service in many of the war plants with a large woman force.

Clerical work.—No roster of women's war occupations is complete without the clerical field. Many additional opportunities for office work have opened up to women not only in the Government service, but more spectacularly in unusual positions in industrial establishments. Various types of war plants have hired women for clerical work in place of the men they once employed, and have put women on factory clerical jobs quite different from the usual more or less routine office work. In the opinion of an official in a large company, there will be a continuing utilization of women for some of these assignments after the war, for which they would not have had an opportunity except for the war.

Transportation and communication.—Unique in their widespread involvement with both military and civilian requirements are the highly complicated and important fields of transportation and communication. The railroad, local transit, and airway branches of the transportation industry not only have been admitting women to men's jobs, but in many instances have been actively recruiting them. In May 1943, about 195,000 women were engaged in the various branches of transportation, and many additional women are needed.

The commercial airlines, the youngest branch of the industry, have readily accepted women on the same terms as men and given them the same training, the same wage rates, the same advancement opportunities, and the same seniority rights. This branch was said to be able to absorb one woman for every two men, using women, for example, in ticket offices, shops and hangars, on the airfields, and on the planes as hostesses.

Although the railroads actually are employing a larger number of women than any other transportation branch, women constituted in May 1943, only 6 percent of all employees. It was expected that during 1943 the total of 100,000 women employed in World War I would be reached and passed. Despite some opposition on the part of male labor, women already are doing jobs regarded definitely as men's in a peacetime economy, in the offices and shops, even in the roundhouses, at ticket windows and information desks, in station and baggage-room work, as cleaners and oilers of engines, as turntable operators, and even on "dressing" the tracks—to mention only a few of the many occupations on which women have been found to be satisfactory.

In local transit service throughout the country a total of 15,854 woman workers was reported for May 1943, and the intercity bus services had 8,510 women in May. As conductors and motormen on trolley cars, as conductors and drivers on busses, as ticket agents, loaders, traffic clerks, and accountants, women have become familiar sights. They also are at work behind the scenes, in the shops, car barns, and garages.

Trucking companies (with over 54,500 women in May 1943) and taxicab firms also are finding women efficient substitutes for men.

The entire communication field, which has always depended to considerable extent on woman workers, is now employing even larger numbers, and is continually calling for more, in the lines which have developed the most conspicuous breaches through the withdrawal of men—the war-burdened telephone and telegraph services and commercial broadcasting studios.

ESSENTIAL CIVILIAN SERVICES

Reference has been made to the acute need for workers to carry on such essential civilian services as work in laundries, dry-cleaning plants, canneries, hotels, restaurants, stores (department, specialty, grocery, drug), and beauty shops; to engage in office work, teaching, home nursing, child care, office cleaning, domestic service, and other pursuits.

Until recent months too narrow a concept was held as to what constituted war work, too little attention paid to the indispensable role of such civilian jobs in the Nation's wartime economy. However, September 1943 was chosen in which to hold a special campaign to salute and recruit women as workers in more than 100 of these "unglamorous" everyday jobs listed by the War Manpower Commission (which is sponsoring the campaign) as "war jobs." To dramatize these jobs as comparable in importance to the production of munitions, a Nation-wide effort, in which many forces are cooperating, is being made.

As the war effort lightens, these essential civilian jobs will require two in every three of the woman workers. It is hoped that the recruitment campaign will induce many from the still large reserve of non-employed housewives without small children to respond, including women who would not under ordinary circumstances go into such pursuits for remuneration but who as volunteers may be rendering more or less similar services, for example, in hospitals, churches, or canteens.

Unfortunately, from the viewpoint of woman wage earners accustomed to employment in these essential services, the war period has

witnessed no sufficient effort to increase the wages for such jobs, which too often are found in the low-paying class. Recent data for laundries in Illinois, New York, and New Jersey show, for example, average weekly earnings of woman wage earners ranging from \$17.50 to \$21. Such wages, as compared with those in almost all other fields competing for labor, are convincing evidence of the reason for the forced closing (reported by the Office of War Information) of 600 laundries in various localities during the past year.

The National War Labor Board has recently, in a number of cases, approved a raise in pay rates for workers in laundries as well as for telephone workers and certain hotel employees, on the basis of substandard wages.

An opinion in connection with an increase of 15 cents an hour granted to workers in 12 Portland (Oreg.) laundries, despite a previous advance commensurate with the "Little Steel" formula, declared:

Reasonable price adjustments would seem to be justifiable in such cases as the instant one so that the operators will not be compelled to pay such low wages in order to stay in business. American labor should not be asked to subsidize American industry by working for wages below the level of health and decency. In cases such as this one, that is exactly what a wage denial would amount to. The burden of subsidizing the laundry industry of the country should be lifted off the backs of its low-paid workers and placed upon the consumers of laundry service.

Canneries, too, which are having a struggle in many areas to get enough workers for their emergency peaks, suffer from the custom of paying wages below the levels in most other industries. An indication of their difficulty in securing woman labor in a community, in competition with the better-paying war industries, is found in the New York and Illinois averages for the food industry in the spring of 1943—\$23 and \$25, respectively.

For the same reason, stores in many places have been unable to hold their employees. A Bureau of Labor Statistics study of Philadelphia department stores disclosed a \$24 average for women in the selling division in September 1942, while a more recent Illinois report gave \$21.54 as the average in that State. Earnings of woman clerical workers in manufacturing establishments in October 1942, averaged \$27.50 in Illinois and \$30 in New York.

It is true that these various enterprises have suffered seriously from the induction of men into military service, but concurrently both male and female workers have been migrating to better-paying occupations or to those more closely identified with the war. As a result, the public in many areas is experiencing some difficulty in obtaining food, clothing, and various services—especially when employment in war work and the more complicated mechanics of ordinary living reduce individuals' opportunity to take care of such matters themselves.

The labor shortages and the needs of these civilian services are reflected in the newspaper advertisements for workers. A cross section of these columns throughout the country tells a story that is strikingly similar and reveals near-desperation on the part of many employers and an effort to "glamorize" the more humble jobs by offering special inducements. Among these inducements are a chance to work for a superior company, with good or ideal working conditions; a 48- or 40-hour week, with Saturday afternoons off and no Sunday work; unusually good pay, with bonuses or commission; paid vaca-

tions; pay while learning; rapid promotion; permanent employment; in short, a real career. In some areas there is a definite appeal to the patriotic motive. Recruitment of all types of workers—men and women, white and Negro, any age from 16 to 65, for part-time or full-time work—seems to be the aim of many of the “ads.”

Post-War Problems and Possibilities

Even while war is being waged, and before the end is in sight, a common question is, What will become of all the woman workers in the post-war period? The frequency and implication of this query are cause for concern. The approach to this question indicates little differentiation between the approximately 13 million women in the labor force prior to the war and the several million added since. As a matter of fact, however, it will not be possible to keep two separate accounts, one for the regular and one for the emergency workers, in a transitional period of demobilization of troops, curtailment of war manufactures, retooling of plants to peacetime production, and development of new industries and services. Therefore, careful planning for woman workers in general and in relation to the whole labor force and the national economy is imperative.

The necessity for such planning in advance of the cessation of hostilities is indicated by the attitudes and the events following the armistice of November 1918. The situation was discussed by the Director of the Woman in Industry Service of the U. S. Department of Labor at the conference of the American Association of Governmental Labor Officials on December 28, 1918.⁵ Briefly, her report called attention to the fact that despite the national importance of women's work, their willingness to respond to the call of industries and services, their efficiency along all lines, reaction had set in and its forces were affecting the status of woman workers. Certain labor organizations (upheld in one case by the National War Labor Board of that period) as well as various public speakers took the view that women who entered industry during the war should relinquish their jobs in the post-war periods. The attitude was due to men's fear of unemployment and fear that wage cuts might result for them because of the availability for jobs of lower-paid women who might be kept on while returning soldiers would search in vain for work.

The Director of the Woman in Industry Service stressed the fact that the way out of the dilemma was a united attack on the cause of the fears, and made the following suggestions and comments:

The strengthening of labor exchanges * * * a wise extension of agencies of adjustment and these can be successful only insofar as they derive their strength from real collective bargaining. * * * It is the absence of these agencies of adjustment which makes the present situation so strained. * * * Labor legislation must meet the test of the new spirit while it busies itself with specific gains very necessary for workers in industry. * * * It is not difficult to prophesy that the problem of labor legislation just ahead is not the formulation of concrete aims but the development of a new spirit and method in administration. Two aims for labor legislation for women workers may be emphasized as of immediate importance. They are the enactment into law of the 8-hour day and the fuller representation of women in important positions in administration of labor laws.

This official had also pointed out that “the problem is not one of withdrawal of any group of workers voluntarily but rather the organ-

⁵ Data are from material in the files of the Women's Bureau, U. S. Department of Labor.

zation of industry in such a way as to utilize to the full all of the available working forces of the country," and "for women in industry the chief danger is that they will remain in certain industries or be introduced into new ones at a lower wage scale than is paid to the men. * * * The war has demonstrated that the range of possibilities for efficiency by women in industry is much larger than has been assumed in the past. This is notably illustrated in the work of women in machine processes."⁶

Many of the above recommendations have become definite factors in the present situation and influential in shaping the future situation for women. In the field of labor legislation, progress has been made in recent years, on both the State and Federal levels, to place a floor under wages and a ceiling on hours, with quite extensive provision for the 8-hour day in spite of temporary relaxation of this standard in some quarters to meet war emergencies. These better legal standards, so generally lacking 25 years ago—and still not Nation-wide in application—will help to bolster women's status in the post-war transition period. A larger share also is now taken by women in the administration of both Federal and State legislation to promote the welfare of workers. A network of public employment offices serves both men and women, and the social security system offers protection against the hazards of unemployment and old age—bulwarks that will be strengthened in the near future if plans now formulated are carried out. Likewise, collective bargaining is now an effective instrument in the hands of a substantial and growing number of woman wage earners; today over 3 million women are found in the ranks of organized labor.

USE OF NEW SKILLS

Another factor that will prove of decisive importance in the adjustment of women as well as men, in the reconstruction period, is the special training received by many persons as a result of the war. It is true that during World War I there was a training program to meet both industrial and military needs, in fact, the Federal Board for Vocational Education was created in 1917; but the kinds and extent of training at that time have been far outstripped by the present program. Though the vocational-training opportunities open to women during the two decades before World War II gave them practically no preparation for their work in the present war effort, and though from the special vocational-training system created as part of the defense program women derived only slight benefit, since then statistics tell an impressive story for women. By June 1943, almost 480,000 women had had preemployment courses and over 300,000 had taken supplementary courses given by the Vocational Training for War Production system. By May 1943, another 140,000 women had taken advantage of the short Engineering, Science, and Management War Training courses, now given free in some 200 colleges and universities. Many hundreds of women have been given technical training by the Signal Corps, Army Air Service, Army Ordnance, the navy yards, and other Government agencies. Countless women have participated in the training-within-industry program for upgrading workers and preparing them to become job instructors, and

⁶ *Life and Labor* (National Women's Trade Union League), December 1918 (p. 272).

also in the extensive training programs of plant managements which have given specialized but simpler in-plant training. More unusual are the arrangements, made with certain educational institutions by some industrial establishments, to give training at company expense to promising young college women, for positions as draftsmen, technicians, engineering aides, aeronautical engineers, etc.

Altogether, as a result of such training programs a goodly proportion of women have acquired skills that will be needed by many enterprises in the coming years. In this connection must be considered the excellent and truly amazing training that some millions of service men have received in this mechanized and highly technical warfare of land, water, and air forces. The men's new skills will serve as valuable qualifications in their post-war reemployment. Despite the Selective Service Act guaranty to demobilized servicemen of their pre-war jobs when circumstances permit, many will prefer other fields more closely allied with their war training. Already, new developments—radar, electronics, plastics, global airlines, world plans for rehabilitation, superhighways—are discernible, which seem to present alluring opportunities for thousands of specially trained men and women. Many workers, especially women, will be absorbed by a rapid and probably phenomenal expansion in consumer-goods manufacture to help replenish depleted stocks the world over.

EQUAL PAY FOR EQUAL WORK

One other vital factor calls for a brief discussion—the principle of equal pay for women. In fact, whenever men and women may be in competition for jobs the essential factor for preventing injustice to either sex in wartime or peacetime is that women be paid the same wage rates as men for comparable work. From its beginning in World War I the U. S. Women's Bureau has urged consistently that wages be based on occupation and not on sex.

The question of equal pay became a very definite issue 25 years ago when, as now, women were taking over jobs left by men called to the front. Recognition of the principle was given by the National War Labor Board of that time through its application in 50 of the cases that came before it, but there were numerous instances of inequality in pay.

Greater gains, and it is to be hoped more lasting ones, seem to have been achieved in the present emergency. Though the beginning of World War II found the double wage standard largely prevailing, considerable impetus has been given by industry, Government, and labor to the extension of the equal-pay principle with the large-scale replacement of men by women. As noted, two of the key war industries (aircraft and shipbuilding) employing large numbers of women, and to great extent in place of men, generally pay women the same rates as men, when on identical or comparable jobs, and also the same entrance rates for new and inexperienced workers. In the other war industries surveyed by the Women's Bureau, four-fifths of the plants paid for the job regardless of sex and four-fifths started inexperienced men and women at the same rate.

The present National War Labor Board has taken several important steps to promote a widespread adoption of the equal-pay principle. In a number of important cases the Board has ordered employers to

put the equal-pay principle into effect in their plants. The Board also issued its Order No. 16, which permits employers voluntarily to make adjustments to equalize the wage or salary rates of women with rates paid men for comparable work, without prior approval by the Board.

Thus, labor unions are given full opportunity by the Government to have an equal-pay clause written into their contracts. The general attitude of organized labor is manifested in the endorsements of the policy by both the American Federation of Labor and the Congress of Industrial Organizations after the United States entered the war. Some unions forged ahead immediately in this matter. The stand of the War Labor Board, plus efforts made by the Women's Bureau, has stimulated other union activities in this direction. Current and comprehensive data are not available, but several months ago it was revealed that the United Electrical, Radio and Machine Workers had entered into some 150 signed agreements having an equal-pay clause and covering at least 800 factories. The United Rubber Workers had negotiated about 142 contracts, and the United Automobile, Aircraft, and Agricultural Implements Workers probably 50, with a similar clause. Definite progress in the requirement of the same wage rates for women as for men also has been made by some of the American Federation of Labor unions.

Other aspects that must be considered in the post-war program for women were pointed out recently by the Director of the U. S. Women's Bureau:

There are two realistic approaches to the problem (as to future developments for the 18 million women, or so, employed in the war period). First, a large number of these women do not expect to continue in paid work. Like their men in the armed forces many women consider their present employment a patriotic duty. They know with the coming of peace their special work will be over. Automatically they will return to their regular business of homemaking.

But there is another inescapable side to the story. For decades in this country millions of women have had to earn their own living, and many also have had to be the total or partial support of dependents. As a result of the war women's wage-earning responsibilities will be greatly increased. A large number of women in all types of positions will have to continue to take the place of men—to take the place as breadwinners of men who fail to return or who come back incapacitated from the battle fronts.

The Women's Bureau is giving attention to post-war plans and possible developments for woman workers, realizing that their employment is complicated by issues distinct in a number of respects from those pertaining to men. Special consideration is imperative not only to guarantee full employment opportunities to women in the transitional period and to prevent undue unemployment difficulties and unfair discrimination against them, but also to dovetail all such questions with the post-war program that will be evolved for men.

Labor Conditions in Bulgaria¹

BULGARIA is almost entirely an agricultural and pastoral country with about 80 percent of the gainfully occupied population engaged in agriculture and related pursuits. Under Turkish rule which lasted for five centuries (1393-1878) practically all social distinctions were obliterated and the country became a nation of peasants. In 1878, by the Treaty of Berlin, the territory lying north of the Balkan range became an autonomous principality under the suzerainty of Turkey, the part of the territory lying south of the range—eastern Rumelia—becoming a Turkish Province. By a coup d'état in 1885, which Turkey was too weak to oppose, Bulgaria effected the fusion of the principality and eastern Rumelia, under one prince, although the territory remained under Turkish overlordship. It was not until 1908, at the time of the Young Turk Revolution, that Bulgaria finally declared her independence and was transformed from a tributary principality into an independent kingdom.

The boundaries of the country have been subject to frequent change. By the Treaty of Bucharest (1913) which terminated the second Balkan war, the Province of Southern Dobrudja with a territory of 7,696 square kilometers was lost to Rumania, but 23,187 square kilometers in Macedonia and Thrace were acquired from Turkey. In 1915, Turkey ceded to Bulgaria an additional strip of territory of 2,588 square kilometers for the purpose of rectifying the Bulgaro-Turkish frontier in Thrace. By the Peace Treaty of Neuilly (Paris, November 27, 1919) Bulgaria ceded 2,566 square kilometers to Yugoslavia and placed 8,712 square kilometers of Thrace at the disposal of the Allied Powers, which subsequently gave this territory to Greece by the Treaty of Lausanne, 1923. The 1919 treaty deprived Bulgaria of her Aegean Sea front. As a result of this rearrangement of territory, hundreds of thousands of Bulgarians residing in the ceded territories moved across the borders of the rearranged State. In 1940, Rumania ceded to Bulgaria the 7,696 square kilometers acquired in 1913 with a population of 294,348, and after the conquest of Greece by the Axis, Bulgaria annexed eastern Macedonia and Thrace with an area of 16,682 square kilometers and a population of 590,000.

The total population of the country in 1934, the date of the last census, was 6,077,939 and the estimated population, calculated on the basis of the natural increase in population and immigration, in 1940 was 6,550,000. Including the populations added through the territories acquired in 1940 and 1941, therefore, the present population of the country would be somewhat in excess of 7 million.

Boris III, King of Bulgaria, reigned from the abdication of his father in October 1918 till his own death in August 1943. A Fascist government was formed in May 1934 by a military coup d'état, and there have been frequent changes of government since that time. Since the death of Boris III, the control of the country has been vested in a regency, acting for the young king, Simeon II.

¹ Prepared in the Bureau's Editorial and Research Division, by Anice L. Whitney.

In March 1941, Bulgaria signed the Three-Power (Axis) pact as German forces moved into the country, occupying the airfields, the port of Varna on the Black Sea, and Sofia, the capital. On June 5, 1942, the United States declared war against Bulgaria.

Economic Resources

Although the soil is the principal economic resource of Bulgaria, the portion of the country suitable for cultivation is relatively small, because of the mountainous character of many sections. Two mountain ranges cross the country from east to west and it is in the valleys, some of which are very fertile, and the lower slopes of the hills that agricultural production is centered. Climatic and soil conditions are varied and permit a wide variety of agricultural products to be grown. The principal grain crop is wheat, but corn, barley, rye, and oats are also produced in considerable quantities and some rice is grown. Tobacco is the most important crop from the standpoint of export value. Other agricultural crops include some cotton, a variety of vegetables and fruits, and oil seeds. Roses are cultivated for the production of attar of roses.

Approximately 38 percent of the total area of the country is arable land, 14 percent is in meadows and pastures, and 29 percent in woods and forests, much of the remainder being waste land. The area annexed from Greece after the Axis occupation of that country included the richest tobacco lands of Greece. The abundant supplies of timber represent the second most important economic resource and coal, with which the country is very well supplied, represents the third. Small amounts of metals, principally copper, and a limited amount of water power exhaust the list of Bulgaria's known natural resources.

Land holdings are generally small, the density of the agricultural population having been estimated at the time of the last official census at 116 per square kilometer of arable land; this would be about 2.1 acres per holding. Of the total number of agricultural holdings in 1934, 30.0 percent were under 12.35 acres, 66.9 percent were under 24.71 acres, and only 1.6 percent were 124 acres or over. In 1934, it was reported that agricultural pursuits contributed about 60 percent of the income and sustained about 80 percent of the population.

Industrial Development

A policy of encouraging industry was adopted by Bulgarian leaders toward the end of the last century, when the import duty was raised, and in 1906, when a tariff system based on specific duties, made high enough to afford protection to the rising industries, was introduced. In addition to tariff protection, legislation was enacted granting to "protected" industries such privileges as exemption from certain taxes and from customs duties for imported machinery, reduction in railway rates, preference in placing Government orders, and the granting of production concessions for limited areas. Industries entitled to protection had to have stated minimums of capital, of workers, and of mechanical force, and were required to be active at least 6 months in the year. Under the influence of this protection, factory production developed in a number of branches of industrial

activity. These special measures for the encouragement of industry were modified subsequent to the enactment of the Industrial Encouragement Law of 1928; in 1936, the privileges formerly granted to local industry were withdrawn and all industrial establishments, instead of only those receiving State encouragement, were placed under uniform State control.

According to a report in 1943, the country suffers from a lack of locally produced fuel. In spite of the use of Bulgarian coal and the increasing use of electricity generated by water power, the country is obliged to import large quantities of petroleum, which represent about 25 percent of the total fuel used in industry.

The most highly developed industry is the textile industry, which accounts for one-fourth of the present total industrial production of the country. The textile mills developed from small establishments built in Turkish times, generally in the mountains, where they used water power which is still used to a considerable extent. The extent of development in recent years has been such that the quality of product now rivals that of textile establishments of western countries.

Next in importance after the textile industry are industries manufacturing foods and drinks, and tobacco products. Measured by value of production, the other principal industries in order of importance are mining, chemicals, installations for the generation of electricity, paper products, leather, rubber and asbestos products, woodworking and furniture, and ceramics and glass. Approximately 80 percent of the raw materials used in industry are Bulgarian products. At the present time, it is said, Bulgarian industrial establishments carry on their work under very great difficulties; nevertheless, their production is greater than at any time in the past.

Occupations of the Labor Force

The latest data regarding the industrial distribution of the population are contained in the 1934 General Census. Of the total population of 6,077,939 in that year, 3,433,103 or 56.5 percent, were gainfully occupied. Agriculture, forestry, and fishing accounted for 2,744,927 persons, and industry for only 266,405. The preponderance of small-scale enterprise in both these fields is shown by the fact that 754,078 persons engaged in agriculture and 75,140 in industry were employers or independent workers, amounting in each case to approximately 28 percent of the total. There were 1,849,575 assistants in agriculture and 18,275 in industry, while employees and wage earners numbered 141,274 and 172,990 in agriculture and industry, respectively.

Table 1 shows the gainfully occupied population in Bulgaria in 1934 by branch of activity and by sex.

Figures issued by the Bulgarian Statistical Office in 1936 showed that, inclusive of workshops where a single person worked for himself, there were at that time 69,232 workshops and industrial enterprises. In May 1943, there were 3,525 registered industrial enterprises. This figure does not include small private workshops in which only one or two men work. Of the enterprises in operation, 1,100 employed 50 or more workmen and used machines of 100 horsepower or over. In the 3,525 registered enterprises, approximately 107,575 persons were employed, of whom 96,125 were wage earners and 11,450 salaried

employees. It was estimated that these workmen and their families together numbered about 600,000 persons. Thus, it is seen that only some 10 percent of the total population within the borders of old Bulgaria gain their living from industry—a percentage which is regarded as very low even for an agricultural country. The value of industrial products, however, is disproportionately high, because in 1940 the total value of the products of Bulgarian industry was more than half the total value of agricultural production.

TABLE 1.—Gainfully Occupied Population in Bulgaria in 1934, by Branch of Activity and by Sex

Industry or profession	Total gainfully employed	Personnel of establishments							
		Employers		Assistants		Salaried employees		Wage earners	
		Male	Female	Male	Female	Male	Female	Male	Female
All industries.....	1,343,103	882,612	93,034	560,311	1,317,930	82,913	20,866	373,146	101,572
Agriculture, forestry, and hunting and fishing.....	2,744,927	700,289	53,789	543,948	1,305,627	1,092	13	102,573	37,596
Mines and quarries.....	8,356	268	13	15	2	190	---	7,842	26
Manufacturing.....	266,405	68,645	6,495	9,989	8,286	3,796	66	137,819	31,309
Transportation and communications.....	43,389	11,517	20	528	---	6,125	1,246	23,816	137
Commerce, banks, and insurance.....	80,904	40,382	1,480	3,696	2,356	16,573	1,459	13,986	972
Domestic and personal service, recreation, sports, and hygiene and medical services.....	85,777	22,001	2,111	2,133	1,658	3,968	1,318	22,295	30,263
Education, religion, and art.....	40,943	2,761	279	2	1	22,093	15,091	637	79
Public services.....	75,460	3,184	---	---	---	29,076	1,673	40,367	1,160
Other, and unspecified occupations.....	186,942	33,565	28,847	---	---	---	---	23,811	---

¹ Includes 719 persons whose situation in the occupation was not reported.

Unemployment

Unemployment in Bulgaria has not been so serious a social problem as in more industrialized countries as there has been a tendency for the peasant to work for a time in industrial enterprises and then return to his farm or village. However, rather unusual measures were taken to deal with such unemployment as the country experienced. A decree of May 14, 1935, relative to the engagement of unemployed persons, provided that every Bulgarian subject who is unemployed is entitled to be placed in employment, although it was provided that the financial and family circumstances of unemployed persons should be taken into account in placing them. The law provided that first preference should be given to skilled wage-earning and salaried employees who are heads of families and have no other means of support. Unemployed persons who have no family and live alone should be placed in employment after the heads of families, and the second and other members of families should be placed after these two groups.

It was further provided that every salaried or wage-earning employee with a family of not more than 3 persons should be dismissed from his post if, in addition to his wages and salary, he or any member of his family was in receipt of a supplementary income derived from wages or any other form of remuneration, a pension, or interest on

the return yielded by real property or rents, if the additional income amounted to 2,500 leva per month for a person who had not had a secondary education, 3,500 leva for a person who had had a secondary education, and 4,500 leva for a person who had had a university education. These amounts were increased by 250 leva, 400 leva, and 500 leva, respectively, for each additional member of the family. Such persons might not be placed in employment as wage-earning or salaried employees. These provisions did not apply to persons in managerial and administrative positions. All persons to whom these provisions applied were required to resign their positions within 1 month from the date of publication of the decree.

According to an amendment of May 14, 1935, persons whom an establishment wished to retain could continue in employment if the enterprise paid a sum, for the duration of employment, equal to 40 percent of the salary or wages paid such a person, into the account of the Labor Directorate of the Bulgarian National Bank.

A later decree, May 4, 1936, relative to the placement of unemployed persons with a secondary or university education, provided that no alien might be taken into any paid employment without the consent of the Labor Directorate. The Directorate could require the establishment or undertaking to engage an unemployed Bulgarian subject as a condition of its consent to the engagement of an alien or, if the establishment did not wish to engage an unemployed person, to pay monthly into the account of the Labor Directorate in the National Bank a sum equal to the remuneration of an unemployed person with a university education, or dismiss an alien who would thus lose the right to employment in Bulgaria.

A decree of August 27, 1936, limited the proportion of alien workers in industrial enterprises to 20 percent of the skilled workers during the first 5 years of the company's existence and none thereafter, and to 40 and 20 percent, respectively, for technical staff. No aliens were allowed employment in the case of managerial staff and unskilled workers.

Employment Agencies

Employment offices under the control of the Minister of Commerce, Industry, and Labor were established as early as 1925. At the same time private fee-charging offices were abolished, although the special offices maintained by labor organizations were allowed to continue their operations if their services were gratuitous. The administration of the employment offices and that of the unemployment-insurance system were closely associated, the offices having three sections—employment-exchange and unemployment section, social-insurance section, and vocational-education section. The law affected all industrial enterprises as well as agricultural undertakings which are recognized as being conducted on modern lines. All Bulgarian citizens of both sexes over the age of 14 were entitled to the services of the employment offices.

Requisitioning of Labor

Civilian mobilization during the war was organized in Bulgaria by an act of May 4, 1940, supplemented by a large number of regulations and orders. The law applies to all nationals of both sexes between the ages of 16 and 70 years, who are exempt from or ineligible for

military service, and covers all public and private administrations, establishments, and enterprises. By way of exception it could also be extended to foreign nationals and enterprises established in Bulgaria.

For the purpose of civilian mobilization workers were divided into two groups—agricultural labor and nonagricultural labor. Registration of workers in both these fields was required by the law and lists were to be prepared which would give a general view of the supply of both types of labor, classified by occupations. Agricultural labor was to be allocated, in accordance with special regulations, to the rural areas which were short of or without labor and equipment in consequence of military mobilization. The Labor Directorate and its inspection authorities are responsible for allocating nonagricultural labor. Public and private administrations were supplied with lists of the civilians who were eligible for mobilization and who could replace persons called to the colors.

The Council of Ministers, acting through the Civilian Mobilization Directorate attached to the Ministry of War, has general charge of civilian mobilization. A Higher Advisory Council attached to the Directorate includes representatives of the various Ministries, the Statistical Office, the military authorities, and of business interests and workpeople.

Wages, Hours, and Working Conditions

The wages paid in Bulgaria are very low as compared with countries of western Europe, and as a result substandard living conditions prevail. The fact that the nation is one of peasant proprietors, who are able to live in times of economic depression on the product of their labors, is the saving factor in the situation.

Hourly wages in industry fell from an average of 7.81 leva² in 1929 to 6.03 leva in 1936 and rose, thereafter, to an average of 9.23 leva in 1941. Although money wages declined between 1929 and 1936, the cost of living also fell and the index of real wages based on 1929 as 100 was 135 in the later year. Both wages and living costs increased up to 1941, the index of real wages being 110 in that year. There was a general 10-percent increase in wages, made effective by a decision of the Council of Ministers, on August 1, 1941.

The average hourly wages of men and women and the index numbers of real wages for the years 1929 to 1941 are shown in table 2; table 3 shows average earnings in various industries in 1938 and 1941.

The wages paid in State construction work during the building season of 1943 are shown in table 4. The hours were increased to 10 per day with the regular rate payable for overtime.

² The lev which had a par value in United States currency of 19.3 cents during the first World War fell to less than 1 cent in 1922. The currency was placed on a full gold exchange standard in 1928, making 92 leva the equivalent of 1 gram of fine gold. The exchange value of the lev during the 1930's reached the highest point—1.2958 cents—in 1936, from which point it declined to 1.2111 cents in 1939, the last year for which quotations are available.

TABLE 2.—Average Hourly Wages of Men and Women, and Index Numbers of Real Wages, 1929–41¹

Year	Hourly wages			Indexes (1929=100) of real wages		
	Male	Female	Total	Male	Female	Total
	<i>Leva</i>	<i>Leva</i>	<i>Leva</i>			
1929.....	10.01	5.98	7.81	100	100	100
1930.....	9.76	6.16	7.33	107	113	103
1931.....	9.25	5.58	7.12	116	117	114
1932.....	7.75	4.90	6.20	105	112	108
1933.....	7.76	4.69	6.53	114	115	123
1934.....	7.29	4.59	6.09	114	121	122
1935.....	7.04	5.13	6.11	118	144	131
1936.....	7.09	5.22	6.03	124	153	135
1937.....	7.78	5.88	6.61	134	169	146
1938.....	8.15	6.33	7.02	136	176	150
1939.....	8.27	6.58	7.32	132	176	150
1940.....	8.82	7.47	8.32	130	184	157
1941.....	10.27	7.72	9.23	122	154	110

¹ Data are from Yearbook of Labor Statistics, 1942 (International Labor Office, Montreal).

TABLE 3.—Average Hourly Earnings in Bulgaria, 1938 and 1941, by Industries and Occupations

Industry and occupation	Average hourly earnings		Industry and occupation	Average hourly earnings	
	1938	1941		1938	1941
Coal mining:			Cotton spinning and weaving—		
Underground workers, male—	<i>Leva</i>	<i>Leva</i>	Continued.	<i>Leva</i>	<i>Leva</i>
Skilled.....	7.75	10.95	Weavers, female.....	4.89	6.31
Unskilled.....	6.59	8.86	Warpers, female.....	5.32	5.69
Surface workers—			Dyers and finishers, male.....	7.37	9.09
Skilled.....			Dyers and finishers, female.....	5.35	5.92
Unskilled.....	5.90	8.62	All occupations—		
All occupations.....	7.03	9.56	Male.....	6.79	8.51
Metal industries:			Female.....	5.14	6.02
Founders, male.....	7.71	10.01	Other textiles and silk:		
Turners, male.....	8.84	11.09	Male workers.....	8.12	9.91
Locksmiths, male.....	8.17	9.54	Female workers.....	4.42	5.92
Blacksmiths, male.....			Average, all textiles:		
Laborers, male.....	6.57	8.06	Male workers.....	6.77	8.82
All occupations, male ¹	7.43	9.19	Female workers.....	4.73	5.99
Ceramics, tile, and brick manufacture:			Soap manufacture:		
Male workers.....	5.03	7.19	Male workers.....	6.82	7.49
Female workers.....	3.21	4.71	Female workers.....		
Cement manufacture: Male workers.....	6.67	8.40	Hides and skins: Male workers.....	8.29	11.28
Sawmilling: Male workers.....	7.03	10.27	Rubber goods:		
Wool spinning and weaving:			Male workers.....	7.44	10.68
Wool sorters, male.....	5.88	7.78	Female workers.....	6.25	7.35
Spinners, male.....	7.86	10.08	Flour mills and rice grinding:		
Spinners, female.....	4.86	5.81	Male workers.....	7.00	9.38
Weavers, male.....	6.33	7.84	Preserved food and meat:		
Weavers, female.....	5.17	6.57	Male workers.....	6.04	8.28
Warpers, female.....	4.11	5.38	Female workers.....	3.02	4.66
Dyers and finishers, male.....	6.68	8.83	Confectionery:		
Dyers and finishers, female.....	4.32	5.65	Male workers.....	8.47	10.96
All occupations—			Female workers.....	3.61	5.65
Male.....	6.37	8.17	Tobacco factories:		
Female.....	4.54	5.92	Tobacco products, male.....	7.22	8.99
Cotton spinning and weaving:			Tobacco products, female.....	4.74	6.01
Cotton operatives, male.....	5.87	7.71	Packers, male.....	8.64	11.83
Spinners, male.....	7.04	9.52	Packers, female.....		
Spinners, female.....	5.14	5.97	Laborers, male.....	8.09	11.38
Weavers, male.....	7.71	10.86	Laborers, female.....	5.74	8.12
			Vegetable oil production: Male workers.....	5.90	8.14

¹ Including certain occupations not given in the table.

TABLE 4.—Daily Wages of Workmen in State Construction Work, for Building Season of 1943

Occupation	Rate per 8-hour day ¹	Occupation	Rate per 8-hour day ¹
	<i>Lera</i>		<i>Lera</i>
Laborers.....	100-120	Miners and support builders, tunnel work.....	200
Drivers.....	110	Master masons, carpenters and others, tunnel work.....	230-300
Excavation workers.....	120-140	Master workmen, tunnel foundations.....	250-320
Skilled workers (gravel, rough stone, tiles, etc.).....	100-180	Master stonecutters and pavers.....	230-300
Foundation workers.....	120-130	Master machinists.....	230-300
Supervisors.....	150	Technical workers with secondary education.....	250
Carpenters, tinsmiths, pipe layers, etc.....	160-200	Teamster with horse and wagon.....	300-400
Machinists (motors and compressors).....	200	Teamster with 2 horses and wagon.....	500-700
Master masons, carpenters, cement workers, painters.....	200	Engineers and architects.....	400
Plumbers.....	200		

¹ 10-hour day worked, with regular hourly rate of pay for hours in excess of 8.

WARTIME WAGE REGULATION

Administrative regulations issued January 27, 1941, under the Civilian Mobilization Act of May 4, 1940, provided that the wages and other remuneration of civilians, who are mobilized for work under this law, should not be governed by individual or collective agreements but should be determined solely by the decision of the Council of Ministers. A decision of the Council of July 25, 1941, taken under this act, provided that wages and salaries of workers and minor employees working permanently for the same employer, whose wages had not been increased under earlier regulations, should be increased 10 percent. The increase was to be effective August 1, 1941, and calculations were to be made on the basis of pay rolls for March 31, 1941. Workers on a piece-work basis were to receive a 10-percent increase per piece. Compensation paid in kind was not subject to an increase. Workers who had received an increase of less than 10 percent during the period March 1 to August 1, 1941, would receive the difference as from August 1. Similar rates were to be effective for workers beginning work after the date on which the increases became effective.

The increases were made applicable also to minimum wages and salaries fixed by collective agreements, decisions of arbitration committees, and orders of the Minister of Commerce, Industry, and Labor which were still in force at the time of the July 1941 decision.

FACTORS AFFECTING WAGES

Since Bulgaria is an agricultural country and also one of small-scale enterprise, a smaller proportion of the workers are benefited by supplementary advantages, such as family allowances and vacations with pay, than in more industrialized countries.

Family allowances.—There was a system of family allowances for workers in State services prior to 1930, but no general system was introduced until August 4, 1942, when regulations were issued by the Council of Ministers. These regulations provided for allowances to all workers of Bulgarian nationality or origin, who are covered by social insurance and are employed in private industrial enterprises, tobacco factories, mines, and electric-power stations, and to workers in public communal or autonomous institutions, establishments, and estates.

The allowances were retroactive to July 1, 1942. Allowances are payable for children up to the age of 21 years, provided the child does not work. The system is administered by the Directorate of Labor to which a special section and self-governing fund have been attached. The cost of the scheme is borne by employers, who pay 10 percent of salaries and wages into the fund. The allowance is 100 leva a month for the first child and 200 leva a month for the others.

Vacations with pay.—Seven days' annual leave with pay for employees working for the same employer for 2 full years, with or without interruption, was granted by the law on contracts of employment passed September 5, 1936. The law covered any institution, establishment, business, or household in which persons are employed. An amendment of December 21, 1940, reduced the period which entitled a worker to a paid vacation to 1 year and increased the vacation to 14 working days. If a worker is dismissed less than 3 months before completion of the period which entitles him to a vacation, he is entitled to 1 day's wages for each completed month's work. Employees of cooperative associations and their central organizations, who were paid by the month, were granted a vacation of 15 days after 1 year's service with the same society or organization, by an agreement concluded May 1, 1939.

Social-insurance contributions.—Contributions are paid by wage earners, salaried employees, and handicraft workers to the social-insurance systems maintained for these classes of workers. Although these contributions form a tax upon wages, the return in the form of benefits more than compensates for these payments.

HOURS OF LABOR

The maximum daily hours of work were fixed at 8 per day and 48 per week for adult workers by a law of June 24, 1919, and at 6 per day for dangerous and unhealthy employments. For children under the age of 16, hours of work were fixed at 6 per day, and night work was prohibited for women and minors. Overtime was prohibited. Prior to that time the hours of work for men had been 11 per day, for women 10, and for children under the age of 16 years, 8 hours. Every wage-earning employee was entitled to an uninterrupted weekly rest period of 36 hours and from 1 to 3 rest periods during the day's work, 1 hour of which was for the mid-day meal. Similar hours were fixed for commercial employees in 1933. In the construction industry, hours were fixed at 8 for day work and 6 for night work by an order issued in 1935. Hours were lengthened to 9 hours on every working day, except Saturday, in State departments and establishments in 1939. A decree of December 2, 1940, provided that in certain enterprises, establishments, and processes to be specified by the Minister of Commerce, Industry, and Labor, the hours of work could be increased to 10 per day for adult workers of both sexes, and to 8 per day in dangerous and unhealthful work, while women over 21 years of age could be employed in night work. The overtime rate for such work could not be less than time and one-quarter.

LABOR AND EMPLOYER ORGANIZATIONS

The Government has exercised close supervision over both worker and employer organizations. Industrial associations of employees

were first authorized by a decree of September 13, 1934, which provided that every farmer, craftsman, wage-earning employee, person engaged in commerce or industry, member of a liberal profession, and salaried employee in a bank or insurance company was entitled to become a member of the appropriate industrial association. Only one association was permitted for each occupational group. Employers and employees could not be members of the same association. Although membership was not compulsory, every person engaged in the branches covered was required to pay the annual contribution. Employees of the State were also authorized to become members of existing industrial associations.

All members of associations in the Kingdom were united in the General Federation of Bulgarian Employees by a decree of January 11, 1935, which also established the organizational framework of the associations by occupation and area. A decree of March 6, 1935, authorized the industrial organization of employers in large-scale industry.

The system of occupational organization was reorganized on fresh bases by a decree of July 1, 1941, which repealed the earlier legislation on trade-unions. By this law, occupations are grouped under the six main headings of agriculture, intellectual or manual employment, handicrafts, industry, commerce, and credit and insurance. The principal duties of an occupational organization are to educate its members in a national spirit, to submit to the Government proposals for educational and social reform, to designate representatives of the occupation for public institutions, and to act as a Government agency for the carrying out of State economic and social policy.

In each occupational group only one national confederation may be formed. Similarly there may be only one association for the group in each district, and one in each locality. Provision was made for six national confederations: Agricultural workers, handicraft workers, wage earners, persons engaged in commerce, employers in large-scale industry, and credit and insurance establishments. Each occupational organization is governed by a committee elected by the members and is financed by compulsory contributions by all persons belonging to the occupation concerned and by voluntary contributions by the members. The rate of the compulsory contribution was to be from 1 to 3 days' pay.

The system is under the direct supervision of the Government, exercised through a Directorate of Occupations, which is subordinate to the President of the Council of Ministers. An advisory council is also attached to the Directorate.

The law follows the German pattern by providing for the establishment of a recreation organization, known as the Work and Joy Council, in the Directorate of Occupations, and for the organization of local work and joy committees.

The latest information on trade-union membership is for 1939, when the number of members was 162,000.

Industrial Relations

COMPULSORY LABOR SERVICE

Bulgaria has a system of compulsory labor service, established by an act of June 5, 1920, which has been amended a number of times.

The original act provided that all men upon reaching the age of 20, and girls (with the exception of Mohammedans) at the age of 16, were liable to compulsory community labor. The labor service could be utilized in all branches of economic activity and public welfare, particularly in the construction of public works. The period of service was fixed at 12 months for men and 6 months for girls, but with only half of this service required when the person concerned was the sole support of the family. The service period could be deferred when the young person was attending school. A Central Office for Compulsory Labor Service was established within the Ministry of Public Works, Communications, and Welfare. In principle, temporary labor service was to be rendered personally, but a law passed in 1922 provided that exemption could be purchased if authorized by a resolution of the communal council.

COLLECTIVE AGREEMENTS

The scope of collective agreements was defined by a law of September 5, 1936. The law provided that collective agreements must be in writing and must be registered with the competent labor inspection office. Agreements may be concluded for a specified period (not exceeding 3 years), for an indefinite period, or for the duration of a specified enterprise (not exceeding 2 years), and are binding upon all employers and employees in the industry whether or not they are members of the organizations concluding the agreements. A decree of June 13, 1940, provided that in case of war the Minister of Commerce, Industry, and Labor may submit to the Council of Ministers a proposal that minimum rates be fixed for employees without consulting the organizations concerned.

INDUSTRIAL DISPUTES

Strikes and lockouts were prohibited by a decree of September 22, 1936. An employee taking part in a strike may be deprived of some or all of the advantages to which he is entitled under the labor protection laws, by a decision of the arbitration court, on the application of the labor inspectorate or the employer. Employers taking part in a lockout are subject to a fine, while persons inciting employees to strike or employers to declare a lockout are liable to imprisonment. This law was enacted after the most serious strike the country had experienced, which took place in the spring of 1936 in the tobacco-processing industry. No strikes were reported by the Bureau of Labor and Social Insurance thereafter.

CONCILIATION AND ARBITRATION

A law of April 12, 1925, provided that the Minister of Commerce, Industry, and Labor should appoint an arbitration court in connection with every local employment exchange. The court was to consist of one justice of the peace for the locality in question, as chairman, and one representative each of employers and employees, proposed by their respective local organizations. The term of office of members of the court was fixed at 3 years. Complaints were to be made in writing and the court was required to render a decision within 7 days. The decisions of arbitration courts could be appealed to the competent court of first instance; but, under an amendment of May 2, 1941, the

decisions of the arbitration courts and of the Central Arbitration Board are final. This law also provided that unanimous awards of the communal arbitration boards, of the Central Arbitration Board, decisions of the Council of Ministers, and orders of the Minister of Commerce, Industry, and Labor should be deemed to be collective contracts of employment and should not be subject to appeal.

Cooperative Movement

One of the outstanding characteristics of the Bulgarian cooperatives is their great diversity. All of the various branches of cooperation—consumers', credit, insurance, agricultural, and workers' productive—are found in Bulgaria. In addition, these branches include not only the usual types found where the cooperative movement is well developed, but also some rather novel forms of cooperation. Thus, the consumers' cooperatives include not only the supply associations providing food, household supplies, etc., but also school (students') cooperatives and medical-care associations. The credit cooperatives include both urban peoples' banks and agricultural credit associations. The agricultural cooperatives include not only the joint buying, processing, and marketing associations, but also associations of cocoon growers, forestry associations, collective-farming associations, and associations distilling attar of roses. The workers' productive associations include water-supply and electricity cooperatives, as well as handicraftmen's associations buying the raw materials and marketing the products.

The Bulgarian movement is also well integrated, each branch having one or more central unions which are in turn members of nation-wide federations.

By the end of 1939—the latest year for which data are available—the cooperative membership in all types of associations numbered 950,571, representing 15.6 percent of the population. Although Bulgaria is primarily an agricultural country, about 62 percent of the cooperative membership was in urban areas and only 38 percent in rural districts. The 3,502 associations had total assets in 1939 amounting to 13,647,460,000 leva.

The whole cooperative movement in Bulgaria is headed up in the National Committee of Bulgarian Cooperation, to which 10 of the 12 federations in the various branches of cooperation belong. Its functions include defense of the interests of the cooperative movement, coordination of its activities, and organization of publicity and educational work regarding the movement.

The Government has been interested in the cooperative movement and has from time to time intervened to assist or regulate it or to assume complete control; it has also made regular statistical surveys of the extent of the cooperative movement.

In 1924, the Government opened a Higher School of Cooperation with the purpose of training employees and managers for cooperative associations. A legislative order was issued in October 1934, merging the Agricultural Bank (a State organization) with the Central Cooperative Bank (making loans largely to urban associations). This measure, it was felt, would tend toward greater cohesion among the various branches of the cooperative movement and make for a more even distribution of funds. Although designed to promote the development of various kinds of cooperatives, this order also resulted

in permitting the Government to exercise some measure of supervision over the work of all the cooperative societies in the country. A decree-law, issued in October 1934, gave the Government authorities the right to remove any officers or administrators in the cooperative movement not acceptable to them and to replace them by their own appointees.

Only meager information is available as to the effect of the war on the cooperatives in Bulgaria. It is known that the agricultural cooperatives and the credit associations are acting as agents of the Government in the collection of agricultural produce. Even as early as 1940, it was reported that over two-thirds of the associations' marketing business consisted of the handling of Government-controlled produce. In 1942, over a third of all the agricultural products marketed in Bulgaria were handled by the cooperatives.

One outcome of war conditions has been the entrance of cooperatives into the canning and preserving industry. Since the beginning of the war, the country has been exporting considerable quantities of fruit and vegetables. Because of the necessity of utilizing to the utmost the available transportation facilities, it seemed desirable to ship these commodities in the least bulky form. Hence, the drying, canning, and preserving of these goods became an important industry in which, by the end of 1941, from 22 to 37 percent of the product was the output of cooperatives.

Social Insurance

General system.—Unlike the systems in the principal European countries which originated as a result of the strong organization of labor, with only a partial governmental control, the Bulgarian general social-insurance system was created directly by the Government in 1924, the part played by the workers' and employers' representatives being simply consultative. The system was apparently adopted in this manner because of the unpreparedness of workers and employers alike for such a task. The law, which has been frequently amended, covers both wage earners and salaried employees in public and private establishments, without distinction as to the nature of employment, nationality, sex, or rate of wage or salary. Workers having no permanent employer, such as porters, cabmen, carters, etc. (but not agricultural workers), were added in 1937. Voluntary insurance was allowed to independent handicraft workers, small employers, farmers, members of the liberal professions, and officials of institutions belonging to the State or local authorities, if their annual income did not exceed 50,000 leva. Alien wage earners and salaried employees are required to insure in respect of accidents, sickness, and maternity, but not for invalidity and old age unless their respective countries also insure Bulgarian nationals employed within their territory. In 1939, the number of insured persons in the system was 238,000.

The costs of the accident insurance are borne by employers. Sickness insurance is financed by equal contributions by the insured persons, employers, and the State. Insured persons are divided into five wage classes on which the contributions and benefits are paid. The employees' contributions range from 1.5 to 4 leva a week, according to their earnings, an equal amount being paid by the employer and the State. Voluntarily insured persons pay from 3 to 8 leva a week,

the State paying half this amount. For workers who do not have a permanent employer, contributions from the employer are 5 percent of the remuneration paid such employees and from the workers, 5 percent of their wages. The threefold contribution for invalidity and old-age insurance is the same as for sickness insurance.

Sickness benefits include cash benefits and medical treatment, including medicines, surgical and hospital treatment, orthopedic appliances, etc. Cash benefits vary according to the earnings of the insured person and a daily allowance is made for each dependent child. Formerly there was free choice of physician, but in 1934 a system of attendance by appointed medical officers in conjunction with the dispensaries of the insurance fund and the works medical officers was instituted.

Maternity benefits include the services of a midwife, medical treatment, and cash benefit which is payable for a maximum period of 12 weeks (6 weeks before and 6 weeks after childbirth). The benefit is payable if the insured woman has paid at least 16 weekly contributions.

An invalidity pension is available to incapacitated persons up to the age of 60, if the working capacity is reduced more than 50 percent as a result of some cause other than an accident and if at least 156 weekly contributions have been paid. The invalidity pension is based on the wage class of the insured person. The average annual benefit ranges from 1,500 leva for class 1 to 6,000 leva for class 5, and is increased by 2 leva per week for each week of contributions in excess of the minimum of 156 weeks.

Old-age pensions are payable at age 60 to insured persons who have paid at least 1,040 weekly contributions, if they have no other means of support and the working capacity is reduced by not less than one-third. The old-age annuity consists of the same basic amount as for invalidity pension, increased by 1 lev per week for each week of contribution in excess of 156. Survivors' pensions were provided by a 1935 decree for the widow, or widower in certain cases, and dependent children or other relatives. The total amount of survivors' pensions may not exceed the individual pension of the deceased.

Accident benefits are payable for injury or death resulting from industrial accident or from one of the listed occupational diseases. The benefits include free medical treatment and a pension varying according to the degree of incapacity produced by the accident or sickness.

The Minister of Commerce, Industry, and Labor administers the act through a Social Insurance Office attached to the Labor Department.

INVALIDITY, OLD AGE, AND DEATH

Salaried and professional workers.—A compulsory disability, old-age, and life-insurance system for white-collar and professional workers was established by a law of January 17, 1941, which was to become effective 4 months later. The law, in general, relates to all persons over 16 years of age engaged in professional work requiring more than a high-school education, if they earn at least 800 leva per month. It covers administrative, technical, and managerial personnel; office employees; commercial employees and salesmen whose work requires special training; teachers, artists, and musicians; physicians, dentists, and pharmacists and their assistants; and secretaries and clerks in the

professional unions. Persons privately practising a free profession may be included, if their respective general professional organizations ask to be covered. Men who are over 55 years of age and women over the age of 50 when first insured are not eligible for disability insurance, but are insurable against old age and death. Voluntary insurance may be taken out in certain cases.

The system is financed by joint contributions by employers and insured persons, no contribution being paid by the State. The total contribution, divided equally between the employer and the insured person, amounts to 12 percent of the salary of the insured person, including cash salary and payments in kind up to a maximum salary of 10,000 leva per month.

Old-age pensions are payable at age 60 for men and 55 for women, if they have been insured at least 60 months. Invalidity benefits are payable for permanent disability amounting to over 50 percent of the capacity of a healthy individual having the same general qualifications in the same or a connected profession, and temporary-disability benefits may be granted for sickness that has lasted for at least 9 months. Death benefits are payable to the husband or wife (until remarriage) of an insured person, to dependent children (until age 18 or marriage), and to the parents of the insured persons if their annual income does not exceed 12,000 leva.

The amount of the old-age pension is determined by the personal account in the insurance fund of each insured person. The total amount of survivors' pensions, based on the old-age or the disability pension (whichever is larger) to which the insured person was entitled, may not exceed the amount of the pension.

The administration of the pension system is in the hands of a pension council of seven persons, appointed by the Minister of Commerce, Industry, and Labor, which includes one representative each of employers, employees, and pensioners.

Agricultural workers.—A special pension system for male agricultural workers was established by an act of February 18, 1941, and an amendment of July 19, 1941. The law covers all male Bulgarian subjects who are engaged in agriculture as their principal source of livelihood and are members of the peasants' unions (*zadrugi*). The pensions, which are payable to an insured person on the first day of January of the year next following the one in which he attains the age of 60 years, amount to 3,600 leva a year paid in quarterly installments.

A special pensions (agricultural) fund is attached to the Old Age Pensions Fund. The fund is formed from half of the contributions of the members of the peasants' unions, which were doubled (from 60 to 120 leva a year) as from the year 1941; 5 percent of the value of the produce exported abroad, beginning with the harvest of 1941; and a State subsidy fixed in the budget. The payment of pensions was scheduled to begin January 1, 1942.

Handicraft workers.—A compulsory insurance system, providing old-age and invalidity pensions, was provided for handicraft workers by a law of February 27, 1941. The law covers all handicraft workers who work for their own account and whose handicraft occupation forms their principal means of livelihood, if they are under the age of 55 years, are not covered by other statutory pension systems, and are not in receipt of a pension on their own account or a widow's pension,

under an act or a decision of the National Assembly, if the said pension exceeds 12,000 leva a year. Persons who have been insured for more than 3 years and who cease to be liable for insurance may continue it on a voluntary basis.

The right to pension is acquired after 5 years of insurance membership which may not be interrupted, except for specified causes, by more than 2 years in the 5 years immediately preceding the date on which the insured person attains the age limit. Pensions are payable at age 60 but may be deferred on the application of the insured person.

UNEMPLOYMENT INSURANCE

Compulsory unemployment insurance dates from a law passed April 12, 1925, which also established a system of employment offices. The unemployment-insurance system is supported by equal contributions of employers, employees, and the State. The labor inspectors and the employment exchanges are responsible for supervision of observance of the law.

All workers or employees compulsorily insured in any type of social insurance are covered, with the exception of domestic servants. Agricultural workers are not covered unless they are employed in enterprises which are deemed by the act to be conducted on modern lines.

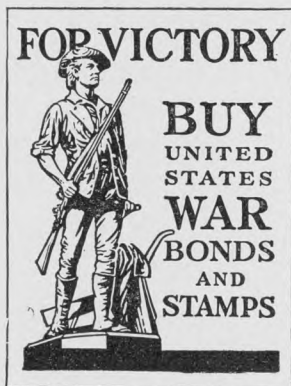
The contributions under the 1925 law amounted to 1 lev per week each, paid by the employer, the employee, and the State. In addition, the fund had certain additional receipts, such as fines, donations, etc. The law was amended June 28, 1933, to provide for the payment to the unemployment-insurance fund of sums collected from foreign workers for permits to remain in the country. These payments were allocated to the account of the fund for homes and gardens for the children of the unemployed who are members of the social-insurance fund.

Benefits under the 1925 law were payable after the payment of 52 contributions during a period of 2 years, but by an amendment of November 12, 1940, the number of required contributions was reduced to 32, and by an act of April 30, 1941, to 16 weeks in cases where unemployment is due to closing the enterprise on account of a shortage of raw materials. The waiting period for the payment of benefits, formerly 16 days, was reduced by the 1940 law to 8 days. The benefit amounts to 16 leva a day for the head of a family and to 10 leva for all other unemployed persons, but is not payable for Sundays. Refusal of employment offered or to take a course of training carried with it, under the 1941 act, liability of removal of a worker's name from the unemployment register and therefore loss of the claim to benefit and to any other relief. In 1938, the latest date for which figures are available, 208,000 persons were covered by unemployment insurance.

SOCIAL INSURANCE INSTITUTION

The administration of Government measures in connection with the general insurance system, the salaried employees' system, and that for handicraftsmen, was placed in a Social Insurance Institution, established by an act of March 6, 1941. The Institution also has charge of the collection of the unemployment-insurance contributions. Other branches of insurance may be attached to the central organiza-

tion by special laws. The different systems operate under the conditions prescribed by the relevant acts, regulations, and orders. The various insurance carriers administered by the Institution are financially independent and the property and accounts of each are kept separate, but the Institution has general charge of the investments of the different funds. General regulations are laid down to insure safe investments. The Institution takes the place of the former Directorate of Labor and Social Insurance, in the Ministry of Commerce, Industry, and Labor.



Wages, Hours, and Living Standards in India¹

By RAJANI KANTA DAS, *formerly of the International Labor Office*

Summary

WORKING hours in India have been regulated by law in many industries and in these cases the maximum workweek usually is 54 or 60 hours. Actual working hours, however, are considerably shorter than the maximum.

Both time and piece rates are paid. Under the law, wages must be paid at least once a month; many industries pay their workers twice a month and some pay by the week or even by the day. The cash wages are supplemented by various bonuses and payments in kind as well as by cost-of-living allowances, but earnings are nevertheless very low in most of the industries.

The standard of living is also very low. The workers' diet is deficient in both quantity and quality; housing often lacks even the minimum facilities for sanitation and health. Indebtedness is common and the high rates of interest form a serious drain on the family income. The high cost of living and the shortage of food under war conditions have seriously affected workers' real wages and the Government and employers have been obliged to open cost-price food stores on the premises of factories and in industrial centers.

Although India has made considerable progress in improving labor standards, several urgent steps remain to be taken, among them the following: (1) Measures to raise the level of education and training of the workers, most of whom are illiterate and unskilled (the present Government schemes of training workers for war industries are commendable but very limited in scope); (2) the creation of minimum-wage-fixing machinery for increasing wages as well as improving the standard of living; (3) the enlargement of the scope of social security, to cover unemployment, sickness, and old age; and (4) the establishment of collective bargaining and the recognition of workers' organizations by employers.

Hours of Work

The working day in organized industry in India originally lasted from sunrise to sunset. By a series of legislative measures beginning in 1881, this long day has been reduced in factories and mines, and limited on railways and, to a certain extent, on board ships, in motor transportation and in workshops, stores, and commercial enterprises. Moreover, rest intervals, weekly holidays, and regulation of spread-overs and overtime have also been provided for. The Hours of Employment Regulations for the railways have been gradually applied to the different systems and by January 1, 1941, all employees of the State-owned railways came within the scope of these regulations.

Hours of work have been established in the following industries: In factories the hours of work for men may not exceed 10 per day and

¹ Second of two articles on wartime labor conditions in India. The first appeared in the *Monthly Labor Review* for September 1943.

Errors in the first article should be corrected as follows: On page 453, line 8 of second paragraph, 43, 200 should read 4,800; 150 should read 882; and (in the following line) 41, 400 should read 4,600.

54 per week in year-round factories, and 11 per day and 60 per week in seasonal factories; in both types of factories, women's hours are 10 per day and 54 per week and those of children, 5 hours a day. Working hours in mines are limited to 10 a day and 54 a week for both men and women for surface work; for men in underground work (prohibited for women), the hours are 9 per day and 54 per week. The law regulating hours of work on railways specifies that they should not exceed 60 a week on the average for a month for all employees except those whose work is essentially intermittent or involves long periods of inactivity; the hours of the latter should not exceed 84 hours a week. Working hours on docks have been fixed at 9 a day, but overtime is permitted up to a maximum of 3 hours on any one day and is paid for at the rate of time and a third. In motor transportation, no driver should be compelled to work for any continuous periods of more than 5½ hours, or for periods aggregating more than 11 hours in any period of 24 hours. In unregulated factories, (i. e., factories or workshops working without mechanical power, or employing fewer than 20 persons) some of the Provinces have certain limitations on working hours; thus, the Central Provinces Unregulated Factories Act of 1937 permits women and children to work only 9 hours and 7 hours a day, respectively.

Actual hours of work are much shorter than the maximums established by the various acts. For instance, in 1938, in the Jharia coal fields which employ the largest number of mine workers, the maximum actual weekly hours were 47 in underground work, 48 in open workings, and 52 for surface work. Similarly, 29 percent of the year-round factories employing men and 30 percent of those employing women worked 48 hours or less; 36 percent of the seasonal factories employing men and 43 percent of those employing women worked 54 hours a week or less.

Industrial Remuneration

WAGE FIXATION AND PAYMENT

The methods of fixing wages are different in different industries. On plantations, wages are generally fixed by the piece or task, but for certain operations time rates are also paid. In mines, piece rates are generally paid for underground work, the unit for coal cutters and loaders being the tub. Railway employees are paid time rates, by the day or by the month. In most other industries time rates are paid, but in building and construction work, as well as in the loading and unloading of ships, work is often done on a contract basis. Both piece and time work are found in the textile industries; of 211,359 men, 44,949 women, and 1,024 children employed in the cotton-mill industry in 1934, 45.6 percent of the men, 70.3 percent of the women, and 2.3 percent of the children were employed on piece work and the remainder on time work.

Until recently there were various methods of wage payment, but some of these have been substantially changed by the Payment of Wages Act, 1936. In practically all industries wages are now paid in cash and directly to the workers who earn them, and the employer or his responsible agent is charged with responsibility for this. There is no uniformity in the length of the pay period in India. Under the Payment of Wages Act, no wage period may exceed 1 month, but in a large number of industries wages are also paid semimonthly, weekly,

or even daily. In the jute mills of Bengal, for instance, almost all process workers are paid by the week. In the cotton mills, wages are generally paid each month in Bombay, Cawnpore and Nagpur, and each fortnight in Ahmedabad. In coal mines the pay period may be either 1 week or half a month. Wages on railways, whether rated monthly or daily, are paid by the month. Throughout India unskilled laborers are generally paid by the day.

Formerly, one of the defects of the wage system in Indian industries was the delay in payment. The majority of employers held up payment for varying lengths of time after the period during which they were earned. This long delay in payment necessitated the granting of advances against wages earned, and sometimes interest was even charged on these sums. The Payment of Wages Act, however, specifies that wages must be paid within 7 days after the period for which they are due in enterprises employing fewer than 1,000 workers, and within 10 days in other cases. Fines and other deductions from wages have also been brought under control. Moreover, the central Government and some of the Provinces have issued regulations governing attachment of wages for debt, imprisonment for debt, and intimidation and molestation for the recovery of debt.

RATES AND TRENDS OF CASH WAGES

There is a great variation in rates of wages, both by industry and by locality.

The rates and movements of wages on plantations are well illustrated by those of the Assam tea gardens from 1928-29, when rates were very high. These wages have gradually declined both because of the industrial depression and the lower cost of living. The trends of wages in the Assam Valley and Surma Valley are shown in table 1. Since the beginning of the war, in 1939, the rates must have increased but no data have yet become available.

TABLE 1.—Average Monthly Wages in Tea Gardens in Two Divisions of Assam in Specified Years, 1923-24 to 1937-38¹

Year	Assam Valley			Surma Valley		
	Men	Women	Children	Men	Women	Children
	<i>Rupees</i> ²	<i>Rupees</i> ²	<i>Rupees</i> ²	<i>Rupees</i> ²	<i>Rupees</i> ²	<i>Rupees</i> ²
1923-24.....	11.32	9.55	5.30	8.80	6.96	4.71
1928-29.....	14.09	11.26	7.38	10.81	8.70	5.49
1932-33.....	11.79	8.94	6.42	7.42	5.30	4.16
1933-34.....	7.47	5.88	4.23	5.39	3.74	2.64
1935-36.....	6.82	5.65	4.01	5.81	4.01	2.85
1937-38.....	7.11	5.81	4.21	6.15	4.26	2.95

¹ Data are from Industrial Labor in India (International Labor Office, 1938) and Annual Report on the Working of the Tea Districts, Emigrant Labor Act (1932), 1937-38.

² Exchange rate of rupee varies; in 1938 it averaged 36.59 cents; present rate, about 30 cents.

The average monthly rates of wages of all workers in mines are obtained by dividing the total amount paid in wages during the month by the average daily attendance. Earnings vary considerably. In the Jharia coal fields, employing the largest number of mine workers, daily earnings of miners dropped from Rs. 0.89 in 1927 to Rs. 0.59 in 1938, unskilled workers' earnings from Rs. 0.61 to 0.47

and women's from Rs. 0.55 to 0.32 (table 2). Daily earnings of loaders and skilled workers varied from Rs. 0.67 to 0.52 and Rs. 0.73 to 0.67 during the same years.

TABLE 2.—Average Daily Earnings of Underground Workers in Jharia Coal Fields in December of Specified Years¹

Year	Miners	Loaders	Skilled workers	Unskilled workers	Women
	<i>Rupees</i>	<i>Rupees</i>	<i>Rupees</i>	<i>Rupees</i>	<i>Rupees</i>
1927	0.89	0.67	0.73	0.61	0.55
1931	.72	.72	.75	.53	.47
1932	.61	.53	.67	.38	.41
1935	.48	.39	.95	.42	.33
1938	.59	.52	.67	.47	-----

¹ Data are from Industrial Labor in India (International Labor Office, 1938), p. 258.

Average earnings of different grades and occupations of railway employees are shown in table 3. As it indicates, about four-fifths of the employees receive an average of Rs. 23 a month.

TABLE 3.—Earnings of Railway Employees in India, 1940-41¹

Class of employees	Number	Percent of total	Total annual pay roll	Per capita earnings	
				Annual	Monthly
All classes	666,365	100.0	<i>Rupees</i> ₹ 354,968,355	<i>Rupees</i> 532	<i>Rupees</i> 44
Gazetted officers	1,670	.3	30,247,371	18,112	1,509
Subordinates, with monthly salaries of—					
Rs. 250 or over	7,618	1.1	39,415,726	5,174	431
Rs. 30 to 250	124,503	18.7	137,919,009	1,108	94
Under Rs. 30	10,007	1.5	2,877,649	287	24
Daily rated labor staff of lower ranks	522,567	78.4	144,438,454	276	23

¹ Data are from Report by the Railway Board on Indian Railways, 1940-41, Vol. II, pp. 250-56. (Excludes Jodhpur, Mysore, and Nizam State Railways.)

² Not the exact sum of the items, but as given in source.

Average earnings of factory workers in the Bombay Presidency in 1934 are shown in table 4. The average monthly earnings ranged from Rs. 21.59 in establishments producing oils, paints, and soaps to Rs. 39.24 in engineering workshops.

TABLE 4.—Average Monthly Earnings in Manufacturing Establishments in the Bombay Presidency, May 1934¹

Industry	Number of persons employed	Average percent of attendance	Average daily earnings	Average monthly earnings
Engineering	46,039	85.8	<i>Rupees</i> 1.71	<i>Rupees</i> 39.24
Printing	8,604	91.9	1.39	34.34
Textiles	256,308	-----	1.10	28.70
Matches	5,468	-----	.87	22.60
Oils, paints, and soaps	23,103	82.9	.83	21.59

¹ Data are from General Wage Census, Bombay Government Labor Office, 1937, Parts I and III, 1936, 1937. Calculated from daily rates on basis of 26 days to a month.

² Adults only.

The trend of earnings (including cost-of-living allowances) in the cotton mills of Bombay during the 28 years from 1914 to 1942 is shown in the following tabular statement. On the basis of earnings of May 1914 as 100, average monthly earnings had increased by 111 per cent by 1926, from which point they declined considerably during the depression years. By the end of 1939, however, earnings had reached and passed the 1926 level, and from that point through July 1942 they continued to rise, reaching a level nearly 3 times that of 1914.

	<i>Average monthly earnings (in rupees)</i>	<i>Index (May 1914=100)</i>
May 1914.....	16. 38	100
May 1921.....	30. 63	187
August 1923.....	32. 75	199
July 1926.....	34. 56	211
December 1933.....	27. 88	170
October 1934.....	29. 00	177
July 1937.....	28. 44	173
February 1938.....	32. 13	196
December 1939.....	35. 38	216
August 1941.....	38. 19	233
January-June 1942.....	40. 25	246
July 1942.....	47. 13	288

BONUSES AND PAYMENTS IN KIND

Besides the regular wages, the earnings of Indian workers are supplemented by special bonuses and various indirect payments which must be taken into consideration in calculating workers' total earnings or incomes. Special bonuses are not paid in mining (except to the supervisory staff) nor in engineering, in the Bombay Presidency. They are, however, paid on the plantations of the south, as in Nilgiris and Coorg. Profit-sharing bonuses, or bonuses for attendance or for quality of work have long been paid in some industries. This has been very common in the cotton mills of Bombay and Ahmedabad. Another important form of bonus is the allowance to compensate for increases in the cost of living, discussed in the following section.

The practice of paying part of the worker's remuneration "in kind" is very widespread in India. Payment in kind generally includes such items as land for cultivation on plantations, free or cheap housing, supply of grain and other necessaries at wholesale or reduced prices, free fuel, and medicines. Miners are allowed a certain quantity of coal for domestic use and railway workers receive free quarters, uniforms, and other clothing. The payments in kind are greatest on the plantations. In the Assam tea gardens they used to form a part of the legal requirements for the protection of the workers under the contract system, and consisted of free housing, medical treatment and firewood, interest-free advances on wages, free grazing for cattle, and land for cultivation either free or at an economic rent. In 1938, the total area of land held by the Assam tea-garden workers amounted to 185,897 acres.

WARTIME WAGE ADJUSTMENTS

As war conditions have led to increased prices, employers have in many cases either increased wages or have granted special cost-of-living allowances. Most of the mills, especially in the Bombay

Presidency, continue to reckon earnings on "basic" rates prevailing in August 1917, to which they add cost-of-living allowances. Some of the industries, including the coal mines, have granted increases in wages, averaging about 10 percent.

On the demand of the G. I. P. Railway employees, an investigation was made by a court of inquiry, which found that the cost of living had increased from 11 to 15 percent for different classes of general consumers and wage workers. As a result of its study, the court established three different "subsistence levels"—Rs. 35 per month for the city of Bombay, Rs. 30 per month for the other towns, and Rs. 25 for the rural districts. It recommended certain rates of allowance which have been granted in most cases.

Some of the measures taken in the various industries to meet advances in the cost of living are noted below:

Some 70,000 mill workers in Cawnpore received an increase varying from 9.38 percent to 12.5 percent of their monthly wages in July 1941, and a further increase of 6.23 percent under certain conditions in July 1942.

An increase of amenity allowances from 1 rupee per month to 0.75 rupee per week was agreed upon by the Jute Mill Association when it recommended a reduction of hours of work from 60 to 54.

Members of the Bombay Millowners' Association gave increases in the rates of wages by from Rs.4.5 to Rs.9, for a period of 26 working days.

The Ahmedabad Millowners' Association granted an increase of 45 percent as from July 1941 to 100,000 workers.

The Sholapur and Bombay cotton-textile mills granted a war bonus of 12.5 percent of the total wages for 1941 to all workers, in addition to the cost-of-living bonus.

A cash bonus of 16.6 percent of the total basic earnings for 1942 was authorized by the companies which are members of the Bombay Cotton Millowners' Association to all their workers.

Employees of the State-managed railways were given increases varying (according to the monthly earnings) from Rs.2 to Rs.4.5 a month. A grant of 1 month's extra pay was made by the Calcutta Corporation to all workers receiving up to Rs.200 a month on August 12, 1942; this was the second such grant made by this organization.

Dockers in Bombay received a 10-percent increase in wages from August 3, 1942, but the present rate is only Rs.2 per day.

Employees of several British Provincial governments (Madras, Bombay, Orissa, the Punjab, Sind, and the Northwest Provinces) were granted a bonus and this example was followed by several of the Indian States.²

Cost and Standard of Living

Accurate information on living standards in India is rather rare. Data are available for some industrial cities (Bombay, Ahmedabad, and Sholapur) in the Bombay Presidency, and a few studies have been made for certain other cities, such as Calcutta, Madras, Jamshedpur, and Cawnpore. Owing to differences in method and date, however, the figures given in these studies are not comparable. Moreover, most of the studies were undertaken about a decade or so ago and no reliable data of recent years are available.

INCOME AND EXPENDITURES

Studies of size of family indicate that the average family ranges in size from 4 (Ahmedabad) to 5.78 (southern railway) persons. The

² International Labor Review (Montreal), December 1942 (p. 727).

Indian family, however, includes, in addition to the natural family—father, mother and children—other relatives who, even though not living under the same roof, are dependent for their livelihood upon the earnings of their relatives in industrial centers. The majority of the families have one earner, but a study of budgets in different centers revealed that the number of families having one earner varied from 36 to 78 percent, the number having two earners from 18 to 53 percent, and the number having three earners from 7 to 46 percent.

The average family income and expenditure in several important industrial centers are shown in the accompanying statement. On the basis of certain limited studies³ it appears that both income and expenditure are twice as high in Bombay as in Cawnpore:

	Average monthly income (rupees)	Average monthly expenditure (rupees)
Bombay (1930), 85 budgets.....	55. 05	55. 56
Ahmedabad (1926), 872 budgets.....	44. 44	39. 35
Calcutta (1930), 125 budgets.....	34. 43	32. 09
Madras (1930), 79 budgets.....	33. 80	32. 59
Cawnpore (1930), 729 budgets.....	25. 53	24. 90

The percentage distribution of the family expenditures for the various budgetary items in the different localities is presented in table 5.

TABLE 5.—Percent of Expenditure of Workers' Families in Specified Localities in India, by Consumption Groups

Locality	Food	Cloth- ing	Rent	Fuel and light	House- hold requis- ites	Miscel- laneous	Total
Bombay (1930).....	57.1	7.3	10.6	7.1	3.1	14.7	100.0
Ahmedabad (1926).....	57.9	9.5	11.7	7.0	1.2	12.7	100.0
Calcutta (1930).....	64.9	7.5	4.7	7.1	1.7	14.0	100.0
Madras (1930).....	60.7	3.8	8.3	7.5	.3	19.3	100.0
Cawnpore (1930).....	48.1	7.4	8.8	6.0	1.8	27.9	100.0

¹ Data are from Industrial Labor in India (International Labor Office, Geneva, 1938).

Except at Cawnpore, more than half of the total expenditure of the family budget was for food alone. By far the largest amount of money was spent for cereals, including rice, wheat, jowar and bajra (two of the Indian millets), or a combination of any two of these products. Considerable numbers of Indian workers, especially the Hindus, are vegetarians and live mostly on cereals, pulses, ghee (clarified butter), and sweetmeats. Mohammedans eat both mutton and beef; beef is a prohibited food for the Hindus, although some of them take mutton. Fish is the chief protein food in Bengal and Madras. Milk is used by all classes of workers wherever it can be had, but it is costly, and pure milk is rarely available in the cities.

Next to food, the most important items are clothing and housing. The monthly rent amounted to less than Rs. 3 for 65 percent of the families in Sholapur (1925), to less than Rs. 6 for 66 percent of the families in Ahmedabad (1926) and to less than Rs. 7 for 62 percent of the families in Bombay (1930). Because of the climate, expenditures on dress is not a heavy item as in European countries. Men,

³ Industrial Labor in India (International Labor Office, Geneva, 1938), p. 280.

as a rule, do not clothe the upper part of their body, and most of the men and women go barefooted. Fuel and light form the next largest item in the budget. The fuel required is mostly firewood for cooking, while, for lighting, kerosene or some vegetable oil is generally used. Household requisites are few in number, consisting of cots, mats, mattresses, blankets, pillows, cooking pots, and a few pieces of simple furniture.

Miscellaneous expenditure covers a wide range of items such as hair oil, washing soap, tobacco, betel (a kind of leaf for chewing), liquor, medicine, school, travel, amusements, remittances to absentee members of the family, and interest on debts. The item, "traveling expenses," usually refers to the cost of the worker's travel between his native place and his place of work. Most workers (and their family members, in some centers) receive free medical care from their employers; there is also a certain amount of personal expenditure for this purpose. Expenditure on schooling for the children is rather a small item in the family budget, and the same holds true for recreation, owing both to the lack of facilities and the low income level. A considerable part of income, amounting to 10 or 12 percent, is spent on drink, especially by the families in the lower strata of Hindu society. "The consumption of drink, or particularly of spirituous liquor," observed the Royal Commission on Labor, "may be said to be a feature of the majority of industrial areas and has created considerable havoc in some of them." The Mohammedans are, however, prohibited by their religion from drinking alcohol. Remittances to relatives are an important item of expenditure, since by far the largest number of Indian workers are migrants and leave some members of their families in their native places.

Payment of interest on debts is a heavy expenditure among almost all classes of industrial workers in India. According to the inquiries of the Bombay Labor Office, in 1921-22, about 47 percent of the families in Bombay City and 61 percent of the families in Sholapur were in debt. In many cases the son inherits the indebtedness of his father, but the most important cause of indebtedness is expenditure for marriages, funerals, festivals, and anniversaries. The burden of debt is aggravated by the excessive interest rates which most workers have to pay, ranging from 9 to 15 percent on money loaned against jewelry, from 15 to 24 percent in the case of promissory notes and mortgages, and from 37.5 to 150 percent in the case of short-term "hand loans" (without documents). Interest payments are, therefore, a heavy burden on the family; they ranged from 2.77 percent of the total family expenditure in Bombay (1921-22) to 6.65 percent in Sholapur (1925).

HOUSING CONDITIONS

Organized industries have usually developed in large towns, although in some cases they have formed the nucleus of new cities. Limitation of space, high land prices, and the lack of any plan or control are responsible for much of the congestion and overcrowding in large cities. Subletting, a common practice among workers' families, is another cause of overcrowding.

The housing accommodations of workers in large organized industries are chiefly supplied by employers, by public or semipublic bodies, and by private landlords. Almost all the plantation and mine workers

are housed by their employers. The general policy adopted by the Government, the railways, and the municipal factories is to provide quarters when funds permit or wherever the housing provided by private enterprise is not adequate. Thus, the S. I. Railway workshops have provided 3,426 dwellings for their workers, at rents not exceeding 10 percent of their wages, and the Bombay Port Trusts have set aside 136 tenements for their workshop staff. Numerous factory workers are housed by their employers. The cotton-mill employers in Bombay have provided 3,887 tenements for their workers. The public chawls⁴ of Bombay, now under the control of the Public Works Department, accommodate 63,000 workers. By far the largest number of industrial workers live, however, in dwellings rented from private landlords.

Most of the dwellings available for the workers in industrial towns, especially those rented from private landlords, lack even such sanitary arrangements as drinking water, latrine, light, and ventilation. Overcrowding is common in the tenements, most of which have only one room. Of 13,189 tenements provided by the cotton-mill industry of the Bombay Presidency, 11,332 (about 86 percent) had one room and only 1,866 (14 percent) had two or three rooms. An inquiry covering 5,363 families in Bombay City in 1930 showed that nearly 60.0 percent of the buildings surveyed had only one window per tenement, 26.0 percent had two windows, and 4.5 percent had no window. In 89.3 percent of the buildings, one toilet was provided for the use of from 1 to 8 tenements, in 8.4 percent one for 9 to 15 tenements, and in 1.6 percent one for 16 tenements or more; 0.7 percent lacked any toilet facilities whatever. Similarly, one water tap supplied 1 to 8 tenements in 25.7 percent of the buildings, 9 to 15 tenements in 40.4 percent, and 16 or more tenements in 33.0 percent; 0.9 percent of the buildings were without even one water tap.

As would be expected, in view of the insanitary and overcrowded housing conditions, the rate of infant mortality is high.

With a view to improving housing conditions of industrial workers, the Royal Commission on Labor in 1931 made a large number of recommendations on such matters as the survey, lay-out, and development of urban and industrial areas, the establishment of minimum standards for floor space and cubic space, ventilation and lighting, water supply, drainage and latrines, architectural plans for working-class houses, Government subsidies to employers for undertaking housing schemes, and the encouragement of cooperative building societies. Thus far, the principal measure taken by the Government of India to implement these recommendations was an amendment to the Land Acquisition Act of 1894, to provide facilities for employers to acquire land for housing projects.

WARTIME COST OF LIVING

The standard of living of industrial workers in India is not only extremely low, but has been very adversely affected by the rise in prices since the outbreak of the war. In the first few months of the war, prices increased by one-third and the wage level was stabilized in March 1940 at a level about 19 percent higher than that of March 1939. Since then the cost of living has increased considerably, as

⁴ In Hindu, "chawl" means literally house; but, in Bombay, chawls are 2- or 3-story tenement houses.

indicated from the movement of wholesale prices of certain commodities in Calcutta (table 6), although retail prices fluctuate more widely than the wholesale prices. There has been a great increase in the prices of all commodities.

TABLE 6.—Index Numbers of Wholesale Prices of Selected Articles in Calcutta¹

Period	Average, all commodities	Cereals	Pulses	Sugar	Tea	Other food articles	Cotton manufactures
1914 (end of July).....	100	100	100	100	100	100	100
1938: Annual average.....	106	72	88	132	130	109	106
1939: Annual average.....	120	86	99	164	142	125	106
1940: Annual average.....	129	99	101	157	149	146	122
1941: Annual average.....	154	112	105	145	202	178	179
1942: Annual average.....	212	158	162	209	240	298	² 180
1943:							
January.....	298	260	238	258	299	434	-----
February.....	311	266	280	260	246	444	-----
March.....	319	334	309	298	199	457	-----
April.....	331	375	307	280	189	505	-----

¹ Data are from The Indian Trade Journal, May 13, 1943, and previous issues.

² For 3 months only.

The importance of price control was realized by the Government of India from the very beginning of the war, but no effective measures were undertaken. After a long delay, the Government called a Food Production Conference in April 1942, issued a food-control order on May 21, and appointed a Central Food Advisory Council, which had its first meeting at New Delhi on August 24 and 25, 1942. The Council recommended the following: (1) The extension of price control to cover all the staple grains which are competitive; (2) the creation of a single agency for the purchase of the requirements for the army and the "deficit" areas, and the delegation to this agency of a monopoly of available rolling stock for the movement of foodstuffs; and (3) the extension of food control to cover retail prices and the fixation of permissible margins.

The fundamental cause of the rise in the prices of foodstuffs and other commodities is the lack of supply to meet the increasing demand of such goods, especially under war conditions. Among the measures undertaken to meet this situation the following should be mentioned:

(1) Increased production of food, especially rice. In 1938-39,⁵ 1,281,000 tons of rice were imported from Burma; the blocking of these imports has caused a great food shortage in India.

(2) Better distribution of foodstuffs by increasing transport facilities. The Government of India decided early in August 1942 to grant a fortnight's priority in railway transportation for the movement of food grains. This facilitated the transport of several shipments of wheat from the Punjab and of substantial quantities of rice from the Madras Presidency to Bombay.

(3) The establishment by the Government of food stores in different industrial areas, where the workers may buy food at very moderate prices. Foodstuffs have been stored at munitions plants and other industrial establishments in the Calcutta area and also at the Jamshedpur and Burnpur steel mills. Nearly all the industrial establishments in India maintain stores where grain may be bought at cost. In 1942 there were 61 such shops in the Bombay mill area.

⁵ Review of the Trade of India in 1938-39, p. 20.

Industrial Welfare

The economic and social backwardness of the working classes in India has made welfare work very desirable. Welfare work measures have already been introduced by large enterprises such as the Tata Iron & Steel Co. at Jamshedpur, the British India Corporation in Cawnpore, and the Buckingham and Carnatic Mills in Madras. Most of these measures relate to improvement of sanitation, comfort and safety, provision of nurseries, construction of suitable dwellings and even model villages, the creation of clinics and maternity and child welfare centers, the opening of day and night schools for boys and girls, and the provision of playgrounds, athletic and dramatic clubs, libraries, and reading rooms.

Excellent medical and first-aid facilities are provided by most of the larger engineering establishments owned by the Government, municipalities, railways, public bodies, and public-utility companies. The majority of the textile mills are also provided with well-equipped dispensaries and part-time doctors. Mining industries have established health organizations at Asansol and Ranigunj for the benefit of their workers; these bodies are also charged with provision of measures for maternity and infant welfare. The plantations, especially in the Surma Valley in Assam, have greatly improved the health conditions of their workers. Several semipublic organizations, such as the Port Trusts and municipalities in Bombay, have undertaken welfare work for their employees. Private organizations for social welfare work are comparatively few in number. The only organization worth mentioning is the Social Service League, organized by the Servants of India Society, which is devoted to elevating the moral and material conditions of the workers.

The most important steps for increasing recreational facilities have been those of the Government of Bombay. In pursuance of its policy for the amelioration of conditions of industrial labor, the Government of Bombay is expanding the activities of its Labor Welfare Department. Several large and small recreation centers have been started in Bombay City, Ahmedabad, Sholapur, and Hubli. Among the facilities provided are indoor and outdoor games, gymnasiums, libraries, lectures, plays, motion pictures, art exhibitions, music, classes in literacy, etc. Woman teachers have been engaged to give lessons to woman workers in sewing, knitting, and similar subjects. The Government has introduced other schemes of labor welfare. In 1941-42 the sum of Rs. 65,000 was earmarked for building gymnasiums in Bombay and Ahmedabad and for installing shower baths and circulating libraries in various industrial centers.

Changing Composition of the Unemployed, April 1940–August 1943¹

THE expansion in industrial activity occasioned by the war has brought the number of unemployed persons in the United States down from 8,800,000 in April 1940 to 1,000,000 in August 1943—a drop of almost 90 percent in a little over 3 years. This decline has been accompanied by an almost complete change in the composition of the unemployed group. Previously, the long-time unemployed (persons out of a job for 1, 2, and even 3 years) and persons on emergency work relief (WPA, CCC, NYA, etc.) accounted for a large proportion of the unemployed. Currently, the group of unemployed is made up largely of persons who either are between jobs or are temporarily ill.

Information on the changing composition of the unemployed has been made available from a special tabulation prepared by the Special Surveys Division, Bureau of the Census, on the basis of its sample monthly report on the labor force. This tabulation provides a breakdown of the various classes of unemployed since April 1940. While such a fine analysis of a small sample cannot be expected to provide completely accurate estimates (which are therefore presented on the responsibility of the Bureau of Labor Statistics), the general trend shown by the Census data is clearly significant.

Unemployed persons as enumerated by the Census Bureau fall into the following three major categories:

1. Actively seeking work.
2. On emergency work relief (WPA, CCC, NYA, etc.).
3. Inactive workers.

The last category (inactive workers) includes all persons without a job, who are not actively seeking work because (a) they believe there is no work available for them in the community, (b) they are on temporary lay-off (owing to bad weather, seasonal slack, etc.), or (c) they are “temporarily” ill.

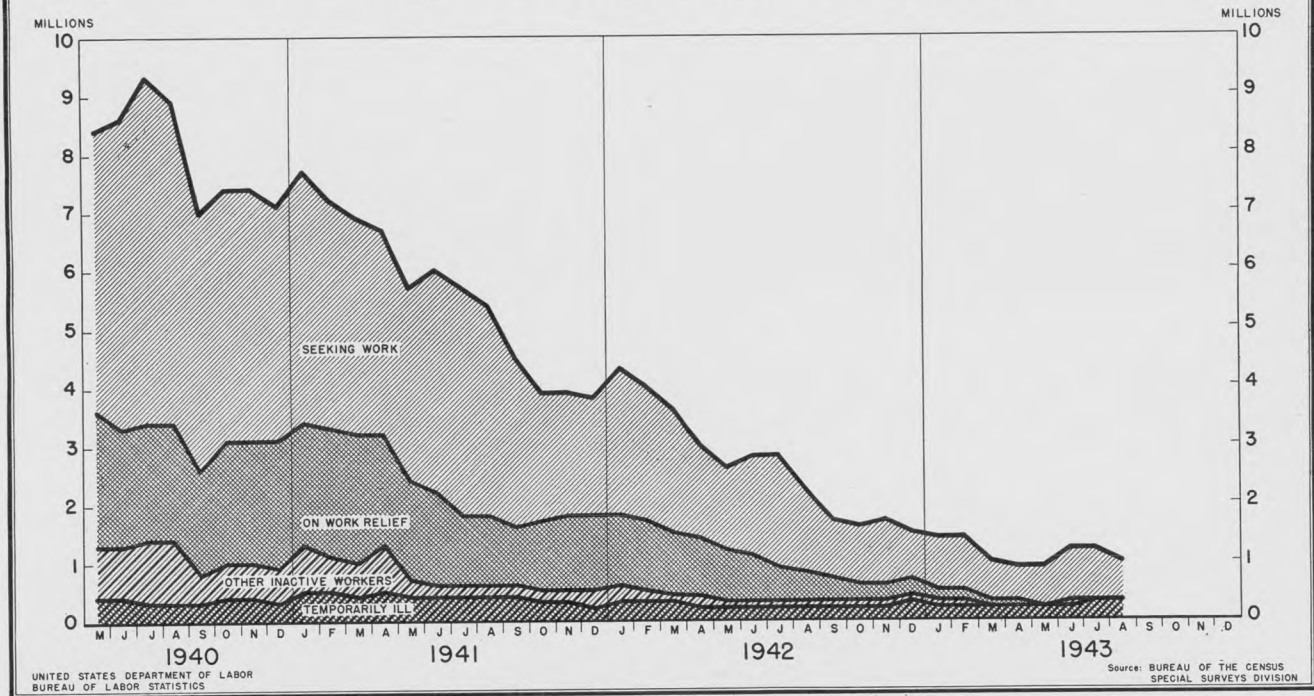
One of the most significant changes in the composition of the unemployed has been brought about by the discontinuance of the WPA, the CCC, the NYA, and other emergency work-relief programs. For a long time persons on emergency relief accounted for as much as one-third of the unemployed, and as late as December 1942 made up one-fifth of the total unemployed. The current fiscal year, however, has witnessed the disappearance of this class of unemployed.

Another depression phenomenon—the inactive worker who does not look for work, because he believes that none is available—also virtually has disappeared. This group was always found in depressed one-industry areas, where it accounted for as much as one-third of the unemployed.² In the spring of 1940 almost as many people were not seeking work because they believed no work was available as were immediately available for work in the spring of 1943.

¹ Prepared in the Bureau's Occupational Outlook Division by Seymour L. Wolfbein.

² See Webb, John N., and Bevis, J. C.: Facts About Unemployment (WPA, Social Problems No. 4, 1940).

CLASSES OF UNEMPLOYED WORKERS



Since unemployed persons on temporary lay-off now are also not a numerically significant group, the only two remaining groups are those actively seeking work and persons temporarily ill. With unemployment down to about one million persons, the 200,000–300,000 persons temporarily ill form a very large proportion of the total; in July they accounted for one-fourth and in August almost one-third of the total number of unemployed persons.

Number of Unemployed Workers of Each Class, April 1940–August 1943¹

Month	Number of unemployed (in millions)						Other
	Total	Seeking work and on work relief	Inactive	Believing no work available	On temporary lay-off	Temporarily ill	
1940:							
April.....	8.8	(²)	(²)	(²)	(²)	(²)	(²)
May.....	8.4	7.1	1.3	0.4	0.3	0.4	0.2
June.....	8.6	7.3	1.3	.4	.4	.4	.1
July.....	9.3	7.9	1.4	.5	.4	.3	.2
August.....	8.9	7.5	1.4	.5	.4	.3	.2
September.....	7.0	6.2	.8	.2	.2	.3	.1
October.....	7.4	6.4	1.0	.3	.2	.4	.1
November.....	7.4	6.4	1.0	.3	.2	.4	.1
December.....	7.1	6.2	.9	.2	.3	.4	.1
1941:							
January.....	7.7	6.4	1.3	.2	.5	.5	.1
February.....	7.2	6.1	1.1	.2	.3	.5	.1
March.....	6.9	5.9	1.0	.2	.3	.4	.1
April.....	6.7	5.4	1.3	.2	.5	.5	.1
May.....	5.7	5.0	.7	.1	.2	.4	.....
June.....	6.0	5.4	.6	.1	.1	.4	.....
July.....	5.7	5.1	.6	.1	.1	.4	.....
August.....	5.4	4.8	.6	.1	.1	.4	.....
September.....	4.5	3.9	.6	.1	.1	.4	.....
October.....	3.9	3.4	.5	.1	.1	.3	.....
November.....	3.9	3.4	.5	.1	.1	.3	.....
December.....	3.8	3.3	.5	.1	.2	.2	.....
1942:							
January.....	4.3	3.7	.6	(³)	.2	.3	.....
February.....	4.0	3.5	.5	(³)	.2	.3	.....
March.....	3.6	3.2	.4	(³)	.1	.3	.....
April.....	3.0	2.6	.4	(³)	.1	.2	.....
May.....	2.6	2.3	.3	(³)	.1	.2	.....
June.....	2.8	2.5	.3	(³)	.1	.2	.....
July.....	2.8	2.4	.3	(³)	.1	.2	.....
August.....	2.2	1.9	.3	(³)	.1	.2	.....
September.....	1.7	1.4	.3	(³)	.1	.2	.....
October.....	1.6	1.3	.3	(³)	.1	.2	.....
November.....	1.7	1.4	.3	(³)	.1	.2	.....
December.....	1.5	1.1	.4	(³)	.1	.3	.....
1943:							
January.....	1.4	1.1	.3	(³)	.1	.2	.....
February.....	1.4	1.1	.3	(³)	.1	.2	.....
March.....	1.0	.8	.2	(³)	(³)	.2	.....
April.....	.9	.7	.2	(³)	(³)	.2	.....
May.....	.9	.6	.2	(³)	(³)	.2	.....
June.....	1.2	.9	.3	(³)	(³)	.2	.....
July.....	1.2	.9	.3	(³)	(³)	.3	.....
August.....	1.0	.7	.3	(³)	(³)	.3	.....

¹ From a special tabulation prepared by the Special Surveys Division, Bureau of the Census, on the basis of its sample monthly report on the labor force. The sample upon which the monthly report on the labor force operates is designed to provide national totals on employment, unemployment, and the labor force. It should be noted, therefore, that the break-down presented in the above table, which is based on a sample of a comparatively very small number of persons, specially tabulated for the Bureau of Labor Statistics, cannot claim to be completely accurate. The general trend in the composition of the unemployed group, however, is clearly shown.

² Not available.

³ Less than 50,000.

The temporary nature of current unemployment also can be judged from the following tabulation, which shows the percent of all persons actively seeking work who were looking for a job for only 3 months or less:

	<i>1942</i>	<i>1943</i>
January -----	79. 0	82. 1
April -----	67. 3	83. 7
July -----	86. 3	92. 7

For the great majority of work seekers, the number of months which elapsed since their last search for a job began was only 3 months or less. In fact, in January, April, and July 1943, one-third of all the unemployed actively seeking work had been doing so for a period of only 1 month or less.

Wartime Policies

Regulations Relating to War Manpower¹

ON AUGUST 16, 1943, the War Manpower Commission put into effect changes in rules for inducting men into the Selective Service System. In addition, further regulations were issued by the Commission to control the transfer of workers to war industry and to hold necessary workers in war production.

The new program is for the purpose of increasing war production and at the same time giving the armed forces the men they need. Essential points in that program deal with (a) critical occupations covering skills urgently needed in the war effort, (b) occupational deferment, (c) transfer of civilian workers from job to job, and (d) nondeferable activities and occupations.

Critical Occupations

The new list of critical occupations contains skills urgently needed in the war industry and war-supporting civilian activity. Workers possessing such skills must get into war industry or supporting civilian activities by October 1, 1943, or lose further claim to Selective Service occupational deferment. In order to insure accurate channeling of workers with these critical skills to the most urgent war jobs, provision is made for their hiring only on referral by or with the consent of the United States Employment Service. Selective Service local boards have been advised to give men with such skills special consideration with reference to deferment if they are in war-useful jobs.

LIST OF CRITICAL OCCUPATIONS

Part I.—*Production and Services Occupations*

Aircraft-engine mechanic, all-round
Aircraft-engine tester, all-round
Aircraft-instrument mechanic, all-round
Aircraft mechanic, all-round
Airplane navigator
Airplane pilot, commercial
Airplane mechanic, all-round
Ballistician
Bessemer converter blower
Blacksmith, all-round
Blast-furnace blower
Blaster, mining
Boatbuilder, steel or wood, all-round
Boilermaker, all-round
Boring-mill operator, all-round

¹ War Manpower Commission, press release, August 14, 1943; Federal Register, August 17, 1943.

- Bricklayer, refractory brick
- Cabinetmaker, all-round
- Cable splicer—telephone, telegraph, or submarine cable
- Cable transmitter and receiver
- Cam-lay-out man
- Car inspector, railroad transportation
- Catalytic-converter engineer, synthetic rubber
- Cementer, oil well
- Chainmaker, all-round
- Chamberman, acid
- Coke burner
- Computer, electric, gravity or seismic
- Conductor, railroad transportation
- Continuous-still engineer, synthetic rubber
- Converter operator, nonferrous smelting and refining
- Coppersmith, marine, all-round
- Coremaker, all-round
- Cutting-machine runner, mining
- Diamond driller, mining
- Die maker, all-round
- Die setter
- Die sinker
- Diesel mechanic, all-round
- Dispatcher—radio communications, telegraph, or submarine cable
- Diver
- Driller, fine diamond dies
- Driller, oil well, cable or rotary
- Electrical tester, power equipment
- Electrician, aircraft, marine, power house, or submarine cable, all-round
- Electrician, installation and maintenance, all-round
- Engineer, chief, first, second, or third assistant, ship]
- Engineer, locomotive, railroad transportation
- Engineer, turbine or diesel
- Engineering draftsman, design
- Finisher, fine diamond dies
- First helper, open hearth or electric furnace
- Flight dispatcher
- Foreman: Included under this designation are only those individuals who are (1) utilizing in their supervisory jobs the knowledge and skills of one or more of the occupations included in the List of Critical Occupations, and (2) those who supervise directly or through subordinate foremen and supervisors production, technical, or scientific work in essential activities, although the occupations of the workers supervised may not be listed. The second category includes only individuals who must be in jobs requiring an extensive knowledge of the production, technical, or scientific work they are supervising, the exercise of independent judgment and responsibility for the products made or services rendered, and a training period of 2 or more years. In some plants, the supervisory personnel may be designated by other than supervisory titles, and where they meet the requirements outlined above they are included
- Form builder, aircraft
- Glass blower, scientific laboratory apparatus
- Heat treater, all-round
- Heater, steel mill, all-round
- Hoisting engineer, mining
- Inspector: Included under this designation are only those workers who are qualified to perform in one or more of the critical occupations appearing in this list, and who utilize the knowledge and skill of such occupations in inspecting work in order to insure uniformity and accuracy of products or services
- Installer, telephone or telegraph equipment
- Instructor: Included under this designation are only those workers who are qualified to perform in one or more of the critical occupations listed and because of their aptitude and experience have been assigned as instructors in training programs either in-plant or vocational
- Instrument maker and repairer, electrical, mechanical, or scientific
- Jewel bearing maker, all-round
- Jointer, submarine cable
- Lay-out man, boilermaking, foundry, machinery, or shipbuilding
- Lead burner, all-round

Lineman—power, telephone, or telegraph, all-round
 Load dispatcher, power or gas
 Locomotive engine repairman
 Loftsmen, aircraft or shipbuilding
 Loom fixer
 Machine driller, mining
 Machine tool-set-up man
 Machinist, all-round
 Machinist, marine, all-round
 Mate, first, second, or third
 Mechanician, communications equipment: This title includes individuals who maintain and repair telephone and telegraph equipment and circuits; technical broadcast equipment; radiotelephone and radiotelegraph equipment; or submarine cable apparatus
 Miller, grain products, all-round
 Millwright
 Miner, underground, all-round: Included under this title are only those individuals whose job assignment requires them to perform the duties involved in driving underground openings including drilling, blasting, timbering. Due to standardizations of mining methods, these functions may be performed by separate individuals whose occupational titles also appear in this list because the jobs meet the criterion of critical occupations. Since the term "miner" is generally used in the industry to identify underground workers it should be clearly understood that it does not cover such workers as muckers, trammers, and helpers
 Molder, bench or floor, all-round
 Model maker, all-round
 Observer, seismic
 Oil-well gun perforator
 Oil-well treater, acidising
 Optical mechanic, all-round
 Paper-making-machine engineer
 Patternmaker, metal or wood
 Pipe fitter, marine
 Powershovel engineer, mining
 Precision-lens grinder, all-round
 Pulpit operator, steel mill
 Pumper, refinery, in charge
 Purification engineer, synthetic rubber
 Radio communications technician
 Radio telegrapher
 Radiophoto technician
 Reactor engineer, synthetic rubber
 Receiver tester, radio or radar
 Refrigerator equipment repairman, gas or electric, all-round
 Refrigerator engineer
 Sheetmetal worker, marine, all-round
 Shipfitter, all-round
 Shipwright, all-round
 Ship rigger, all-round
 Ship captain
 Ship pilot
 Signal maintainer
 Still operator, chemical, all-round
 Stillman, petroleum processing
 Supervisor (*see* Foreman)
 Switchboard operator, power
 Tanner, all-round
 Testing and regulating technician, telephone or telegraph
 Timberman, mining, all-round
 Tool designer
 Tool maker
 Train dispatcher
 Transmission engineer
 Tugboat captain
 Tugboat engineer
 Wood seasoner, kiln
 X-ray equipment serviceman

PART II.—*Professional and Scientific Occupations*²

Accountant: Included under this title are certified public accountants and those who have comparable training, experience, or responsibilities

Agronomist
Anatomist
Architect, naval
Astronomer
Bacteriologist
Chemist

Engineer, professional or technical: This title covers persons who are actually engaged as engineers in the operating, research, or teaching phases of these professions, who are qualified either by having met the educational requirements or because of long experience. In addition, this title is intended to include those individuals who may specialize in certain phases of the professions listed below, such as mechanical engineers who specialize in the automotive, heating, or refrigerating engineering field but whose special designations have not been mentioned:

Aeronautical	Marine
Agricultural	Mechanical
Ceramic	Metallurgical
Chemical	Mining
Civil	Petroleum
Communications	Radio
Electrical	Safety

Entomologist
Forester
Geologist
Geophysicist
Horticulturist
Mathematician (including cryptanalyst)
Metallurgist
Meteorologist
Nematologist
Oceanographer
Parasitologist
Pathologist, medical
Pharmacologist
Physicist
Physiologist, medical
Plant physiologist or pathologist
Seismologist

Occupational Deferments

Selective Service local boards are instructed to give the greatest consideration to occupational deferment. Such deferment for necessary men has always been, and is to continue to be, based on the judgment of the local Selective Service boards, but an additional yardstick is set up for measuring the "replaceability" of men in vital industry. The boards are instructed to consider (a) the shortage of the registrant's skill in the total labor force; (b) the shortage of workers to replace the man even though he is an unskilled worker; and (c) a shortage in the place of employment even when no national shortage exists.

Transfers in Civilian Jobs

Uniform standards governing all transfers are to be incorporated in local employment-stabilization plans. At the same time, broad

² The titles appearing in this critical list of professional, technical, and scientific occupations are also intended to cover those persons who are engaged in full-time teaching of these professions. In addition, these titles are also intended to cover persons engaged in full-time inspecting duties which require the utilization of the knowledge of the critical occupations.

powers to determine when a transfer is in the interest of the war effort are given to local and regional War Manpower Commission offices.

Standards under which transfer will be allowed and statements of availability issued by employers are as follows:

An individual whose last employment is or was in an essential or locally needed activity shall receive a statement of availability from his employer if—

(1) He has been discharged, or his employment has been otherwise terminated by his employer, or

(2) He has been laid off for an indefinite period, or for a period of 7 or more days, or

(3) Continuance of his employment would involve undue personal hardship, or

(4) Such employment is or was at a wage or salary or under working conditions below standards established by State or Federal law or regulation, or

(5) Such employment is or was at a wage or salary below a level established or approved by the National War Labor Board (or other agency authorized to adjust wages or approve adjustments thereof) as warranting adjustment, and the employer has failed to adjust the wage in accordance with such level or to apply to the appropriate agency for such adjustment or approval thereof.

To insure the accurate channeling of critical skills to the most urgent jobs, workers in critical occupations may not be hired merely on the presentation of a statement of availability. Referral by or with the consent of the United States Employment Service is required to employ them.

In order to control migration the Employment Service referral is necessary also in the case of workers who have not lived or worked in the locality during the preceding 30-day period.

To permit maximum adjustment to the needs of particular labor market areas, a series of optional controls is outlined, permitting the extension of USES referral to new groups of occupations and activities. These are designed to afford an opportunity for flexibility and for meeting needs which may develop locally.

Extension of Nondeferable Occupations

The War Manpower Commission has expanded the list of non-deferable occupations and activities that the Bureau of Selective Service announced as effective April 1, 1943.³ This extension is intended (a) to encourage the transfer of fathers into jobs which will aid the war effort and (b) to insure that when fathers are drafted, the fathers who contribute least to the war effort will be inducted first.

LIST OF NONDEFERABLE ACTIVITIES AND OCCUPATIONS

All occupations in the following activities are nondeferable:

Manufacturing of the following products:

Alcoholic beverages

Amusement machines and equipment, such as juke boxes, slot machines, games of chance, and pin-ball machines (does not include athletic and sport equipment)

Art goods—stamped and otherwise; artists' materials; decorative materials

Book gilding, bronzing, and edging

Costume jewelry

Costumes: Lodge, masquerade, theatrical, academic caps and gowns

Curtains, draperies, and bedspreads

Cut, beveled, and etched glass

Cutware

³ See Monthly Labor Review, March 1943 (p. 468).

Decorative feathers, plumes, and artificial flowers
 Fancy fabrics such as brocades, chiffons, damasks, laces and lace goods, velvet, etc.
 Frames, mirror and picture
 Furniture—garden, beach, porch, toy
 Games and toys
 Greeting, souvenir, visiting, and picture post cards
 Jewelers' fixings and materials
 Jewelry
 Jewelry cases
 Lapidary work (nonindustrial)
 Merchandising display equipment such as cabinets and showcases (excluding refrigerated display equipment)
 Mosaic glass
 Musical instruments, except for the armed forces
 Novelties, manufactured from materials of any kind, such as fancy boxes and containers, souvenirs, figures, models, carvings, ornamental shoe buckles, albums, costume novelties, etc.
 Ornamental gold and silver leaf and foil (nonindustrial)
 Pleating, stitching, tucking, and embroidery
 Signs and advertising displays
 Silverware and plated ware (nonindustrial)
 Smoking accessories, such as cigarette and cigar holders, boxes, cases, lighters; smoking stands and tobacco jars
 Soft drinks
 Stained, leaded, ornamented, and decorative glass
 Trimming and art needlework

Services:

Amusement arcades
 Amusement ticket agencies
 Automobile-rental service
 Clubs—social, fraternal, business, and political
 Dance, music, theatrical, and art studios and schools
 Gambling
 Interior decorating
 Night clubs
 Parking lots
 Photographic studios
 Pool and billard halls
 Race tracks and courses
 Travel agencies
 Turkish baths, massage parlors, clothing rental, porter service, and social-escort services

Wholesale and retail trade:

Antiques
 Artists' supplies
 Beer, wines, and liquors
 Candy, confectionery, and nuts
 Custom furriers
 Florists
 Games and toys
 Jewelry
 Musical instruments
 Novelties
 Pet shops
 Soft drinks
 Tobacco

All the following occupations are nondeferable regardless of the activity in which they may be found:

Advance-advertising agent	Floorwalker
Amusement-device operator	Fortuneteller (including astrologer, clairvoyant, medium, mind reader, palmist, etc.)
Bar boy	Gardener
Bar cashier	Greenskeeper
Barker	Ground keeper
Bartender	Guide, sightseeing
Bath-house attendant	Guide, hunting and fishing
Beauty operator	Hairdresser
Bellboy	Houseman
Billposter	Lavatory attendant
Book and periodical agent	Literary and actor agent
Booking agent	Managing agent (theatrical and film)
Bootblack	Marker (in wholesale and retail trade)
Bus boy	Model
Butler	Newsboy
Caller, station	Night club manager and employees
Canvasser	Porter (other than in railroad-train service)
Carhop, curb services	Private chauffeur
Car polisher	Receptionist
Car washer	Sales clerk
Caterer, social	Sign painter
Charman and cleaner	Sign writer
Cosmetician	Soda dispenser
Custom furrier	Taxidermist
Dancing teacher	Ticket taker
Desk clerk—hotel, apartment, club, etc.	Usher
Dishwasher	Valet
Doorman and starter	Waiter (other than in railroad-train service)
Elevator operator (passenger and freight—excluding industrial freight elevators used in connection with warehousing and production)	Window trimmer and display man
Elevator starter (passenger and freight)	
Errand boy (including messenger and office boy)	

In addition to the activities and occupations set forth above, the status of idleness is to be treated as a nondeferable activity.

*Deferral of Registrants Qualified for Critical Occupations*⁴

Instructions supplementing the rules of August 16, 1943, relating to critical occupations and job transfers were issued by the Selective Service Bureau of the War Manpower Commission on September 7. These instructions call for the referral to the United States Employment Service of cases involving Selective Service registrants engaged in or qualified for critical occupations in war production or a war-supporting activity. Under this procedure, the Employment Service may recommend that a registrant be deferred in his present employment or place him in more essential production.

Registrants engaged in nondeferable activities or occupations are reclassified without regard to their dependency status unless they submit evidence to their local boards that they have registered with the United States Employment Service for transfer. If they submit such evidence prior to September 15, they are given a 30-day grace period. However, after October 1, when fathers with children born before September 15, 1942, become liable for induction, any 30-day grace period which may be running for a "nondeferable" registrant

⁴ War Manpower Commission, press release, September 7, 1943.

will be canceled if his order number is reached in the course of normal local board reclassification procedures.

Regarding registrants who are employed in the 149 occupations listed by the War Manpower Commission on August 16, Selective Service pointed out that there are not more than 400,000 such registrants of military age throughout this country. Because of this relatively small number, Selective Service advised its local boards:

It is of the utmost importance that registrants (1) who have the necessary qualifications, (2) who are utilizing them to the fullest extent in a critical occupation * * *, and (3) whose removal from their present employment would have an adverse effect upon the maintenance of required production schedules, be given the most serious consideration for extended occupational deferment before being reclassified out of a deferred classification into a class available for service.



Additional Regulations for Making Individual Wage and Salary Adjustments¹

THE National War Labor Board, on August 18, 1943, issued General Order No. 31, giving additional regulations regarding individual wage and salary adjustments. These regulations divided all employers into 2 classes—those with 30 or fewer employees and those with 31 or more.

Employers of 30 or fewer employees may, without approval of the Board, make individual wage or salary increases for particular jobs, provided that the total of such increases to any employee (subject to National War Labor Board jurisdiction) shall not exceed 10 cents per straight-time hour during any year (beginning July 1, 1943), nor shall the yearly total of such increases exceed an average of 5 cents per straight-time hour for all employees in the establishment. Other requirements are that such increases may not be used to gain the Board's approval of increases to eliminate intraplant inequalities; shall not result in a rate higher than that paid by the employer between July 1, 1942, and June 30, 1943, for like employment; shall not increase production costs appreciably or increase prices; and shall not run counter to any existing collective agreements.

Employers of 31 or more employees may make individual wage or salary increases, without the approval of the Board, under a schedule which contains (a) job-classification wage or salary rates or rate ranges and (b) a plan for making individual adjustments within and between such wage or salary rates or rate ranges. To satisfy these conditions, the job classifications must involve more than a mere descriptive title: they must be clearly defined and described. The required "plan" is an orderly, definite procedure or group of procedures for making adjustments, within specified limits, in the wage or salary rates of individual employees.

The regulations outlined a plan for those employers who have none properly in existence. Such a plan provides for increases because of merit, promotion, reclassification, and apprentice or trainee programs.

Employers who had not satisfied the requirements that would permit them to make wage and salary increases without the approval of the National War Labor Board were informed how they might obtain such approval. They were to submit all wage or salary rate schedules

¹ Data are from Federal Register, August 26 and 27, 1943.

and "plans" for approval to the appropriate Regional War Labor Board. In those schedules all proposed rate changes, single rates, and job classifications were to be set forth fully, and described and defined. The plan, in addition to providing for increases, is also to indicate the approximate percentage increase in pay-roll costs and in total production costs.

Separate schedules are to be submitted for separate establishments or for each group of similar establishments.

On August 23, 1943, the National War Labor Board amended General Order No. 30 relating to increases in wage or salary rates. By that amendment, increases in wage or salary rates which do not bring such rates above 40 cents per hour, may be made without the approval of the National War Labor Board. Prior to the amendment, such increases were allowed without the approval of the Board, provided that these increases did not furnish a basis either to increase price ceilings of the commodity or service involved, or to resist otherwise justified reductions in such price ceilings.



Enforcement of Directives of National War Labor Board¹

UNDER Executive Order No. 9370 of August 16, 1943, when the National War Labor Board reports to the Director of Economic Stabilization cases in which the Board's orders have not been complied with, the Director is to issue such directives as he may deem necessary to effectuate the necessary compliance. Those directives were to be issued—

(a) To other departments or agencies of the Government, directing the taking of appropriate action relating to withholding or withdrawing from a noncomplying employer any priorities, benefits, or privileges extended, or contracts entered into, by executive action of the Government, until the National War Labor Board has reported that compliance has been effectuated;

(b) To any Government agency operating a plant, mine, or facility, possession of which has been taken by the President under the War Labor Disputes Act, directing such agency to apply to the Board, under that act, for an order withholding or withdrawing from a noncomplying labor union any benefits, privileges, or rights accruing to it under the terms or conditions of employment in effect when possession was taken, until the noncomplying labor union has demonstrated to the satisfaction of the National War Labor Board its willingness and capacity to comply; but, when the check-off is denied, dues received from the check-off shall be held in escrow for the benefit of the union to be delivered to it upon compliance by it.

(c) To the War Manpower Commission, in the case of noncomplying individuals, directing the entry of appropriate orders relating to the modification or cancelation of draft deferments or employment privileges, or both.

¹ Federal Register, August 19, 1943 (p. 11463).

Employment and Labor Conditions

Labor in the British Colonial Dependencies

GROWING attention is being given to the protection of labor in the colonial dependencies of the British Empire. A report issued by the Colonial Office¹ reviews some of the changes made by the Government in the 6-year period from 1937 to 1943, through action of two kinds—the establishment of labor departments or full-time industrial advisers and the enactment of labor legislation.

Adoption of a program to benefit the workers was suggested to the colonial governors in 1937 by the Secretary of State. The Secretary expressed the opinion that workers should be given a fair share of the returns accruing from improvement in the financial position following the period of world economic depression. As a first step he advocated the formation of adequate machinery and the creation of a staff for proper inspection and supervision of the conditions under which labor was employed. During the following 2 years, further communications were sent to the colonial officials in regard to different phases of the labor problem, such as conciliation and arbitration machinery and the preparation of statistical series to show the cost of living.

In May 1938 the post of Labor Adviser to the Secretary of State was created. Visiting the various parts of the Colonial Empire to obtain first-hand information on labor conditions is one of the chief functions of the Adviser. A Social Services Department was also provided for in 1938, to be attached to the Colonial Office and to deal with labor questions affecting the Colonial Empire in general. In 1942, a Colonial Labor Advisory Committee was substituted for the Colonial Office Labor Committee which had been established in 1930. The body formed in 1930 was a domestic committee; the new advisory committee includes outside experts with first-hand knowledge of industrial problems in Great Britain which have their counterpart in the colonies. The committee has very broad terms of reference, its functions being to consider and advise upon any questions concerning the employment of labor in the colonies which the Secretary of State may decide to refer to it.

Labor Supervision

In 1937 there were 11 colonial dependencies having special departments or staffs with full-time officers to supervise the conditions under which labor is employed. By 1941 the total had increased to 33, including all four West African Colonies; all the West Indian Colonies; British Guiana and British Honduras; Palestine; Tanganyika Terri-

¹ Labor Supervision in the Colonial Empire, 1937-43. Great Britain, Colonial Office. London, 1943. (Colonial No. 185.)

tory, Northern Rhodesia and Nyasaland; Mauritius; Cyprus; Fiji; and Hong Kong. Although the number of full-time officers employed was only approximately 150 in 1941, that total was over four times the total number employed in 1937. The outbreak of war caused a slowing down in the staffing of the new labor departments, as a great many of the younger men were called to the colors.

Some of the colonies established employment agencies under the supervision of the labor departments. The territories include Barbados, British Guiana, Ceylon, the Gold Coast, Jamaica, Mauritius, St. Christopher and Nevis, St. Vincent, Sierre Leone, and Trinidad. In Palestine the establishment of municipal labor exchanges has been authorized. Provision of these facilities is largely for the purpose of helping workers to obtain employment after hostilities cease.

The attention of colonial governments has been directed to the importance of establishing labor advisory boards, having as nearly balanced representation of employers and employees as possible, and an independent chairman, in each case. Formation of such bodies was among the important recommendations in a report by the Labor Adviser,² who suggested that, in addition to the regular membership, labor advisory boards should be permitted to take into membership persons with specialized knowledge of medicine, law, etc., when required.

At the present time the interchange of information between colonial governments in the same area is especially important. Regional conferences are held for the labor officers; visits are made by the Labor Adviser; and the annual and other reports of the various colonial labor departments are circulated to all other colonial labor departments. Exemplifying the advantages of the interchange of information, the report under review states that the cost-of-living survey made in Jamaica in 1939 serves as a model for other colonial governments in making similar studies, notably in West Africa.

Labor Legislation

During the period under review, several hundred laws and regulations affecting labor conditions were passed in the colonies. The legislation concerned various important questions, such as the recognition and regulation of trade-unions, conciliation and arbitration machinery, minimum-wage machinery, workmen's compensation, industrial-accident prevention, and giving effect to International Labor Conventions which the British Government had ratified as far as they were applicable to local conditions.

Following the outbreak of war some 500 protective labor laws were adopted. A great deal of the legislation is of a wartime character, and most of it is based on that of Britain. Sometimes the terms duplicate those in the original legislation, but more often the provisions have been simplified to meet local circumstances. Laws of another part of the Empire have been adopted as a model in only a few instances, notably in some of the laws of Mauritius.

Trade-unions.—A circular issued by the Secretary of State in 1930 stressed the desirability of colonial laws, legalizing and requiring compulsory registration of trade-unions and providing for the sympathetic supervision and guidance of such organizations. In almost

² Labor Conditions in the West Indies, by Major Orde Browne. (Cmd. 6070.)

every case the provisions of the legislation adopted in compliance with this suggestion have been copied from those in laws of the United Kingdom.

Substantial headway in trade-union acts has been made only in the period beginning with 1937. Laws are in effect in 33 territories. Of the 300 unions registered, the large majority are in British Guiana, Cyprus, Ceylon, Jamaica, Nigeria, and Trinidad.

Minimum wages.—The majority of colonial governors expressed the view that the International Labor Convention on Minimum Wages, though suitable for highly industrialized countries, was impractical in the colonies. The Secretary of State therefore suggested that simpler legislation should be adopted; for example, a law might provide that minimum wages could be fixed in an occupation in which the officials were satisfied that the rate of pay was unduly low. Most of the laws passed are of the suggested type.

In general, however, colonial policy has been to encourage wage adjustment by means of collective bargaining. Use of the minimum-wage machinery has been encouraged only when negotiation between employers and employees has failed.

Cost of living.—Living costs have risen substantially in practically every colonial territory since 1939. In two theaters of war—Malta and Cyprus—the advance has been very great. It has been least marked in Central Africa. Excluding Malta and Cyprus, the rise has been, roughly, 50 to 60 percent above the 1939 figure. The rate of increase is showing signs of slowing down, according to the Colonial Office, because of measures taken locally to ration essential commodities and to control prices, and in some cases because of subsidy.

In certain territories the more rapid rise in cost of living than in wages has been compensated for by bonus payments of different kinds.

Industrial disputes and their settlement.—At the beginning of the period reviewed, Ceylon was the only territory that had a conciliation law. In 1938 it was suggested that colonial governors should establish some form of conciliation and arbitration machinery. Trinidad had in the same year passed an ordinance based on the United Kingdom Industrial Courts Act. Provision was made for the settlement of disputes in Fiji by ordinance in 1941, and in British Guiana by ordinance in 1942; and the Straits Settlements and the Federated Malay States enacted legislation in 1940, both laws being based on those of Britain.

Wartime legislation.—Numerous colonies have issued orders to safeguard the maintenance of personnel in industries regarded as essential to the prosecution of the war, the defense of the territory, or the life of the community.

Many colonies have found it desirable to take measures, under their defense legislation, to avoid slow-downs in the war effort owing to industrial disputes. Before the war started, a large number of industrial disputes took place in various parts of the Colonial Empire. The settlement of industrial differences is one of the major tasks of the colonial labor departments, and during the war period special attention has been directed toward avoidance of losses entailed in serious strikes.

Workmen's compensation.—Workmen's compensation laws, differing somewhat in design and scope, have been passed in 30 territories, mainly in West Africa, the West Indies, and Malaya. Other im-

portant colonies which have given their workers such protection are Ceylon and Mauritius. Most of this legislation has been passed during the period beginning with 1937, and in some important cases the laws have been passed since the war began.

Factories and shops legislation.—A small number of colonies had full-time factory inspectors prior to the war. Provision for inspection of factories, and for their cleansing, ventilation, and lighting had been made in the public-health ordinances of most colonies. Nearly every colony had protective legislation for women and children; and some had regulations dealing with employment in dangerous, offensive, or unhealthful occupations.

In November 1939 the British Government called attention to the need for accident prevention and suggested that the colonies pass protective laws in the light of the provisions of the Factories Act of 1937. Although the war makes the introduction of improvements difficult, such laws have been passed in Aden (1941), British Honduras (1942), Ceylon (1942), Dominica (1941), the Gambia (1941), Jamaica (1940), Malta (1940), Mauritius (1942), Northern Rhodesia (1942), St. Vincent (1940), and Sierra Leone (1941).

Conditions of employment in stores are regulated by law in the majority of the colonies. During the war period legislation has been enacted to provide shorter hours, especially in the West Indies.



Labor Conditions in Chile, 1942¹

WORLD conditions and a continuous rise in cost of living caused labor in Chile to be somewhat restive during the year 1942. However, prolonged labor disputes were avoided, and through enactment of labor and social-security legislation certain gains were attained. Low productivity was a matter of concern to the Government, and on several occasions the President and Cabinet members appealed to the workers to increase their output. Incomplete figures for 1942 indicate that as compared with 1941 average daily wages increased by from 8 to 9 pesos² in the key industries (exclusive of mining and agriculture).

Cost of Living and Price Controls

The general cost-of-living index in Santiago in 1942, based on March 1928=100, rose from an average of 242.3 in 1941 to an average of 304.3 in 1942, an increase of about 25.6 percent. Compared with 1940, the 1942 index was about 15 percent greater, but compared with 1939 the index of 1942 showed a gain of about 63 percent. From September 1939, the date of opening of European hostilities, to December 1942 the index of the cost of living as a whole rose 77.3 percent.

The index of food prices showed the largest increase, while the rise in rents was less marked. From 1941 to 1942 clothing prices increased less than those of food, but from 1939 to 1942 increased slightly more than food. The index of fuel and power costs leveled off somewhat during 1942.

The accompanying table shows the trend in cost of living in the capital, Santiago, since 1937.

¹ Data are from report of Joel C. Hudson, first secretary, United States Embassy, Santiago, Chile; and from International Labor Review (Montreal), April and July 1943.

² Average exchange rate of peso in 1942=5 cents.

Indexes of Cost of Living in Santiago, Chile ¹

Period	Indexes (March 1928=100) of —					
	General index	Food	Rent	Fuel and light	Clothing	Various
1937: Annual average	176.4	204.8	135.5	162.4	190.9	131.0
1938: Annual average	184.1	214.4	144.6	168.9	190.9	140.1
1939: Annual average	186.6	210.4	157.7	162.6	199.9	146.1
1940: Annual average	210.3	244.8	171.3	181.9	218.3	155.8
1941: Annual average	242.3	280.6	184.1	218.1	277.5	170.0
1942: Annual average	304.3	366.7	224.8	252.3	350.4	182.6
1941: December	264.4	313.6	187.9	222.3	311.5	177.2
<i>1942</i>						
January	267.2	316.3	187.9	227.3	318.4	179.4
February	272.6	322.4	187.9	229.2	335.3	179.4
March	285.8	335.9	211.2	240.8	346.8	179.1
April	296.6	347.1	235.5	244.7	351.4	179.1
May	301.1	359.8	234.5	256.5	351.4	179.1
June	301.0	355.0	234.5	251.9	351.5	181.8
July	302.0	357.2	234.5	251.9	351.5	181.7
August	313.3	381.3	234.5	252.3	351.5	185.5
September	318.7	394.6	234.5	244.1	351.5	185.8
October	329.7	414.7	234.5	267.8	351.5	187.4
November	329.2	404.9	234.5	280.4	371.9	186.0
December	332.4	411.6	234.5	281.3	371.9	187.1

¹ Data supplied by Dirección General de Estadística of Chile.

Although the rise in the cost of living was partly influenced by external factors, it has been attributed by the Banco Central de Chile largely to internal inflationary influences, "especially the alleged lack of equilibrium that has existed during 1942 between the production and supply of goods on the one hand, and the supply of money on the other."

The Commissariat of Subsistence and Prices attempted to apply some checks to the rising cost of living during the year. There was no general price ceiling, but prices of selected articles, declared to be "articles of prime necessity and habitual use and consumption," were set so as to limit profits to a reasonable percentage. Rents of dwellings and of commercial premises used for the manufacture of articles of prime necessity or habitual use and consumption were held to come within this category and were subjected to control by the Commissariat. As compared with the levels of 1941, rents rose in 1942 by 22 percent. Though rents were more strictly controlled than other items, the controls did not apply effectively to dwellings renting for more than 1,000 pesos per month.

Trend of Wages

The following indexes, published by the National Statistical Office, show the movement of wages during the past 7 years, on the basis of 1927-29=100.

1936	147.3	1940	287.9
1937	177.9	1941	341.6
1938	200.5	1942	400.8
1939	237.5		

Unemployment

Unemployment did not constitute a serious problem in 1942. World conditions, lack of shipping space to the United States, and the

tightening of export restrictions from the United States caused fears of considerable unemployment, but there has been so far little indication that these fears have been realized to any appreciable extent. Unemployment did occur among chauffeurs and garagemen, owing to the rationing of gasoline and the elimination of many motor vehicles, and also occurred to a minor extent among metal workers. Figures of number of applicants to the Government employment bureaus do not indicate the actual number of laborers out of work, but they can be used as a measure of the relative unimportance of unemployment in the year 1942. The monthly average number of applicants was 1,011; in January—the peak month—there were 1,245, and in June—the lowest month—there were 827.

Settlement of Labor Disputes

Figures covering the number of strikes that took place in 1942 have not been released, but labor unrest in Chile during the year extended over the entire country. The most extensive strikes were those in the different mining enterprises—nitrate, copper, coal—and the general strike in Punta Arenas, which affected commerce and industry in that region. There were other disputes of less magnitude in various industries, and in addition there were numerous small controversies which never came to the point of arbitration or strike.

A new High Labor Council (*Consejo Superior de Trabajo*), to act as intermediary between the employer and labor groups and the Government, was reestablished by a Ministry of Labor decree (No. 18-880) of October 2, 1942. The council is composed of 25 members, experts in various fields. The council will have the following permanent committees, designed to handle labor problems more effectively: Arbitration Committee, Board of Classification of Salaried Employees and Laborers, Mining Committee, Committee of Commerce and Industry, and Agricultural Committee.

Labor Legislation

The single-shift or continuous working day in the cities of Santiago, Valparaiso, Viña del Mar, and Concepción, was provided for by a law of May 16, 1942. The law came into effect on June 1, 1942, with factories scheduled to work from 8 a. m. to 4 p. m., and private and public offices from 9 a. m. to 5 p. m., with a rest period of 30 minutes for the noon meal. This change, intended to bring relief from growing transportation and other difficulties, proved to be a hardship to most workers owing to the difficulty of obtaining a quick lunch, the sudden rise in the price of all lunch foodstuffs, and the refusal of some offices to allow their personnel to leave the premises during the 30-minute rest period. Before the end of the year many Government offices as well as private organizations had succeeded in obtaining permission to return to the old schedule of hours.

Previous legislation governing automatic salary increases and tenure of office of private employees was modified and extended by law No. 7280 of September 11, 1942. This law provided for annual adjustment of salaries of these employees by the joint salary commission and the payment of a special indemnity at the termination of employment.

Another decree (No. 5724 of October 21, 1942) specifically provided that mining companies having camps or towns could not limit, prohibit, or impose conditions upon the right of assembly in such places.

New organic regulations to govern the labor offices were issued late in 1942, on the recommendation of the Minister of Labor.

Social Security

In order to help cover increases in salaries granted to certain Government employees, the employers' pay-roll tax was increased by law No. 7236 of August 14, 1942.

The preventive and curative medical services of the different social-insurance funds were consolidated in a single institution, the National Medical Service for Nonmanual Workers, by decree No. 32/1552 of November 14, 1942.

Essential functions of the Department of Social Welfare, which supervises and controls social-insurance institutions, were set forth in decree No. 56/1790 of December 31, 1942. In general the Department will establish standards concerning accounting, management of funds, compilation of statistics, etc.

The General Directorate for Social Assistance, created by decree of August 26, 1942, is responsible for assisting unemployed workers, persons voluntarily unemployed (defined as those socially maladjusted), needy persons, and victims of disasters. A decree of September 21, 1942, contains detailed provisions for the organization of this agency.



Industrial Development in China¹

THE Ministry of Economic Affairs of Free China, which undertook a registration of factories, reported that there were 1,915 privately owned factories using power-driven machinery and employing over 30 workers each, at the close of 1942. Of these, 28.6 percent were making equipment; 27.2 percent, chemical products; 22.7 percent, textiles and clothing; 7.1 percent, metallurgical products; 5.2 percent, food products; and 3.2 percent, electricity; 2.8 percent were printing works; and there was a miscellaneous group comprising 3.2 percent of the total. These establishments were distributed over 12 Provinces, as follows: 936 in Szechwan, 368 in Hunan, 173 in Kwangsi, 170 in Shensi, 63 in Kansu, 55 in Kiangsi, and the remaining 150 in the Provinces of Kweichow, Yunnan, Fukien, Kwangtung, Hupei, and Sikiang.

These private enterprises are under the supervision of the Ministry of Economic Affairs, from which they have received financial and technical aid. At the close of 1942 the aggregate loan to all the industries was divided as follows: Chemical products, 21.3 percent; electricity, 20.7 percent; equipment, 19.9 percent; metallurgy, 19.4 percent; textiles, 14 percent; and other industries, 4.7 percent.

The industrialization of Free China dates back to the time when the factories were transferred to the interior of the Republic, early in the war. Recent statistics indicate that 639 factories have been

¹ Data are from *International Labor Review* (Montreal), August 1943.

so transferred, 472 having again started operations after arrangements for their adjustment or amalgamation. The construction of new plants in the interior has also been stimulated, with the aid of the Ministry of Economic Affairs. New establishments received approximately 50 percent of all the loans extended.

An outcome of the measures taken by the Minister of Economic Affairs to reorganize and develop these industries was the notable expansion in production in 1941 and 1942, which is shown by the following index numbers:

	Index of production (1940=100)	
	1942	1941
Iron.....	555	259
Steel.....	136	122
Coal.....	123	113
Power.....	214	200
Machine tools.....	133	127
Acids.....	237	105
Caustic soda.....	324	300
Chloride of lime.....	458	348
Alcohol.....	111	104
Cotton yarn (machine made).....	261	253
Wheat flour.....	145	139



Changes in New Zealand Labor Conditions

INCREASING labor shortage is stressed as a problem in the report of the New Zealand Department of Labor for the year ended March 31, 1943. Production is hampered also by the shortage in supplies, owing in part to priorities and the freezing of stocks to fill anticipated emergency demands. To meet the continuing labor shortage, more women were being employed in factory work. In primary industries, where seasonal activities cause temporary labor shortages, experienced workers were released from the armed forces to assist. Men in bivouac camps were employed for harvesting and similar purposes, and even though they were unskilled in some cases, it is stated, they formed a pool of willing labor.

The report under review treats a number of important wartime labor questions, which are discussed briefly below.

Overtime Work

Labor inspectors did not believe that the extended overtime hours being worked in factories to fill defense requirements were a detriment to the health of women and boys. Extension of the working hours of male workers over age 16 is not subject to official limitation, except in respect to "meal breaks." For women and boys under 16 the inspectors must give approval for overtime and it may not exceed 90 hours in a year, with the provision that in cases arising from exceptional circumstances an additional 30 hours may be authorized. With the approval of the Industrial Emergency Council, overtime beyond the 120-hour limit was permitted in 3,936 cases (3,902 women and 34 boys) to a total of 235,212 hours in the fiscal year 1943. For earlier war years the extended hours were greater—1,549,635 in 1942, 1,413,157 in 1941, 1,241,807 in 1940, and 950,140 in 1939. These

figures are exclusive of time worked by women on night shifts, as provided under suspension orders. In spite of shift arrangements, overtime has increased in many industries. For example, overtime hours increased in woolen milling from 98,444 hours in 1939 to 174,053 in 1940 (shift employment became practicable on June 20, 1940), to 235,374 in 1941, and 310,843 in 1942.

Canteens in Industry

Overtime and shift work and the employment of women who formerly performed tasks in their homes raised the question as to whether the workers had reasonable opportunity to obtain meals. Although the need for canteens was not so great as it was in Great Britain, where aerial bombardment and the transfer of plants to outlying areas raised special problems, investigation showed that difficulties with regard to catering did exist in New Zealand.

Although no provision of law required New Zealand employers to provide canteen facilities, a number of employers had provided very creditable canteens. After public investigation it was determined that the problem of canteens was, for the time at least, capable of solution without legal authority.

Women in Employment

From 1931-32 to 1942-43 the number of women employed in factories increased by over 100 percent, that is from 18,545 to 38,092. The trend toward an increasing proportion of woman workers was in progress even before the war. In 1913-14 women (numbering 17,322) formed 30 percent of the force, and in 1939-40 the total (31,332) had increased to 38.5 percent.

New Zealand factory legislation contains special restrictions concerning female workers—for example, limiting their hours of work—but no statutory differentiation is made in wage rates. Nevertheless, lower wage scales for women than for men were established in awards of the Court of Arbitration and in other orders. In many industries, however, no separate rate has been prescribed for women employed in the war program, and when women have entered employments in which no special rate was established for female workers, they have received the rate for the job. On the several occasions when applications were made to fix rates for women, the Industrial Emergency Council has adhered to the principle of equal pay for equal work, except when it was shown that the woman worker's labor was less productive than that of a man. In cases of the latter kind, lower rates were fixed for female labor.

Because of the emergency, legal prohibitions on the employment of female workers in factories between the hours of 6 p. m. and 8 a. m. have been lifted in a number of industries, such as ammunition manufacture, bread baking, biscuit manufacture, brushware manufacture (two employers), laundry (one hospital board), and woolen milling.

Workshop Committees

Workshop committees have been established in some towns, but they are not general. In several cases good work has been done by the

committees; in other instances they have served merely as a channel for expressing dissatisfaction. It is not within their jurisdiction to deal with matters arising out of an award. Matters regarded by the Department of Labor as suitable for discussion by workshop committees are health and safety, greater efficiency, increased production, prevention of waste, and cleanliness of the factory.

Absenteeism

A complete survey of absenteeism throughout the Dominion was not possible, owing to the lack of staff. It was also found that few employers had recorded the reasons for absences of their employees. Certain conclusions were drawn from a number of cases which were reviewed in considerable detail.

Some workers who had been recorded as absent without reason were found in fact to have been sick. Since they were employed in an essential industry, but had neglected to obtain a formal release from the manpower authorities, their names were retained on the employment record although under normal conditions they would have been removed. In other cases, workers had made unauthorized changes of jobs and were recorded as absent by the original employer, owing to his ignorance of the change; in reality, the employees were at work elsewhere.

Women in Industry

Wartime Employment of Women in Manufacturing¹

WARTIME industrial expansion has resulted in almost doubling the number of women in manufacturing industries since October 1939, bringing the total number of women employed in June 1943 to more than 4¼ million. Women now comprise about 30 percent of all manufacturing wage earners. Field studies conducted by the Women's Bureau of the U. S. Department of Labor indicate that although many of the women hired have had no previous factory experience, they are well suited to many kinds of industrial work and are superior to men at certain tasks, particularly those which require dexterity and attention to details. The metal, industrial chemicals, and rubber industries have been especially active in recruiting women. These industries which produce the ships, planes, and implements of war employed nearly 2 million woman wage earners in June 1943, while the textile, leather, and apparel industries which have always utilized women in great numbers employed almost 1½ million.

TABLE 1.—*Estimated Employment of Woman Wage Earners in Manufacturing, by Economic Division,¹ January and June 1943*

Economic division	Woman wage earners				All wage earners (thousands)	
	Number (thousands)		Percent of total ²		January	June
	January	June	January	June		
All manufacturing.....	3,766	4,276	27.9	30.9	13,503	13,821
Metal, industrial chemicals, and rubber industries.....	1,438	1,859	19.4	23.7	7,422	7,858
Basic metals.....	59	94	5.6	8.9	1,048	1,049
Metal fabricating.....	1,292	1,668	21.7	26.1	5,965	6,391
Industrial chemicals.....	21	26	9.4	11.1	226	229
Rubber.....	66	71	36.1	37.8	183	189
Food industries.....	248	262	25.7	27.5	965	953
Textile, apparel, and leather industries.....	1,473	1,455	58.5	60.2	2,518	2,416
Other manufacturing industries.....	607	700	23.4	27.0	2,598	2,594

¹ These divisions were devised to distinguish groups of industries of special significance in wartime. They represent combinations of complete industries classified by pre-war product and cannot be considered clear-cut categories.

² Percentages computed on unrounded figures.

During the initial stages of war expansion the manufacturing industries hired men preponderantly. Between October 1939 and April 1942, 5 million wage earners were added to manufacturing industries; less than 10 percent of these were women. As long as a supply of men was still available many industries were reluctant to hire women. Traditionally women had been utilized only in lower-

¹ Prepared in the Bureau's Employment Statistics Division.

paying jobs. The industries which had large proportions of women were, for the most part, highly seasonal and therefore offered very irregular employment. An entirely new concept of the jobs which women could fill was necessary before they could be used to their fullest capabilities. The growing depletion of the male labor supply and the rapidly expanding war industries literally forced employers to try out women in all industries and almost all jobs, between April 1942 and June 1943. Thus, women represented more than four-fifths of the net total of 1,833,000 wage earners added to the manufacturing industries between April 1942 and June 1943.

TABLE 2.—Estimated Employment of Woman Wage Earners in Manufacturing, in Specified Months, October 1939—June 1943

Year and month	Woman wage earners		Man wage earners (thousands)	All wage earners (thousands)
	Number (thousands)	Percent of total		
1939: October.....	2,268	125.6	6,586	8,854
1940: October.....	2,270	24.1	7,134	9,404
1941: April.....	2,425	23.5	7,885	10,310
1942: October.....	2,743	23.6	8,873	11,616
1942: April.....	2,751	22.9	9,237	11,988
1942: October.....	3,336	25.3	9,830	13,166
1943: January.....	3,766	27.9	9,737	13,503
February.....	3,915	28.7	9,718	13,633
March.....	4,015	29.2	9,712	13,727
April.....	4,112	29.9	9,623	13,735
May.....	4,172	30.5	9,524	13,696
June.....	4,276	30.9	9,545	13,821

¹ Derived from data of the 1939 Census of Manufactures: "Persons Employed in Manufacturing Establishments, by Sex," August 1941.

Before the war 85 percent of all woman wage earners in manufacturing were in the nondurable-goods industries. However, the rapid wartime growth of the durable-goods industries relative to the nondurable resulted in more nearly equalizing the distribution of women in these two groups. By June 1943, 58 percent of all woman wage earners were in the nondurable-goods industries, while 42 percent were in those making durable goods.

The number of men in the durable-goods industries continued to increase until March 1943, even though male employment in nondurable-goods industries began to decline in October 1942. Undoubtedly the drop in male employment in the nondurable-goods industries was in large part due to the shifting of workers to jobs in essential war industries. However, the increase in male employment in the manufacture of durable goods in this period (October 1942 to March 1943) was greater than the decrease in their employment in nondurable-goods industries, indicating that some men came from the farms, older men came out of retirement, and youths left schools.

Since March 1943 the number of men in both the durable- and nondurable-goods industries has been declining. Fortunately the number of women entering manufacturing industries was more than sufficient to replace the men leaving for the armed forces. For this reason total manufacturing employment has continued to increase to a level of almost 14 million.

Each of the major durable-goods groups showed substantial increases in the number of women hired. Most spectacular of these was

TABLE 3.—Estimated Employment of Woman Wage Earners in Durable and Nondurable Goods Manufacturing, in Specified Months, October 1939–June 1943

Year and month	Woman wage earners				Man wage earners (thousands)		All wage earners (thousands)	
	Number (thousands)		Percent of total		Durable goods	Non-durable goods	Durable goods	Non-durable goods
	Durable goods	Non-durable goods	Durable goods	Non-durable goods				
1939: October.....	340	1,928	18.6	139.5	3,627	2,959	3,967	4,887
1940: October.....	381	1,889	8.4	38.7	4,144	2,990	4,525	4,879
1941: April.....	445	1,980	8.5	39.1	4,798	3,087	5,243	5,067
October.....	517	2,226	8.6	39.9	5,518	3,555	6,035	5,581
1942: April.....	577	2,174	8.9	39.6	5,923	3,314	6,500	5,488
October.....	982	2,354	13.2	41.3	6,482	3,348	7,464	5,702
1943: January.....	1,382	2,384	17.6	42.4	6,493	3,244	7,875	5,628
February.....	1,494	2,421	18.7	43.0	6,504	3,214	7,998	5,635
March.....	1,573	2,442	19.4	43.4	6,526	3,186	8,099	5,628
April.....	1,656	2,456	20.3	43.9	6,489	3,134	8,145	5,590
May.....	1,727	2,445	21.2	44.2	6,432	3,092	8,159	5,537
June.....	1,814	2,462	22.0	44.2	6,436	3,109	8,250	5,571

¹ Derived from data of the 1939 Census of Manufactures: "Persons Employed in Manufacturing Establishments, by Sex," August 1941.

the transportation-equipment group, which employed only 1,800 women in October 1939 and employed more than 466,800 in June 1943. In the latter month women accounted for more than 20 percent of the total number of wage earners in this group, as compared with only 1 percent in October 1939.

TABLE 4.—Estimated Number of Woman Wage Earners, by Major Industry Groups, in Specified Months, October 1939–June 1943

Industry group	Number (in thousands)				
	1939	1941	1942	1943	
	October	April	April	April	June
Durable goods:					
Iron and steel.....	68.8	93.2	124.3	293.9	317.8
Electrical machinery.....	100.3	131.2	174.2	313.4	323.6
Machinery, except electrical.....	28.4	43.0	62.0	218.9	240.2
Transportation equipment.....	1.8	4.3	33.1	410.9	466.8
Automobiles.....	29.5	31.6	20.5	118.2	142.0
Nonferrous metals.....	34.9	55.4	56.6	83.4	91.7
Lumber and timber.....	4.1	8.0	11.6	49.9	53.0
Furniture.....	36.9	31.6	39.9	82.8	89.9
Stone, clay, and glass.....	35.3	46.6	55.2	84.7	89.3
Nondurable goods:					
Textile-mill products.....	527.7	554.9	587.7	627.0	620.2
Apparel.....	626.0	687.9	729.6	696.1	669.8
Leather.....	139.6	149.9	161.1	169.2	164.5
Food.....	263.8	177.4	211.6	245.7	262.1
Tobacco.....	64.9	61.2	62.1	63.0	60.3
Paper.....	69.4	71.4	78.1	96.1	100.2
Printing and publishing.....	59.3	69.6	71.4	88.1	92.2
Chemicals.....	46.0	59.3	102.4	219.5	231.2
Petroleum and coal.....	.3	.5	.8	5.9	6.9
Rubber.....	33.0	42.0	39.9	68.3	71.4
Miscellaneous.....	98.1	105.5	129.1	176.9	182.7

The extent to which certain industries employed women is best illustrated by the fact that 8 industries employed more than 100,000 women each in June 1943. These are aircraft, automobiles, boots and shoes, cotton goods, electrical equipment, machine-shop products,

men's clothing, and women's clothing. An additional 10 industries employed more than 50,000 women. Further proof of the widespread utilization of women in manufacturing may be seen in the fact that in 30 industries women represent more than half of the total employment, while in only 6 do they account for less than 5 percent. In October 1939 women constituted less than 5 percent of the employment in 42 industries.

TABLE 5.—Number of Women per 100 Wage Earners in Manufacturing Industries and Groups in Specified Months, October 1939 to June 1943

Industry group or industry	1939 October ¹	1941 April	1942 April	1943	
				April	June
All manufacturing	25.6	23.5	22.9	29.9	30.0
Durable goods	8.6	8.5	8.9	20.3	22.0
Nondurable goods	39.5	39.1	39.6	43.9	44.2
Iron and steel and their products	6.2	6.8	7.9	17.0	18.5
Blast furnaces, steel works, and rolling mills	1	1	1	5	6
Gray-iron and semisteel castings	1	(3)	(3)	6	7
Malleable-iron castings	4	(3)	(3)	8	9
Steel castings	(2)	(2)	(2)	6	7
Cast-iron pipe and fittings	(2)	(2)	(2)	2	2
Tin cans and other tinware	28	30	31	39	41
Wire drawn from purchased rods	11	9	9	19	23
Wirework	22	21	20	28	31
Cutlery and edge tools	28	21	26	31	32
Tools (except edge tools, machine tools, files, and saws)	11	10	10	20	20
Hardware	23	27	28	35	36
Plumbers' supplies	5	5	6	18	19
Stoves, oil burners, and heating equipment, not elsewhere classified	3	4	5	25	25
Steam and hot-water heating apparatus and steam fittings	6	7	8	22	25
Stamped and enameled ware and galvanizing	23	21	22	34	36
Fabricated structural and ornamental metalwork	(2)	(2)	1	7	7
Bolts, nuts, washers, and rivets	14	13	15	26	29
Forgings, iron and steel	(2)	1	(2)	11	12
Screw-machine products and wood screws	12	14	24	32	35
Steel barrels, kegs, and drums	11	(3)	(3)	23	28
Firearms	5	3	8	24	27
Electrical machinery	33.9	31.9	33.5	45.1	46.1
Electrical equipment	17	24	26	39	40
Communication equipment	58	55	56	59	59
Machinery, except electrical	5.2	5.2	5.9	17.7	19.2
Machinery and machine-shop products	4	5	6	19	21
Engines and turbines	2	1	1	12	14
Tractors	1	(2)	(2)	8	12
Agricultural machinery, excluding tractors	1	1	1	7	12
Machine tools	(2)	1	2	12	13
Machine-tool accessories	3	5	6	20	20
Textile machinery	4	4	5	17	18
Pumps and pumping equipment	6	3	4	12	13
Typewriters	4	32	35	39	39
Cash registers, adding and calculating machines	4	16	20	32	34
Washing machines, wringers, and driers, domestic	4	6	9	31	36
Sewing machines, domestic and industrial	12	13	16	29	30
Refrigerators and refrigeration equipment	9	10	10	26	26
Transportation equipment, except automobiles	1.0	.9	2.7	18.5	20.4
Locomotives	1	(2)	(2)	2	3
Car building, electric and steam railroad	1	(2)	1	6	9
Aircraft and parts, excluding aircraft engines	4	1	6	37	39
Aircraft engines	4	1	4	27	28
Shipbuilding	(2)	(2)	(2)	6	8
Motorcycles, bicycles, and parts	10	16	17	25	27
Automobiles	6.6	5.4	4.8	18.1	21.0
Nonferrous metals and their products	13.7	16.6	15.3	20.3	22.1
Smelting and refining, primary, of nonferrous metals	(2)	(2)	(2)	2	2
Alloying and rolling and drawing of nonferrous metals, except aluminum	7	9	10	17	18
Clocks and watches	48	47	48	51	53
Silverware and plated ware	22	25	23	33	32
Lighting equipment	26	26	23	29	32
Aluminum	10	7	4	12	15

See footnotes at end of table.

TABLE 5.—Number of Women per 100 Wage Earners in Manufacturing Industries and Groups in Specified Months, October 1939 to June 1943—Continued

Industry group or industry	1939 October	1941 April	1942 April	1943	
				April	June
Lumber and timber basic products.....	0.9	1.6	2.1	10.4	11.0
Sawmills and logging camps.....	1	2	2	9	9
Planing and plywood mills.....	1	1	3	15	17
Furniture and finished lumber products.....	10.3	8.4	10.3	23.0	25.1
Mattresses and bedsprings.....	18	16	17	33	35
Furniture.....	6	7	8	22	25
Wooden boxes, other than cigar.....	8	7	9	23	26
Caskets and other morticians' goods.....	20	17	17	22	23
Wood preserving.....	(2)	(2)	(2)	3	3
Stone, clay, and glass products.....	11.1	13.1	14.6	23.6	24.8
Glass and glassware.....	18	18	20	30	31
Cement.....	(2)	(2)	(2)	2	3
Brick, tile, and terra cotta.....	3	5	5	7	9
Pottery and related products.....	32	32	37	43	43
Gypsum.....	(2)	(2)	(2)	11	11
Wallboard, plaster (except gypsum), and mineral wool.....	1	1	1	16	21
Lime.....	(2)	(2)	(2)	1	2
Abrasive wheels.....	16	14	14	37	38
Textile-mill products and other fiber manufactures.....	43.4	43.9	45.1	50.0	50.3
Cotton manufactures, except smallwares.....	38	39	40	45	45
Cotton smallwares.....	53	52	57	62	63
Silk and rayon goods.....	50	52	52	58	58
Woolen and worsted manufactures, except dyeing and finishing.....	41	42	42	47	47
Hosiery.....	61	60	62	67	68
Knitted cloth.....	38	46	45	51	51
Knitted outerwear and knitted gloves.....	76	74	78	80	79
Knitted underwear.....	76	74	74	78	78
Dyeing and finishing textiles, including woolen and worsted.....	17	18	21	28	29
Carpets and rugs, wool.....	31	30	30	37	38
Cordage and twine.....	33	31	32	43	44
Apparel and other finished textile products.....	74.0	76.1	76.6	78.3	78.8
Men's clothing, not elsewhere classified.....	66	68	69	72	73
Shirts, collars, and nightwear.....	88	86	88	89	89
Underwear and neckwear, men's.....	87	85	86	89	89
Work shirts.....	91	89	89	92	91
Women's clothing, not elsewhere classified.....	78	81	80	80	80
Corsets and allied garments.....	90	87	88	89	89
Millinery.....	69	70	68	71	68
Handkerchiefs.....	94	90	92	94	94
Housefurnishings, other than curtains, etc.....	64	62	61	74	75
Textile bags.....	66	63	68	73	70
Leather and leather products.....	40.0	40.2	41.7	48.9	49.4
Leather.....	9	9	9	16	17
Boot and shoe cut stock and findings.....	30	30	33	35	36
Boots and shoes.....	45	47	49	56	57
Leather gloves and mittens.....	61	64	65	72	72
Trunks and suitcases.....	30	31	39	51	52
Food.....	28.4	21.3	23.7	27.0	27.5
Slaughtering and meat packing.....	15	15	16	21	22
Condensed and evaporated milk.....	3	7	7	13	14
Ice cream.....	17	12	17	21	24
Flour.....	2	3	3	7	7
Cereal preparations.....	29	31	30	34	36
Baking.....	15	20	22	29	29
Sugar refining, cane.....	7	8	10	18	19
Sugar, beet.....	1	(2)	(2)	3	6
Confectionery.....	67	61	60	63	62
Malt liquors.....	1	1	1	7	9
Canning and preserving.....	56	40	42	43	42
Tobacco manufactures.....	66.9	66.5	66.8	67.7	67.8
Cigarettes.....	48	49	49	55	54
Cigars.....	80	79	80	80	81
Tobacco (chewing and smoking) and snuff.....	50	47	46	50	52
Paper and allied products.....	24.0	23.8	24.0	30.8	31.6
Paper and pulp.....	8	9	9	14	16
Paper goods, other.....	35	36	39	46	47
Envelopes.....	56	55	56	58	58
Paper bags.....	51	48	41	48	47
Paper boxes.....	41	38	39	46	47

See footnotes at end of table.

TABLE 5.—Number of Women per 100 Wage Earners in Manufacturing Industries and Groups in Specified Months, October 1939 to June 1943—Continued

Industry group or industry	1939 October	1941 April	1942 April	1943	
				April	June
Printing, publishing, and allied products.....	17.8	20.7	21.6	26.7	27.6
Newspapers and periodicals.....	8	(3)	(2)	9	10
Printing, book and job.....	23	26	27	35	36
Lithographing.....	22	24	24	35	38
Bookbinding.....	42	42	43	51	51
Chemicals and allied products.....	14.7	15.0	17.8	29.5	31.2
Paints, varnishes, and colors.....	5	5	6	12	13
Drugs, medicines, and insecticides.....	42	46	47	56	56
Perfumes and cosmetics.....	69	62	66	69	67
Soap.....	17	17	16	23	23
Rayon and allied products.....	26	24	24	32	34
Chemicals, not elsewhere classified.....	3	4	4	10	10
Compressed and liquefied gases.....	1	(2)	(2)	5	5
Ammunition, small-arms.....	32	(3)	36	48	49
Cottonseed oil.....	1	(2)	2	3	5
Fertilizers.....	(2)	1	2	6	6
Products of petroleum and coal.....	.3	.4	.6	4.8	5.5
Petroleum refining.....	(2)	(2)	1	4	5
Roofing materials.....	1	1	1	8	13
Rubber products.....	24.6	27.8	28.1	36.7	37.8
Rubber tires and inner tubes.....	14	16	18	29	30
Rubber goods, other.....	28	31	30	40	42
Miscellaneous industries.....	36.6	34.7	35.7	43.9	44.9
Professional and scientific instruments and fire-control equipment.....	15	14	16	41	42
Photographic apparatus.....	26	22	22	35	35
Optical instruments and ophthalmic goods.....	33	30	32	42	42
Pianos, organs, and parts.....	10	13	11	23	24
Games, toys, and dolls.....	51	45	48	52	53

¹ Derived from data of the 1939 Census of Manufactures: "Persons Employed in Manufacturing Establishments, by Sex," August 1941.

² Less than 1.

³ Not available.

⁴ Derived from Census data by estimation.

In the preceding tables sex-ratio data are shown for 132 industries from October 1939 to June 1943. Ratios for October 1939 are derived from the 1939 Census of Manufactures release, "Persons Employed in Manufacturing Establishments, by Sex." Data from October 1940 through June 1943 are based upon reports to the Bureau of Labor Statistics from manufacturing establishments. For June 1943, reports were received from approximately 23,000 establishments, employing more than 8 million wage earners. This number represents about three-fourths of the establishments which report employment each month and constitutes more than four-fifths of the wage earners in the complete sample.

Each series published is based on a sample covering at least one-fifth of the estimated wage-earner employment for the entire industry. Half the series are based on samples covering 60 percent or more of the estimated wage-earner employment; 10 percent on samples greater than 90 percent.

Social Security

Principal Features of Workmen's Compensation Laws, as of September 1943¹

EVERY State, except Mississippi, has a workmen's compensation law. In addition, such legislation exists in Alaska, Hawaii, and Puerto Rico. Federal workmen's compensation laws cover Government employees, longshoremen and harbor workers, and private employees in the District of Columbia.

The main objective of workmen's compensation legislation is the payment of benefits to injured employees or to the dependents of those killed in industry, regardless of who was at fault in the accident. All of the States agree as to this principle, but under the different laws workers do not have equal protection, because the laws vary so widely. In some States, for example, employers are required to operate under the compensation act, while in others they may refuse to do so if they prefer to risk an injured worker's suit for damages. Again, some occupations or industries covered in one State are not covered in another, and more than a third of the States do not provide coverage for occupational diseases. Some laws provide a more liberal amount and period of benefits than others. The degree of protection a worker receives is also affected by the various administrative provisions of the different laws.

The employers bear the cost of compensation, although a few laws require the workers to make small contributions.

The following comparative analysis covers only the major features of the laws relating to compensation and does not include provisions on industrial safety. It is based on a study of the laws, some correspondence with administrative agencies, and in a few instances on administrative rulings which have clarified or modified the legislation.

Scope of Legislation

To workers, the vital questions concerning workmen's compensation are: What industries are covered? What persons are entitled to compensation? What exemptions are made? If an injured workman is excluded from the benefits of the act, it is of no particular importance to him that his State has an efficient system of administration, or that the compensation scale is high, or that payments are well secured by adequate supervision of insurance carriers.

None of the State laws applies to all employees. The principal exemptions in most of the laws are agricultural workers and domestic service, nonhazardous employments, numerical exceptions (employers

¹ Prepared in the Division of Labor Standards of the U. S. Department of Labor by Alfred Acee.

having less than a specified number of employees); public employees, and casual workers.

COMPULSORY AND ELECTIVE LAWS

Compensation laws may be classified as compulsory or elective. A compulsory law is one which requires every employer within the scope of the compensation law to accept the act and pay the compensation specified. An elective act is one in which the employer has the option of either accepting or rejecting the act, but in case he rejects it he loses the customary common-law defenses (assumed risk of the employee, negligence of fellow servants, and contributory negligence).

Although no compensation law covers all employments and all wage earners, in a number of States the exempted employments may be brought under the provisions of the laws through voluntary acceptance by the employer or joint election by employer and employee, but the employer loses no rights or defenses if he does not accept. Such action on the part of an employer is called voluntary and to this extent the compensation law is a voluntary one. Thus, a law may be either compulsory or elective as to employments covered, and voluntary as to employments exempted.

Table 2 on page 734 indicates that 23 of the workmen's compensation acts are compulsory² and 30 are elective. Some of the elective acts, however, are compulsory as to public employees. In 22 of the elective laws, coverage is presumed unless the employer or worker makes a statement of rejection. This is true in the following laws: Alabama, Alaska, Colorado, Connecticut, Florida, Georgia, Indiana, Iowa, Kansas, Louisiana, Missouri, Nebraska, New Jersey, New Mexico, North Carolina, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Vermont, and Virginia.

In the other elective laws the employer must take positive action to prove acceptance; if he does so, the worker's acceptance is presumed, except in Kentucky, where the worker also must sign an acceptance. In 6 States the acceptances are filed with designated State authorities (Kentucky, Maine, Montana, Nevada, New Hampshire and Rhode Island), while the act of obtaining insurance signifies election in Texas and West Virginia. In Arizona the law is compulsory as to the employer, but the employee may elect not to be covered.

SUITS FOR DAMAGES

Employers accepting the compensation act are generally exempt from damage suits; those rejecting the act are relieved of the duty of paying compensation, but are subject to suit with the usual defenses abrogated. In cases where an employee rejects the compensation act and sues an employer who has accepted it, the employer usually retains his three defenses.

In about two-thirds of the jurisdictions, the employee may bring an action for damages, with the common-law defenses removed, when the employer has failed to secure payment of compensation, to provide insurance, or to pay the premiums.

² Including Massachusetts, where the act becomes compulsory on November 15, 1943.

NUMERICAL EXEMPTIONS

In 30 jurisdictions employers of less than a stipulated number of employees are exempt. However, most of the acts permit voluntary acceptance in such cases. In some of the laws the numerical exemption does not apply to certain employments, such as in mines, building construction, sawmills, logging operations, and other hazardous employments. In other States the numerical exemptions apply only to nonhazardous employment.

TABLE 1.—States Making Numerical Exemptions in Workmen's Compensation Laws¹

Employers are exempt who have fewer than—									
2 employees	3 employees	4 employees	5 employees	6 employees	7 employees	8 employees	10 employees	11 employees	15 employees
Oklahoma	Arizona Delaware Florida Kentucky Ohio Texas Utah Wisconsin	Colorado New Mexico New York (nonhazardous only) Puerto Rico Rhode Island	Alaska Arkansas Connecticut Kansas New Hampshire North Carolina Tennessee	Maine Massachusetts ²	Virginia Michigan Vermont	Alabama	Georgia	Missouri	South Carolina

¹ In some States there are deviations for certain industries and occupations.

² Effective Nov. 15, 1943.

HAZARDOUS EMPLOYMENTS

In 9 States (Kansas, Louisiana, Maryland, Montana, New Mexico, Oklahoma, Oregon, Washington, and Wyoming) the compensation laws apply only to hazardous employments, but in all of these, except Oklahoma and Wyoming, employers and employees in other occupations are permitted to come under the act. The laws of Kansas, Louisiana, and New Mexico are elective, while those of the other States are compulsory. In Illinois and New York the workmen's compensation acts are compulsory as to hazardous industries and elective as to other employments. In New York, particularly, the list of hazardous industries is so comprehensive that most employments are compulsorily covered. The New Hampshire act applies only to employers having a specified number of employees, but in hazardous employments numerical exemptions do not apply. In Missouri the commission may require coverage of hazardous industries without regard to numerical exemption. In most of the States the covered industries are enumerated, but the list is not complete in several States, and in some a "blanket clause" is used, while in others additions have been made by administrative agencies and the courts.

PUBLIC EMPLOYMENTS

Employees of the State and its subdivisions and of municipalities are covered in 33 jurisdictions. In several States compensation for public employees is compulsory, although it is elective as to private employments. Public employees are partially included in 12 additional States. In 4 jurisdictions (Alaska, Arkansas, Missouri, and New Hampshire) public employees are excluded, although in Missouri

the law authorizes an affirmative acceptance of its provisions by the State or the county, and in New Hampshire the Governor and Council, upon petition and hearing, may award compensation to State employees. In Alabama, Arkansas, and Tennessee public employees may be covered by voluntary action.

EMPLOYMENTS SPECIFICALLY EXCLUDED

Agricultural employments are usually excluded from the operation of workmen's compensation laws. However, in most States voluntary coverage is permitted. Domestic servants are excluded also, for the most part, but usually employers may elect to come within the coverage. Casual employees are likewise generally excluded, and in a few cases employees receiving more than a designated wage are not covered. In California, however, domestic servants working over 52 hours a week are covered. In New York, private or domestic chauffeurs are subject to the act in cities of over 2,000,000 population. Employees engaged in threshing grain are specifically covered in Kentucky, and the Minnesota act applies to commercial threshermen and balers. In South Dakota the operation of certain farm machinery is covered, and the Arizona law covers employees engaged in the operation of mechanical agricultural implements.

Some laws specifically exclude certain industries; in others, industries are excluded by omission from listed employments requiring coverage. Thus, the Florida act specifically excludes independent contractors and various types of turpentine industries, and the Maine law excludes employees engaged in logging operations. In North Carolina the law exempts sawmill and logging operators having fewer than 15 employees, and the South Carolina law excludes a number of industries such as logging operations and the production of turpentine.

OCCUPATIONAL DISEASES

As originally enacted, none of the workmen's compensation laws provided benefits for occupational diseases. As late as in 1936 there were only 16 States which compensated for occupational diseases. This protection was also given to employees of the District of Columbia, Hawaii, Puerto Rico, and to employees covered by the Federal Employees Compensation Act and the Longshoremen's and Harbor Workers' Act. It is now generally recognized, however, that a worker should be protected from illness arising from his job as well as from injuries caused by industrial accidents. There are now 32 jurisdictions which by one method or another compensate for all or specified occupational diseases.

The laws covering occupational diseases provide benefits for any disability resulting from an occupational disease, either by listing specific diseases covered or by using (instead of the word "accident") the word "injury," which the courts in some States have construed to cover occupational-disease disability. A few laws specifically define the word "injury" to include occupational diseases. An encouraging development in this field in recent years has been the increasing use of the general-coverage system in place of the schedule system. During 1943 three States (Michigan, Minnesota, and Nebraska) provided for general coverage. There are now 19 acts

which provide general or blanket coverage; 13 others cover only diseases listed specifically in schedules which are sometimes quite limited in extent.

In Missouri, occupational diseases are compensable only when both employer and employee elect to be covered. Under the laws of Illinois and Indiana, the employer is required to make a special election whenever coverage is desired under the occupational-disease law. A separate act in Montana provides for the payment of \$30 a month out of public funds to persons totally disabled from silicosis, if they have been residents of the State for 10 years.

In some of the States special provisions limit payments for silicosis by reducing benefits and by imposing certain residence requirements. The West Virginia law covers silicosis only and requires the employer to make a special election. The Kentucky law, which is of the schedule type, covers only a few specified diseases.

The jurisdictions with full or limited coverage of occupational diseases are as follows:

<i>Full coverage</i>		<i>Schedule coverage</i>	
California	Nebraska	Arizona	North Carolina
Connecticut	New York	Arkansas	Pennsylvania
District of Columbia	North Dakota	Delaware	Puerto Rico
Hawaii	Ohio	Idaho	Rhode Island
Illinois	Oregon	Kentucky	Utah
Indiana	Washington	Maryland	West Virginia
Massachusetts	Wisconsin	New Jersey	
Michigan	United States:		
Minnesota	Civil Employees		
Missouri	Longshoremen's Act.		

Security for Payment

To make certain that benefit payments will be made when due, the States require that the covered employer shall obtain insurance or give proof of his qualifications to carry his own risk, which is known as self-insurance. In most of the States the employer is permitted to insure in private insurance companies. State insurance systems exist in 19 jurisdictions. Eight of these are called "exclusive" because employers are required to insure their risks in the State fund. Competitive State funds exist in 11 States, where employers may choose whether they will insure their risks in the State fund, or with private insurance companies, or will qualify as "self-insurers" with the privilege of carrying their own risks.

Table 2 indicates the insurance requirements in the different acts and shows the States having elective and compulsory acts. It will be noted that 23 of the acts are compulsory and 30 are elective.

TABLE 2.—Insurance Requirements of Workmen's Compensation Acts

Jurisdictions	Compensation compulsory or elective	Insurance provided in—	
		State fund: Exclusive or competitive	Private companies or by self-insurance
Alabama.....	Elective		Either.
Alaska.....	do		(1).
Arizona.....	Compulsory	Competitive	Either.
Arkansas.....	do		Do.
California.....	do	Competitive	Do.
Colorado.....	Elective	do	Do.
Connecticut.....	do		Do.
Delaware.....	Compulsory		Do.
District of Columbia.....	do		Do.
Florida.....	Elective		Do.
Georgia.....	do		Do.
Hawaii.....	Compulsory		Do.
Idaho.....	do	Competitive	Do.
Illinois.....	do		Do.
Indiana.....	Elective		Do.
Iowa.....	do		Do.
Kansas.....	do		Do.
Kentucky.....	do		Do.
Louisiana.....	do		Do.
Maine.....	do		Do.
Maryland.....	Compulsory	Competitive	Do.
Massachusetts.....	do ²		Do.
Michigan.....	Compulsory	Competitive	Do.
Minnesota.....	do		Do.
Missouri.....	Elective		Do.
Montana.....	do	Competitive	Do.
Nebraska.....	do		Do.
Nevada.....	do	Exclusive	
New Hampshire.....	do		Self-insurance.
New Jersey.....	do		Either.
New Mexico.....	do		Do.
New York.....	Compulsory	Competitive	Do.
North Carolina.....	Elective		Do.
North Dakota.....	Compulsory	Exclusive	
Ohio.....	do	do	Self-insurance.
Oklahoma.....	do	Competitive	Either.
Oregon.....	Elective	Exclusive	
Pennsylvania.....	do	Competitive	Do.
Puerto Rico.....	Compulsory	Exclusive	
Rhode Island.....	Elective		Do.
South Carolina.....	do		Do.
South Dakota.....	do		Do.
Tennessee.....	do		Do.
Texas.....	do		Private companies.
Utah.....	Compulsory	Competitive	Either.
Vermont.....	Elective		Do.
Virginia.....	do		Do.
Washington.....	Compulsory	Exclusive	
West Virginia.....	Elective	do	Self-insurance.
Wisconsin.....	Compulsory		Either.
Wyoming.....	do	Exclusive	
United States:			
Longshoremen's Act.....	do		Do.
Civil employees.....	do	(3)	

¹ No security is required, but in case beneficiary files notice of death claim, employer may deposit \$9,000 with clerk of district court or give bond for that amount. In other cases claimant may have writ of attachment issued unless employer files an undertaking in an amount double that sued for.

² Effective Nov. 15, 1943.

³ By direct appropriation of Congress.

Amount and Period of Benefits

The amount of money that injured workers actually receive under the different compensation acts is determined by three factors: The rate, usually a percentage of the wages; the term or period of payment; and, in most States, a fixed maximum or weekly total payment. The amount and method of payment also differ according to the type of the injury. The acts prescribe payments in case of death and in case of permanent total disability, and also have specific provisions covering permanent partial disability and temporary total disability.

PERCENTAGE OF WAGES

In all but 4 jurisdictions (Alaska, Oregon, Washington, and Wyoming) the amount of compensation is based upon the wage received by the injured worker. A few acts provide fixed lump sums or pensions for certain injuries, but apply the percentage system to all others. In most of the acts there are varying proportions of wages ranging from 42½ to 70 percent for different types of injury. However, workers do not necessarily receive the amount which would be indicated by these percentages, as in most States there is a limitation on the maximum amount of weekly benefits which an employee may receive. In addition, in some States the percentage varies with the worker's conjugal condition and the number of his children:

MAXIMUM LIMITATION

Maximum periods during which compensation may be paid vary widely in the different acts. Maximum weekly payments range from \$12 to \$30. Especially when earnings are relatively high, as at present, the maximum weekly benefits may be only a fraction of wages, making it difficult for the injured worker to meet living costs. As a result of this difficulty, a number of States increased the maximum weekly benefits in 1943.

Arizona is the only State which does not limit the maximum weekly benefits.

DEATH BENEFITS

Methods for determining compensation for death vary considerably and do not in all cases depend upon the fact that the deceased was a source of support to legal beneficiaries. In Arizona, Nevada, New York, Oregon, Washington, West Virginia, and the United States (civil employees' act), the law provides for the payment of benefits to a widow for life or until remarriage and in the case of children until a specified age is reached. The majority of the other acts have a similar provision, but limit the total amount payable. The Oklahoma law does not cover fatal accidents.

DISABILITY BENEFITS

Compensation is paid in four designated classes of disability: Permanent total, permanent partial, temporary total, and temporary partial. The term "disability" has been defined in varying ways by the courts in interpreting compensation laws. Some have held that it means inability to earn wages, or full wages, at the work in which the employee was engaged at the time of the injury, while others have held that it means inability to perform any kind of work which might be obtained. A few courts have interpreted the term to mean inability to obtain work.

Table 3 shows for the various jurisdictions the percentage of wages paid, the maximum number of weeks during which benefits are paid, and the limitation of payments as to weekly and total amounts. This information is given in tabular form for injuries causing death, permanent total disability, permanent partial disability, and temporary total disability. In the case of permanent partial disability compensation is frequently based on a percentage of the wage loss.

TABLE 3.—Minimum and Maximum Benefits under Workmen's Compensation Laws, by Extent of Disability and by State, September 1943¹

State	Maximum percentage of wages	Maximum period	Limit of payments per week		Total maximum stated in law
			Minimum	Maximum	
Alabama	65	300 weeks	\$5 (actual wage if less).	\$18.00	\$6,000
Alaska					9,000
Arizona	66 $\frac{2}{3}$	Widowhood, or specified minority age of children.			
Arkansas	65	450 weeks	\$7	20.00	7,000
California	65		\$6.50	25.00	6,000
Colorado	50	312 weeks	\$5	14.00	4,375
Connecticut	50	312 weeks; thereafter reduced payments to children to age 18.	\$7	30.00	
Delaware	65	312 weeks; thereafter to children until specified age.	\$7	19.50	
District of Columbia	66 $\frac{2}{3}$	Widowhood, or specified minority age of children.	\$8	25.00	7,500
Florida	60	350 weeks	\$6 (actual wage if less).	18.00	5,000
Georgia	42 $\frac{1}{2}$	300 weeks			
Hawaii	66 $\frac{2}{3}$	Widowhood, or specified minority age of children.	\$8	25.00	7,500
Idaho	55	400 weeks	\$6 (actual wage if less).	12.00	
Illinois	4 times average annual earnings.		\$7.50	20.00	6,462
Indiana	55	300 weeks	\$10.01 (actual wage if less).	18.70	5,500
Iowa	60	do	\$6	15.00	
Kansas	3 times average annual earnings.			18.00	4,000
Kentucky	65	400 weeks	\$5	12.00	4,800
Louisiana	65	300 weeks	\$3 (actual wage if less).	20.00	
Maine	66 $\frac{2}{3}$	do	\$7	21.00	5,000
Maryland	66 $\frac{2}{3}$	416 weeks	\$8 (actual wage if less).	18.00	5,000
Massachusetts		400 weeks; thereafter to children until specified age.	\$4	12.00	(?)
Michigan	66 $\frac{2}{3}$	400 weeks	\$8	27.00	
Minnesota	66 $\frac{2}{3}$		\$8 (actual wage if less).	20.00	7,500
Missouri	66 $\frac{2}{3}$		\$6	20.00	
Montana	66 $\frac{2}{3}$	400 weeks	\$8	21.00	
Nebraska	66 $\frac{2}{3}$	325 weeks	\$6 (actual wage if less).	15.00	
Nevada	70	Widowhood, or specified minority age of children.		19.38	
New Hampshire	(3)				5,400
New Jersey	60	300 weeks; thereafter to children until specified age.	\$10 (actual wage if less).	20.00	
New Mexico	60	300 weeks	\$10	18.00	
New York	66 $\frac{2}{3}$	Widowhood, or specified minority age of children unless blind or crippled.	\$11.54	25.00	
North Carolina	60	350 weeks	\$7	21.00	6,000
North Dakota	66 $\frac{2}{3}$	Widowhood, or specified minority age of children.	12	20.00	
Ohio	66 $\frac{2}{3}$	416 weeks		21.00	7,000
Oregon		Widowhood, or specified minority age of children.	\$4.62	20.31	
Pennsylvania	66 $\frac{2}{3}$	300 weeks; thereafter reduced payments to children to age 16.	\$10	18.00	
Puerto Rico					3,000
Rhode Island	60	600 weeks	\$12	20.00	

See footnotes at end of table.

TABLE 3.—Minimum and Maximum Benefits under Workmen's Compensation Laws, by Extent of Disability and by State, September 1943¹—Continued

DEATH—Continued

State	Maximum percentage of wages	Maximum period	Limit of payments per week		Total maximum stated in law
			Minimum	Maximum	
South Carolina	60	350 weeks	\$5	\$25.00	\$6,000
South Dakota	(4)				5,000
Tennessee	60	400 weeks	\$7 (actual wage if less).	18.00	5,000
Texas	60	360 weeks	\$7	20.00	
Utah	60	312 weeks ⁵		24.00	7,500
Vermont	50	260 weeks	\$7		3,500
Virginia	55	300 weeks	\$6	18.00	6,000
Washington		Widowhood, or specified minority age of children.	\$5.77	⁶ 11.54	
West Virginia		do		⁷ 6.92	
Wisconsin	(8)		\$10	15.00	
Wyoming				(9)	9,500
United States:					
Civil employees	66½	Widowhood, or specified minority age of children.	\$13.46	26.92	
Longshoremen	66½	do	\$8	25.00	7,500

PERMANENT TOTAL DISABILITY

Alabama	65	550 weeks ¹⁰	\$5 (actual wage if less).	\$18.00	\$6,000
Alaska					9,000
Arizona	65	Life		(11)	
Arkansas	65	450 weeks	\$7	20.00	7,000
California	65	240 weeks; thereafter 40 percent of wages for life.	\$6.50	25.00	
Colorado	50	Life	\$5	14.00	
Connecticut	50	520 weeks	\$7	30.00	
Delaware	60	450 weeks	\$8 (actual wage if less).	18.00	
District of Columbia	66½	Period of disability	do	¹² 25.00	7,500
Florida	60	350 weeks	do	22.00	5,000
Georgia	50	do	\$4 (actual wage if less).	20.00	7,000
Hawaii	66½	Life	\$8	25.00	7,500
Idaho	60	400 weeks; thereafter \$6 per week (\$8 if dependent children).	\$6	⁶ 16.00	
Illinois	65	417 weeks	\$7.50	23.50	¹³ 6,462
Indiana	55	500 weeks	\$10.01 (actual wage if less).	18.70	5,500
Iowa	60	400 weeks	\$6 (actual wage if less).	15.00	
Kansas	60	416 weeks	\$6	18.00	
Kentucky	65	520 weeks	\$5	15.00	7,500
Louisiana	65	400 weeks	\$3 (actual wage if less).	20.00	
Maine	66½	500 weeks	\$7	21.00	7,500
Maryland	66½	Period of disability	\$10 (actual wage if less).	23.00	7,500
Massachusetts	66½	500 weeks ¹⁴	\$11 (actual wage if less) ¹⁵	20.00	
Michigan	66½	750 weeks	\$10	21.00	
Minnesota	66½	Period of disability	\$8 (actual wage if less).	20.00	10,000
Missouri	66½	300 weeks; thereafter 25 percent of wages for life.	\$6	20.00	

See footnotes at end of table.

TABLE 3.—Minimum and Maximum Benefits under Workmen's Compensation Laws, by Extent of Disability and by State, September 1943¹—Continued

State	Maximum percentage of wages	Maximum period	Limit of payments per week		Total maximum stated in law
			Minimum	Maximum	
Montana.....	66 $\frac{2}{3}$ %	500 weeks.....	\$8.....	\$21.00	
Nebraska.....	66 $\frac{2}{3}$ %	300 weeks ¹⁶	\$6 (actual wage if less).....	15.00	
Nevada.....	60.....	Life.....	\$6.92.....	11 13.85	
New Hampshire.....	50.....	300 weeks.....	\$8.....	21.00	
New Jersey.....	66 $\frac{2}{3}$ %	400 weeks; thereafter at reduced rate during rehabilitation.....	\$10 (actual wage if less).....	20.00	
New Mexico.....	60.....	550 weeks.....	do.....	18.00	
New York.....	66 $\frac{2}{3}$ %	Life.....	\$15 (actual wage if less).....	12 25.00	
North Carolina.....	60.....	400 weeks.....	\$7.....	21.00	\$6,000
North Dakota.....	66 $\frac{2}{3}$ %	Period of disability.....	\$9 (actual wage if less).....	20.00	
Ohio.....	66 $\frac{2}{3}$ %	Life.....	\$8 (actual wage if less).....	21.00	
Oklahoma.....	66 $\frac{2}{3}$ %	500 weeks.....	do.....	18.00	
Oregon.....	66 $\frac{2}{3}$ %	Period of disability.....	\$9.23.....	20.31	
Pennsylvania.....	66 $\frac{2}{3}$ %	500 weeks.....	\$9 (actual wage if not under \$5).....	18.00	7,500
Puerto Rico.....	50.....	340 weeks.....	\$3.....	10.00	3,000
Rhode Island.....	60.....	1,000 weeks.....	\$12.....	20.00	12,000
South Carolina.....	60.....	500 weeks.....	\$5.....	25.00	6,000
South Dakota.....	55.....	Period of disability.....	\$7.50 (actual wage if less).....	15.00	5,000
Tennessee.....	60.....	550 weeks ¹⁷	\$7 (actual wage if less).....	18.00	5,000
Texas.....	60.....	401 weeks.....	\$7.....	20.00	
Utah.....	60.....	260 weeks ¹⁸	\$7.....	16.00	
Vermont.....	50.....	do.....	\$7 (actual wage if less).....	15.00	4,000
Virginia.....	55.....	500 weeks.....	\$6.....	16.00	7,000
Washington.....	60.....	Life.....	\$5.77.....	10 13.85	
West Virginia.....	66 $\frac{2}{3}$ %	do.....	\$8.....	16.00	
Wisconsin.....	70.....	do. ¹²	\$14.....	20 24.50	
Wyoming.....	60.....	do.....	\$11.54.....	16.15	21 6,000
United States:					
Civil employees.....	66 $\frac{2}{3}$ %	Period of disability.....	\$13.46.....	10 26.92	
Longshoremen.....	66 $\frac{2}{3}$ %	do.....	\$8 (actual wage if less).....	12 25.00	7,500

PERMANENT PARTIAL DISABILITY

[Maximum period for specific injuries is given, followed by maximum period (if greater) for disabilities not listed in schedule of specific injuries (here referred to as nonlisted disabilities).]

Alabama.....	65.....	400 weeks.....	\$5 (actual wage if less).....	\$18.00	
Alaska.....					\$7,200
Arizona.....	55.....	260 weeks; during disability for non-listed disability.....			(²²)
Arkansas.....	65.....	200 weeks; 450 weeks for nonlisted disability.....	\$7.....	20.00	23 7,000
California.....	65.....	240 weeks ²⁴	\$6.50.....	25.00	
Colorado.....	50.....	208 weeks.....	\$5.....	14.00	(²³)
Connecticut.....	50.....	275 weeks; 520 weeks for nonlisted disability.....	\$7.....	25.00	(²³)
Delaware.....	60.....	220 weeks; 300 weeks for nonlisted disability.....	\$8 (actual wage if less).....	18.00	(²⁵)

See footnotes at end of table.

TABLE 3.—Minimum and Maximum Benefits under Workmen's Compensation Laws, by Extent of Disability and by State, September 1943 ¹—Continued

PERMANENT PARTIAL DISABILITY—Continued

State	Maximum percentage of wages	Maximum period	Limit of payments per week		Total maximum stated in law
			Minimum	Maximum	
District of Columbia.	66 $\frac{2}{3}$	288 weeks; during disability for non-listed disability.	\$8 (actual wage if less).	\$25.00	²⁶ \$7,500
Florida.	60	200 weeks; 350 weeks for nonlisted disability.	do	22.00	²³ 5,000
Georgia.	50	200 weeks; 300 weeks for nonlisted disability.	\$4 (actual wage if less).	20.00	²⁵ 5,000
Hawaii.	66 $\frac{2}{3}$	280 weeks; during disability for non-listed disability.	\$8 (actual wage if less).	25.00	²³ 7,500
Idaho.	55	238 weeks.	do	16.00	(²⁵)
Illinois.	65	225 weeks; 417 weeks for nonlisted disability.	\$7.50	23.50	(²³)
Indiana.	55	250 weeks; 500 weeks for nonlisted disability.	\$10.01 (actual wage if less).	18.70	5,500
Iowa.	60	225 weeks.	\$6 (actual wage if less).	15.00	-----
Kansas.	60	210 weeks; 415 weeks for nonlisted disability.	-----	18.00	(²⁵)
Kentucky.	65	200 weeks; 335 weeks for nonlisted disability.	\$5	12.00	4,000
Louisiana.	65	400 weeks.	\$3 (actual wage if less).	20.00	-----
Maine.	66 $\frac{2}{3}$	150 weeks; 300 weeks for nonlisted disability.	\$7	21.00	-----
Maryland.	66 $\frac{2}{3}$	212 weeks.	\$8 (actual wage if less).	18.00	²⁵ 3,816
Massachusetts.	-----	175 weeks.	-----	-----	²⁷ 4,500
Michigan.	66 $\frac{2}{3}$	200 weeks; 500 weeks for nonlisted disability.	\$7	18.00	-----
Minnesota.	66 $\frac{2}{3}$	450 weeks (including 25 weeks each for healing and rehabilitation).	\$8 (actual wage if less).	20.00	-----
Missouri.	66 $\frac{2}{3}$	232 weeks; 400 weeks for nonlisted disability.	\$6	20.00	(²⁵)
Montana.	66 $\frac{2}{3}$	200 weeks; 500 weeks for nonlisted disability.	\$8	21.00	-----
Nebraska.	66 $\frac{2}{3}$	225 weeks; 300 weeks for nonlisted disability.	\$6 (actual wage if less).	15.00	(²⁵)
Nevada.	50	260 weeks.	\$6.92	13.85	(²³)
New Hampshire.	50	300 weeks.	\$8	21.00	-----
New Jersey.	66 $\frac{2}{3}$	230 weeks; cumulative for 2 or more specified injuries, to maximum of 500 weeks.	\$10 (actual wage if less).	20.00	(²⁵)
New Mexico.	60	180 weeks.	do	-----	(²³)
New York.	66 $\frac{2}{3}$	312 weeks; during disability for non-listed disability.	\$8 (actual wage if less).	25.00	(²⁵)
North Carolina.	60	200 weeks; 300 weeks for nonlisted disability.	\$7	21.00	²³ 6,000
North Dakota.	66 $\frac{2}{3}$	234 weeks; 450 weeks for nonlisted disability.	-----	20.00	-----
Ohio.	66 $\frac{2}{3}$	215 weeks.	\$14	21.00	²⁷ 6,000
Oklahoma.	66 $\frac{2}{3}$	250 weeks; 300 weeks for nonlisted disability.	\$8 (actual wage if less).	18.00	(²⁵)
Oregon.	-----	208 weeks.	\$8.08	11.54	(²⁵)
Pennsylvania.	66 $\frac{2}{3}$	215 weeks; 300 weeks for nonlisted disability, weekly maximum \$15.	\$0 (or full wage, but not under \$5).	18.00	-----
Puerto Rico.	50	300 weeks.	\$3	10.00	²³ 2,000
Rhode Island.	60	255 weeks; 800 weeks for nonlisted disability, weekly maximum \$18.	\$8	20.00	(²⁵)

See footnotes at end of table.

TABLE 3.—Minimum and Maximum Benefits under Workmen's Compensation Laws, by Extent of Disability and by State, September 1943¹—Continued

PERMANENT PARTIAL DISABILITY—Continued

State	Maximum percentage of wages	Maximum period	Limit of payments per week		Total maximum stated in law
			Minimum	Maximum	
South Carolina	60	200 weeks; 300 weeks for nonlisted disability.	\$5	\$25.00	²⁸ \$6,000
South Dakota	55	200 weeks; 312 weeks for nonlisted disability, at rate of 50 percent of wages.	\$7.50 (actual wage if less)	15.00	(²³)
Tennessee	60	400 weeks	\$7 (actual wage if less)	18.00	
Texas	60	200 weeks; 300 weeks for nonlisted disability.	\$7	20.00	
Utah	60	200 weeks; 312 weeks for nonlisted disability.		16.00	²⁹ 6,250
Vermont	50	170 weeks; 260 weeks for nonlisted disability.	\$7 (actual wage if less)	15.00	(²⁵)
Virginia	55	200 weeks; 300 weeks for nonlisted disability.	\$6	18.00	²⁸ 7,000
Washington					³⁰ 3,600
West Virginia	66%	240 weeks; 340 weeks for nonlisted disability.	\$8	16.00	
Wisconsin	70	500 weeks; 1,000 weeks for nonlisted disability.	\$14	21.00	(³¹)
Wyoming					²³ 2,500
United States: Civil employes	66%	Whole period of disability		26.92	
Longshoremen	66%	288 weeks; during disability for nonlisted disability.	\$8 (actual wage if less)	25.00	²⁶ 7,500

TEMPORARY TOTAL DISABILITY

[Only those States are listed in which the laws specifically provide for temporary total disability. In the other States the same benefits are paid as for permanent total disability.]

Alabama	65	300 weeks	\$5 (actual wage if less)	\$18.00	\$5,400
Alaska	65	Period of disability			
Arizona	65	433 weeks			(³²) 7,000
Arkansas	65	450 weeks	\$7	20.00	6,000
California	65	240 weeks	\$6.50	30.00	6,000
Colorado	50	Period of disability	\$5	14.00	
District of Columbia	66%	do	\$8 (actual wage if less)	25.00	¹² 7,500
Florida	60	350 weeks	do	22.00	5,000
Hawaii	66%	Period of disability	do	25.00	7,500
Illinois	65	do	\$7.50	23.50	6,462
Indiana	55	500 weeks	\$10.01 (actual wage if less)	18.70	5,500
Iowa	60	300 weeks	\$6 (actual wage if less)	15.00	
Kansas	60	415 weeks	\$6	18.00	
Louisiana	65	300 weeks	\$3 (actual wage if less)	20.00	
Maryland	66%	312 weeks	\$10 (actual wage if less)	23.00	3,750
Massachusetts	66%	500 weeks	\$11 (actual wage if less) ¹⁵	20.00	4,500
Michigan	66%	do	\$10	21.00	10,500
Minnesota	66%	300 weeks	\$8 (actual wage if less)	20.00	
Missouri	66%	400 weeks	\$6 (actual wage if less)	20.00	
Montana	66%	300 weeks	\$8	21.00	
Nevada	66%	433 weeks	\$6.92	18.46	³¹ 8,000

See footnotes at end of table.

TABLE 3.—Minimum and Maximum Benefits under Workmen's Compensation Laws, by Extent of Disability and by State, September 1943¹—Continued

TEMPORARY TOTAL DISABILITY—Continued

State	Maximum percentage of wages	Maximum period	Limit of payments per week		Total maximum stated in law
			Minimum	Maximum	
New Jersey.....	66%	300 weeks.....	\$10 (actual wage if less).	\$20.00	-----
New Mexico.....	60.....	550 weeks.....	do.....	18.00	-----
New York.....	66%	Period of disability.....	\$8 (actual wage if less).	25.00	\$5,000
North Dakota.....	66%	do.....	\$9 (actual wage if less).	³³ 20.00	-----
Ohio.....	66%	312 weeks.....	\$8 (actual wage if less).	21.00	4,200
Oklahoma.....	66%	300 weeks.....	do.....	18.00	-----
Oregon.....	66%	Period of disability.....	\$6.92.....	22.38	-----
Puerto Rico.....	50.....	104 weeks.....	\$2.50.....	10.00	-----
South Dakota.....	55.....	312 weeks.....	\$7.50 (actual wage if less).	15.00	4,680
Tennessee.....	60.....	300 weeks.....	\$7 (actual wage if less).	18.00	5,000
Utah.....	60.....	312 weeks.....	do.....	16.00	³⁴ 6,250
Washington.....	66%	Period of disability.....	\$5.19.....	11.54	(³⁵)
West Virginia.....	66%	78 weeks.....	\$8.....	16.00	-----
Wisconsin.....	70.....	Period of disability.....	\$8.75.....	24.50	(³¹)
Wyoming.....	66%	do.....	\$11.54.....	25.38	-----
United States: Longshorem.....	66%	do.....	\$8 (actual wage if less).	25.00	¹² 7,500

¹ Only the most important provisions of the laws are given.

² For widow, plus \$3 for each child under 18, or over 18 and incapacitated.

³ Total compensation is 150 times average weekly earnings subject to total maximum.

⁴ Compensation is based on four times average annual earnings payable in installments equal to 50 percent of average earnings. Total minimum \$2,400.

⁵ Benefits may be extended indefinitely in meritorious cases. Total minimum \$2,000.

⁶ Plus additional amounts for dependent children.

⁷ For widow, plus \$5 monthly for each child under 16.

⁸ Compensation equals four times average annual wage, but not to exceed 70 percent of weekly wage for from 280 to 1,000 weeks depending on age.

⁹ \$50 per month for widow or invalid widower, total \$4,500 (plus \$180 per year per child, total \$5,000).

¹⁰ \$5 (or actual wage if less) after 400 weeks.

¹¹ Additional allowance for constant attendant if necessary.

¹² Additional compensation for vocational rehabilitation.

¹³ Thereafter reduced payments depending on type of disability.

¹⁴ After \$4,500 is paid 50 percent of wages during disability.

¹⁵ Minimum of \$7 must be paid for normal weekly hours of 15 or over.

¹⁶ Thereafter for life 45 percent of wages (but not under \$4.50 (or actual wage if less) or over \$10).

¹⁷ After 400 weeks \$7 (or actual wage if less).

¹⁸ Thereafter 45 percent of average weekly wages for life. Award is increased 5 percent for each dependent child (not to exceed 5) under 18 years.

¹⁹ Plus additional compensation for dependent children and constant attendant if necessary.

²⁰ After 78 weeks maximum is \$21.

²¹ Plus \$180 per year for each child under 18, total \$5,500, additional amount for disfigurement.

²² In addition to compensation for temporary total disability. Additional amount allowed for disfigurement and for constant attendant if necessary.

²³ In addition to compensation for temporary total disability. Additional amount allowed for disfigurement.

²⁴ Thereafter if the disability is over 70 percent, life pension of from 10 to 40 percent.

²⁵ In addition to compensation for temporary total disability.

²⁶ In addition to compensation for temporary total disability. Additional benefit allowed for disfigurement and vocational rehabilitation.

²⁷ \$10 per week for schedule injuries in addition to all other compensation. For nonlisted disability 66 percent of weekly wages during disability, maximum \$20, total maximum \$4,500.

²⁸ Additional benefit for disfigurement.

²⁹ In addition to compensation for temporary total disability. Additional amount allowed for disfigurement. Benefits increased 5 percent for each dependent child (not to exceed 5) under 18 years.

³⁰ Where there are two or more injuries an employee may receive compensation in excess of maximum given.

³¹ In addition, employee receiving rehabilitation is paid cost of maintenance.

³² Plus \$10 per month for total dependents residing in United States.

³³ Plus \$1 per week for each dependent child under 18, maximum \$25 per week.

³⁴ Plus 5 percent for each dependent child (not to exceed 5) under 18 years.

³⁵ Plus additional compensation for dependent children and for constant attendant if necessary. There is a special schedule of monthly payments for first 6 months of disability for married or widowed employees

PERIOD OF BENEFITS FOR PERMANENT PARTIAL DISABILITY

Compensation laws include two methods of computing benefits for permanent partial disability—payment of a percentage of the wage loss, and payment during fixed periods for specified injuries. These two methods exist side by side in the laws which have schedules covering certain specified injuries. Injuries not included in the schedule are compensated on a percentage basis, as shown in table 3. In Alabama, Washington, and Wyoming the payments are fixed sums, but in all other jurisdictions the schedule payments are based on wages. In California the amount of the benefit varies depending upon the age and the occupation of the employee.

The worker who has a permanent partial disability is usually totally disabled for a temporary period immediately after the accident. About half of the laws provide for payment of temporary total benefits in addition to the full amount for permanent partial disability. The remaining laws require that these temporary total benefit payments be subtracted from the amount due for permanent partial disability.

The number of weeks provided by law during which compensation is payable for a specified injury under the compensation laws is shown in table 4.

TABLE 4.—Number of Weeks for Which Compensation is Payable for Specified Injuries, by States

State	Loss or loss of use of—													
	Arm (at shoulder)	Hand	Thumb	Index finger	Middle finger	Ring finger	Little finger	Leg (at hip)	Foot	Great toe	Other toe	Sight of an eye	Hearing, 1 ear	Hearing, both ears
Alabama ¹	200	150	60	45	30	20	15	175	125	30	10	100	-----	150
Arizona ²	³ 260 ⁴ 217	³ 217 ⁴ 173	65	39	30	22	17	217	173	30	11	⁵ 130	87	260
Arkansas ²	200	150	60	35	30	20	15	175	125	30	10	100	40	150
California ⁶	³ 240 ⁴ 220	³ 180 ⁴ 160	³ 40 ⁴ 36	³ 26 ⁴ 28	³ 24 ⁴ 20	³ 24 ⁴ 20	³ 16 ⁴ 12	³ 240 ⁴ 240	160	32	8	80	40	160
Colorado ²	208	104	50	26	18	11	13	208	104	26	11	⁵ 139	35	139
Connecticut ²	275	208	75	48	38	25	20	208	156	38	13	208	52	156
Delaware ²	220	200	60	35	30	20	15	220	150	30	10	125	52	104
District of Columbia ²	280	212	51	28	18	17	7	248	173	26	8	140	52	200
Florida ²	200	150	60	35	30	20	15	175	125	30	10	100	40	150
Georgia ²	200	150	30	35	30	20	15	175	125	30	10	100	-----	150
Hawaii ⁷	280	212	51	28	18	17	7	248	173	26	8	140	52	200
Idaho ⁷	240	200	70	40	40	30	20	180	125	30	12	⁵ 140	35	150
Illinois ²	225	170	70	40	35	25	20	190	135	35	12	120	50	125
Indiana ¹	250	200	60	40	35	30	20	200	150	60	(⁸)	150	75	200
Iowa ¹	225	150	40	30	25	20	15	200	125	25	15	100	50	150
Kansas ²	210	150	60	37	30	20	15	200	125	30	10	110	25	100
Kentucky ¹	200	150	⁹ 60	⁹ 45	⁹ 30	⁹ 20	⁹ 15	200	125	30	10	100	-----	-----
Louisiana ¹	200	150	50	30	20	20	20	175	125	20	10	100	-----	-----
Maine ¹⁰	150	125	50	30	25	18	15	150	125	25	10	100	-----	-----
Maryland ²	212	166	50	30	25	20	15	212	150	25	10	160	50	150
Massachusetts ¹¹	² 75 ⁴ 50	³ 75 ⁴ 50	³ 40 ³ 20	³ 20	12	12	12	50	50	12	12	50	-----	-----
Michigan ¹	250	200	60	35	30	20	15	200	150	30	10	150	-----	-----
Minnesota ²	200	175	60	35	30	20	15	200	150	30	10	100	52	156
Missouri ¹	³ 232 ⁴ 212	³ 175 ⁴ 160	³ 60 ⁴ 55	³ 45 ⁴ 40	³ 35 ⁴ 30	³ 35 ⁴ 30	³ 22 ⁴ 16	³ 207 ⁴ 207	150	40	14	⁵ 118	44	168
Montana ¹	200	150	60	30	30	20	12	200	125	30	12	⁵ 120	20	120
Nebraska ²	³ 225 ⁴ 217	³ 175 ⁴ 173	60	35	30	20	15	215	150	30	10	125	50	100
Nevada ²	³ 260 ⁴ 217	³ 217 ⁴ 173	65	39	30	22	17	217	173	30	11	⁵ 130	87	260
New Hampshire ¹²	170	140	40	25	20	15	10	170	120	20	8	100	42	170
New Jersey ²	230	175	65	40	30	20	15	175	125	30	10	100	40	160
New Mexico ²	180	110	50	25	20	15	12	180	100	30	12	⁵ 125	35	135
New York ¹³	312	244	75	46	30	25	15	288	205	38	16	160	60	150
North Carolina ¹	220	170	65	40	35	22	16	200	144	35	10	120	70	150
North Dakota ²	234	¹⁴ 195	⁹ 60	⁹ 35	⁹ 25	⁹ 18	⁹ 16	234	136 ¹⁵	25	10	100	29 ¹⁶	156

See footnotes at end of table.

TABLE 4.—Number of Weeks for Which Compensation is Payable for Specified Injuries, by States—Continued

State	Loss or loss of use of—													
	Arm (at shoulder)	Hand	Thumb	Index finger	Middle finger	Ring finger	Little finger	Leg (at hip)	Foot	Great toe	Other toe	Sight of an eye	Hearing, 1 ear	Hearing, both ears
Ohio ²	215	165	60	35	30	20	15	190	140	30	10	125		
Oklahoma ¹	250	200	60	35	30	20	15	175	150	30	10	100		(15)
Oregon ¹⁶	208	165	52	35	20	17	13	191	139	22	9	87	78	208
Pennsylvania ¹	215	175	60	35	30	20	15	215	150			125		150
Puerto Rico ²	300	³ 200 ⁴ 180	50	35	25	25	15	250	160	25	15	⁵ 160	25	200
Rhode Island ²	255	199	60	36	26	20	18	255	150	30	10	120		
South Carolina ¹	200	150	60	35	30	20	15	175	125	30	10	100	70	150
South Dakota ²	200	150	50	35	30	20	15	160	125	30	10	100		
Tennessee ¹	200	150	60	35	30	20	15	175	125	30	10	100		150
Texas ¹	200	150	60	35	30	20	15	200	125	30	10	100		150
Utah ²	200	150	60	30	30	20	12	180	125	30	12	⁵ 120		
Vermont ²	170	140	40	25	20	15	10	170	120	20	8	100	17 42½	170
Virginia ¹	200	150	60	35	30	20	15	175	125	30	10	100	50	
West Virginia ¹	240	200	80	40	28	20	20	240	140	40	16	132		
Wisconsin ²	500	333½	125	50	40	30	30	500	250	83½	18 25	⁵ 275	50	333½
United States: Longshoremen ²	280	212	51	28	18	17	7	248	173	26	8	140	52	200

¹ Payments under this schedule are exclusive of or in lieu of all other payments.

² Payments under this schedule are in addition to payments for temporary total disability during the healing period.

³ For major member.

⁴ For minor member.

⁵ By enucleation.

⁶ Payments under this schedule are exclusive of or in lieu of all other payments. Amounts depend on age and occupation of employee. Figures given are for unskilled workman 39 years old.

⁷ Payments under this schedule are in addition to payments for temporary total disability during healing period; 99 percent of specific schedule to be paid employee. Employer must pay 2 percent additional to special indemnity fund.

⁸ For loss of second toe, 30 weeks; third toe, 20 weeks; fourth toe, 15 weeks; and fifth toe, 10 weeks.

⁹ For loss of a metacarpal bone for corresponding thumb, finger, or fingers, 10 weeks is added.

¹⁰ Payments cover total disability for period specified. Partial disability based upon wage loss may be compensated at end of period given for not over 300 weeks in all.

¹¹ Payments under this schedule are in addition to all other compensation.

¹² Plus compensation for actual healing period not in excess of specified number of weeks, except in case of loss of hearing.

¹³ In lieu of other payments unless period of temporary total disability exceeds fixed periods for each class of injury.

¹⁴ For loss of master hand 25 percent additional.

¹⁵ For loss of hearing special compensation; maximum \$3,000.

¹⁶ For additional loss of 1 or more toes other than the great toe, an additional period of 10 weeks.

¹⁷ In lieu of all other benefits except medical and hospital.

¹⁸ For loss of second toe, 30 weeks.

MEDICAL BENEFITS

In all the compensation acts medical aid, including hospitalization if needed, is required to be furnished to injured workers, in addition to compensation payments. In early legislation the provision for medical aid was narrowly restricted as to the monetary cost, the period of treatment, or both. In the later development of the acts such absolute restrictions have in some cases been changed to initial maximum benefits, after which additional medical aid is furnished upon the approval of the administrative authority. In 13 States medical aid is required to be furnished without limit as to time or amount. In a number of States the acts require that artificial limbs and other appliances be furnished to injured workmen.²

² Artificial appliances are required to be furnished in the following laws: Alabama, Arizona, Arkansas, California, Colorado, Connecticut (by court decision), District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Kansas, Kentucky, Maine, Maryland, Massachusetts, Minnesota, Montana, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Washington, West Virginia, Wisconsin, Wyoming, and United States (civil employees and longshoremen's acts).

TABLE 5.—Statutory Provisions Relating to Medical Benefits in Workmen's Compensation Laws

State	Full benefits		Limited benefits	
	By statute	By administrative authority ¹	Period	Amount
Alabama			90 days	\$200.
Alaska			1 year	Unlimited.
Arizona			100 months	Do.
Arkansas ²		Yes ³		
California	No limit			
Colorado			4 months	\$500. ⁴
Connecticut	No limit			
Delaware		Yes ⁵		
District of Columbia	No limit			
Florida		Yes ⁶		
Georgia		Yes ⁵		
Hawaii	No limit			
Idaho ²	do			
Illinois ²	do			
Indiana ²			90 days	Unlimited.
Iowa			Unlimited	\$600.
Kansas			60 days	\$100. ⁷
Kentucky			90 days	\$200. ⁸
Louisiana			Unlimited	\$250.
Maine		Yes ⁵		
Maryland			Unlimited	\$750. ⁹
Massachusetts		Yes ³		
Michigan			6 months ¹⁰	Unlimited.
Minnesota	No limit			
Missouri		Yes ⁵		
Montana			9 months	\$500.
Nebraska	No limit			
Nevada			6 months ¹¹	Unlimited.
New Hampshire			60 days	Do.
New Jersey		Yes ⁶		
New Mexico			Unlimited	\$400.
New York ²	No limit			
North Carolina ²			10 weeks	Unlimited.
North Dakota	No limit			
Ohio		Yes ⁶		
Oklahoma		Yes ³		
Oregon		Yes ⁶		
Pennsylvania			60 days	\$150. ⁹
Puerto Rico	No limit			
Rhode Island		Yes ⁶		
South Carolina		Yes ³		
South Dakota			20 weeks	\$400.
Tennessee			90 days	\$100. ¹²
Texas			4 weeks ¹³	Unlimited.
Utah ²		Yes ⁶		
Vermont			60 days ¹⁴	\$75. ¹⁴
Virginia			60 days ¹⁵	Unlimited.
Washington			(16)	Do.
West Virginia			Unlimited	\$800.
Wisconsin	No limit			
Wyoming			Unlimited ¹⁷	\$150. ¹⁷
United States:				
Civil employees	No limit			
Longshoremen	do			

¹ After an initial period or amount stated in the law (as indicated by notes) the administrative agency may extend the time or amount indefinitely.

² Special limitations in occupational diseases.

³ After period specified, as follows: Arkansas, 60 days; Oklahoma, 60 days; and South Carolina, 10 weeks.

⁴ Additional benefits if insured in State Fund.

⁵ After specified time and amount as follows: Delaware, 30 days and \$200; Georgia, 10 weeks and \$500; Maine, 30 days and \$100; Missouri, 90 days and \$750.

⁶ After expenditure of specified amount as follows: Florida, \$1,000; New Jersey, \$100; Ohio, \$200; Oregon, \$250; Rhode Island, \$500; Utah, \$500.

⁷ Commissioner may extend to \$500.

⁸ Additional services may be authorized and maximum amount increased to \$400.

⁹ Additional amounts for hospital services.

¹⁰ Commission may extend additional 6 months.

¹¹ May be extended additional year.

¹² May be extended to \$300 for medical expenses and \$200 for hospital expenses.

¹³ May be extended to 91 days.

¹⁴ Also hospital charges 60 days, maximum \$200.

¹⁵ Additional services not to exceed 180 days.

¹⁶ In temporary disability, continues not longer than period of compensation, and in permanent disability, not beyond the date of award.

¹⁷ Additional \$200 for medical treatment and \$300 for hospital treatment. Hospital services may be further extended for 6-month periods.

WAITING PERIOD

All of the States except Oregon provide that during a specified period of time immediately following the injury, compensation shall not be paid. This "waiting time" ranges from a minimum of 1 day to a maximum of 14 days, with the majority of the States requiring a 7-day waiting period.

TABLE 6.—*Waiting Time Required under Workmen's Compensation Laws*

1 to 6 days	7 days	10 or 14 days	Compensation paid for waiting period if disability lasts specified time
Alaska (1) Delaware (3) Florida (4) Illinois (6) ⁶ Maryland (3) Missouri (3) Oklahoma (5) Rhode Island (3) South Carolina (3) Utah (3) Washington (3) Wisconsin (3) United States: Civil employees (3)	Alabama ¹ Arizona Arkansas California Connecticut District of Columbia Georgia Hawaii ⁵ Idaho Indiana Kansas Kentucky Louisiana Maine Massachusetts Michigan ² Minnesota ¹ Montana ⁸ Nebraska Nevada New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio ⁹ Pennsylvania Puerto Rico ¹ South Dakota Tennessee Texas Vermont Virginia West Virginia Wyoming ⁶ United States: Longshoremen	Colorado (10) Iowa (14) ³	Arizona (2 weeks) Arkansas (4 weeks) Connecticut (3 weeks) District of Columbia (7 weeks) Hawaii (7 weeks) Idaho (4 weeks) ⁴ Illinois (28 days) ⁶ Iowa ⁷ Kentucky (4 weeks) Louisiana (6 weeks) Maine (6 weeks) Massachusetts (2 weeks) Michigan (4 weeks) Minnesota (4 weeks) Missouri (4 weeks) Montana (3 weeks) ⁸ Nebraska (6 weeks) Nevada (1 week) New Hampshire (1 week) New Jersey (7 weeks) New York (35 days) North Carolina (28 days) North Dakota (7 days) Rhode Island (2 weeks) South Carolina (14 days) South Dakota (6 weeks) Tennessee (4 weeks) Texas (4 weeks) Virginia (6 weeks) West Virginia (21 days) Wisconsin (10 days) Wyoming (15 days) United States: Longshoremen (7 weeks)

¹ Applies only to temporary disability.² In case of death, compensation is payable from date of injury.³ No waiting period in case of permanent partial disability.⁴ If disability period exceeds 4 weeks, waiting period is to be reduced by 4 days, and by 1 additional day for each week the total disability exceeds 4 weeks.⁵ Total disability, but compensation payable from first day of disability in case of partial disability.⁶ Applies only to temporary total disability.⁷ If compensation extends beyond fifth, sixth, or seventh week after injury, such compensation is increased by two-thirds.⁸ Period doubled if injured has no beneficiary residing in the United States.⁹ Also, no compensation allowed for the first week of total disability, whenever it may occur.

The waiting period relates only to compensation. Medical and hospital care is provided immediately, regardless of the fact that compensation is not paid for specified periods.

Most of the laws provide that if the disability continues for a certain number of weeks, the payment of compensation is retroactive to the date of injury. The number of waiting days required by each law is presented in table 6; the last column shows the number of weeks of disability required for the payment of compensation from the time of injury.

Claim Administration

There are two general methods of administering workmen's compensation laws: (1) By an administrative commission or board created by the laws, or (2) by the courts. The desirability of administration by an agency specifically created for that purpose is recognized in all but seven laws—those of Alabama, Alaska, Louisiana, New Hampshire, New Mexico, Tennessee, and Wyoming. The Alabama law provides for limited supervision by the Department of Industrial Relations, and in Wyoming the workmen's compensation fund is under the supervision of the State treasurer. In these seven States the responsibility for approving the settlement of claims is in the courts.

If a worker is to receive promptly the full compensation to which he is entitled under the law, an administrative board or commission is generally deemed essential. Experience has shown that courts are not properly equipped to render the type of service needed for workmen's compensation administration, which involves not only the question of benefits but also medical care, accident prevention, and vocational rehabilitation. The National Conferences on Labor Legislation have repeatedly recommended administration by a commission or board rather than by the courts.

In States where the law is administered by a commission or board, the State agency usually has exclusive jurisdiction over the determination of facts, with appeals to the courts limited to questions of law. However, in some States the court is also permitted to consider the whole case again, thus taking it entirely out of the commission's jurisdiction.

Second Injuries

When an employee has sustained an injury involving a loss of a member of the body and afterwards loses another in a second injury, in the same or another occupation, he may become permanently and totally disabled, thus increasing the amount to be paid in the form of workmen's compensation. All the compensation laws, except those of Alabama, Louisiana, New Hampshire, Pennsylvania, Puerto Rico, Vermont, and the United States (civil employees), contain provisions regarding payment of compensation in such cases.

Some of the laws limit the amount to be paid to the worker to the usual award that would be paid for an injury of the type that he received, regardless of his actual disability resulting from the combined injuries. Under more advanced legislation, however, payment is made for the actual disability resulting from the combined injuries. If the cost of such compensation is to be imposed upon the latest employer, handicapped persons may be refused employment. To meet such problems, "second injury funds" have been created so that when a second injury occurs, the employer will have to pay only for the last injury, yet the employee is compensated for the disability resulting from the combined injuries, the remainder of the award being paid from the fund.

Second-injury funds have been established in Arkansas, the District of Columbia, Hawaii, Idaho, Illinois, Maine, Massachusetts, Michigan,

Minnesota, Missouri, New Jersey, North Carolina, Oklahoma, Rhode Island, South Carolina, Utah, Washington, Wisconsin, and the United States (longshoremen's act). The method of financing the second-injury fund differs in the various laws. One method which appears popular and satisfactory is to place in the fund the amounts awarded in fatal cases where there are no dependents. The North Dakota, Ohio, Washington, and West Virginia laws provide for the payment of compensation in the case of second injuries, although they do not have second-injury funds. Instead, in North Dakota and Ohio, the excess cost of second injuries is paid from the State fund surplus, and in Washington from the funds of industrial classification. In West Virginia, payment is made from any money in the State fund at the commissioner's disposal.

The advantage of second-injury funds is that they facilitate the employment of physically handicapped workers without curtailing their compensation rights. A few State laws attempt to meet the problem of second injuries by permitting the employee to "waive" his compensation for a subsequent injury—a method held to be undesirable by National Conferences on Labor Legislation.

Provisions in Special Cases

WORKERS INJURED OUTSIDE THE STATE

About two-thirds of the compensation laws cover injuries occurring outside of the State. Generally these laws require that the contract of employment must have been made within the State and either that the employee is a resident of the State or that the employer's place of business is within the State. In the other jurisdictions the law contains no statement as to whether it applies to injuries sustained outside the State, but some courts have interpreted the law as being applicable to such injuries.

ILLEGALLY EMPLOYED MINORS

All of the compensation laws cover minors, and 16 of the acts (Alabama, Florida, Illinois, Indiana, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, New Jersey, New York, Pennsylvania, Puerto Rico, Rhode Island, Utah, and Wisconsin) provide extra compensation in the case of injury to minors who are illegally employed. Twenty-eight of the laws provide compensation for minors illegally employed on the same basis as if they were employed legally. Nine of the laws fail to cover minors illegally employed.

NONRESIDENT ALIEN DEPENDENTS

None of the workmen's compensation acts makes any distinction between resident aliens and resident citizens, but a large number have discriminatory provisions affecting nonresident alien dependents. Some of these laws exclude such dependents, and others reduce the benefits or permit benefits to be paid in a lump sum in reduced amounts. A number of the laws permit such benefits to be paid only to persons of a designated relationship.

Several of the laws exempt residents of Canada from discriminatory provisions; others declare such provisions subject to the terms of any

treaty. A few laws deny all benefits to aliens whose national laws would exclude citizens of the United States in like circumstances. Table 7 analyzes the provisions regarding nonresident alien dependents.

TABLE 7.—Provisions of Workman's Compensation Laws Regarding Nonresident Alien Dependents¹

Exclusion	Reduced benefits	Permitting commutations to lump sums in reduced amounts	Restricting possible beneficiaries
Alabama Hawaii New Mexico Pennsylvania South Dakota West Virginia	Alaska Arizona Colorado Delaware Florida Georgia Idaho ² Illinois Iowa ² Kansas Kentucky Maine Michigan Montana ² Nevada Oregon Utah Virginia Washington Wyoming	Arkansas District of Columbia Kentucky Maryland Nebraska New York ³ North Carolina Oklahoma South Carolina United States: Civil employees Longshoremen	Arkansas Delaware District of Columbia Florida Illinois Kentucky Maryland Montana Nebraska New York North Carolina Oregon South Carolina Washington Wisconsin Wyoming United States: Longshoremen
Presumption of dependency destroyed	Excluding payments to dependents in countries not maintaining diplomatic relations with United States	Placed on same footing as resident dependents	No provision
California	Washington	Connecticut ⁴ Minnesota Ohio Tennessee Texas	Indiana Louisiana Massachusetts Missouri New Hampshire New Jersey North Dakota Puerto Rico Rhode Island Vermont

¹ The provisions are subject to change by treaties between the United States and foreign countries.

² If foreign government excludes payment to United States citizens, then payments are excluded under State law.

³ If nonresident would not have full control of compensation, employer or insurer may be required to pay it to State comptroller.

⁴ If dependents as defined under the law are nonresidents and there are residents who are dependents in fact, compensation may be apportioned between them.

Housing Conditions

New Dwelling Units in Nonfarm Areas, First Half of 1943¹

Summary

CONSTRUCTION was started on 200,000 new nonfarm family dwelling units during the first 6 months of 1943. Of this total, 85,700, or less than 45 percent, were privately financed, mainly under the private war-housing program of the National Housing Agency. For the same period of 1942 the privately financed dwellings constituted almost two-thirds (192,000) of the 304,000 units started.

Publicly financed housing projects for which construction contracts were let during the first half of 1943 will provide 114,053 family dwelling units,² most of which are of temporary types. All are reserved for families of war workers or military personnel. In addition, Federal construction contracts were awarded for dormitories to accommodate 31,004 persons and trailer projects to contain 16,736 units, as well as for the conversion of 2,117 structures to provide 8,949 additional family units.

During the first half of 1943 the number of units in 1-family houses declined 36 percent from the corresponding totals for the first 6 months of 1942; 2-family units declined 39 percent; and multifamily units, 22 percent.

One-family dwellings comprised about 82 percent of all units started during the first 6 months of 1943, 2-family dwellings accounted for 4 percent, and multifamily units for 14 percent. During the same period in 1942, 84 percent of the new units were of the 1-family type, 4 percent were of the 2-family type, and 12 percent in multifamily buildings.

Scope of Report

The above estimates cover the construction of all new family dwelling units in the nonfarm area of the United States. The "nonfarm area" of the United States consists of all urban and rural nonfarm places. The urban designation is applied to all incorporated places with a population of 2,500 or more in 1940, and, by special rule, to a small number of unincorporated civil divisions. Rural nonfarm construction includes all construction for nonagricultural use in unincorporated areas and incorporated places of less than 2,500 population. Hence, urban construction is classified by location, whereas rural

¹ Prepared in the Bureau's Division of Construction and Public Employment by George Schumm.

² In addition to the 114,053 new family-dwelling units, 1,359 slum-clearance units were designated as war housing and contracts were awarded for 290 converted family-dwelling units for a total of 115,702 Federally financed family-dwelling units provided for war workers during the first 6 months of 1943, exclusive of the Home Owners' Loan Corporation conversion program.

nonfarm construction is classified according to the intended use of individual buildings.

Building-permit reports collected by the Bureau of Labor Statistics have provided the basic information for current estimates of residential construction. The Bureau began the regular collection of these data in 1920, at first including only the larger cities. Since that time coverage has been steadily expanded until it now includes more than 2,400 cities and 1,000 rural incorporated places. In addition, since 1939 a small number of counties have been reporting building permits issued for their unincorporated areas. Valuable supplementary data, particularly with respect to rural construction, were made available for the period January 1940 through August 1942 by the Defense Housing Survey, a joint enterprise of the Bureau of Labor Statistics, the National Housing Agency, and the Work Projects Administration.

Since building permits are issued when construction work is about to start, estimates derived from permits represent the future dwelling-unit capacity of buildings upon which construction was started in the period specified. No attempt is made here to estimate the number of family accommodations gained by alterations and conversions or those lost by demolitions.

Volume of New Residential Construction

Construction was started on an estimated 199,800 new nonfarm family dwelling units during the first 6 months of 1943, a third less than during the first half of 1942. Of these new units, less than 45 percent were privately financed, and over 55 percent were in public housing projects.

The 85,747 privately financed family dwelling units begun during the first half of 1943 showed a decrease of 55 percent as compared with the number of such units started during the same period of 1942. Since midsummer, 1941, private residential construction activity has been rapidly declining, the number of new dwelling units started during each quarter being lower than during the preceding quarter, with the exception of the second quarter of 1943. During 1941 and the first quarter of 1942 this decline was due mainly to the reluctance of builders to start construction, because of growing material stringencies. By April 1942 these shortages had reached such a point that it became necessary for the War Production Board to issue Conservation Order L-41, halting all nonessential construction. Since that time private residential construction has been limited to that for which there will be a continuing need, in areas of intense war activity.³

The 50-percent increase in the number of new privately financed dwelling units started in the second quarter of 1943, over the first quarter, represented the normal seasonal rise. On the basis of current information it seems probable that, except for seasonal factors, private builders' activities will remain at substantially that level for the rest of 1943. As a result, the total number of privately financed units begun during 1943 is not expected to exceed 175,000, the smallest annual total since 1934.

Between September 1941 and June 1943 applications for priorities for the construction of 438,598 new privately financed family-dwelling

³ For a more complete discussion of the private war housing program, see Monthly Labor Review, September 1943, p. 513.

units were approved by WPB field offices, including 40,000 units started before September 1941, which required priorities assistance for completion. By the end of June 1943 a total of 242,580 of these units had been completed and 80,495 more were under construction. In addition, priorities for the privately financed conversion of existing structures, to provide accommodations for 47,570 families, had been approved.

According to the Federal Housing Administration, 73,458 privately financed units were started with priorities assistance, during the first half of 1943. This figure is based on builders' reports of construction progress and hence is not strictly comparable with an estimate based on building permits issued.

Although private residential construction has declined to depression levels, the 114,053 publicly financed new family-dwelling units for which construction contracts were let during the first half of 1943 exceeds the number of publicly financed units started during either half of 1942 or in any preceding year. The Federally financed war-housing program has, however, passed its peak, and practically all of the larger projects are either completed or nearing completion. By June 30, 1943, there had been made available for occupancy or had been started under the Federally financed war-housing program 446,734 family-dwelling units, 134,479 dormitory units, and trailer parks to accommodate 35,166 trailers. In addition to this program, during the first half of 1943, the Home Owners' Loan Corporation awarded contracts for the conversion of 2,117 structures to provide 8,949 additional family units.

Comparison by Population Groups

Fewer units were started in each city-size group and the rural nonfarm area during the first half of 1943 than were started during the same months of 1942. The urban and rural nonfarm totals declined 34 and 35 percent, respectively. The sharpest reduction, 50 percent, was in cities with populations of 500,000 and over, while cities of 5,000 to 10,000 declined the least, 13 percent.

Declines in privately financed units started during the first half of 1943, as compared with the first half of 1942, ranged from 43 percent for cities of from 100,000 to 500,000 population to 62 percent for cities with populations of 500,000 and over. The number of publicly financed units put under construction contract declined from the total for the first half of 1942 in the two largest city-size classes and in the rural nonfarm area. Small increases occurred in all other city-size groups except the 5,000-10,000 population group, where almost 4 times as many units were started from January through June 1943 as during the first half of 1942. The increased proportion of publicly financed units in urban areas results principally from the decreased number of units in extremely large projects which are generally situated in rural nonfarm areas because of the lack of suitable sites within corporate limits. Further details are shown in table 1.

One-family dwellings comprised about 82 percent of all units started during the first 6 months of 1943, 2-family dwellings accounted for 4 percent, and multifamily units for 14 percent. During the same period in 1942, 84 percent of the new units were of the 1-family

type, 4 percent were of the 2-family type, and 12 percent were in multifamily buildings. The number of 1-family units started by private builders during the first half of 1943 was 60 percent less than in the same period last year. Privately financed units in 2-family houses declined 24 percent and in multifamily units, 36 percent. Wartime restrictions on building materials were largely responsible for this shift from single-family to 2-family and multifamily units in privately financed structures.

TABLE 1.—*New Dwelling Units in Nonfarm Areas, by Population Group and Source of Funds, First 6 Months of 1942 and 1943*

Area and population group (1940 census)	Total		Private funds		Public funds	
	First 6 months of—					
	1943	1942	1943	1942	1943	1942
All nonfarm areas.....	199,800	303,600	85,747	191,853	114,053	111,747
Percent of change.....	-34.2		-55.3		+2.0	
Total urban.....	112,800	170,300	54,954	117,179	57,846	53,121
Cities of—						
500,000 population and over.....	20,800	41,600	10,785	28,413	10,015	13,187
100,000 to 500,000 population.....	26,500	39,400	14,742	25,595	11,758	13,805
50,000 to 100,000 population.....	13,500	19,400	5,480	12,489	8,020	6,911
25,000 to 50,000 population.....	10,600	16,900	4,978	11,827	5,622	5,073
10,000 to 25,000 population.....	22,900	29,600	8,587	19,085	14,313	10,515
5,000 to 10,000 population.....	12,100	13,900	6,282	12,307	5,818	1,593
2,500 to 5,000 population.....	6,400	9,500	4,100	7,463	2,300	2,037
Rural nonfarm.....	87,000	133,300	30,793	74,674	56,207	58,626

Details of the distribution of the new dwelling units by type and population group are shown in table 2.

TABLE 2.—*New Dwelling Units in Nonfarm Areas, by Population Group and Type of Dwelling, First 6 Months of 1942 and 1943*

Area and population group (1940 census)	All types		1-family units		2-family units ¹		Multifamily units ²	
	First 6 months of—							
	1943	1942	1943	1942	1943	1942	1943	1942
All nonfarm areas.....	199,800	303,600	163,600	254,300	7,700	12,700	28,500	36,600
Percent of change.....	-34.2		-35.7		-39.4		-22.1	
Total urban.....	112,800	170,300	87,800	126,800	7,300	11,800	17,700	31,700
Cities of—								
500,000 population and over.....	20,800	41,600	16,000	20,400	1,900	4,200	2,900	17,000
100,000 to 500,000 population.....	26,500	39,400	19,700	30,700	2,200	3,000	4,600	5,700
50,000 to 100,000 population.....	13,500	19,400	9,300	13,500	700	1,600	3,500	4,300
25,000 to 50,000 population.....	10,600	16,900	7,700	13,900	800	1,100	2,100	1,900
10,000 to 25,000 population.....	22,900	29,600	19,300	26,800	800	900	2,800	1,900
5,000 to 10,000 population.....	12,100	13,900	10,300	12,400	800	800	1,000	700
2,500 to 5,000 population.....	6,400	9,500	5,500	9,100	100	200	800	200
Rural nonfarm.....	87,000	133,300	75,800	127,500	400	900	10,800	4,900

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

Comparison by Geographic Division

The areas of expanding war activities have been of increasing importance in determining the geographic distribution of new dwelling units. During 1940, 28 percent of all new nonfarm family dwelling units were in the West South Central, Mountain, and Pacific States. During the first half of 1943, however, 44 percent of all new units were in these areas. On the other hand, the New England and Middle Atlantic States, highly industrialized before the war, contained only 13 percent of the new units started during the first half of 1943, as compared to 23 percent during 1940. Only in the West South Central States were more units started during the second quarter of 1943 than during the comparable 1942 months, whereas declines of from 36 to 71 percent were registered in all other geographic divisions.

The housing begun by private builders during the second quarter of 1943 was concentrated largely in the East North Central and South Atlantic States; 4 of every 9 privately financed family dwellings started during this period were in these 13 States and the District of Columbia. The decline in the number of privately financed units begun during the second quarter of 1943 affected all regions in varying degree. The decreases ranged from 13 percent for the Mountain States to 66 percent for the West North Central States.

Over 40 percent of the publicly financed family-dwelling units on which construction was begun in the second quarter of 1943 were in the Pacific States. During the second quarter of 1942 and the first quarter of 1943, these States accounted for 37 and 29 percent, respectively, of the publicly financed units (table 3). This concentration was due in part to the extremely large amount of war housing needed there and in part to the fact that, for a substantial part of this housing, the need was temporary only.

TABLE 3.—*New Dwelling Units in Nonfarm Areas, by Geographic Division and Source of Funds, Second Quarter of 1942 and First and Second Quarters of 1943*

Geographic division	Total			Private funds			Public funds		
	Second quarter 1943	First quarter 1943	Second quarter 1942	Second quarter 1943	First quarter 1943	Second quarter 1942	Second quarter 1943	First quarter 1943	Second quarter 1942
All divisions.....	81,300	118,500	166,400	51,591	34,156	80,921	29,709	84,344	85,479
New England.....	2,900	4,000	6,200	2,188	1,170	3,969	712	2,830	2,231
Middle Atlantic.....	7,900	11,900	19,000	6,200	3,778	13,592	1,700	8,122	5,408
East North Central.....	15,200	17,500	28,200	11,604	6,077	17,888	3,596	11,423	10,312
West North Central.....	3,000	4,200	10,500	1,717	1,917	5,100	1,283	2,283	5,400
South Atlantic.....	14,100	24,300	36,300	11,402	8,033	13,779	2,698	16,267	22,521
East South Central.....	3,100	4,000	7,000	2,158	1,758	2,960	942	2,242	4,040
West South Central.....	11,800	11,200	9,700	6,319	4,074	8,016	5,481	7,126	1,684
Mountain.....	2,800	10,400	4,400	1,640	1,102	1,893	1,160	9,298	2,507
Pacific.....	20,500	31,000	45,100	8,363	6,247	13,724	12,137	24,753	31,376

Although the number of multifamily units started during the second quarter of 1943 was but 44 percent of the number started during the second quarter of 1942, only 4 geographic divisions shared in this decline. The largest numerical decrease shown in table 4, from 10,600 to 1,600 units, occurred in the Pacific States and resulted chiefly from

a shift in public housing from multifamily structures to 1-family row-type units. The number of 2-family units begun during the second quarter of 1943 showed a decline from the comparable 1942 totals in 3 regions. However, only the decline from 2,400 to 900 units in the Middle Atlantic States was of significant proportions.

TABLE 4.—New Dwelling Units in Nonfarm Areas, by Geographic Division and Type of Dwelling, Second Quarter of 1942 and First and Second Quarters of 1943

Geographic division	All types			1-family units			2-family units ¹			Multifamily units ²		
	Second quarter 1943	First quarter 1943	Second quarter 1942	Second quarter 1943	First quarter 1943	Second quarter 1942	Second quarter 1943	First quarter 1943	Second quarter 1942	Second quarter 1943	First quarter 1943	Second quarter 1942
All divisions.....	81,300	118,500	166,400	68,100	95,500	142,400	5,000	2,700	5,500	8,200	20,300	18,500
New England.....	2,900	4,000	6,200	2,200	3,000	5,600	100	100	100	600	900	500
Middle Atlantic.....	7,900	11,900	19,000	6,500	10,300	15,300	900	700	2,400	500	900	1,300
East North Central.....	15,200	17,500	28,200	12,900	14,900	26,600	1,200	600	800	1,100	2,000	800
West North Central.....	3,000	4,200	10,500	2,300	3,100	9,900	300	400	200	400	700	400
South Atlantic.....	14,100	24,300	36,300	9,700	17,400	31,700	1,200	400	1,000	3,200	6,500	3,600
East South Central.....	3,100	4,000	7,000	2,900	3,400	5,700	100	100	200	100	500	1,100
West South Central.....	11,800	11,200	9,700	11,000	9,400	9,300	400	100	300	400	1,700	100
Mountain.....	2,800	10,400	4,400	2,500	7,400	4,200	0	100	100	300	2,900	100
Pacific.....	20,500	31,000	45,100	18,100	26,600	34,100	800	200	400	1,600	4,200	10,600

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

Estimated Permit Valuations

The permit valuation of the 199,800 new nonfarm family dwelling units started during the first half of 1943 was estimated to aggregate \$485,698,000, or about half of the \$975,086,000 estimated for the first half of 1942 (table 5). Of the 1943 total, the 85,747 new privately financed dwelling units accounted for slightly over half, \$249,631,000, and the 114,053 publicly financed units for the remainder, \$236,067,000. The construction-cost limitations imposed on private builders during the spring of 1942, in order to conserve critical building materials, resulted in the trend from 1-family houses to 2-family and multifamily units mentioned previously, and was reflected in the 9-percent decline in the average permit valuation from the first half of 1943 to the first half of 1942. The average construction cost of publicly financed family dwelling units declined even more—36 percent—as a result of successive shifts in emphasis from permanent to demountable units early in 1942 and from demountable to temporary units somewhat later in 1942.

When comparing the private and public valuations shown in table 5, allowances must be made for the general understatement of construction costs by private builders when applying for building permits. This understatement is estimated to average about 15.5 percent of the permit valuation.⁴ After making this allowance, it is estimated that construction of the 199,800 units started during the first half of 1943 will aggregate approximately \$525,000,000.

⁴ This relationship, under wartime conditions, may be somewhat different, but there are no data on which to base a more current estimate.

TABLE 5.—*Estimated Permit Valuation of New Dwellings in Nonfarm Areas, by Geographic Division and Source of Funds, First 6 Months of 1942 and 1943*
 [In thousands of dollars]

Geographic division	Total		Private funds		Public funds ¹	
	First 6 months of—					
	1943	1942	1943	1942	1943	1942
All divisions.....	485,698	975,086	249,631	615,840	236,067	359,246
New England.....	19,973	45,354	12,658	31,385	7,315	13,969
Middle Atlantic.....	57,111	151,228	32,069	110,179	25,042	41,049
East North Central.....	105,940	194,316	70,517	149,939	35,423	44,377
West North Central.....	16,182	52,461	9,106	37,254	7,076	15,207
South Atlantic.....	90,308	185,209	49,199	90,081	41,109	95,128
East South Central.....	12,044	44,386	6,720	23,212	5,324	21,174
West South Central.....	41,178	64,476	19,731	56,173	21,447	8,303
Mountain.....	30,269	28,072	7,191	14,206	23,078	13,866
Pacific.....	112,693	209,584	42,440	103,411	70,253	106,173

¹ Contract values.

Cooperation

Activities of Consumers' Cooperatives in 1942

Summary

IN SPITE of the beginning of wartime restriction of commodities and the regulation of sales, the year 1942 was marked by substantial increases in cooperative business and earnings. As in 1941, many associations reported that 1942 was the most successful year in their history. Cooperative wholesaling was particularly successful and for most of the wholesales the 1942 sales represented an all-time high; for the whole group, business increased 23.3 percent and earnings 35.6 percent. Production more than doubled. The total cooperative wholesale business (including services as well as wholesale distribution) amounted to over \$125,000,000.

TABLE I.—Estimated Membership and Business of Consumers' Cooperatives, 1942

Type of association	Estimated number of associations	Estimated membership	Estimated business
<i>Local associations</i>			
Retail distributive:		<i>Individuals</i>	
Stores and buying clubs.....	2,500	540,000	\$195,000,000
Petroleum associations.....	1,400	650,000	197,000,000
Other distributive.....	50	19,000	7,500,000
Retail distributive departments of marketing associations.....	525	175,000	165,000,000
Service:			
Associations providing rooms and/or meals.....	275	23,000	4,000,000
Housing.....	59	2,100	1,575,000
Medical care—			
On contract.....	30	100,000	1,600,000
Own facilities.....	11	15,000	1,150,000
Burial:			
Own facilities.....	35	25,000	260,000
Caskets.....	6	2,500	10,000
Cold storage.....	50	25,500	925,000
Water.....	33	2,000	375,000
Printing and publishing.....	16	75,000	475,000
Recreation.....	25	3,500	72,500
Miscellaneous.....	45	1,400	188,000
Electricity.....	850	1,210,000	35,000,000
Telephone.....	5,000	330,000	5,485,000
Credit unions.....	10,601	3,139,457	251,439,862
Insurance.....	2,000	10,000,000	185,000,000
<i>Wholesale associations</i>			
Interregional.....	2		
Regional:		<i>Affiliated associations</i>	
Wholesale distribution.....	27	3,203	116,250,000
Services.....			1,607,000
Production.....			2,503,000
Retail distribution.....			11,541,550
District:			
Wholesale distributive.....	11	150	2,625,000
Services.....			98,720

¹ Impossible to estimate.

² Not including production of separate subsidiary organizations.

The local consumers' cooperatives—with retail sales amounting to about \$564,000,000, plus services (meals, housing, burial, medical care, etc.) estimated at about \$10,630,500—are believed to have done a total business of well over \$575,000,000, serving about 1½ million members and their families. Although this is still an insignificant proportion of the population and of the retail trade of this country, the figures are steadily increasing and the 1942 figures represent an all-time peak in both respects.

In addition to the consumers' cooperatives proper, there were some 18,500 electricity, telephone, insurance and credit associations with an estimated membership of over 14½ million. This figure represents a slight decline from 1941 for this group of associations, as a result of a 165,000 drop in membership among the credit unions in 1942.

Local Associations in 1942

The local associations, like other retail businesses, were affected by rationing, wartime shortages of goods, and problems of transportation and delivery. The rationing of gasoline had not begun to be felt very severely in 1942, except among the urban associations in the East.

Very optimistic reports on condition of local cooperatives were made in various sections of the country. In the State of Washington it was stated that in 1942 the Grange cooperatives "almost without exception enjoyed the best year in their history."¹ From Ohio it was reported that "from the standpoint of all-round progress the year 1942 has been our greatest," and similarly encouraging statements were made concerning the associations in Eastern Cooperative Wholesale territory (New England and Middle Atlantic States). The Farmers Union State Exchange, in Nebraska, reported that 1942 was on the whole a very good year for the member associations. The Nebraska Union Farmer, in its issue of April 14, 1943, gave the following estimates of 1942 business and net earnings of the Farmers' Union cooperatives in the State.

	<i>Business</i>	<i>Earnings</i>
110 petroleum associations-----	\$4, 400, 000	\$255, 000
75 store associations-----	6, 000, 000	225, 000
240 grain elevators-----	43, 200, 000	720, 000
Total-----	53, 600, 000	1, 200, 000

Reports received by the U. S. Bureau of Labor Statistics for 1,385 local associations indicated a volume of business of nearly \$202,000,000 for 1942 for these organizations. The more than 1,100 associations for which data for both 1941 and 1942 were available made noteworthy gains in business and net earnings. Membership also increased. For the whole group of associations business was nearly a fourth larger in 1942 than in 1941. The greatest progress was made by the store associations, but the petroleum associations also showed a volume nearly 14 percent above that of the previous year, even though over a fifth of their number sustained a falling off in business as compared with the preceding year, as against less than 10 percent of the stores (table 2). To some extent the amount of business was raised by the advance in price levels, and to some extent undoubtedly

¹Grange News (Seattle), June 19, 1943.

by enlarged memberships and patronage. Membership of identical associations reporting for both years increased by about 9 percent, in spite of the fact that over a fourth of the associations had a smaller membership in 1942 than in 1941.

Five percent of the total reporting associations operated at a loss in 1942; only 1.7 percent had a loss in both years and 3.3 percent had a gain in 1941 but a loss in 1942. Further, 2.9 percent went from a loss in 1941 to a gain in 1942 and 68.5 percent increased their earnings in 1942 over those in 1941. A larger proportion of the petroleum associations than of other types had a smaller amount of earnings in 1942 than in 1941.

TABLE 2.—Membership, Business and Net Earnings of Local Cooperatives in 1942 as Compared with 1941

Type of association	Membership			Amount of business			Net earnings				
	Per- cent of in- crease in total	Percent reporting—		Per- cent of in- crease in total	Percent reporting—		Percent which went from—		Percent reporting—		
		In- crease in 1942	De- crease in 1942		In- crease in 1942	De- crease in 1942	Gain in 1941 to loss in 1942	Loss in 1941 to gain in 1942	Loss in both years	In- crease in gain in 1942	De- crease in gain in 1942
All types.....	9.1	73.9	26.1	24.1	84.2	15.8	3.3	2.9	1.7	68.5	23.6
Stores and buying clubs.....	8.3	75.5	24.5	30.8	90.8	9.2	5.4	4.9	2.2	69.5	17.9
Petroleum associations.....	9.5	73.8	26.2	13.6	78.9	21.1	2.0	1.2	.4	64.7	31.7
Other consumers' cooperatives.....	5.8	50.0	50.0	41.8	81.8	18.2			50.0	50.0	
Distributive departments of farmers' marketing associa- tions.....	16.8	53.3	46.7	43.1	87.5	12.5		3.7		90.9	7.4

As the first full year of war, 1942 brought serious problems of procurement of supplies, of transportation, and of distribution. Many commodities became scarce and some practically disappeared from the market altogether. Rationing of certain items, such as tires and petroleum products, cut down the volume of business particularly in urban areas; the associations serving farmers maintained their volume fairly well. To some extent, the procurement problem was met by the substitution of new lines for those in falling supply.

Diversification of business has been urged by the cooperative wholesales for some years and the associations which heeded the advice have begun to reap the benefits since the war began. Petroleum associations have added groceries, hardware, seeds, fertilizer, etc., the sales of which compensate for the decreases in or disappearance of such items as electrical appliances, refrigerators, tires, and metal goods. Also, numbers of cases have occurred in which two or even three local cooperatives have consolidated into a single association, in the interests of efficiency and economical operation. In some cases, store and gasoline associations operating in the same town have merged.

Cooperative Wholesales in 1942

OPERATIONS OF WHOLESALERS

The business, earnings, and patronage refunds of individual wholesales are shown for 1941 and 1942 in table 3.

One association shown—Farmers Union Cooperative Brokerage—was placed in liquidation at the end of its fiscal year. As noted, its territory and members will hereafter be served by the Farmers Union Central Exchange. The Cooperative Wholesale for southern California, a small association that had been having increasing difficulty in obtaining supplies, suspended operations late in the year. No data on volume of business, etc., are available for it, or for the Northwest Cooperative Society whose business was taken over by Farmers Union Central Exchange.

TABLE 3.—Business, Net Earnings, and Patronage Refunds of Cooperative Wholesales, 1941 and 1942

Association and State	Amount of business ¹		Net earnings		Patronage refunds	
	1942	1941	1942	1941	1942	1941
All associations:						
Interregional, distributive.....	\$9,905,611	\$4,204,059	\$11,702	\$277,021	\$105,343	\$238,093
Regional:						
Distributive, wholesale.....	111,606,247	90,562,69	5,411,897	3,812,642	4,325,712	3,106,925
Service.....	1,595,257	759,170				
District:						
Distributive.....	2,178,180	2,352,522	125,829	128,791	107,734	115,906
Service.....	98,720	101,340				
<i>Interregional</i>						
Illinois: National Cooperatives.....	(²)	(²)	11,702	38,928	11,117	(³)
Ohio: United Cooperatives.....	9,905,611	4,204,059	(³)	238,093	94,226	238,093
<i>Regional</i>						
Illinois:						
Central States Cooperatives:						
Distributive, wholesale.....	264,025	229,394	6,119	7,240	6,645	5,784
Services:						
Educational.....	2,402	(³)	1,264	(³)		
Auditing.....	204					
Illinois Farm Supply Co.....	15,083,781	8,359,583	1,055,499	1,094,408	902,813	883,753
Indiana: Farm Bureau Cooperative Assn.						
Distributive, wholesale.....	9,255,394	9,498,598	793,428	397,371	496,897	588,852
Services:						
Auditing.....	11,637	10,075				
Trucking.....	225,104	169,717				
Auto repair.....	15,333	8,605				
Insurance bonds, etc.....	25,384	22,568				
Finance (credit).....	21,381	(³)				
Other.....	297,441	169,774				
Productive departments.....	4,233,097	4,300,005				
Iowa:						
Iowa Farm Service Co.....	63,488	54,359	45,549	35,518	39,690	30,050
Cooperative Service Co.....	(³)	83,763	30,814	10,838	20,815	9,155
Massachusetts: United Cooperative Farmers.....	2,631,424	1,842,445	69,058	(³)	(⁶)	(³)
Michigan: Farm Bureau Services:						
Distributive, wholesale.....	4,343,815	3,523,985	247,052	88,420	232,773	45,268
Productive departments.....	416,214					
Services: Management.....	(³)	11,413				
Distributive, retail.....	1,244,298	206,376				
Minnesota:						
Midland Cooperative Wholesale.....	6,949,509	6,228,796	149,503	124,731	122,646	102,051
Farmers Union Central Exchange.....	8,949,756	8,098,812	347,663	321,055	200,950	174,257
Minnesota Farm Bureau Service Co.....	1,181,000	836,828	72,700	33,112	72,600	33,112
Missouri: Consumers Cooperative Assn.:						
Distributive, wholesale.....	9,885,198	6,851,056	190,101	161,346	7545,356	109,644
Services:						
Auditing.....	10,401	7,541				
Trucking.....	23,966	34,421				
Productive departments.....	4,878,016	4,655,753				
Distributive, retail.....	(³)	383,450		12,306		3,547

See footnotes at end of table.

TABLE 3.—Business, Net Earnings, and Patronage Refunds of Cooperative Wholesales, 1941 and 1942—Continued

Association and State	Amount of business ¹		Net earnings		Patronage refunds	
	1942	1941	1942	1941	1942	1941
<i>Regional—Continued</i>						
Nebraska: Farmers Union State Exchange:						
Distributive, wholesale.....	\$2,407,020	\$2,398,898	\$110,757	\$99,741	\$50,117	\$45,041
Services: Trucking.....	90,024	99,470	13,750			
Productive departments.....	⁴ 336,225	⁽³⁾	2,940	⁽³⁾	⁽³⁾	⁽³⁾
Distributive, retail.....	879,970	748,742	2,276	⁽³⁾	22,262	⁽³⁾
New York: Eastern Cooperative Wholesale.	2,765,155	2,107,827	63,634	40,645	56,544	-----
Ohio: Farm Bureau Cooperative Assn.:						
Distributive, wholesale.....	12,850,586	9,929,399	359,607	248,370	168,735	105,932
Services: Trucking.....	101,017	50,185				
Productive departments.....	⁴ 587,613	⁴ 877,006				
Pennsylvania: Pennsylvania Farm Bureau Cooperative Association.....	5,192,905	2,604,327	227,715	129,903	144,253	76,502
South Dakota: Farmers Union Cooperative Brokerage:						
Distributive, wholesale.....	174,040	595,762	3,834	¹⁰ 236	⁽¹¹⁾	-----
Services:						
Auditing.....	171	1,563				
Trucking.....	176	1,437				
Texas: Consumers Cooperatives Associated.	1,420,601	969,762	59,300	25,133	24,856	7,860
Utah: Utah Cooperative Association.....	216,568	285,082	⁽³⁾	18,490	⁽³⁾	17,565
Virginia: Southern States Cooperative:						
Distributive, wholesale.....	19,700,580	18,080,714	1,186,938	603,709	860,886	535,064
Services:						
Accounting and management.....	61,258	⁽³⁾	¹⁰ 78,419	⁽³⁾		⁽³⁾
Other.....	527,965					
Distributive, retail.....	9,017,282	⁽³⁾	149,459	⁽³⁾	46,073	⁽³⁾
Washington: Pacific Supply Cooperative:						
Distributive, wholesale.....	3,268,562	3,191,045	275,652	228,645	255,918	200,000
Services:						
Trucking.....	109,723	125,351	27,687			
Auto repair.....	45,408	25,340	952			
Finance.....						
Wisconsin: Central Cooperative Wholesale:						
Distributive, wholesale.....	5,002,840	4,792,257	147,801	144,113	123,219	125,757
Services: Auditing.....	26,262	21,710	999			
Productive departments.....	⁴ 1,652,772	⁴ 319,764	⁽⁹⁾			
<i>District</i>						
California: Associated Cooperatives of Southern California.....	217,849	190,431	80	2,197	-----	1,437
Michigan:						
Cooperative Services ¹²	155,925	149,581	6,258	10,368	5,922	7,041
Northland Cooperative Federation.....	105,842	¹³ 96,750	4,073	6,257	⁽³⁾	⁽³⁾
Minnesota:						
Trico Cooperative Oil Association.....	260,436	254,980	23,517	31,139	23,517	30,551
Range Cooperative Federation:						
Distributive, wholesale.....	571,240	900,746	24,600	30,931	22,236	27,931
Services:						
Trucking.....	17,772	16,868				
Auto repair.....	36,440	40,243				
Insurance.....	15,031	16,396				
Mortuary.....	25,208	24,513				
Recreation.....	4,269	3,320				
Productive departments.....	⁴ 398,879	⁴ 261,180				
Wisconsin:						
Fox River Valley Cooperative Wholesale.....	549,019	466,416	40,843	24,755	39,684	24,210
A & B Cooperative Association:						
Distributive, wholesale.....	108,974	121,473	7,492	8,588	7,271	7,728
Distributive, retail.....	11,228						12
Cooperative Services.....	197,666	172,145	15,954	14,556	9,104	3,903

¹ Wholesale distributive business unless otherwise stated.

² Business is that of pooling orders and making master contracts.

³ No data.

⁴ Included in wholesale distributive business also.

⁵ Total brokerage and trading income.

⁶ 2.9 percent; amount not reported.

⁷ Includes refunds from earnings of productive subsidiary associations.

⁸ Included with retail.

⁹ Included with wholesale.

¹⁰ Loss.

¹¹ All earnings will eventually be returned to members; association in liquidation; functions taken over by Farmers Union Central Exchange.

¹² Name formerly H-O-B Cooperative Oil Association.

¹³ Includes business done by recreational facilities.

Altogether, the reporting regional associations had a wholesale distributive and service business amounting to over 113 million dollars. Of this, services accounted for only 15 percent; the rest was distributive. The district associations reported sales of over 2¼ millions, of which 4.5 percent was for services.

Net earnings amounted to \$5,411,897 for the regional associations and \$125,829 for the district associations—a total of \$5,537,726. For regional associations reporting for both 1941 and 1942, the distributive business increased by 23.3 percent and the service business by 31.3 percent. Earnings increased 35.6 percent.

Patronage refunds.—Member associations received in patronage refunds from the wholesales, on the 1942 business, a total of \$4,538,789—\$105,343 from the interregional associations, \$4,325,712 from the regional organizations, and \$107,734 from the district wholesales. A considerable proportion of the refunds on patronage was paid, not in cash, but in the form of shares credited to the member associations. This was done in order to improve the capitalization of the central associations, many of which have always been inadequately financed.

The annual meetings of the associations have been recognizing more and more the necessity for stronger financing and, on the recommendations of the boards of directors, have been voting increasingly to pay at least part of the patronage refunds in the form of shares or to put them into revolving funds payable 3 to 5 years hence. This latter practice has been in vogue for only about 5 years and the deferred refunds of those earlier years are now being paid, in cash.

In order to strengthen the organization for the post-war period, several of the wholesales have also set aside special reserves. The Pennsylvania Farm Bureau Cooperative Association set aside \$13,896, approximately 12 percent of the wholesale inventory, as a special reserve to cover the probable post-war decline in inventory values. The Ohio Farm Bureau Cooperative Association set aside \$75,000 for a similar purpose. At the end of its 1942 fiscal year, Southern States Cooperative had an inventory reserve of \$325,758, of which \$200,000 was added from the 1941-42 earnings.

Productive operations.—Profitable as the wholesale distributive operations have been, those associations that have gone into production have found that in the latter lie even greater possibilities of savings for their members. For this reason, as well as because of the factors of safety in supplies and of future development, that the cooperative wholesales have been intensifying their drive into production. In Ohio, at least 70 percent of the 1942 savings were made on the productive activities. Consumers Cooperative Association (the wholesale which was the pioneer and had made the greatest strides in production) reported combined earnings of \$668,062 in 1942, of which \$477,961 (or nearly 72 percent) came from its oil wells, pipe line, refinery, and other productive activities, and only 28 percent from wholesale distribution.

Operations of Credit Unions, 1942

Summary

IN 1942, for the first time since the Bureau of Labor Statistics has been compiling annual data on the operations of credit unions, the credit branch of the cooperative movement showed a downward trend. The total number of associations that had received charters by the end of 1942 had increased 1.4 percent over the preceding year, but membership, number and amount of loans made during the year, and amount of loans outstanding at the end of the year all showed decreases. The membership declined only 5.0 percent, but the amount of loans granted fell by 31.1 percent and loans outstanding by 32.0 percent.

The above situation was not peculiar to credit unions, but has been shared by all other types of lending agencies though not all have shown such sharp declines as have the credit unions. There are numerous reasons for the decrease, among which may be cited the limitations on installment buying and the sharp contraction of the activities and purposes for which, previously, credit union loans were made. Loans for such purposes as house repairs, educational courses, the financing of purchases of furniture, refrigerators, automobiles, etc., are today drastically reduced not only by shortages of civilian goods and by shrinking college enrollments, but also by Regulation W limiting the size of individual loans to amounts that can be repaid within 12 months. Because of the generally higher level of earnings, the need to borrow is neither so general among workers nor so acute. Credit union members still borrow from their associations but the loans are smaller and are contracted for a much narrower range of purposes—largely for family emergencies, such as expenses of illness or death, or for consolidations of debts, etc.

Indicative of the greater earnings and lessened need is the fact that the paid-in share capital and total assets of credit unions continued to grow in 1942. A considerable part of these surplus funds has been invested in Government bonds. No data on reserves are available for the Federal credit unions; those of associations under State charter showed an increase of 18.3 percent as compared with 1941.

Altogether, the 9,469 associations for which data were available (about 90 percent of the total chartered) had a combined membership of 3,139,457 at the end of 1942 and made loans aggregating \$249,660,061. Assets totaled \$340,188,694.

Net earnings on the year's business amounted to \$10,675,147. Data on amounts returned in dividends are not available for the Federal credit unions. Those paid by associations under State charter totaled \$5,176,376.

At the end of 1942, a total of 10,601 associations had received charters. This number was 145 greater than that at the end of the preceding year, but included a number of associations in dissolution. The Credit Union National Association reported that "hundreds of liquidations" of credit unions took place in 1942, many of which were the result of "panic, war jitters, and inability to fight the war the right

way." This trend was halted before the end of the year. The Federal Credit Union Division states that among the Federal credit unions, those liquidating were only the very small associations.

Considering credit unions of all types combined, at the end of 1942 six States (Illinois, Massachusetts, New York, Ohio, Pennsylvania, and Wisconsin) had over 500 associations each, and in two of these (Illinois and New York) credit union membership exceeded 300,000. Illinois was the leading State as regards loans made during the year (nearly \$28,000,000), but loans totaling over \$10,000,000 were made in each of the five States of California, Massachusetts, New York, Ohio, and Pennsylvania.

The data on which the above findings are based were furnished to the Bureau of Labor Statistics for the State-chartered associations in most cases by the State officials—usually the Superintendent of Banks—charged with the supervision of these associations. For Alabama, Georgia, Idaho, and North Dakota, the data were supplied by the State Credit Union League. For Virginia, the data were furnished by the State official and the Credit Union League. No report was received for Mississippi; for this State estimates were made, based upon the trend in other States and in this State in previous years. The same was done also for certain items concerning which some States do not require reports. The figures for all of the Federal associations were furnished by the Federal Credit Union Division, now in the Federal Deposit Insurance Corporation.

The data shown for individual States include both the Federal and State credit unions, except in Delaware, Hawaii, Nevada, New Mexico, South Dakota, and Wyoming, where there is no State credit union act. In Connecticut where credit union legislation was passed in 1939, no associations had been chartered by the State at the end of 1942. For all of these States the figures therefore cover Federal credit unions only.

Operations in 1941 and 1942

The membership and business operations of credit unions are shown, by States, for 1941 and 1942, in the table following. Data are for the calendar year in all States, except for the State-chartered associations in Arizona, Kentucky, New Hampshire, and North Carolina, where they are for years ending June 30.

Operations of Credit Unions in 1941¹ and 1942, by States

State, and type of charter	Year	Number of associations ²		Number of members	Number of loans made during year	Amount of loans—	
		Chartered	Reporting			Made during year	Outstanding, end of year
All States	1942	10,601	9,469	3,139,457	1,943,991	\$249,660,061	\$148,762,961
	1941	10,456	9,650	3,304,390	2,409,464	362,291,005	218,867,882
State associations	1942	5,621	5,399	1,791,938	1,128,480	158,123,094	105,876,211
	1941	5,663	5,506	1,907,024	1,393,529	227,959,046	149,618,395
Federal associations	1942	4,980	4,070	1,347,519	815,511	91,536,967	42,886,750
	1941	4,793	4,144	1,396,696	1,015,935	134,331,959	69,249,487
Alabama	1942	95	87	23,658	21,864	2,575,065	1,272,249
	1941	89	87	22,550	22,508	3,416,654	1,814,307
Arizona	1942	25	22	³ 3,802	³ 2,608	³ 348,878	180,107
	1941	23	22	³ 3,920	³ 2,819	³ 484,561	298,828
Arkansas	1942	37	29	3,682	3,869	254,407	132,043
	1941	40	35	5,498	6,240	537,831	260,072
California	1942	508	457	199,172	³ 130,237	³ 18,037,253	10,233,838
	1941	498	457	211,423	³ 147,282	³ 26,866,712	17,425,644
Colorado	1942	118	109	24,879	³ 17,056	³ 2,571,389	1,120,222
	1941	113	106	27,626	³ 20,966	³ 3,348,893	1,870,415
Connecticut ⁴	1942	214	179	96,931	46,729	5,884,490	2,472,209
	1941	212	190	95,356	66,780	8,461,724	3,981,202
Delaware ⁴	1942	13	11	2,811	1,889	176,638	89,739
	1941	13	11	3,200	2,724	263,705	148,763
District of Columbia	1942	129	109	70,803	³ 43,507	4,740,720	2,880,680
	1941	126	115	78,632	³ 57,864	8,213,770	4,916,584
Florida	1942	204	171	36,066	25,875	3,012,198	1,732,640
	1941	201	178	39,142	46,560	5,558,363	2,749,794
Georgia	³ 1942	146	112	³ 30,939	25,102	² 779,071	1,622,294
	1941	156	145	³ 45,047	³ 35,637	³ 5,136,700	3,266,827
Hawaii ⁴	1942	100	93	37,499	13,670	2,359,964	1,513,557
	1941	100	93	37,353	21,547	4,918,591	2,777,388
Idaho	³ 1942	46	34	4,324	2,103	259,110	133,085
	1941	41	39	4,630	3,240	407,462	216,481
Illinois	1942	849	836	349,936	³ 231,730	27,765,716	17,038,979
	1941	841	831	³ 366,491	272,118	43,495,547	26,132,514
Indiana	1942	337	299	³ 101,673	³ 64,453	³ 8,531,891	3,423,880
	1941	332	310	³ 105,144	³ 79,572	³ 10,538,820	5,292,534
Iowa	1942	243	214	44,037	³ 25,465	3,173,641	2,498,219
	1941	261	217	47,413	39,249	5,088,344	3,548,308
Kansas	1942	145	133	28,889	³ 18,093	2,134,745	1,319,197
	1941	138	132	26,749	³ 19,070	² 2,663,027	1,832,090
Kentucky	1924	125	115	² 27,461	³ 18,455	³ 3,379,342	2,201,233
	1941	129	124	33,824	³ 26,293	³ 3,894,381	2,632,844
Louisiana	1942	166	138	³ 32,922	³ 30,381	³ 3,130,165	1,196,904
	1941	139	122	³ 35,110	³ 26,844	³ 3,897,804	2,101,101
Maine	1942	54	44	9,817	5,267	558,045	356,755
	1941	47	37	9,997	9,280	939,425	567,886
Maryland	1942	76	68	29,353	³ 18,758	³ 1,894,590	945,858
	1941	75	72	³ 32,768	³ 25,389	² 7,008,068	1,470,670
Massachusetts	1942	568	544	255,836	³ 158,057	³ 24,629,075	16,132,974
	1941	565	547	³ 260,293	180,764	33,098,818	20,305,406
Michigan	1942	282	249	101,136	³ 59,415	³ 10,564,345	6,155,480
	1941	283	261	106,208	79,012	13,504,348	8,623,108
Minnesota	1942	394	362	73,092	46,308	4,876,474	6,273,488
	1941	400	373	79,828	64,877	8,144,246	8,113,066
Mississippi	³ 1942	23	23	5,875	3,980	378,908	254,453
	³ 1941	25	22	6,151	4,662	499,457	328,662
Missouri	1942	395 ⁴	382	98,343	³ 64,492	³ 6,686,808	³ 4,810,631
	1941	396	386	104,262	³ 78,981	³ 11,748,393	7,720,939
Montana	1942	45	39	5,862	³ 2,581	³ 269,673	155,209
	1941	42 ⁴	37	5,383	³ 2,960	³ 332,776	207,722
Nebraska	1942	212	208	35,803	26,296	3,885,935	1,834,326
	1941	212	208	35,540	33,470	4,901,728	2,445,199
Nevada ⁴	1942	6	5	675	185	21,687	12,299
	1941	6	6	777	381	50,978	26,369
New Hampshire	1942	17	17	5,923	³ 3,470	³ 908,052	662,337
	1941	18	18	6,170	³ 4,898	³ 1,005,141	698,518
New Jersey	1942	280	245	113,361	79,370	6,905,554	3,267,671
	1941	276	250	112,797	79,733	9,817,258	5,267,197
New Mexico ⁴	1942	19	14	1,485	798	88,636	45,751
	1941	13	10	1,522	1,171	151,867	81,254
New York	1942	928	799	300,050	³ 193,080	³ 31,538,905	17,196,206
	1941	908	805	308,711	³ 231,211	³ 37,076,869	21,015,536
North Carolina	1942	187	173	32,232	³ 27,763	³ 2,695,272	1,556,658
	³ 1941	178	164	40,120	36,977	³ 3,194,217	1,564,677
North Dakota	1942	114	65	8,602	³ 5,178	³ 458,744	239,481
	1941	115	88	8,578	5,523	633,721	313,336

See footnotes at end of table.

Operations of Credit Unions in 1941 ¹ and 1942, by States—Continued

State, and type of charter	Year	Number of associations ²		Number of members	Number of loans made during year	Amount of loans—	
		Chartered	Reporting			Made during year	Outstanding, end of year
Ohio.....	1942	718	642	224,545	114,374	\$13,902,793	\$7,850,789
	1941	709	654	232,967	154,709	23,035,873	12,990,877
Oklahoma.....	1942	87	77	³ 19,447	11,720	1,397,850	744,911
	1941	95	89	³ 17,672	³ 12,873	³ 2,070,347	1,250,711
Oregon.....	1942	92	81	16,382	9,210	1,066,449	772,255
	1941	85	77	18,639	16,476	1,944,661	1,361,249
Pennsylvania.....	1942	694	598	241,814	134,965	15,435,936	8,164,499
	1941	674	604	263,338	163,254	22,813,354	11,872,196
Rhode Island.....	1942	40	34	23,814	7,980	1,486,372	3,343,196
	1941	39	33	23,520	10,693	2,109,086	3,579,689
South Carolina.....	1942	61	36	7,825	³ 9,624	³ 633,099	³ 293,487
	³ 1941	60	44	6,734	4,700	458,314	247,693
South Dakota ⁴	1942	37	32	5,191	3,655	378,327	176,704
	1941	35	34	5,440	4,117	592,274	249,502
Tennessee.....	1942	160	132	39,065	³ 31,778	³ 4,135,787	1,680,836
	1941	156	136	43,049	³ 38,003	³ 5,031,609	2,676,693
Texas.....	1942	456	391	89,496	³ 64,545	³ 7,232,265	4,307,161
	³ 1941	439	388	98,394	97,522	13,132,428	8,171,474
Utah.....	1942	72	66	12,007	³ 6,862	³ 906,272	593,058
	1941	68	62	12,299	³ 8,716	³ 1,418,856	944,188
Vermont.....	1942	10	8	1,108	1,059	60,483	22,180
	1941	7	5	265	495	29,466	15,693
Virginia.....	³ 1942	127	97	28,854	19,241	2,061,500	1,081,232
	1941	122	101	29,035	³ 29,535	³ 3,280,036	1,733,723
Washington.....	1942	248	220	44,614	22,585	2,765,767	1,870,228
	1941	247	236	51,527	38,547	5,943,541	3,527,655
West Virginia.....	1942	75	56	17,151	11,808	1,060,274	605,213
	1941	81	71	19,499	³ 14,282	³ 1,578,172	938,435
Wisconsin.....	1942	597	596	168,614	75,034	9,428,179	6,221,555
	1941	607	600	171,452	³ 78,000	13,945,437	9,133,782
Wyoming ⁴	1942	22	18	2,601	1,557	162,622	75,005
	1941	22	18	2,347	1,002	186,852	100,081

¹ Some revisions made in 1941 figures.

² Most of the difference between the total number of associations and the number reporting is accounted for by associations chartered but not in operation by the end of the year and associations in liquidation which had not relinquished their charters.

³ Data partly estimated.

⁴ Federal credit unions only; no State-chartered associations in this State.

Industrial Accidents and Safety

Causes and Prevention of Injuries From Falls in Shipyards¹

Summary

ONE in every five disabling injuries experienced by shipyard workers during the first 4 months of 1943 resulted from falls. During this period 13,512 injuries were reported under the U. S. Navy Department-U. S. Maritime Commission program of safety and industrial health in contract shipyards. The proportion of falls to a lower level (53 percent) slightly exceeded that of falls on a level surface (47 percent).

Broken bones resulted from 563 of the reported falls, and 28 of these were skull fractures. Forty-three falls resulted in severe brain concussions, and 26 produced hernias. Two workers were drowned as the result of falls into water.

In absolute numbers, falls were most common in the daylight hours between 7 a. m. and 5 p. m. In proportion to the number of employees working at various hours, however, falls occurred relatively more frequently in the period from 5 p. m. to midnight, and most frequently in the hours from midnight to 7 a. m.

Analysis of the causes of the reported falls indicates 10 corrective measures, which, if successfully applied, would have prevented at least three-fourths of the accidents. These preventive measures are divided into two groups. The first consists of steps which management can carry out on its own initiative. The second consists of measures which cannot be put into operation by directive, but can be initiated by management and made effective through full cooperation between the workers and their supervisors. Management's part in promoting these measures would consist of the promulgation of positive rules of safe conduct and the establishment of continuous programs of safety education designed to instill safety consciousness into the minds of all employees.

The measures which management can undertake, and the proportion of disabling falls which each may be expected to eliminate are as follows:

	<i>Possible percent of injuries eliminated</i>
(1) Provide for better housekeeping on working surfaces, such as scaffolds, stagings, decks, floors, and docks.....	26
(2) See that guardrails are provided on all stagings, scaffolds, catwalks, and ramps, around all open decks, and around all hatchways and manholes.....	13

¹ Prepared in the Division of Industrial Injury Statistics by Frank S. McElroy and Arthur L. Svenson.

	<i>Possible percent of injuries eliminated</i>
(3) See that stagings and other elevated working surfaces are properly constructed by special crews and that stagings and scaffolds are frequently and thoroughly inspected for unsafe conditions which may have developed in use.....	7
(4) Provide sufficient lights, do not require men to work in dark areas....	2
(5) Provide for proper inspection to insure that beams, girders, lifting parts, saddles, strongbacks, jack-clamps, etc., are safely braced, bolted, or welded.....	2

The following are measures in which management must win cooperation from all employees, and the proportion of disabling falls which each may be expected to eliminate:

	<i>Possible percent of injuries eliminated</i>
(1) Stop shortcutting when going from one part of the boat, or yard, to another.....	9
(2) Have each worker think of his footing at all times.....	7
(3) Stop the improper use of ladders, such as attempting to carry excessive amounts of material while climbing, or descending while facing outward.....	6
(4) Stop the practice of walking or working on beams or girders when unnecessary, and avoid approaching the edge of decks or openings unless necessary to the work.....	3
(5) See that guards, demountable railings, etc., are in use where necessary and that they are properly set or adjusted.....	2

Causes of Shipyard Falls

UNSAFE WORKING CONDITIONS

More than a fourth of all the reported falls were directly associated with poor housekeeping. The problem of the safe placement of electric cables, air lines, and welding lines, which must frequently extend through or across working surfaces and passageways, is admittedly difficult in shipbuilding. The fact remains, however, that if this had been accomplished, it would have avoided 177 of the disabling falls reported during the 4-month period. Less excusable, because the remedies should be comparatively easily applied, were the 169 cases in which workers tripped over materials, tools, and scrap which had been allowed to accumulate on working surfaces. In one reported instance, a porter suffered a broken leg when he fell over material placed at the bottom of the steps which he was cleaning. Another example of this type of fall was that in which a loose plank lying in a poorly lighted shaft alley tripped a pipe fitter, who was walking through the passageway, and deprived the war effort of a skilled mechanic for several days.

The period covered by this study included a part of the winter season when ice and snow add greatly to the hazards of working in outdoor areas. Unsanded surfaces of decks, docks, scaffolds, and other work places made dangerous because of ice or snow, produced nearly 5 percent of all the reported falls. Slippery conditions resulting from rain, water, fresh paint, and spilled oil or grease, however, accounted for a slightly greater proportion of the falls (5.4 percent). In many instances, these unsafe conditions developed gradually and were apparently unnoticed by the safety inspectors until an injury resulted. A case in point was that involving an operating engineer who slipped on the deck of his crane, which was subsequently found

to be covered with an imperceptible film of oil. This discovery led to a general clean-up in that particular yard. A somewhat similar case occurred in another yard where a worker slipped on a ramp. Investigation there indicated that grease and oil, carried on the shoes of many workers, had made the so-called "safety" cleats so slippery as to constitute a positive slipping hazard.

The lack of adequate guardrailings around openings or at the edge of elevated working surfaces, and the use of ladders without safety shoes or proper lashings, produced 355 falls, or 13 percent of all the falls reported. The necessity of such guards seems to be generally recognized within the various yards, and many practicable corrective measures have been worked out. The very substantial number of falls resulting from unguarded conditions, however, indicates that much must yet be done to extend the use of adequate guards. In at least one yard the problem has been met through the creation of a crew of specialists, within the safety department, which is given the specific responsibility of seeing that adequate guards and railings are installed throughout the yard.

Nearly 7 percent of all the reported falls were caused by defective scaffolds or staging. In the majority of cases this condition resulted from faulty original construction. Lack of frequent and thorough inspection and of careful maintenance was indicated, however, by a number of accidents resulting from weakened standards and spawls. Loose and overlapping floor boards and gaps between the hulls and scaffolds were outstanding among the defects of original construction.

A detailed record of the unsafe conditions, which caused the 2,722 disabling falls, appears in table 1.

TABLE 1.—Unsafe Working Conditions Indicated by Accidents From Falls in Shipyards

Unsafe working condition	Total falls		Falls on same level		Falls to different levels	
	Number	Per cent	Number	Per cent	Number	Per cent
Total.....	2,722	100	1,266	100	1,456	100
Unguarded or inadequately guarded.....	355	13	18	1	337	23
Hatchways, manholes, openings.....	234		12		222	
Staging, scaffolds without railings.....	66				66	
Ladders not lashed or without safety shoes.....	35		1		34	
Decks, floors, docks.....	7				7	
Ramps, runways, catwalks.....	6		2		4	
Assembly tables, plattens.....	6		3		3	
Stairs, steps.....	1				1	
Poor housekeeping.....	695	26	578	46	117	8
Materials, objects, on work surfaces.....	397	15	354	28	43	3
Decks, floors not cleared of.....	346		320		26	
Cables, air or pressure lines, hose.....	177		169		8	
Metal parts, saddles, strong-backs, bolts.....	116		107		9	
Lumber, blocks, wood scraps.....	47		38		9	
Tools.....	6		6			
Scaffolds, staging not cleared of.....	28		12		16	
Cables, air or pressure lines, hose.....	10		4		6	
Lumber, blocks, wood scraps.....	10		4		6	
Metal parts, saddles, strong-backs, bolts.....	8		4		4	
Yards not cleared of.....	23		22		1	
Metal parts, saddles, strongbacks, bolts.....	13		12		1	
Lumber, wood, scraps.....	6		6			
Other material, equipment, etc.....	4		4			

TABLE 1.—Unsafe Working Conditions Indicated by Accidents From Falls in Shipyards—Continued

Unsafe working condition	Total falls		Falls on same level		Falls to different levels	
	Number	Percent	Number	Percent	Number	Percent
Poor housekeeping—Continued.						
Slippery work surfaces.....	278	10	216	17	62	4
Ice and snow on.....	132		111		21	
Decks, floors, docks.....	61		53		8	
Yards.....	40		40			
Staging, scaffolds.....	10		5		5	
Track (crane and railway).....	5		5			
Ramps, catwalks, platforms.....	4		3		1	
Ladders.....	4		1		3	
Stairs, steps, plattens, etc.....	8		4		4	
Rain and moisture on.....	117		90		27	
Decks, floors, docks.....	56		48		8	
Assembly tables, plattens.....	27		23		4	
Metal plates, beams, girders.....	11		9		2	
Staging, scaffold.....	8		2		6	
Ladders.....	7		5		2	
Runways, catwalks, platforms.....	6		3		3	
Stairs, steps.....	2				2	
Fresh paint, oil or grease on.....	20		15		14	
Decks, floors, docks.....	10		8		2	
Metal plates, beams, girders.....	5		2		3	
Stairs, steps.....	4				4	
Plattens, ladders, staging, etc.....	10		5		5	
Unsafe piling or storage of.....	20	1	8	1	12	1
Metal plates, girders, beams, parts.....	15		5		10	
Lumber, scrap wood.....	4		2		2	
Cables, air or pressure lines.....	1		1			
Defective construction of.....	195	7	12	1	183	13
Scaffolds, staging.....	186		11		175	
Ramps, catwalks.....	6		1		5	
Decks, floors.....	3				3	
Improper illumination of.....	62	2	22	2	40	3
Hatchways, manholes, openings.....	21		1		20	
Floors, decks, docks.....	15		8		7	
Assembly tables, plattens.....	8		5		3	
Yard.....	7		7			
Staging, scaffolds.....	6				6	
Stairs, steps, ramps.....	4				4	
Cranes.....	1		1			
Poorly braced, welded, bolted.....	41	2	7	1	34	2
Metal beams, girders, plates, other parts.....	19		5		14	
Ladders.....	7				7	
Decks, floors, gangways.....	6				6	
Stairs, shoring, saddles, strongbacks, etc.....	9		2		7	
Old, worn.....	33	1	10	1	23	2
Ladders.....	14				14	
Staging, scaffolds.....	4		2		2	
Other hand tools.....	4		1		3	
Wrenches.....	3		2		1	
Floors, runways, ramps, roadways, etc.....	8		5		3	
Poorly designed.....	22	1	4	(1)	18	1
Scaffolds.....	8		2		6	
Racks, shelves, ramps, gangplanks.....	6		2		4	
Stairs, ladders, benches, plattens.....	8				8	
Unsafe working conditions, not elsewhere classified.....	216	8	126	10	90	6
No unsafe working conditions.....	785	28	297	23	488	33
Unclassified—insufficient data.....	318	12	192	15	126	9

¹ Less than half of 1 percent.

Unsafe Practices

Eighty-four percent of the 2,722 falls studied definitely can be related to the failure of someone to act safely, but the majority of these unsafe acts resulted in injury to persons other than those who committed the unsafe acts.

The most outstanding unsafe act resulting in falls was that of leaving material, tools, equipment, and scrap in unsafe positions. Supervisors who permitted these poor housekeeping conditions to exist must share the blame for such tripping hazards with the workmen who created them.

Stage builders who failed to construct adequate staging, scaffolds, and ladders properly or failed to place hand and guard railings on otherwise completed construction were responsible for nearly 15 percent of all the reported falls. The inspectors who failed to recognize the deficiencies of such inadequate construction must share in this responsibility. In most instances of falls resulting from the use of unsafe scaffolds the persons injured had nothing to do with the unsafe construction. There were, however, 48 reported cases in which the injured persons had been using makeshift scaffolds which they had constructed themselves from boxes, sawhorses, and planks. Although it was not always so stated in the reports, the use of such makeshift scaffolds may generally be considered not only an unsafe act but also a positive violation of the yard safety rules.

Short-cutting, and thereby taking unnecessary chances, when moving from place to place in the yards led to 247 disabling falls. Chiefly responsible was the failure to use provided walkways, ramps, and catwalks. Falls resulting from attempts to jump over open spaces were particularly numerous among workers on plattens, skids, and assembly tables. Jumping from scaffolds and sliding down ropes instead of using ladders or stairs caused numerous falls, as did also the act of walking on beams or girders when not necessary to the work. The most frequently recommended preventive measure for the elimination of accidents of this type was the installation of additional stairs, walkways, ramps, etc., at more convenient points.

Failure to observe the time-worn maxim "Watch your step" resulted in disabling injuries to 50 workers who tripped when they walked backwards while pulling cables or lines. Forty-three others fell over objects which they probably would have avoided if they had not been running; it is pertinent to note that accidents of this type generally occurred at quitting time.

The most unusual accident reported, however, was that involving a burner's helper who stood on the end of a plate and watched his leaderman burn off the part on which he was standing.

Of a total of 193 reported falls from ladders, only 33 resulted from defects in the ladders. In 122 instances no cause other than failure to maintain a good grip could be assigned. In 33 cases, however, the climbers were definitely attempting to carry excessive quantities of materials. A painter, for example, undertook to carry "six paint buckets" as he climbed, and a shipfitter tried to carry "a 20-ton jack, a lunch box, and a pair of coveralls." The use of hand lines to raise or lower material would probably have prevented all 33 of these accidents. To descend a ladder while facing outward is practically inviting accident; nevertheless, five falls resulting from this procedure were reported. In one of these cases the worker attempted his descent with his hands in his pockets.

The unsafe acts which led to the reported falls are given in table 2.

TABLE 2.—Unsafe Personal Actions Causing Accidents From Falls in Shipyards

Unsafe act	Total falls		Falls on same level		Falls to different levels	
	Number	Per cent	Number	Per cent	Number	Per cent
Total	2,722	100	1,266	100	1,456	100
Leaving materials unsafely, such as	467	18	393	31	74	5
Cables, air lines, hose, etc.	194		177		17	
Metal stock and members	161		141		20	
Lumber	66		43		23	
Miscellaneous, scraps, debris	41		32		9	
Ladders, boxes, etc.	5				5	
Short-cutting	247	9	88	7	159	11
Failure to use provided walkways, ramps, catwalks	92		64		28	
Failure to use provided ladders and stairs to ascend or descend	74		4		70	
Walking on beams, girders, etc., when unnecessary	62		13		49	
Jumping from vehicles, platforms, etc.	19		7		12	
Failure to place hand or guard railing	216	8	11	1	205	14
At open hatchways, manholes, openings	199		8		191	
On steps, ramps, etc.	10		3		7	
At edge of decks, floors	7				7	
Failure to take secure footing or proper position	200	7	127	10	73	5
Walking backwards	50		18		32	
Running	43		37		6	
On piled materials	27		23		4	
On floors, decks	20		15		5	
On stairs, steps	19		15		4	
On assembly tables and plattens	18		13		5	
On scaffolds, staging	18		6		12	
On trucks	5				5	
Failure to construct safely	198	7	9	1	189	13
Scaffolds, staging	107		6		101	
Using box, horse, etc., instead of ladder or scaffold	48		3		45	
Ladders	33				33	
Gangways, runways, steps	10				10	
Unsafe use of ladders	160	6	12	1	148	10
Failure to have secure grip while ascending or descending	122		11		111	
Carrying tools, equipment	33		1		32	
Ascending or descending frontwards	5				5	
Working or walking too near edge of	91	3			91	6
Staging or scaffold	58				58	
Assembly tables, plattens	11				11	
Decks, floors, docks	9				9	
Flatcars, trucks, barges	7				7	
Catwalks, platforms	6				6	
Nonuse of guards, demountable railings, etc.	53	2	4	(1)	49	3
Failure to tighten, set or adjust properly	38		4		34	
Removing from machines, etc.	15				15	
Having insecure grip while working with	37	1	13	1	24	2
Cables, airlines, ropes, etc.	13		1		12	
Wrenches	11		6		5	
Lumber, metal parts	7		3		4	
Bars	6		3		3	
Unsafe act, not elsewhere classified	322	12	161	13	161	11
No unsafe act	428	16	258	20	170	12
Unclassified—Insufficient data	303	11	190	15	113	8

¹ Less than half of 1 percent.

Time of Falls

Sixty percent of all the falls for which the time of occurrence was reported occurred in the daylight hours between 7 a. m. and 5 p. m. Twenty-two percent occurred between 5 p. m. and midnight, and the remaining 18 percent between midnight and 7 a. m. Reduced to an

hourly basis these proportionate numbers of injuries indicate that for every 6 disabling falls in the daylight hours there were 3.1 disabling falls in the evening hours and 2.6 in the early morning hours.

Data relating to the proportionate exposure at various hours, in terms either of man-hours or of total employment, were not available for the particular yards which furnished accident information. The relative volume of falls during different periods of the day, therefore, could not be expressed in terms of the standard frequency rate. It is possible, however, to make a reasonably accurate frequency comparison from such general employment figures as are available.

Recent employment figures for the entire shipbuilding industry have indicated that the total employment in shipyards is distributed 63 percent on the day shift, 26 percent on the evening shift, and 11 percent on the midnight shift. Assuming that these proportions hold for the reporting shipyards it is possible to express the comparable hourly exposure for the three shift periods as approximating the ratio of 6.3, 2.6, and 1.1.

Correlation of this exposure ratio with the hourly ratio of injury occurrence indicates that, in relation to exposure, falls occur 25 percent more frequently in the hours from 5 p. m. to midnight than in the daylight hours between 7 a. m. and 5 p. m. In the period between midnight and 7 a. m., falls occur nearly 2½ times as frequently as in the daylight hours. From these differences it is reasonable to conclude that inadequate lighting played a major part in the occurrence of many of the nighttime falls.

Industrial Injuries, June 1943

JUNE reports from 12,329 manufacturing plants listed 29,677 disabling work injuries experienced by employees during the month. The reporting plants employed 7,050,700 workers, or nearly 44 percent of the Bureau of Labor Statistics estimate of total manufacturing employment during the month. Assuming that the reporting establishments constitute a representative sample, the total number of disabling injuries experienced by workers in all manufacturing plants of the United States during June, therefore, may be estimated as about 68,000. Added to the estimates for previous months, this brings the estimated number of disabling injuries in manufacturing during the first half of 1943 to a total of 387,000. This exceeds by 70,000 the estimate of disabling injuries in manufacturing for the entire year of 1940.

Many of these injured workers had not recovered at the time the June reports were prepared. The actual record of days lost from work because of these occupational injuries, therefore, is not available. Twenty days, however, is a conservative average time loss for each disabling injury. On this basis the June injuries represent the direct loss of 1,360,000 man-days of production, without any allowance for the continuing economic loss resulting from the many deaths included in the totals or from the reduced productivity of those workers who suffered permanent physical impairments. This direct loss alone is equivalent to a month of full-time employment for 52,000 workers.

At the end of June, 0.3 percent of the reported injuries were known to have been fatal and 3.5 percent had definitely developed into permanent physical impairments. It is reasonably certain, however, that these proportions will be increased when the final outcome of injuries presumed to be only temporary at the end of June becomes known.

The general trend of injury-frequency rates in June was upward. Thirty-six industries had slightly higher frequency rates in June than in May and 12 industries had significant increases of 5 or more points in their rates. For 26 industries the June averages represented the highest frequency rate reported in any of the first 6 months of 1943. On the other hand, the June averages were the lowest monthly rates so far reported for 11 industries. The lowest industry average for June was that of the cement group, which had only 5.1 disabling injuries for each million employee-hours worked during the month. In sharp contrast, the dairy-products group reported an average of 79.3 disabling injuries per million employee-hours worked in June.

Because of the longer period covered, the cumulative frequency rates presented in the accompanying table offer a more stable basis of comparison between industries than do the rates for a single month. Three industries, dairy products, planing mills, and sawmills, had cumulative averages of over 60 disabling injuries for every million employee-hours worked. The wooden-container industry had a cumulative rate of 52.4, and the concrete, gypsum and plaster products, corrugated boxes, enameling and galvanizing, forgings, foundry, and the plate-fabricating and boiler-shop products industries each had cumulative rates of over 40.

On the other hand, there were eight industries with cumulative injury-frequency rates of less than 10. These industries were women's clothing, 5.3; sighting and fire-control equipment, 6.9; radios and phonographs, 7.8; rayon and allied products (chemical), 8.3; cement, 8.4; men's clothing, 8.6; soap and glycerin, 9.0; and iron and steel, 9.9.

Industrial Injury-Frequency Rates¹ for Selected Manufacturing Industries, June 1943, with Cumulative Rates for 1943

Industry ²	June		1943: Cumulative frequency rate	Industry ²	June		1943: Cumulative frequency rate
	Number of establishments	Frequency rate ³			Number of establishments	Frequency rate ³	
Agricultural machinery and tractors	48	25.1	17.2	Iron and steel	230	9.8	9.9
Aircraft	42	9.0	10.2	Knit goods	52	10.1	11.1
Aircraft parts	188	16.7	18.2	Leather	27	20.6	23.9
Ammunition—20 mm. and over	384	24.7	27.8	Machine shops, general	146	36.1	34.2
Ammunition—small arms	19	16.2	18.9	Metalworking machinery	900	20.5	20.1
Baking	17	17.3	17.7	Motor vehicles	150	13.6	14.6
Book and job printing	42	17.8	14.3	Motor-vehicle parts	61	25.3	24.4
Books and shoes, not rubber	298	12.7	13.8	Nonferrous-metal products	396	27.5	25.3
Canning and preserving	51	21.3	19.5	Paints and varnishes	69	22.1	21.1
Carpets and rugs	8	7.3	13.3	Paper	165	35.3	32.4
Cement	91	5.1	8.4	Paper and pulp (integrated)	71	27.5	25.2
Chemicals, industrial	346	20.4	18.2	Petroleum refining	172	13.0	12.5
Clothing, men's	514	8.3	8.6	Planing mills	27	47.6	63.2
Clothing, women's	326	9.0	5.3	Plate fabrication and boiler-shop products	71	51.9	45.2
Coke ovens	23	11.7	19.1	Plumbers' supplies	18	19.6	18.1
Concrete, gypsum, and plaster products	125	53.3	49.8	Pottery	9	27.0	22.8
Confectionery	10	13.3	16.8	Radios and phonographs	205	7.6	7.8
Construction and mining machinery	114	34.1	32.4	Railroad equipment	38	25.2	20.8
Corrugated boxes	86	50.0	43.6	Rayon and allied products (chemical)	15	13.1	8.3
Cotton goods	108	16.2	15.6	Rubber boots and shoes	13	14.1	11.7
Cutlery and edge tools	30	28.3	22.6	Rubber tires	33	14.0	13.9
Dairy products	24	79.3	66.5	Sawmills	18	73.0	67.1
Drugs, toiletries, and insecticides	47	21.7	22.1	Set-up boxes	235	15.2	16.0
Dyeing and finishing	50	26.1	22.3	Shipbuilding	161	31.0	30.2
Electrical equipment and supplies	650	12.0	11.2	Sighting and fire-control equipment	37	6.0	6.9
Enameling, galvanizing, etc.	18	42.8	46.2	Slaughtering and meat packing	208	35.2	36.0
Engines and turbines	62	19.7	(4)	Small arms	56	11.2	10.7
Explosives	35	13.1	11.2	Smelting and refining (non-ferrous)	183	36.1	29.5
Fabricated structural steel	131	28.8	31.9	Soap and glycerin	17	11.8	9.0
Fiber boxes	36	41.8	30.0	Stamped and pressed metal products	306	33.0	32.4
Folding boxes	97	21.5	22.6	Steam fittings and apparatus	59	33.6	33.4
Food-products machinery	28	34.9	31.9	Stoves and furnaces, not electric	58	45.5	37.1
Forgings, iron and steel	156	46.0	40.7	Tanks, military	23	16.1	11.8
Foundries, iron and steel	609	47.9	40.9	Tank parts, military	64	22.6	22.1
Furniture, except metal	71	29.8	29.6	Textile machinery	11	25.0	15.4
Furniture, metal	24	26.8	28.7	Tin cans and other tinware	42	19.9	19.4
General industrial machinery	683	26.0	24.6	Tools, except edge tools	60	31.1	23.2
Glass	31	20.6	18.3	Wire and wire products	164	22.1	22.5
Guns and related equipment	164	17.0	17.5	Wooden containers	39	41.7	52.4
Hardware	40	23.2	24.0	Woolen goods	157	20.6	19.3

¹ The frequency rate represents the average number of disabling industrial injuries for each million employee-hours worked.

² A few industries have been omitted from this table because the coverage for the month did not amount to 1,000,000 or more employee-hours worked.

³ Computed from all reports received for the month. Not based on identical plants in successive months.

⁴ Not available.

Industrial Disputes

Secretary of Labor Authorized to Make Findings Under War Labor Disputes Act ¹

THE War Labor Disputes Act gives the President power to take possession of and operate any industrial facilities carrying on war contracts, in which a labor disturbance threatens to impede the progress of the war.

The President, on August 10, 1943, authorized and directed the Secretary of Labor to exercise the power vested in the President to make findings under section 2 (b) (3) of the War Labor Disputes Act. Under this directive the Secretary is given authority to determine whether the activities of a plant are required and have been contracted for in the prosecution of the war. Among the plant activities which may thus be contracted for are reconstruction, maintenance, storage, repair, or transportation.

The Secretary of Labor was further authorized to obtain from all departments and agencies of the Government such information as may be necessary in the exercise of this power.

Activities of the United States Conciliation Service, August 1943

THE United States Conciliation Service during August disposed of 2,066 situations involving 809,998 workers (table 1). The services of this agency were requested by the employers, employees, and other interested parties. Of these situations, 217 were strikes and lockouts involving 81,853 workers; 1,137 were threatened strikes and controversies involving 379,359 workers. During the month 384 disputes were certified to the National War Labor Board, and in 64 cases other agencies assumed jurisdiction. The remaining 264 situations included investigations, arbitrations, requests for information, consultations, etc.

The facilities of the Service were used in 28 major industrial fields, such as building trades and transportation, and the manufacture of iron and steel, transportation equipment, textiles, food, etc. (table 2), and were utilized by employees and employers in 47 States, the District of Columbia, Virgin Islands, and Puerto Rico (table 3).

¹ Data are from Public Law No. 89, 78th Congress, 1st Session; Federal Register, August 14, 1943 (p. 11281).

TABLE 1.—Situations Disposed of by United States Conciliation Service, August 1943, by Type of Situation

Type of situation	Number	Workers involved
All situations handled.....	1 2,066	809,998
Disputes.....	1,354	461,212
Strikes.....	214	81,638
Threatened strikes.....	146	77,141
Lockouts.....	3	215
Controversies.....	991	302,218
Other situations.....	264	52,907
Arbitrations.....	91	18,399
Technical services.....	13	4,530
Investigations.....	63	3,939
Requests to conduct consent elections.....	2	3,089
Requests for information.....	9	26
Consultations.....	50	155
Special services of Commissioners.....	22	2,755
Complaints.....	14	14
Disputes referred to other agencies during negotiations.....	448	315,879
To National War Labor Board.....	384	305,986
To National Labor Relations Board.....	43	8,670
To other Federal agencies.....	2	350
To Wage Adjustment Board.....	6	221
To non-governmental agencies.....	5	305
To State agencies.....	8	347

¹ During the month 188 cases involving 53,764 workers were adjusted subject to hearings officer or arbitration procedure with the hearings officer or arbitrator to be selected by the National War Labor Board.

TABLE 2.—Situations Disposed of by United States Conciliation Service, August 1943, by Industries

Industry	Disputes		Other situations		Total	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
All industries.....	1,802	777,091	264	32,907	2,066	809,998
Agriculture.....	3	111	1	5	4	116
Building trades.....	75	33,991	8	812	83	34,803
Chemicals.....	63	15,773	9	354	72	16,127
Communications.....	11	24,790	3	101	14	24,891
Electrical equipment.....	40	25,155	7	417	47	25,572
Food.....	188	43,916	26	6,531	214	50,447
Furniture and finished lumber.....	63	11,246	2	104	65	11,350
Iron and steel.....	298	122,567	30	3,263	328	125,830
Leather.....	38	6,766	23	2,851	61	9,617
Lumber.....	48	5,736	5	36	53	5,772
Machinery.....	101	80,588	15	1,022	116	81,610
Maritime.....	6	7,265	3	46	9	7,311
Mining.....	26	2,246	2	150	28	2,396
Motion pictures.....			1	1	1	1
Nonferrous metals.....	58	16,489	11	1,823	69	18,312
Paper.....	28	6,473	4	15	32	6,488
Personal service.....	76	5,978	6	690	82	6,668
Petroleum.....	21	8,818	3	57	24	8,875
Printing.....	40	5,817	4	13	44	5,830
Professional.....	8	2,346	1	8	9	2,354
Rubber.....	16	29,114	1	23	17	29,137
Stone, clay, and glass.....	56	6,641	12	273	68	6,914
Textile.....	83	40,178	25	1,877	108	42,055
Tobacco.....	8	9,186	1	12	9	9,198
Trade.....	105	26,550	12	7,381	117	33,931
Transportation.....	108	19,974	11	383	119	20,357
Transportation equipment.....	128	196,652	15	5,400	143	200,052
Utilities.....	20	4,594	2	11	22	4,605
Miscellaneous.....	87	18,131	21	1,248	108	19,379

TABLE 3.—Situations Disposed of by United States Conciliation Service, August 1943, by States

States	Disputes		Other situations		Total	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
All States.....	1, 802	777, 091	264	32, 907	2, 066	809, 998
Alabama.....	19	7, 134	4	44	23	7, 178
Arizona.....	14	1, 228	1	844	15	2, 072
Arkansas.....	9	1, 077	1	100	10	1, 177
California.....	107	80, 618	11	665	118	81, 283
Colorado.....	16	2, 674	2	5	18	2, 679
Connecticut.....	23	27, 085	5	932	28	28, 017
Delaware.....	5	6, 185	1	70	6	6, 255
District of Columbia.....	12	9, 227	6	1, 969	18	11, 196
Florida.....	13	8, 719	2	314	15	9, 033
Georgia.....	7	2, 604	4	26	11	2, 630
Idaho.....	9	355	-----	-----	9	355
Illinois.....	174	45, 424	21	447	195	45, 871
Indiana.....	68	13, 166	4	109	72	13, 275
Iowa.....	42	6, 000	-----	-----	42	6, 000
Kansas.....	15	14, 768	-----	-----	15	14, 768
Kentucky.....	18	4, 703	-----	-----	18	4, 703
Louisiana.....	9	1, 693	6	19	15	1, 712
Maine.....	2	46	5	11	7	57
Maryland.....	15	21, 652	4	17	19	21, 669
Massachusetts.....	57	21, 196	27	1, 875	84	23, 071
Michigan.....	113	76, 293	29	4, 232	142	80, 525
Minnesota.....	33	13, 990	2	240	35	14, 230
Mississippi.....	3	585	2	4	5	589
Missouri.....	117	27, 680	12	1, 102	129	28, 782
Montana.....	1	250	2	403	3	653
Nebraska.....	8	4, 297	-----	-----	8	4, 297
Nevada.....	1	1	-----	-----	1	1
New Hampshire.....	8	4, 105	-----	-----	8	4, 105
New Jersey.....	66	42, 791	9	1, 143	75	43, 934
New Mexico.....	4	121	2	2	6	123
New York.....	171	93, 524	16	900	187	94, 424
North Carolina.....	27	6, 028	3	71	30	6, 099
Puerto Rico.....	17	23, 516	5	3, 082	22	26, 598
Virgin Islands.....	2	2, 576	-----	-----	2	2, 576
North Dakota.....	4	109	-----	-----	4	109
Ohio.....	156	77, 862	28	3, 119	184	80, 981
Oklahoma.....	25	1, 039	1	3	26	1, 042
Oregon.....	38	2, 808	4	148	42	2, 956
Pennsylvania.....	168	71, 028	16	1, 420	184	72, 448
Rhode Island.....	10	3, 418	1	700	11	4, 118
South Carolina.....	10	7, 154	-----	-----	10	7, 154
South Dakota.....	1	2, 500	-----	-----	1	2, 500
Tennessee.....	26	3, 675	8	1, 976	34	5, 651
Texas.....	24	9, 750	-----	-----	24	9, 750
Utah.....	4	566	-----	-----	4	566
Vermont.....	3	506	-----	-----	3	506
Virginia.....	21	3, 569	5	108	26	3, 677
Washington.....	28	8, 542	4	6, 514	32	15, 056
West Virginia.....	16	2, 823	6	269	22	3, 092
Wisconsin.....	63	10, 431	5	24	68	10, 455

Labor Laws and Decisions

Recent State Legislation on Labor Relations¹

DURING the last half of the 1943 sessions of State legislatures the trend of legislative action toward regulation of the activities of trade-unions continued. Five more States—Alabama, Florida, Massachusetts, Michigan, and Minnesota—enacted restrictive industrial relations measures. This brought to 11 the total number of States that have adopted such legislation this year.²

Regulation of Labor Unions

Among the most stringent of the laws enacted since April are those of Alabama and Florida. In Florida, paid agents of unions must now be licensed annually by the secretary of state.³ Licenses are limited to persons who have been citizens for 10 years and have resided in the United States for 10 years prior to applying for a license. Applicants must never have been convicted of a felony and must be of good moral character. The decision as to whether agents meet these qualifications rests with the Governor, the secretary of state, and the superintendent of education. Unfair labor practices of employees, enumerated in the act, follow closely those of the recently enacted Kansas law. They include striking because of an inter-union dispute, or without authorization by a secret ballot of a majority of the employees involved; picketing beyond the area of the industry within which the labor dispute arises; picketing by force or violence or in a manner to prevent ingress and egress; picketing which interferes with an employee's right to work; the prevention of any union elections or interference with right of franchise of any union member. The act fixes \$15 as the maximum amount which labor unions may charge as initiation fees, but allows those in effect on January 1, 1940, to be continued. Annual reports must be made to the secretary of state on the organization and officers of the unions. An accounting to members on financial matters is required.

The Florida Legislature also passed a proposed constitutional amendment to bar closed-shop agreements in the State.⁴ The amendment, which will be submitted to the voters in the general election of 1944, states as part of the declaration of rights: "The right of persons to work shall not be denied or abridged on account of membership or nonmembership in any labor union or labor organization, provided that this clause shall not be construed to deny or abridge the right of employees by and through a labor organization or labor union to bargain collectively with their employer."

¹ Prepared in the Division of Labor Standards of the U. S. Department of Labor.

² For a summary of 1943 legislation affecting labor relations adopted before mid-April in Arkansas, Colorado, Kansas, Idaho, South Dakota, and Texas, see *Monthly Labor Review*, May 1943 (pp. 941-944).

³ H. 142; approved June 10, 1943.

⁴ H. J. R. 13; became law without Governor's approval, May 8, 1943.

The new Alabama law incorporates several provisions of union-regulation laws adopted by other States during the recent sessions.⁵ An "antiviolence" clause, identical with the one adopted in Arkansas, makes it unlawful to use force or violence or threats of force or violence to prevent any person from engaging in a lawful vocation, or for any person acting in concert with others to assemble at or near a labor dispute to use or threaten to use force or violence. As provided in the Kansas and Florida laws, striking is forbidden unless approved by a majority of the employees to be governed thereby. Secondary boycotts are illegal. Other sections relating to supervision of union affairs appear to be patterned upon the new Texas registration statute. Unions are required to file detailed reports with the State, and these must be made available to all persons who wish to examine them. Fees for work permits are declared illegal, as are also political contributions by unions. A new development prohibits acceptance of executive or professional employees into membership in any union open to other employees. Under the statute a department of labor is created to enforce this act and to promote voluntary settlement of disputes. This new department is to be separate from the existing department of industrial relations, which is responsible for the administration of all the State's labor laws.

Unions in agriculture.—In Minnesota, an amendment to the Labor Relations Act is aimed primarily at unions in agriculture.⁶ Labor organizations are prohibited from hindering, by threats, force, or intimidation, the transportation, production, processing, or marketing of farm products by producers, processors, or marketing organizations. Conspiring to injure any processor or marketing organization by secondary boycotts or other means in order to coerce or damage farmers is also forbidden. The scope of the act goes beyond agriculture, however. Interference with free and uninterrupted use of streets and highways is made an unlawful act. A strike may not be called unless it has been voted by a majority of the voting employees in a collective-bargaining unit composed of employees of an employer or association of employers against whom the strike is directed. Jurisdictional disputes are subjected to State supervision. Whenever an interunion controversy becomes grounds for picketing, boycotting, or striking, the Governor is empowered to appoint a labor referee to resolve the conflict. Pending the referee's determination, it is illegal to picket, strike, or boycott the employer's industry or place of business.

Financial provisions.—A separate Minnesota enactment requires elections of officers for terms not to exceed 4 years and charges the responsible officer of every labor organization with the duty of making financial statements to members.⁷ Noncompliance disqualifies unions from representing employees in collective bargaining.

Massachusetts became the third State in 1943 to ban the exaction of fees by labor unions for work permits.⁸ Alabama and Texas are the other States which prohibited this practice.

Obstruction of goods.—In Michigan, restrictions were imposed on all types of activities obstructing transportation of goods within the

⁵ S. 341; approved June 29, 1943.

⁶ Ch. 624; approved April 24, 1943.

⁷ Ch. 625; approved April 24, 1943.

⁸ Ch. 385; approved June 2, 1943.

State.⁹ Under the law it is now a criminal offense, punishable by fine and imprisonment, to stop or hinder the operation of any vehicle transporting farm or commercial products in order to delay the transportation or loading or unloading of such products.

Amendments of Previous Acts

In addition to these laws imposing limitations on union activities, a few minor changes were made in existing acts governing industrial relations. The Minnesota anti-injunction act was strengthened by reducing to 7 days the period of time during which a temporary injunction in a labor dispute may remain in effect.¹⁰ Previously the court could hold up decisions in injunction cases for as long as 60 days.

The Wisconsin Legislature modified the section of the Employment Peace Act which forbade entering into a closed-shop agreement unless three-fourths of the employees affected approve.¹¹ The amendment requires the approval of three-fourths of the voting employees, provided such three-fourths constitute a majority of the employees in the unit.

Pennsylvania extended the application of its Labor Relations Act to firms also covered by the Wagner Act.¹² The definition of employer formerly excluded those to whom the Federal law applied.

This State also amended a provision which gave the court discretion to determine whether the certification of a bargaining agent remained in force during the court's review of a challenge of the certification's validity.¹³ The amendment declares the certification void during the process of review.

Still other Pennsylvania amendments permit members of the labor relations board to engage in business, be officers in a labor union, or participate in political activities.¹⁴ Labor organizations are forbidden to deny membership on account of political affiliation, upon penalty of losing their privileges under the law.

⁹ Public Act 24; approved March 23, 1943.

¹⁰ Ch. 658; approved April 24, 1943.

¹¹ Ch. 465; approved July 7, 1943.

¹² Act 315; approved May 27, 1943.

¹³ Act 287; approved May 26, 1943.

¹⁴ S. 202; approved May 3, 1943.

Recent Decisions of Interest to Labor¹*Wage and Hour Decisions*

RESTITUTION of wages included in consent decree.—Adopting a position contrary to that of the Federal District Court in Minnesota in *Walling v. Miller* (47 F Supp. 1004),² the Federal District Court in Connecticut in *Walling v. Alderman*³ held that a consent decree, enjoining violations of the Fair Labor Standards Act, may include a provision for restitution of wages.

Sections 11 (a) and 17 of the Fair Labor Standards Act provide for the issuance of court orders, on the application of the Administrator, restraining violations of the wage and hour provisions of the act. Section 16 of the act permits employees to sue for the recovery of underpayments, an equal amount of liquidated damages, and attorney's fees. The company, in each case, had consented to a decree which forbade future violations of the act and directed the payment of back wages. In the Miller case the court had held that inasmuch as the employees had a direct remedy to collect unpaid wages, the court lacked jurisdiction to order restitution as part of the restraining order, since there is no provision in the act permitting the Administrator to seek restitution. The court, however, in the instant case, declined to follow the Miller decision and held that it had power to enforce payment of back wages as a part of a consent decree enjoining violations. Accordingly it was decided that the employer's failure to make restitution constituted contempt of court.

Wage claim under statute held arbitrable dispute.—Employees instituted an action to recover unpaid overtime compensation claimed to be due to them under the Fair Labor Standards Act (29 U. S. C., sec. 201 et seq.). The employment contract contained a provision for arbitration of "any difficulty or disagreement * * * growing out of the relations of employers and employed." The defendant asked the court to halt trial until arbitration proceedings could be conducted. The United States District Court for the Middle District of Pennsylvania denied the request, and the defendant appealed to the Circuit Court of Appeals for the Third Circuit in *Donahue v. Susquehanna Collieries*.⁴

Section 3 of the Federal Arbitration Act (9 U. S. C. 3) authorizes a court to stay a trial of an action pending in a Federal court when there is "any issue referable to arbitration under an agreement in writing for such arbitration." The appellate court held that a claim for unpaid wages was within the scope of the arbitration clause of the contract and the Federal statute. It took the view that the judicial enforcement remedies of the Fair Labor Standards Act were not

¹ Prepared in the Office of the Solicitor, Department of Labor. The cases covered in this article represent a selection of significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in the field of labor law nor to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

² Presently on appeal in the Eighth Circuit Court of Appeals.

³ — F. Supp. — (Aug. 13, 1943).

⁴ — Fed. (2d) — (Sept. 1, 1943).

exclusive, and decided that the statutory wage claim presented an arbitrable dispute.⁵

The court seems not to have considered the effect of section 1 of the Federal Arbitration Act which provides that "nothing herein contained shall apply to contracts of employment of seamen, railroad employees, or any other class of workers engaged in foreign or interstate commerce." This language evidences a legislative intention that disputes under employment contracts involving employees in interstate commerce are not arbitrable under the act.

Furthermore, there remains unanswered the question whether an arbitrator who decides in favor of the employees, in addition to the underpayments, is bound to award the employees an equal amount as liquidated damages which the employees would recover if they were successful in the action brought under section 16 (b) of the Fair Labor Standards Act.

Decisions Relative to Labor Disputes

Validity of antistrike law challenged.—The Federal Government brought a criminal indictment against members of a mine workers' union, charging them with encouraging a strike in a Government-operated mine in violation of the War Labor Disputes Act (Smith-Connally Act). The War Labor Disputes Act declares it to be a criminal offense, punishable by a fine of not more than \$5,000 or imprisonment for not more than 1 year, or both, to encourage any person to strike or to aid in the strike of a plant, mine, or facility in the possession of the United States. In denying a motion to dismiss the case, the Federal District Court pointed out that the war powers of the Government were very broad, and that the act was a valid exercise of those powers. In addition, it held that the act was not an invasion of freedom of speech guaranteed by the Federal Constitution.⁶

The miners subsequently entered a plea of no defense, were given 6-month suspended sentences, and were placed on probation for 3 years.

Employee election not warranted by minority union's winning of strike vote.—A union requested the National Labor Relations Board to reconsider its petition for an election to determine the bargaining representative for employees in a plant. The Attorney General of the United States had previously issued an opinion upholding the right of a minority union in a plant to file a notice of a labor dispute and to have the National Labor Relations Board conduct a strike ballot.⁷ This ruling was based on the wording of section 8 (a) of the War Labor Disputes Act (Pub. L. No. 89, 78th Cong.), which provides that "the representative of the employees of a war contractor" must file a strike vote 30 days before any interruption in production. The term "representative" was held to refer not only to the union representing the majority group but to the minority union as well. In accordance with this opinion a strike referendum was conducted and a majority vote favored a strike. On the basis of this poll, the min-

⁵ Compare *In re Benedict and Limited Editions Club, Inc.*, 12 Lab. Rel. Rept. 127, where the court held that the reinstatement under the National Labor Relations Act of discharged employees did not present an arbitrable dispute under Section 1448 of the New York Civil Practice Act. Discussed in *Monthly Labor Review*, May 1943 (p. 948).

⁶ *United States of America v. Congelio et al.* (August 30, 1943), United States District Court for the Western District of Pennsylvania.

⁷ *Op. Atty. Gen.*, Vol. 40, No. 69 (July 29, 1943).

ority union contended that the Board should invoke the representation procedure provided by the National Labor Relations Act.⁸

The Board, however, reiterated its general rule that where a company holds an unexpired contract with another union, a petition for the determination of representatives of employees is appropriate only when filed a reasonable time before expiration of the existing contract. The Board reasoned that the strike vote was not indicative of employee dissatisfaction with the existing bargaining unit, since the question of representation was not put in issue by the strike referendum.

Conflict of State and Federal authority.—The National War Labor Board granted a maintenance-of-membership clause to a union despite the employer's objection that this award would violate a State law.⁹

The company's objection to the provision was that it would violate the Wisconsin Employment Peace Act (sec. 111.06) which makes it an unfair labor practice for an employer "to encourage or discourage membership in any labor organization, * * *; provided that an employer shall not be prohibited from entering into an all-union agreement * * * where three-quarters or more of the employees * * * shall have voted affirmatively by secret ballot in favor of such all-union agreement in a referendum conducted by the [State Employment Relations] board * * *." The War Labor Board, however, ruled that although the required referendum had not been held, the Board's authority, derived from the war powers of the President under Executive Order 9017, and Congressional enactment of the War Labor Disputes Act, was superior to State regulation of employment relations. In its opinion the Board stated, "The War Labor Board's ruling upon maintenance of membership does not invade the province of the sovereignty of the State of Wisconsin. Rather, its ruling constitutes an exercise of war power over private contracts, which power supplants that of the State in time of war. In cases of this type, the safety of the Nation demands that the war powers of the United States be regarded as supreme. * * *"

The Board added that compliance with its directive would not constitute a violation of the State law, as the right to demand a maintenance-of-membership clause was granted by the National Labor Relations Act and, further, that the Wisconsin law was directed against voluntary, and not involuntary, union assistance or discrimination by an employer.

Union-shop contract declared inviolate by National War Labor Board.—In the case of *In re Trailer Company of America*¹⁰ a union had a union-shop contract with a company, effective for 1 year or for the duration of the war, whichever was longer. During this period several union members engaged in organizational activities on behalf of another union which was seeking to gain membership among the employees. The union holding the contract with the employer expelled these members, and the company discharged them. In the interim the rival union petitioned the National Labor Relations Board for an election to determine which union should represent the employees. Several more members of the union holding the contract were expelled from its membership for shifting their affiliation to the rival union, and their discharge was demanded on threat of

⁸ *In re Allis-Chalmers Mfg. Co.*, 52 National Labor Relations Board No. 18.

⁹ *In re J. Greenbaum Tanning Co.*, 10 War Labor Reports 527.

¹⁰ 9 War Labor Reports 809 (June 25, 1943).

strike. The rival union also threatened to strike if this second group of workers was discharged.

After certification of the case to the Cleveland Regional War Labor Board, that Board, although conceding the validity of the contract, in effect suspended the union-shop provisions by declaring that the issue of discharge of the employees should await the determination of the employee election.

The National War Labor Board, however, canceled the orders of the regional board, and directed it to review the merits of the case. It stated that as long as a union had been certified by the National Labor Relations Board as the bargaining agent, its contract would be enforced by the War Labor Board.¹¹

Charitable institutions subject to jurisdiction of War Labor Board.—The Brooklyn, N. Y., Central Young Men's Christian Association was requested by the National War Labor Board to conform to its wage-stabilization policies.¹² The organization had contended that it was not required to recognize and bargain with a union because the New York Labor Relations Act exempts charitable organizations from collective bargaining and, furthermore, its activities were intrastate exclusively.

In rejecting this argument, the Board pointed out that it had taken jurisdiction of intrastate activities. It also stated that the New York State constitution recognized the right of all employees to bargain collectively, and that charitable organizations were subject to the wage-stabilization policies of the Board.¹³

Court restrains proceedings of Regional War Labor Board Panel.—A panel of the Regional War Labor Board at Atlanta was prevented by court order from conducting proceedings to settle a labor dispute.¹⁴ The temporary restraining order was issued on the petition of seven laundries.

Under section 7 of the War Labor Disputes Act the Board may not assume jurisdiction of a labor dispute unless it threatens "substantial interference with the war effort." The companies claimed that this condition was not satisfied. In addition, the companies contended that the Board is bound to accede to decisions of the National Labor Relations Board. Since the latter Board has ruled that the companies are engaged in intrastate commerce and not subject to the jurisdiction of the National Labor Relations Act, it was argued that the War Labor Board is also prohibited from proceeding in the case. Whether a permanent injunction will issue will be determined after a further court hearing of the parties.

Railway Labor Act

The National Mediation Board is given the authority by the Railway Labor Act to investigate railway disputes and designate the bargaining agent for employees involved. The act also guarantees to

¹¹ *In re Trailer Company of America*, 10 War Labor Reports 374 (August 11, 1943). In the meantime, the National Labor Relations Board ordered an election to be held, since the contract had been in effect more than a year.

¹² *In re Brooklyn Central Young Men's Christian Association*, 10 War Labor Reports 379.

¹³ Although section 715 of the New York Labor Relations Act exempts employees of "charitable, educational, or religious associations or corporations," the New York State Labor Relations Board in *In re Trustees of Columbia University* (12 Labor Relations Rept. 914) held that a university was subject to the act as regards its building-service employees in a commercial building operated and owned by it.

¹⁴ *J. R. Dekle et al. v. Robt. M. Hitch et al.* Temporary restraining order issued by the Superior Court of Chatham County, Georgia (Aug. 18, 1943); reported in 12 Labor Relations Reporter 937.

crafts or classes of railway employees the right to organize and bargain collectively (45 U. S. C. A. sec. 152).

A union of station "redcaps" had been refused recognition by a railroad employer. The National Mediation Board dismissed an application for investigation of the dispute on the ground that the station porters were not a separate "class or craft" within the meaning of the Railway Labor Act, and therefore not entitled to representation separate from that accorded to a recognized union representing the clerical, office, station, and warehouse employees. The district court reversed the ruling of the Board, and the decision was affirmed by the Circuit Court of Appeals of the District of Columbia in *Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees et al. v. United Transport Service Employees of America*.¹⁵

The appellate court found that the Negro "redcaps" were ineligible for membership in the presently recognized bargaining group, and that they had not been given an opportunity to participate in an employee election. In view of these facts, the court concluded that the action of the Board was unjustified and that the porters were a separate "class or craft" entitled to apply for certification of a separate union as their bargaining agent.

Chief Justice Groner, in a concurring opinion, observed that a technical definition of "class or craft" need not be discussed. He stated that the question was whether the Railway Labor Act would sanction a procedure providing for designation of an organization as bargaining agent for Negro employees who were prohibited from becoming members of the group. He further stated that to uphold such a rule would be to violate one of the purposes of that act which was to insure freedom in choosing bargaining representatives.

Social Security Laws

Restrictive construction of "available for work."—An employee working on a third shift was forced to quit her job in order to take care of her four children. For this reason she refused an offer by her employer to work on the same shift, stating that she could work only on the first or second shifts. The South Carolina Unemployment Commission ruled that the claimant "is able to work and is available for work" within the meaning of the State Unemployment Compensation Act (Laws of S. C. 1942, as amended, sec. 7035-84 (c)) and entitled to unemployment benefits. It held that the statutory conditions had been met, inasmuch as the claimant had quit her job for good cause and was ready and willing to work on the first and second shifts.

The Court of Common Pleas of Greenville County, South Carolina, however, in *Judson Mills v. South Carolina Unemployment Compensation Commission*¹⁶ reversed this holding and stated that it was not the purpose of the law to provide benefits for one who gave up his job "solely because of a change in his personal circumstances" and decided that to be eligible for benefits the "unemployed individual must be able to do and be available for the work which he or she has been doing."

Individual stoppage of work precludes receipt of unemployment benefits.—A strike occurred in a plant, but little or no curtailment in

¹⁵ — Fed. (2d) — (Aug. 2, 1943).

¹⁶ Presently on appeal to the Supreme Court of South Carolina.

production resulted. One of the strikers applied for work but received a letter of dismissal. He then filed a claim with the State commission for unemployment benefits, which was granted. The employer appealed from the award, contending that the State unemployment-compensation law prohibits payment in these circumstances.

The Oklahoma Employment Security Act (c. 52, S. L. 1936, sec. 5) provides that an individual shall be disqualified for benefits "for any week * * * in which his total or partial unemployment is due to a stoppage of work which exists because of a labor dispute at the factory, establishment, or other premises at which he is or was last employed * * *." In affirming a decision of the District Court of Tulsa County, the Supreme Court of Oklahoma in *Board of Review v. Mid-Continent Petroleum Co.*¹⁷ denied the employee's claim. Although the court conceded that the plant was operating at normal capacity, it interpreted the statutory disqualification "due to stoppage of work" as referring "to the individual work of the employee" and not to a cessation of work at the plant.

Free-lance jockeys held to be independent contractors.—An owner and trainer of race horses brought suit to recover social-security taxes claimed to have been erroneously assessed upon wages paid by him to certain free-lance jockeys.

The jockeys were not regularly employed by the plaintiff, but each was engaged for a particular race. The Federal Social Security Act (U. S. C. 1940 Ed., Title 42, sec. 1107) levies a tax upon the wages of "employees." Article 205 of Treasury Regulation 90, promulgated under Title IX of the Social Security Act uses a "degree of control" test in determining if an employer-employee relationship exists. The Federal District Court for the Northern District of Illinois, Eastern Division, in *Whalen v. Harrison*¹⁸ held that the free-lance jockeys were independent contractors and not "employees."

The Court pointed out that the owner had no right to prescribe the manner in which a jockey should perform his duties, as those duties were outlined by regulations of the State racing commission. It stated that the owner did not have the right of discharge after the jockey was once on the horse, and observed that the right of discharge is a necessary element of control without which the master-servant relationship could not be deemed to exist.

Miscellaneous State Decisions

State Anti-Kick-back Law limited in application.—The Anti-Kick-back Law of the State of Washington makes it an offense for an employer, "whether * * * in private business or an elected public official" to receive "from any employee a rebate of any part of wages theretofore paid by such employer to such employee." (Wash. Rem. Rev. Stat. Supp., 1941, secs. 7612-21). Under this statute a county treasurer was charged with collecting or receiving a rebate of wages paid to an employee in the county treasurer's office. Upon appeal, the State Supreme Court in *State of Washington v. Carter*¹⁹ held that the money was not a rebate within the statutory definition.

¹⁷ — Pac. (2d) —.
¹⁸ — Fed. Supp. —.
¹⁹ — Pac. (2d) —.

The court relied on *United States v. Laudani* (134 Fed. (2d) 847²⁰), in which it was held that a foreman having authority to hire and discharge workers engaged in public construction work was not guilty of receiving a rebate under the Federal Anti-Kick-back Statute (40 U. S. C. A., Sec. 276b), since he did not pay any part of the wages under the contract of employment.²¹ In a similar manner, the court reasoned that since the wages of the employee working in the treasurer's office were paid by the county, the amounts received by the treasurer were collected by him as an individual and not as an employer.

Responsibility for employment of child labor.—A 12-year old girl brought an action for damages for personal injury against a school board of education. In return for her daily services in the school cafeteria owned and operated by the board, she was given a 15-cent lunch. She suffered an injury as a result of falling from a defective stool. It was claimed that the board had illegally employed a minor (New York Labor Law, Consol. Laws, c. 31, section 130) and failed to keep the school furniture repaired, in violation of the Education Law (section 275, subdivision 14). No claim of common-law negligence was made. The appellate court reversed a judgment of the trial court for the plaintiff, and an appeal was taken to the highest State court in *Warney v. Board of Education of School Dist. No. 5 of Town of Irondequoit et al.*²²

The school board contended that the cafeteria was not a "restaurant" within the purview of the child-labor law, which prohibits the employment of children under 16 years of age in restaurants. The court rejected the argument that the statute was directed to more commercial employments. It also stated that whether the cafeteria was a restaurant need not be determined, since the Education Law (section 629) makes unlawful the employment of a child under 16 years of age in any business or service, and that the cafeteria was such a "service." The court further held that the violation of the State child-labor law was itself evidence of negligence, reversed the judgment of the appellate court, and ordered a new trial.

²⁰ Discussed in Monthly Labor Review, May 1943 (p. 946).

²¹ Contra, *United States v. McGraw*, 47 Fed. Supp. 927.

²² 290 N. Y. 329, 49 N. E. (2d) 466, reversing 264 App. Div. 813, 34 N. Y. S. (2d) 787.

National Income

Wages and Salaries and Other Income, 1939-43

A STUDY of the national product and income from 1939 to the second quarter of 1943,¹ made by the Department of Commerce contains comparisons of the aggregate income of employed persons and other groups, data on consumer expenditures and savings, and other information of labor interest. It is stated that a new stage in the development of the war economy has been reached. After an unprecedented expansion, the national economy is approaching a ceiling on total output, as a result of shortages of manpower and other resources. Even without correction for price increases, the rate of growth of the gross national product fell off in the first half of 1943. War expenditures, although continuing to increase as a percentage of the total gross national product, also exhibited a leveling-off trend. Consumer expenditures remained high but, when deflated to take account of price increases, they indicated no considerable change in volume of consumption.

The changes in national income by distributive shares from 1939 to the second quarter of 1943 are indicated in table 1.

TABLE 1.—National Income, by Distributive Shares, 1939-43¹

Item	National income					
	Amount (billions)			Index numbers (1939=100)		
	1939	1941	Second quarter, 1943 ²	1939	1941	Second quarter, 1943 ²
Total national income.....	\$70.8	\$95.6	\$146.1	100.0	135.0	206.4
Total compensation of employees.....	48.1	64.6	103.2	100.0	134.3	214.6
Salaries and wages.....	44.2	60.9	100.0	100.0	137.8	226.2
Supplements.....	3.8	3.7	3.2	100.0	97.4	84.2
Net income of proprietors.....	11.2	15.5	24.6	100.0	138.4	219.6
Agricultural.....	4.3	6.2	13.6	100.0	144.2	316.3
Nonagricultural.....	6.9	9.3	11.0	100.0	134.8	159.4
Interest and net rents.....	7.4	7.9	9.5	100.0	106.8	128.4
Net corporate profit.....	4.2	7.7	8.7	100.0	183.3	207.1
Dividends.....	3.8	4.4	-----	100.0	115.8	-----
Savings.....	.4	3.3	-----	100.0	825.0	-----

¹ Compiled from tables 2 and 6, National Product and Income in the First Half of 1943 (Survey of Current Business, August 1943, pp. 9-14). Items do not necessarily add to totals given, because of rounding of figures.

² Seasonally adjusted figures for the second quarter multiplied by 4.

Total national income increased from \$70,800,000,000 in 1939 to \$95,600,000,000 in 1941; the seasonally adjusted annual rate in the

¹ Survey of Current Business, August 1943 (pp. 9-14); National Product and Income in the First Half of 1943, by George Jaszi. Earlier studies giving additional details and definitions of terms include an article by Milton Gilbert and George Jaszi, entitled "National Income and National Product in 1942," in Survey of Current Business, March 1943 (pp. 10-26).

second quarter of 1943 was \$146,100,000,000, or over twice the income of 1939. The compensation of employees totaled \$48,100,000,000 in 1939 and the seasonally adjusted annual rate during the second quarter of 1943 was \$103,200,000,000, also more than twice the 1939 total. The largest increase in the major shares of the national income was in the share going to agricultural proprietors, the amount at the seasonally adjusted annual rate in the second quarter of 1943 being more than 3 times the amount in 1939. Net corporate profits increased by a slightly smaller percentage than did compensation of employees.

The figures given in table 1 are aggregates, and the analysis of the comparative changes in the distributive shares of the national income going to different groups calls for consideration of changes in the numbers in the different groups and of changes in the hours of work. The changes in the numbers of persons receiving the different forms of income were mainly in the employed group. The total income going to this group was vastly increased by the abnormal growth in the number of employed persons. The estimated average was 32,721,000 in 1939 and 49,181,000 in the second quarter of 1943. This increase of 50 percent was accounted for almost equally by the expansion of civilian employment and by additions to the armed forces. The rise in hours of work, accompanied by premium payments for overtime, also added substantially to wage payments. In May 1943 the hours of factory workers were about 20 percent longer than in 1939. The increases in most of the nonmanufacturing industries were not so large but were nevertheless considerable.

Gross national product or gross national expenditure is defined as the aggregate value of currently produced goods and services flowing to government, to consumers, and, for the purpose of gross capital formation, to business. The gross national product in 1939 totaled \$88,600,000,000 and the seasonally adjusted annual rate in the second quarter of 1943 was \$184,900,000,000 (table 2).

TABLE 2.—Gross National Product or Expenditure, 1939-43¹

Item	Amount (in billions)		
	1939	1941	Second quarter 1943 ²
Gross national product or expenditure	\$88.6	\$119.2	\$184.9
Government expenditures for goods and services	16.0	25.7	96.7
Federal Government	7.9	17.8	89.9
War	1.4	12.5	87.1
Nonwar	6.5	5.3	2.8
State and local government	8.1	7.8	6.8
Output available for private use	72.6	93.5	88.1
Private gross capital formation	10.9	19.0	-1.1
Construction	3.6	5.4	1.5
Residential	2.0	2.9	-----
Other	1.6	2.5	-----
Producers' durable equipment	5.5	8.9	2.0
Net change in business inventories .....	.9	3.5	-3.4
Net exports of goods and services .....	.8	.9	-1.1
Net exports and monetary use of gold and silver .....	.2	.2	(³)
Consumers' goods and services	61.7	74.6	89.2
Durable goods	6.4	9.1	6.3
Nondurable goods	32.6	40.1	53.8
Services	22.7	25.4	29.1

¹ Compiled from tables 1 and 5, National Product and Income in the First Half of 1943 (Survey of Current Business, August 1943, pp. 9-14). Items do not necessarily add to totals given, because of rounding of figures.

² Seasonally adjusted figures for the second quarter multiplied by 4.

³ Less than \$50,000,000.

It will be noted from table 2 that an outstanding change was the rise in expenditures for war from \$1,400,000,000 in 1939 to \$87,100,000,000 (at the seasonally adjusted annual rate) in the second quarter of 1943. The latter figure is 47 percent of the gross national product. The remarkable productivity of the American economy is apparent from the fact that in spite of this tremendous increase in expenditures for war, the expenditures for consumer goods and services also increased, the rise being from \$61,700,000,000 in 1939 to \$89,200,000,000 (at the seasonally adjusted annual rate) in the second quarter of 1943. There was a significant net increase even after deflation of expenditures to take account of price changes. Consumer expenditures, in terms of 1939 dollars, rose to about \$70,000,000,000 in 1941 and by the second quarter of 1943 there was a slight additional increase. It is stated, however, that private capital formation was reduced and that consumer expenditures were partly fed by heavy drains on business inventories.

Consumer expenditures increased materially, but taxes and savings increased to a much greater extent (table 3). Personal taxes and nontax payments to Federal, State, and local governments increased from \$3,100,000,000 in 1939 to \$4,000,000,000 in 1941, and by the second quarter of 1943 the seasonally adjusted annual rate had risen to \$14,700,000,000. The net savings of individuals rose from \$6,000,000,000 in 1939 to \$13,700,000,000 in 1941, and, on the basis of the seasonally adjusted annual rate, to \$36,600,000,000 in the second quarter of 1943.

TABLE 3.—Disposition of National Income, 1939-43¹

Item	Amount (in billions)		
	1939	1941	Second quarter 1943 ²
Income payments to individuals.....	\$70.8	\$92.2	\$140.5
Personal taxes and nontax payments.....	3.1	4.0	14.7
Federal.....	1.3	2.0	12.8
State and local.....	1.9	1.9	1.9
Disposable income of individuals.....	67.7	88.2	125.8
Consumer expenditures.....	61.7	74.6	89.2
Net savings of individuals.....	6.0	13.7	36.6

¹ Compiled from tables 3 and 7, National Product and Income in the First Half of 1943 (Survey of Current Business, August 1943, pp. 9-14). Items do not necessarily add to totals given, because of rounding of figures.

² Seasonally adjusted figures for the second quarter multiplied by 4.

The author of the article here reviewed concludes with the following comment:

The more than doubling of gross national product since 1939, two-thirds of which has been due to an increase in physical volume rather than to a rise in prices, indicates that the economy has responded to the production requirements of the war program. In interpreting the significance of the surging level of savings, one should remember that these savings include windfalls that are the result of the price rise, and that they exceed the amount of voluntary saving which constitutes an offset against inflation at the current level of income. A large proportion of savings, moreover, continues to be made in highly liquid form, and will constitute a latent inflationary threat, unless it is absorbed by taxes or immobilized by other means.

Wage and Hour Regulations

40-Cent Minimum for Home Workers in Embroidery Industry

TO BE effective November 15, 1943, the minimum hourly rate for industrial home workers in the embroideries industry has been fixed at 40 cents under the Fair Labor Standards Act of 1938. "This rate shall be paid by every employer to each of his home-work employees, except as subminimum employment of specific handicapped workers has been provided for by special certificates issued by the Wage and Hour Division." Overtime is to be compensated for at one and one-half times the regular rate.¹

The wage order for the embroideries industry provides that no work in this industry shall be carried on in or about a home, apartment, tenement, or room in a residential establishment, after November 15, 1943, except by persons who have secured special home-work certificates issued in accordance with the regulations of the Wage and Hour Division authorizing such work by a worker who—

(a) (1) Is unable to adjust to factory work because of age or physical or mental disability; or

(2) Is unable to leave home because his presence is required to care for an invalid in the home; and

(b) (1) Was engaged in industrial home work in the industry, as defined, prior to November 2, 1942 (except that if this requirement shall result in unusual hardship to the individual home worker it shall not be applied); or

(2) Is at any time engaged in such industrial home work under the supervision of a State vocational rehabilitation agency or of a sheltered workshop.

The embroideries industry is defined as—

The production of all kinds of hand- and machine-made embroideries and ornamental stitchings, including, but not by way of limitation, tucking, shirring, smocking, hemstitching, hand rolling, fagoting, Bonnaz embroidery, appliqueing, crochet beading, hand drawing, machine drawing, rhinestone trimming, sequin trimming, spangle trimming, eyelets, passementerie, pleating, the application of rhinestones and nailheads, stamping and perforating of designs, Schiffl embroidery and laces, burnt-out laces and velvets, Swiss hand-machine embroidery, thread splitting, embroidery thread cutting, scallop cutting, lace cutting, lace making-up of embroidered yard goods, straight cutting of embroidery and cutting out of embroidery, embroidery trimmings, bindings (not made in textile establishments), pipings and emblems: Provided, however, that (a) the foregoing when produced or performed by a manufacturer of a garment, fabric or other article for use on such garment, fabric or other article, and (b) the manufacture of covered buttons and buckles, shall not be included.

¹ Data are from Federal Register for September 3, 1943, (pp. 12,127-12,128).

Recommended Optimum Hours in Australia¹

WEEKLY hours ranging from 40 to 56, according to type of work, were recently recommended by the Industrial Welfare Division of the Australian Department of Labor and National Service, as the optimum for regular and continuous employment.² These hours were arrived at after study to determine what hours would give the greatest output continuously, that is, for 6 months or longer, in work requiring different degrees of physical or mental effort. The recommended scale was as follows:

	<i>Weekly hours</i>
Laboring or muscular work (done entirely by physical exertion of the worker)-----	1 44-45
Nonautomatic machine work requiring physical exertion.....	48
Work requiring constant attention but little muscular exertion, i. e., semi-automatic (and some automatic) machine work, most process work.....	2 48-52
Work requiring only intermittent attention and not physical exertion, i. e., some automatic machine work:	
Men-----	56
Women-----	52
Mental work—clerical and inspection.....	2 40-48

¹ Shorter hours should be worked under specially arduous conditions, e. g., in high temperatures.

² The maximum depends on the degree of concentration required.

Hours of juveniles.—Juveniles, that is, boys and girls under the age of 18 years, should not be asked to work over 44 hours a week regularly. If they are employed with men and women whose workweek is longer, that circumstance does not constitute a sufficient reason for permitting juveniles to work in excess of 44 hours. If necessary, part-time labor should be employed to man the machinery after the juveniles have completed 44 hours of work weekly.

Hours of men and women.—The report states that there is no reason for hours of men and women to differ, except that women should not be employed regularly for over 52 hours a week.

Shifts, averaging of hours, etc.—It is concluded that averaging of weekly hours will not reduce output seriously. Within reasonable limits, and to meet technical requirements, hours may be lengthened for a few weeks and correspondingly reduced for an equivalent period.

On the 3-shift system, unless required by technically continuous production, hours should not exceed 52 weekly.

On broken shifts, half of the break should be added to actual working time in computing the maximum length of the broken shift. By this means, allowance can be made for the loss of rest and free time caused by the longer spread of hours.

Hours on specific kinds of work.—In the opinion of the Department, labor engaged on heavy manual work in construction, navvying, or industry probably could not work over 44 or 46 hours weekly without an actual decline in production. Under particularly arduous condi-

¹ Data are from a report (No. 524) by Nelson Trusler Johnson, United States Minister, Canberra.

² Under the National Security (Hours of Work) Regulations, effective on November 30, 1942, total weekly hours are limited to 56 for males over 18 years of age and to 48 for males under that age, with the exception of 3 weeks in any 3 months, when longer hours are permitted in cases of emergency. The regulations are concerned with overtime, however, and were not intended to imply that 56 hours would be the most efficient for regular and continuous working.

tions, such as in high temperatures, less than 40 hours a week might produce the maximum output.

Muscular work includes many types, and on some assembly work (frequently done by women) there is little obvious physical exertion, but frequent movements of the arms and hands are required. Considerable dexterity is necessary and "it is probable that maximum output in this class of work will not be attained if hours are increased beyond 46 per week."

Nonautomatic machine work requiring physical exertion—for which a maximum of 48 hours per week is suggested—is common in machine shops. Work on the capstan lathe is typical. On such a lathe the operator must pay close attention to the machine throughout working hours, and must make a series of rhythmic muscular movements, some of which may require a good deal of exertion.

On semiautomatic machines in machine shops, the operator removes finished articles and inserts new ones. If this work consumes only part of the worker's time, 52 hours are deemed to give the best output. Where the worker has charge of several machines of this type, so that continuous concentration is required to tend the machines in turn, the working week should not exceed 48 hours. Also, when raw material is fed into a moving dial or belt, the speed of which usually demands a high degree of mental and visual concentration on the part of the operator, 48 hours should be the maximum.

The tasks described in the preceding paragraph, as well as most assembly work, fall in the classification "requiring constant attention but little muscular effort." For assembly work, recommended maximum hours are 48 to 52 weekly, according to the amount of concentration required. Other work that should be limited to such hours is done in the metal trades and in transport.

On automatic machinery that requires intermittent attention, the chief function of the operative is to see that the machine is fed with raw material. If the machine is of the hopper-fed type in which large quantities of materials are fed in at infrequent intervals, output should be constant per hour. In practice, when hours are excessive, more spoilage occurs, and, as work of this kind is uninteresting, the absenteeism rate rises if hours are increased beyond an average of 56.

All types of visual inspection and office work are classified as work that is predominantly mental, on which a maximum working week of from 40 to 48 hours is recommended. The Department believes that no good result is attained by requiring hours in excess of 48 on this kind of work unless it is of a most routine type. For work requiring close concentration the working week should be much shorter—not over 40 hours. The explanation is that the fatigue resulting from such work is produced by mental exertion and monotony. A clerk who concentrates on the same task all day cannot retain his efficiency as long as a person who does a variety of things.

Cost of Living and Retail Prices

Changes in Cost of Living in Large Cities, August 1943

FRESH vegetable prices continued seasonally lower from mid-July to mid-August and resulted in the third consecutive monthly decline in the cost of living for city workers—a drop of one-half of 1 percent. Food prices as a group were down 1.3 percent, and more than balanced smaller increases during the month for other goods and services. Since the decline in food prices began, in May, the average family food bill for staples has fallen 4.1 percent and the entire cost of living by 1.5 percent. On August 15 the index computed by the Bureau of Labor Statistics stood at 123.2 percent of its 1935–39 average.

Food prices were high in August notwithstanding the summer declines. They averaged about 9 percent above August 1942, and nearly 47 percent above the low levels prevailing just before the outbreak of war in Europe in August 1939. This August the sharp price declines for fresh fruits and vegetables averaged 7 percent, but they were considerably greater in some cities than in others. The price of cabbage fell nearly 25 percent during the month, sweetpotatoes and apples 17 percent, green beans 15 percent, onions and white potatoes 10 percent, and spinach 8 percent; there were smaller reductions for carrots and lettuce. However, fresh vegetables remained at comparatively high levels, about 33 percent above August 1942 and more than 90 percent above August 1939.

Aside from fresh produce, the most important declines in August were for fresh fish, the prices of which have been rising steadily to more than double pre-war levels. Under a new OPA ceiling regulation, there was a decline during the month of 3.5 percent. There were also declines for meats, amounting to 0.8 percent for beef and veal, 0.9 percent for pork and 1.1 percent for lamb, representing continued adjustments to an OPA “cut-back” which reduced prices in the previous month. The only other important food price movements were a seasonal increase of 9 percent for eggs, an advance of 4.6 percent for tea, and a decline of about 2 percent for canned peas.

Differences from city to city in food price changes were unusually great from July to August. In northern areas price reductions were especially large, amounting on the average to 2.3 percent in New York, 2.9 percent in Detroit, and 2.8 percent in Bridgeport and Denver. In many southern cities, because of the earlier growing season, prices had already begun to increase seasonally.

Living costs other than food were on the whole moderately higher from July to August. Clothing prices rose 0.2 percent, the disappearance of lower price lines more than balancing clearance sales for certain summer goods. Housefurnishings and fuels and utility rates were higher by 0.1 percent. Miscellaneous goods and services rose 0.3 percent, because of higher charges by hospitals, motion-picture houses, and beauty and barber shops in 7 of the 21 cities surveyed.

TABLE 1.—Indexes of Cost of Living in Large Cities on August 15, 1943, and Previous Dates

Date	Indexes ¹ (1935-39=100) of cost of—						
	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
1939: August 15	98.6	93.5	100.3	104.3	97.5	100.6	100.4
1941: January 15	100.8	97.8	100.7	105.0	100.8	100.1	101.9
1942: May 15	116.0	121.6	126.2	109.9	104.9	122.2	110.9
August 15	117.5	126.1	125.2	108.0	106.2	123.0	111.1
September 15	117.8	126.6	125.8	108.0	106.2	123.6	111.4
1943: July 15	123.8	139.0	128.6	(²)	107.7	125.4	115.9
August 15	123.2	137.2	128.9	(²)	107.8	125.5	116.2

¹ Based on changes in cost of goods purchased by wage earners and lower-salaried workers in large cities.
² Rents not surveyed in July or August.

TABLE 2.—Percent of Change ¹ in Cost of Living in Large Cities, in Specified Periods

Date	All items	Food	Clothing	Rent ²	Fuel, electricity, and ice	House-furnishings	Miscellaneous
July 15, 1943, to Aug. 15, 1943	-0.5	-1.3	+0.2	(³)	+0.1	+0.1	+0.3
Sept. 15, 1942, to Aug. 15, 1943	+4.6	+8.4	+2.5	0	+1.5	+1.5	+4.3
Aug. 15, 1942, to Aug. 15, 1943	+4.9	+8.8	+3.0	0	+1.5	+2.0	+4.6
May 15, 1942, to Aug. 15, 1943	+6.2	+12.8	+2.1	-1.7	+2.8	+2.7	+4.8
Jan. 15, 1941, to Aug. 15, 1943	+22.2	+40.3	+28.0	+2.9	+6.9	+25.4	+14.0
Aug. 15, 1939, to Aug. 15, 1943	+24.9	+46.7	+28.5	+3.5	+10.6	+24.8	+15.7

¹ Based on changes in cost of goods purchased by wage earners and lower-salaried workers in large cities.
² Changes through June 15, 1943.
³ Rents surveyed at quarterly dates, March 15, June 15, September 15, December 15.

TABLE 3.—Percent of Change ¹ in Cost of Living in Specified Periods, by Cities

City	Percent of change from—				
	Aug. 15, 1942, to Aug. 15, 1943	Aug. 15, 1939, to Aug. 15, 1943	Jan. 1, 1941, to Aug. 15, 1943	May 15, 1942, to Aug. 15, 1943	Sept. 15, 1942, to Aug. 15, 1943
Average: Large cities	+4.9	+24.9	+22.2	+6.2	+4.6
New England: Boston	+4.0	+23.5	+21.0	+5.7	+3.2
Middle Atlantic:					
Buffalo	+4.0	+27.2	+23.0	+4.0	+4.0
New York	+5.5	+23.8	+21.4	+8.2	+5.4
Philadelphia	+5.0	+25.3	+23.5	+6.8	+4.8
Pittsburgh	+5.9	+25.6	+22.1	+6.7	+5.2
East North Central:					
Chicago	+4.5	+24.3	+21.2	+5.3	+4.6
Cincinnati	+5.5	+27.2	+24.3	+6.8	+4.9
Cleveland	+7.5	+27.8	+35.3	+7.6	+6.9
Detroit	+5.6	+26.5	+23.4	+4.9	+5.2
West North Central:					
Kansas City	+5.0	+22.4	+22.7	+5.8	+5.2
Minneapolis	+3.8	+21.2	+18.7	+4.2	+3.4
St. Louis	+4.4	+25.0	+21.4	+6.1	+5.1
South Atlantic:					
Baltimore	+5.3	+27.1	+24.5	+6.1	+4.7
Savannah	+8.5	+32.8	+30.1	+9.1	+8.0
Washington, D. C.	+5.0	+24.4	+22.8	+7.0	+4.8
East South Central: Birmingham	+6.4	+28.3	+24.3	+6.5	+6.4
West South Central: Houston	+3.8	+21.3	+19.7	+5.1	+3.5
Mountain: Denver	+4.0	+22.7	+21.0	+4.7	+3.2
Pacific:					
Los Angeles	+2.7	+23.9	+21.5	+5.4	+2.3
San Francisco	+3.9	+25.2	+22.1	+5.7	+2.8
Seattle	+3.4	+25.4	+23.2	+3.8	+2.5

¹ Based on indexes of cost of goods purchased by wage earners and lower-salaried workers in large cities.

TABLE 4.—Indexes of Cost of Living, by Cities, August 15, 1943

City	Indexes ¹ (1935-39=100) of cost of—					
	All items	Food	Clothing	Fuel, electricity, and ice	House-furnishings	Miscellaneous
Average: Large cities.....	² 123.2	³ 137.2	⁴ 128.9	⁵ 107.8	⁴ 125.5	⁴ 116.2
New England: Boston.....	119.9	131.1	124.4	118.4	119.7	113.3
Middle Atlantic:						
Buffalo.....	125.3	138.1	128.5	104.8	126.6	121.6
New York.....	122.6	137.2	129.6	110.7	119.1	115.9
Philadelphia.....	122.5	135.3	129.3	105.8	123.8	114.8
Pittsburgh.....	123.6	137.8	132.0	110.3	124.7	115.5
East North Central:						
Chicago.....	122.7	136.4	124.3	103.2	120.4	113.9
Cincinnati.....	123.8	137.6	133.6	103.8	129.8	116.8
Cleveland.....	127.8	145.2	131.6	113.5	125.1	115.3
Detroit.....	124.6	134.8	129.9	108.8	123.3	122.7
West North Central:						
Kansas City.....	120.7	131.7	127.7	107.9	120.4	116.9
Minneapolis.....	120.8	130.4	128.0	102.5	125.8	118.6
St. Louis.....	122.6	140.2	129.3	106.2	117.6	112.4
South Atlantic:						
Baltimore.....	125.4	145.2	128.2	106.7	129.0	114.3
Savannah.....	131.9	152.4	132.3	113.0	121.5	122.6
Washington, D. C.....	122.7	138.5	136.3	106.5	131.5	120.7
East South Central: Birmingham	126.4	141.3	130.0	102.4	121.8	116.5
West South Central: Houston	122.1	136.2	130.7	92.8	123.2	118.3
Mountain: Denver.....	121.0	134.5	124.3	100.9	121.9	116.2
Pacific:						
Los Angeles.....	124.5	141.1	129.6	94.2	119.2	118.4
San Francisco.....	124.3	137.3	127.3	92.1	118.7	124.3
Seattle.....	125.8	139.8	130.9	102.4	121.2	123.5

¹ Based on changes in cost of goods purchased by wage earners and lower-salaried workers in large cities.

² Rents surveyed at quarterly dates—March 15, June 15, Sept. 15, Dec. 15.

³ Based on prices for 56 cities collected on the Tuesday nearest the 15th of the month.

⁴ Based on data for 21 cities.

⁵ Based on data for 34 cities.

TABLE 5.—Indexes of Cost of Living in Large Cities, 1935 to August 1943

Year	Indexes ¹ (1935-39=100) of cost of—						
	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
1935.....	98.1	100.4	96.8	94.2	100.7	94.8	98.1
1936.....	99.1	101.3	97.6	96.4	100.2	96.3	98.7
1937.....	102.7	105.3	102.8	100.9	100.2	104.3	101.0
1938.....	100.8	97.8	102.2	104.1	99.9	103.3	101.5
1939.....	99.4	95.2	100.5	104.3	99.0	101.3	100.7
1940.....	100.2	96.6	101.7	104.6	99.7	100.5	101.1
1941.....	105.2	105.5	106.3	106.2	102.2	107.3	104.0
1942.....	116.5	123.9	124.2	108.5	105.4	122.2	110.9
1943:							
Jan. 15.....	120.7	133.0	126.0	108.0	107.3	123.8	113.2
Feb. 15.....	121.0	133.6	126.2	108.0	107.2	124.1	113.6
Mar. 15.....	122.8	137.4	127.6	108.0	107.4	124.5	114.5
Apr. 15.....	124.1	140.6	127.9	108.0	107.5	124.8	114.9
May 15.....	125.1	143.0	127.9	108.0	107.6	125.1	115.3
June 15.....	124.8	141.9	127.9	108.0	107.7	125.4	115.7
July 15.....	123.8	139.0	128.6	(²)	107.7	125.4	115.9
Aug. 15.....	123.2	137.2	128.9	(²)	107.8	125.5	116.2

¹ Based on changes in cost of goods purchased by wage earners and lower-salaried workers in large cities.

² Rents collected at quarterly dates—Mar. 15, June 15, Sept. 15, and Dec. 15.

Food Prices in August 1943

PERCENTAGE increases in retail food costs on August 17, 1943, compared with August and September 1942, January 1941, and August 1939, are presented in table 1.

TABLE 1.—Percent of Change in Retail Prices of Food in 56 Large Cities Combined,¹ in Specified Periods, by Commodity Groups

Commodity group	Percent of change from—				
	July 13, 1943, to Aug. 17, 1943	Sept. 15, 1942, to Aug. 17, 1943	Aug. 18, 1942, to Aug. 17, 1943	Jan. 14, 1941, to Aug. 17, 1943	Aug. 15, 1939, to Aug. 17, 1943
All foods	-1.3	+8.4	+8.8	+40.3	+46.7
Cereals and bakery products	+3.3	+2.6	+2.7	+13.9	+15.7
Meats	-9	-7	+2	+28.3	+35.5
Beef and veal	-8	-5.4	-4.9	+9.0	+19.7
Pork	-9	-7.8	-7.3	+32.8	+29.9
Lamb	-1.1	+1.0	+1.5	+36.8	+36.6
Chickens	+1	+10.1	+11.7	+51.4	+55.6
Fish, fresh and canned	-2.9	+20.2	+22.8	+70.3	+103.0
Dairy products	0	+4.5	+6.0	+26.9	+43.3
Eggs	+9.0	+7.9	+14.9	+71.9	+84.6
Fruits and vegetables	-5.9	+31.0	+27.6	+82.1	+83.9
Fresh	-7.0	+37.7	+32.7	+92.1	+93.3
Canned	-2	+5.2	+6.0	+42.5	+42.1
Dried	+6	+11.5	+15.2	+60.5	+77.1
Beverages	+6	+1.2	+1.5	+37.8	+32.0
Fats and oils	0	+4.8	+5.1	+57.5	+49.7
Sugar and sweets	+2	-3	-1	+32.8	+32.4

¹ The number of cities included in the index was changed from 51 to 56 in March 1943, with the necessary adjustments for maintaining comparability. At the same time the number of foods in the index was increased from 54 to 61.

TABLE 2.—Indexes of Retail Costs of Food in 56¹ Large Cities Combined,² by Commodity Groups, in Specified Months

[1935-39=100]

Commodity group	1943		1942		1941	1939
	Aug. 17 ³	July 13	Sept. 15	Aug. 18	Jan. 14	Aug. 15
All foods	137.2	139.0	126.6	126.1	97.8	93.5
Cereals and bakery products	108.1	⁴ 107.8	105.4	105.3	94.9	93.4
Meats	129.7	⁴ 130.9	130.6	129.5	101.1	95.7
Beef and veal	119.2	120.2	126.0	125.3	109.4	99.6
Pork	114.3	115.3	124.0	123.3	86.1	88.0
Lamb	135.0	136.5	133.7	133.0	98.7	98.8
Chickens	147.2	⁴ 147.1	133.7	131.8	97.2	94.6
Fish, fresh and canned	202.2	208.3	168.2	164.7	118.7	99.6
Dairy products	133.4	⁴ 133.4	127.7	125.8	105.1	93.1
Eggs	167.4	153.6	155.2	145.7	97.4	90.7
Fruits and vegetables	169.9	⁴ 180.5	129.7	133.1	93.3	92.4
Fresh	179.4	⁴ 192.9	130.3	135.2	93.4	92.8
Canned	130.2	130.5	123.8	122.8	91.4	91.6
Dried	159.9	159.0	143.4	138.8	99.6	90.3
Beverages	125.3	124.5	123.8	123.5	90.9	94.9
Fats and oils	126.5	126.5	120.7	120.4	80.3	84.5
Sugar and sweets	126.6	⁴ 126.4	127.0	126.7	95.3	95.6

¹ Indexes based on 51 cities combined prior to March 1943.

² Aggregate costs of 61 foods (54 foods prior to March 1943) in each city, weighted to represent total purchases of families of wage earners and lower-salaried workers, have been combined with the use of population weights.

³ Preliminary.

⁴ Revised.

RETAIL COST OF ALL FOODS

AVERAGE FOR 51 LARGE CITIES
1935-39=100



UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

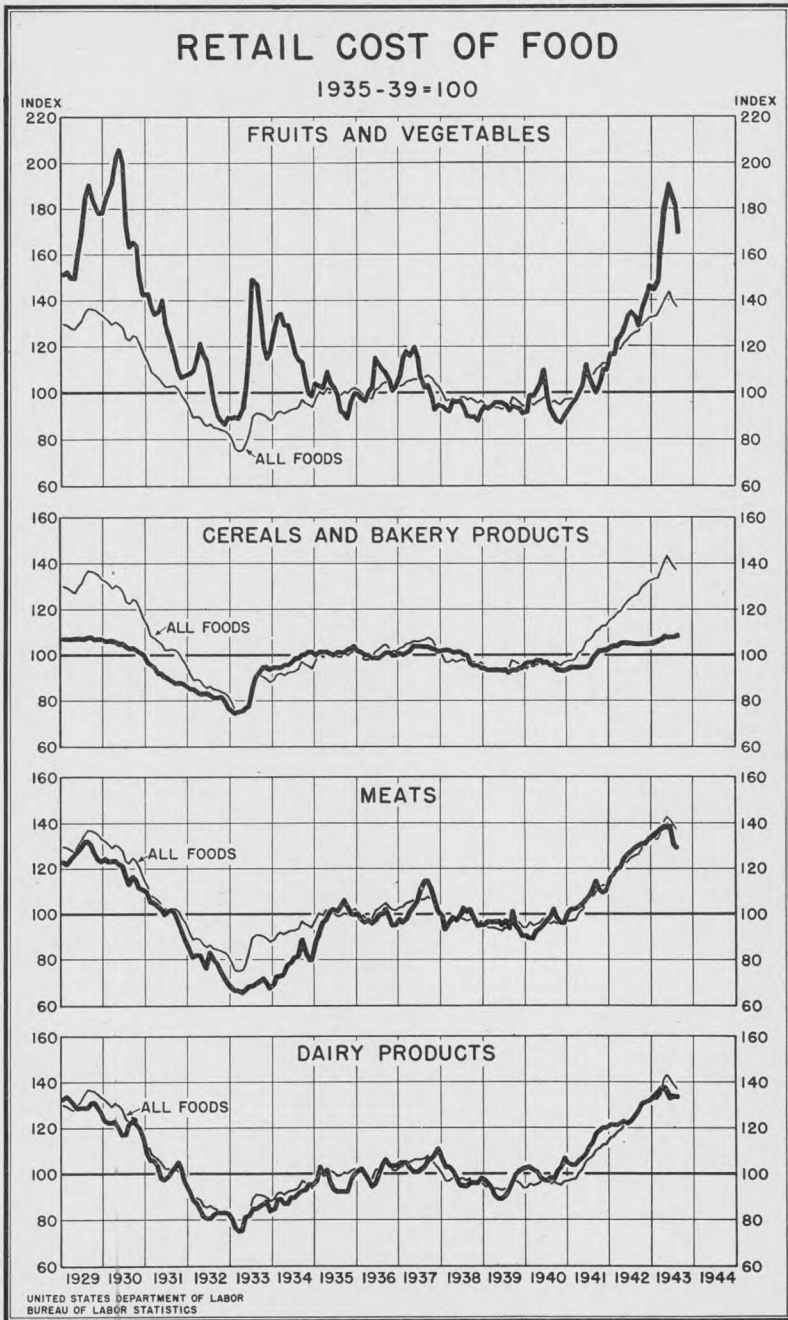


TABLE 3.—Average Retail Prices of Foods in Large Cities Combined,¹ August 1943, and Percent of Change in Specified Periods

Commodity	Average price	Percent of change from—				
		July 13, 1943, to Aug. 17, 1943	Sept. 15, 1942, to Aug. 17, 1943	Aug. 18, 1942, to Aug. 17, 1943	Jan. 14, 1941, to Aug. 17, 1943	Aug. 15, 1939, to Aug. 17, 1943
Cereals and bakery products:						
Cereals:						
Cents						
Flour, wheat..... 10 pounds.....	61.7	+0.5	+13.6	+18.2	+49.0	+72.3
Macaroni..... pound.....	15.6	0	+10.6	+10.6	+13.0	+11.4
Wheat cereal ² 28 ounces.....	23.4	0	-2.5	-2.5	-4	-3.3
Corn flakes..... 8 ounces.....	6.7	+1.5	-4.3	-5.6	-5.6	-4.3
Corn meal..... pound.....	5.8	+1.8	+16.0	+18.4	+38.1	+45.0
Rice ² do.....	12.8	+1.6	+2.4	+3.2	+62.0	+70.7
Rolled oats..... do.....	8.6	0	-1.1	-1.1	+21.1	+21.1
Flour, pancake ² 20 ounces.....	10.5	0	(³)	(³)	(³)	(³)
Bakery products:						
Bread, white..... pound.....	8.9	0	+2.3	+2.3	+14.1	+14.1
Bread, whole-wheat..... do.....	9.8	0	+3.2	+3.2	+12.6	+11.4
Bread, rye..... do.....	10.1	0	+4.1	+4.1	+12.2	+9.8
Vanilla cookies..... do.....	28.1	-1.4	+4.1	+1.8	+12.0	(⁴)
Soda crackers..... do.....	18.4	+2.2	+10.8	+11.5	+22.7	+24.3
Meats:						
Beef:						
Round steak..... do.....	41.6	-1.7	-5.9	-5.5	+7.8	+14.3
Rib roast..... do.....	33.7	-1.2	-2.9	-2.0	+7.0	+16.6
Chuck roast..... do.....	29.0	-3	-3.3	-2.4	+15.1	+28.9
Stew meat ² do.....	30.8	-1.3	(⁵)	(⁵)	(⁵)	(⁵)
Liver..... do.....	36.1	-1.9	(⁵)	(⁵)	(⁵)	(⁵)
Hamburger..... do.....	28.3	-1.4	(⁵)	(⁵)	(⁵)	(⁵)
Veal:						
Cutlets..... do.....	45.5	-1.7	-17.1	-16.7	+7	+7.1
Roast, boned and rolled ² do.....	34.6	-6	(⁵)	(⁵)	(⁵)	(⁵)
Pork:						
Chops..... do.....	38.0	-8	-11.8	-11.4	+30.6	+23.0
Bacon, sliced..... do.....	42.2	-1.2	+3.2	+5.5	+40.2	+38.8
Ham, sliced..... do.....	52.6	-1.1	-11.7	-11.1	+16.6	+13.4
Ham, whole..... do.....	36.1	-6	-5.7	-5.0	+37.8	+31.8
Salt pork..... do.....	23.0	-4	-3.4	-3.0	+37.7	+49.4
Liver ² do.....	22.2	-1.3	(⁵)	(⁵)	(⁵)	(⁵)
Sausage ² do.....	38.4	-3	(⁵)	(⁵)	(⁵)	(⁵)
Bologna, big ² do.....	34.4	-6	(⁵)	(⁵)	(⁵)	(⁵)
Lamb:						
Leg..... do.....	40.0	-1.2	+5.5	+6.1	+43.9	+44.9
Rib chops..... do.....	46.0	-1.1	-2.3	-1.7	+31.4	+25.3
Poultry: Roasting chickens ⁵ do.....	44.3	+1	+10.1	+11.7	+51.4	+55.6
Fish:						
Fish (fresh, frozen) ⁵ do.....	(⁶)	-3.5	+22.4	+25.8	+74.5	+106.0
Salmon, pink..... 16-ounce can.....	23.7	-8	+8.7	+9.2	+51.0	+85.2
Salmon, red ² do.....	41.4	+1.2	+2.0	+2.5	+56.8	+79.2
Dairy products:						
Butter..... pound.....	50.5	7 +.2	-2	+4.3	+32.9	+64.5
Cheese..... do.....	37.4	-1.8	+9.0	+10.0	+38.5	+51.4
Milk, fresh (delivered)..... quart.....	15.5	0	+3.3	+3.3	+19.2	+29.2
Milk, fresh (store)..... do.....	14.4	0	+6.7	+6.7	+21.0	+30.9
Milk, fresh (delivered and store) ² do.....	15.1	0	+4.1	+4.1	+18.9	+29.1
Milk, evaporated..... 14½-ounce can.....	10.1	0	+13.5	+16.1	+42.3	+50.7
Eggs: Eggs, fresh ⁵ dozen.....	59.2	+9.0	+7.9	+14.9	+71.9	+84.6
Fruits and vegetables:						
Fresh fruits and vegetables:						
Fruits:						
Apples..... pound.....	11.3	-16.9	+82.3	+71.2	+117.3	+156.8
Bananas..... do.....	12.0	+8	+16.5	+20.0	+81.8	+96.7
Oranges..... dozen.....	50.3	+4.8	+28.6	+27.7	+84.2	+59.7
Grapefruit ² each.....	9.6	-5.9	+2.1	+14.3	(⁸)	(⁸)
Vegetables:						
Beans, green..... pound.....	13.7	-14.9	+18.1	+13.2	-2.1	+90.3
Cabbage..... do.....	4.9	-24.6	+25.6	+16.7	+44.1	+25.6
Carrots..... bunch.....	8.1	-2.4	+17.4	+19.1	+35.0	+76.1
Lettuce..... head.....	12.6	-6.7	+8	-14.3	+50.0	+50.0
Onions..... pound.....	7.9	-10.2	+75.6	+75.6	+119.4	+119.4
Potatoes..... 15 pounds.....	64.5	-9.8	+33.5	+30.6	+120.9	+87.5
Spinach..... pound.....	13.4	-7.6	+25.2	+26.4	+83.6	+71.8
Sweetpotatoes..... do.....	14.2	-17.4	+121.9	+71.1	+184.0	+158.2
Beets ² bunch.....	8.2	-3.5	(⁸)	(⁸)	(⁸)	(⁸)
Canned fruits and vegetables:						
Canned fruits:						
Peaches..... No. 2½ can.....	26.8	-4	+11.7	+13.6	+62.4	+56.7
Pineapple..... do.....	28.0	0	-1.1	+1.4	+34.0	+33.3
Grapefruit juice..... No. 2 can.....	14.3	0	+15.3	+22.2	(⁸)	(⁸)

See footnotes at end of table.

TABLE 3.—Average Retail Prices of Foods in Large Cities Combined,¹ August 1943, and Percent of Change in Specified Periods

Commodity	Average price	Percent of change from—				
		July 13, 1943, to Aug. 17, 1943	Sept. 15, 1942, to Aug. 17, 1943	Aug. 18, 1942, to Aug. 17, 1943	Jan. 14, 1941, to Aug. 17, 1943	Aug. 15, 1939, to Aug. 17, 1943
Fruits and vegetables—Continued.						
Canned fruits and vegetables—Continued.						
Canned vegetables:						
Beans, green..... No. 2 can	14.6	0	+6.6	+5.8	+46.0	+46.0
Corn..... do	14.0	0	+5.3	+6.9	+30.8	+34.6
Peas..... do	14.6	-2.0	0	-2.7	+10.6	+7.4
Tomatoes..... do	12.5	- .8	+7.8	+7.8	+48.8	+45.3
Soup, vegetable ² 11-ounce can	12.8	-2.3	(³)	(³)	(³)	(³)
Dried fruits and vegetables:						
Fruits: Prunes..... pound	16.7	0	+12.8	+21.9	+74.0	+89.8
Vegetables:						
Navy beans..... do	10.3	+3.0	+13.2	+14.4	+58.5	+77.6
Soup, dehydrated, chicken noodle ² ounce	3.7	0	(³)	(³)	(³)	(³)
Beverages:						
Coffee..... pound	30.0	0	+4.5	+3.8	+44.9	+34.5
Tea..... ¼ pound	22.9	+4.6	+2.2	+1.3	+30.1	+33.1
Cocoa ² ½ pound	8.9	0	-12.7	-12.7	-2.2	+3.5
Fats and oils:						
Lard..... pound	18.9	- .5	+9.2	+11.2	+103.2	+90.9
Shortening other than lard:						
In cartons..... do	19.9	0	+2.1	+1.5	+76.1	+70.1
In other containers..... do	24.9	+ .4	+2.0	+ .4	+36.1	+23.3
Salad dressing..... pint	25.1	- .4	- .4	- .4	+24.9	(⁴)
Oleomargarine..... pound	24.0	+1.3	+7.1	+7.1	+53.8	+45.5
Peanut butter..... do	33.3	+ .6	+19.8	+23.8	+86.0	+86.0
Oil, cooking or salad ² pint	30.5	+ .3	(³)	(³)	(³)	(³)
Sugar and sweets:						
Sugar..... pound	6.8	0	-1.4	0	+33.3	+30.8
Corn sirup..... 24 ounces	15.7	0	+4.0	+4.7	+15.4	+14.6
Molasses ² 18 ounces	15.7	0	+5.4	+6.8	+17.2	+15.4
Apple butter ² 16 ounces	13.2	+ .8	(³)	(³)	(³)	(³)

1 Based on 51 cities combined prior to 1943 and on 56 cities combined from January 1943 to date.
 2 Not included in the index.
 3 Priced for the first time in February 1943.
 4 Not available.
 5 Percentage change computed on the index.
 6 Composite price not computed.
 7 July price revised from 51.1 to 50.4 cents per pound.
 8 Priced for the first time in October 1941.

TABLE 4.—Indexes of Average Retail Cost of all Foods, by Cities,¹ on Specified Dates

City	Indexes (1935-39=100)				City	Indexes (1935-39=100)			
	Aug. 17, 1943 ²	July 13, 1943	Aug. 18, 1942	Jan. 14, 1941		Aug. 17, 1943 ²	July 13, 1943	Aug. 18, 1942	Jan. 14, 1941
United States.....	137.2	139.0	126.1	97.8	East North Central:				
New England:					Chicago.....	136.4	³ 137.1	125.5	98.2
Boston.....	131.1	132.5	122.5	95.2	Cincinnati.....	137.6	³ 137.9	125.8	96.5
Bridgeport.....	135.2	139.1	126.4	96.5	Cleveland.....	145.2	145.0	125.8	99.2
Fall River.....	134.0	135.6	125.4	97.5	Columbus, Ohio.....	131.6	130.8	119.2	93.4
Manchester.....	133.7	136.6	125.2	96.6	Detroit.....	134.8	138.8	123.7	97.0
New Haven.....	136.7	138.2	125.2	95.7	Indianapolis.....	135.1	137.0	126.9	98.2
Portland, Maine.....	133.6	136.1	125.8	95.3	Milwaukee.....	134.4	136.2	121.7	95.9
Providence.....	135.0	135.8	126.1	96.3	Peoria.....	141.2	143.2	130.2	99.0
Middle Atlantic:					Springfield, Ill.....	142.1	144.2 ⁴	130.9	96.2
Buffalo.....	138.1	140.5	127.6	100.2	West North Central:				
Newark.....	139.0	141.2	127.0	98.8	Cedar Rapids ⁴	138.0	139.6	120.0	95.9
New York.....	137.2	³ 140.5	125.1	99.5	Kansas City.....	131.7	132.0	121.2	92.4
Philadelphia.....	135.3	135.8	124.0	95.0	Minneapolis.....	130.4	131.3	122.9	99.0
Pittsburgh.....	137.8	³ 138.9	125.0	98.0	Omaha.....	130.8	133.3	121.4	97.9
Rochester.....	133.1	134.8	125.2	99.9	St. Louis.....	140.2	141.6	129.0	99.2
Scranton.....	137.5	139.6	125.5	97.5	St. Paul.....	128.9	131.2	119.7	98.6
					Wichita ⁴	146.2	146.7	131.3	97.2

See footnotes at end of table.

TABLE 4.—Indexes of Average Retail Cost of all Foods, by Cities,¹ on Specified Dates—Continued

City	Indexes (1935-39=100)				City	Indexes (1935-39=100)			
	Aug. 17, 1943 ²	July 13, 1943	Aug. 18, 1942	Jan. 14, 1941		Aug. 17, 1943 ²	July 13, 1943	Aug. 18, 1942	Jan. 14, 1941
South Atlantic:					West South Central:				
Atlanta.....	139.2	141.5	124.9	94.3	Dallas.....	135.4	135.5	122.7	92.6
Baltimore.....	145.2	146.3	129.6	97.9	Houston.....	136.2	137.4	130.0	102.6
Charleston, S. C.....	136.5	136.4	125.2	95.9	Little Rock.....	137.6	135.2	127.6	95.6
Jacksonville.....	150.9	152.5	134.9	98.8	New Orleans.....	153.3	153.8	135.6	101.9
Norfolk ³	151.1	150.4	131.6	95.8	Mountain:				
Richmond.....	137.0	136.9	125.6	93.7	Butte.....	137.2	³ 138.6	123.6	98.7
Savannah.....	152.4	153.0	132.3	100.5	Denver.....	134.5	138.4	126.0	94.8
Washington, D. C.....	138.5	140.1	127.5	97.7	Salt Lake City.....	139.5	142.2	128.8	97.5
Winston-Salem ⁴	138.3	³ 136.5	121.1	93.7	Pacific:				
East South Central:					Los Angeles.....	141.1	142.4	136.8	101.8
Birmingham.....	141.3	140.9	126.1	96.0	Portland, Oreg.....	144.7	145.7	137.8	101.7
Jackson ⁴	151.5	148.1	134.0	105.3	San Francisco.....	137.3	³ 140.0	130.2	99.6
Knoxville ⁴	156.2	³ 155.8	132.9	97.1	Seattle.....	139.8	140.9	136.1	101.0
Louisville.....	134.7	134.9	124.3	95.5					
Memphis.....	148.0	147.7	132.1	94.2					
Mobile.....	149.7	148.6	131.4	97.9					

¹ Aggregate costs of 61 foods (54 foods prior to March 1943) in each city, weighted to represent total purchases of families of wage earners and lower-salaried workers, have been combined for the United States with the use of population weights. Primary use is for time-to-time comparisons rather than place-to-place comparisons.

² Preliminary.

³ Revised.

⁴ Indexes based on June 1940=100.

⁵ Includes Portsmouth and Newport News.

Annual Average Indexes, 1913 to August 1943

Annual average indexes of food costs for the years 1913-42 and monthly indexes for January 1942 through August 1943 are presented in table 5.

TABLE 5.—Indexes of Retail Food Costs in 56 Large Cities Combined,¹ 1913 to August 1943

[1935-39=100]

Year	All-foods index	Year	All-foods index	Year and month	All-foods index	Year and month	All-foods index
1913.....	79.9	1927.....	132.3	1941.....	105.5	October.....	129.6
1914.....	81.8	1928.....	130.8	1942.....	123.9	November.....	131.1
1915.....	80.9	1929.....	132.5			December.....	132.7
1916.....	90.8	1930.....	126.0	1942			
1917.....	116.9	1931.....	103.9	1943			
1918.....	134.4	1932.....	86.5	January.....	116.2		
1919.....	149.8	1933.....	84.1	February.....	116.8	January.....	133.0
1920.....	168.8	1934.....	93.7	March.....	118.6	February.....	133.6
1921.....	128.3	1935.....	100.4	April.....	119.6	March.....	137.4
1922.....	119.9	1936.....	101.3	May.....	121.6	April.....	140.6
1923.....	124.0	1937.....	105.3	June.....	123.2	May.....	143.0
1924.....	122.8	1938.....	97.8	July.....	124.6	June.....	141.9
1925.....	132.9	1939.....	95.2	August.....	126.1	July.....	139.0
1926.....	137.4	1940.....	96.6	September.....	126.6	August.....	137.2

¹ Indexes based on 51 cities combined prior to March 1943.

Estimated Intercity Differences in Cost of Living, March 15, 1943

TO COMPARE the cost of living in different cities, a standard budget was established by the Works Progress Administration. The budget measures the cost of approximately the same level of living and avoids differences caused by variations in income, habits, and customs. The figures here presented give a comparison based upon this standard budget at "maintenance" level for 33 cities.

This is not an official budget of the Department of Labor, nor does it represent a recommended standard of living. It was prepared by the WPA Division of Social Research, and its cost in 59 cities in March 1935 was computed by that Division.

Since 1939 the figures have been kept up to date by the Bureau of Labor Statistics. The Bureau has used its regularly reported changes in retail prices in the cities covered by the Bureau of Labor Statistics cost-of-living indexes to estimate changes in the cost of this standard budget each quarter, but such data can yield only approximate figures on differences in living costs between cities.

WPA "Maintenance" Budget and Later Revisions

The family budget devised by the Works Progress Administration in 1935 is made up of goods and services which they estimated were needed by a 4-person family of an unskilled manual worker living at the "maintenance" level. The "maintenance" level is described as above the "minimum of subsistence" level or "emergency" level of relief budgets, but below the standard of the skilled worker. It is stated that this budget does not "approach the content of what may be considered a satisfactory American standard of living".

The hypothetical family for which the budget was prepared is made up, according to the Works Progress Administration, of a moderately active man who wears overalls at work, his wife, a boy age 13, and a girl age 8. No household help is employed. The family lives in a four- or five-room house or apartment with an indoor bath and toilet; has gas, electricity, and a small radio; uses ice for refrigeration; and has no automobile. They read a daily newspaper and go to the movies once a week. Their food is an "adequate diet at minimum cost." They pay for their own medical care. No savings other than life insurance are provided.

An identical list of goods and services was priced in each of 59 cities in 1935, with certain adjustments in fuel, ice, and transportation to take account of climatic and other local conditions. The Bureau of Labor Statistics of the United States Department of Labor cooperated with the Division of Social Research of the Works Progress Administration in obtaining prices necessary to compute the original cost of the budget in 1935. Details of this study and a description of the goods and services included in the budget¹ can be found in the report "Intercity Differences in Costs of Living in March 1939, 59 Cities." (WPA Research Monograph XII.)

¹ The report also includes details of a more restricted budget at an "emergency" level. That budget has not been kept up to date by the Bureau of Labor Statistics.

The budget has never been completely repriced since 1935. In December 1938,² the budget was in part priced again in almost all of the cities and the food-cost budget was entirely recomputed in terms of the "adequate diet at minimum cost" of the United States Bureau of Home Economics. This diet provides greater variety than that originally used in the "maintenance" budget. In subsequent quarters, food costs have been recomputed, using current price data. For other parts of the budget, the current cost is estimated by using the changes recorded in the Bureau's regular indexes of changes in living costs from time to time.³ These indexes are based on a budget composed of different qualities of goods and having different relative importance than the Works Progress Administration "maintenance" budget. Because of these differences, the cost figures resulting from application of the cost-of-living indexes to the "maintenance" budget are merely approximations of the actual current cost of that budget.

In view of the changes in buying habits, particularly during the last 2 years, the "maintenance" budget as defined in 1935 is not entirely applicable to present situations. The figures are presented, however, in the absence of any better measure of comparison of living costs between cities.

Intercity Differences in March 1943

Table 1 shows the estimated dollar cost of the "maintenance" budget in 33 large cities as of March 15, 1943. Table 2 presents these data as relatives on the basis of the cost in Washington, D. C., at that date as 100.

TABLE 1.—Estimated Cost of Living of 4-Person Manual Worker's Family at Maintenance Level in 33 Cities, March 15, 1943

City	Total	Food	Clothing	Housing	Fuel and light	Furniture, furnishings, household equipment	Miscellaneous
Atlanta	\$1,628.56	\$662.46	\$200.22	\$291.25	\$98.18	\$36.74	\$339.71
Baltimore	1,622.37	662.84	209.37	255.17	109.48	45.03	340.48
Birmingham	1,568.17	649.31	214.60	245.19	74.94	38.44	345.69
Boston	1,706.92	645.18	207.75	271.79	154.06	39.68	388.46
Buffalo	1,626.49	649.56	213.77	259.74	115.14	40.62	347.66
Chicago	1,765.46	675.85	198.05	306.52	132.64	38.55	413.85
Cincinnati	1,645.15	652.69	226.34	276.02	99.51	43.71	346.88
Cleveland	1,731.31	660.43	226.94	304.51	117.27	40.75	381.41
Denver	1,578.81	633.45	203.99	243.27	115.32	39.19	343.59
Detroit	1,772.80	661.06	214.40	324.66	125.33	38.61	408.74
Houston	1,592.14	639.90	201.83	250.00	84.75	40.79	374.87
Indianapolis	1,594.09	627.96	200.43	253.91	102.34	41.23	368.22
Jacksonville	1,620.18	674.64	185.81	237.46	116.12	40.92	365.23
Kansas City	1,535.60	626.89	210.41	220.41	113.69	39.13	325.07
Los Angeles	1,617.02	627.65	213.12	250.10	71.07	41.28	413.80
Manchester	1,660.73	680.44	199.02	200.57	184.22	39.22	357.26
Memphis	1,633.66	648.44	228.52	287.12	89.97	42.79	336.82
Milwaukee	1,672.04	625.06	177.86	304.15	128.34	38.17	398.46
Minneapolis	1,699.37	652.98	205.66	310.70	141.95	39.06	349.02

² A study of "Differences in Living Costs in Northern and Southern Cities" was made at the request of the Wage and Hour Division. The July 1939 Monthly Labor Review carries an article describing the survey.

³ The Bureau's indexes of changes in living costs from time to time measure changes in the cost of a budget representing actual family expenditures of a cross section of employed wage earners and clerical workers in each of 34 cities. Since these expenditures differ in each city, depending on incomes, local habits, etc., indexes based on them cannot be used to compare living costs between cities. Further information about these indexes may be found in Bulletin 699, "Changes in Cost of Living in Large Cities in the United States, 1913-41," available from the Superintendent of Documents, Government Printing Office, Washington, D. C., and monthly mimeographed reports issued by the Bureau of Labor Statistics, U. S. Department of Labor, Washington, D. C.

TABLE 1.—Estimated Cost of Living of 4-Person Manual Worker's Family at Maintenance Level in 33 Cities, March 15, 1943—Continued

City	Total	Food	Clothing	Housing	Fuel and light	Furniture, furnishings, household equipment	Miscellaneous
Mobile.....	\$1,479.09	\$654.78	\$197.82	\$192.80	\$83.65	\$40.16	\$309.88
New Orleans.....	1,600.72	693.44	211.84	215.06	70.73	45.27	364.38
New York.....	1,800.38	714.71	208.26	311.04	129.99	41.22	395.16
Norfolk.....	1,691.48	680.98	219.08	262.41	113.72	43.44	371.85
Philadelphia.....	1,624.66	657.28	212.76	265.09	108.47	40.06	341.00
Pittsburgh.....	1,678.09	670.92	212.56	291.58	96.34	40.62	366.07
Portland, Maine.....	1,674.03	681.03	204.92	212.59	171.72	39.94	363.83
Portland, Oreg.....	1,665.87	678.17	200.98	205.86	161.32	41.13	378.41
Richmond.....	1,611.97	627.31	214.46	254.90	110.49	42.23	362.58
St. Louis.....	1,689.29	677.20	204.09	296.38	114.13	43.10	354.39
San Francisco.....	1,789.61	695.20	214.55	292.04	83.71	43.48	460.63
Scranton.....	1,649.68	675.98	202.95	263.89	102.60	39.62	364.64
Seattle.....	1,696.97	687.11	217.08	201.98	129.13	42.72	418.95
Washington.....	1,789.33	657.32	225.21	351.75	122.60	45.08	387.37

TABLE 2.—Estimated Cost of Living of 4-Person Manual Worker's Family at Maintenance Level in 33 Cities as Percent of Cost in Washington, D. C., March 15, 1943

City	Total	Food	Clothing	Housing	Fuel and light	Furniture, furnishings, household equipment	Miscellaneous
Atlanta.....	91.0	100.8	88.9	82.8	80.1	81.5	87.7
Baltimore.....	90.7	100.8	93.0	72.5	89.3	99.9	87.9
Birmingham.....	87.6	98.8	95.3	69.7	61.1	85.3	89.2
Boston.....	95.4	98.2	92.2	77.3	125.7	88.0	100.3
Buffalo.....	90.9	98.8	94.9	73.8	93.9	90.1	89.7
Chicago.....	98.7	102.8	87.9	87.1	108.2	85.5	106.8
Cincinnati.....	91.9	99.3	100.5	78.5	81.2	97.0	89.5
Cleveland.....	96.8	100.5	100.8	86.6	95.7	90.4	98.5
Denver.....	88.2	96.4	90.6	69.2	94.1	86.9	88.7
Detroit.....	99.1	100.6	95.2	92.3	102.2	85.6	105.5
Houston.....	89.0	97.3	89.6	71.1	69.1	90.5	96.8
Indianapolis.....	89.1	95.5	89.0	72.2	83.5	91.5	95.1
Jacksonville.....	90.5	102.6	82.5	67.5	94.7	90.8	94.3
Kansas City.....	85.8	95.4	93.4	62.7	92.7	86.8	83.9
Los Angeles.....	90.4	95.5	94.6	71.1	58.0	91.6	106.8
Manchester.....	92.8	103.5	88.4	57.0	150.3	87.0	92.2
Memphis.....	91.3	98.6	101.5	81.6	73.4	94.9	87.0
Milwaukee.....	93.4	95.1	79.0	86.5	104.7	84.7	102.9
Minneapolis.....	95.0	99.3	91.3	88.3	115.8	86.6	90.1
Mobile.....	82.7	99.6	87.8	54.8	68.2	89.1	80.0
New Orleans.....	89.5	105.5	94.1	61.1	57.7	100.4	94.1
New York.....	100.6	108.7	92.5	88.4	106.0	91.4	102.0
Norfolk.....	94.5	103.6	97.3	74.6	92.8	96.4	96.0
Philadelphia.....	90.8	100.0	94.5	75.4	88.5	88.9	88.0
Pittsburgh.....	93.8	102.1	94.4	82.9	78.6	90.1	94.5
Portland, Maine.....	93.6	103.6	91.0	60.4	140.1	88.6	93.9
Portland, Oreg.....	93.1	103.2	89.2	58.5	131.6	91.2	97.7
Richmond.....	90.1	95.4	95.2	72.5	90.1	93.7	93.6
St. Louis.....	94.4	130.0	90.6	84.3	93.1	95.6	91.5
San Francisco.....	100.0	105.8	95.3	83.0	68.3	96.5	118.9
Scranton.....	92.2	102.8	90.1	75.0	83.7	87.9	94.1
Seattle.....	94.8	104.5	96.4	57.4	105.3	94.8	108.2
Washington.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Living Costs in Puerto Rico¹

Summary

FROM March 1941 to December 1942 living costs to wage-earner families in Puerto Rico advanced twice as rapidly as in continental United States—39.3 percent as compared with 19.0 percent. Partial resumption of regular imports in the early months of 1943 resulted in some declines from the December 1942 peak for foodstuffs, but continuing increases in the costs of other elements in the budget raised July 1943 living costs to 1.7 percent above their December peak and 41.7 percent above their level in March 1941. Each of the six Puerto Rican communities for which separate cost-of-living indexes are available reported much the same variations in living costs. In San Juan, a city of 169,000 in 1940, living costs had risen 37 percent by December 1942, but in July 1943 were only 0.7 percent above the December peak. The other five municipalities all showed larger increases than San Juan until December 1942, and three of the five showed larger increases from that date to July 1943.

From June to July 1943 living costs in the Island dropped 0.4 percent, marking the first decline since January 1943 (table 1). Reductions in food costs, which now represent approximately 55 percent of wage earners' living costs, were chiefly responsible for the decline. Average prices of locally produced foods decreased 1.7 percent and those of imported foods 0.2 percent. Total living costs declined during the month in four of the six municipalities; small increases were shown in Comerio and Salinas.

TABLE 1.—Indexes of Living Costs, March 1941 to July 1943, in 6 Municipalities in Puerto Rico

Date	Puerto Rico	San Juan	Adjuntas	Comerio	Salinas	Cabo Rojo	Manati
March 1941.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
December 1941.....	114.3	114.4	116.8	113.4	114.9	115.7	117.1
June 1942.....	130.2	126.7	133.1	133.6	131.2	128.6	133.4
December 1942.....	139.3	136.9	143.1	144.7	139.2	138.1	140.0
January 1943.....	136.6	132.6	138.2	140.5	139.4	135.0	139.1
February 1943.....	136.8	133.3	138.4	138.1	139.8	136.6	138.9
March 1943.....	137.2	133.2	139.2	138.7	140.1	138.2	138.6
April 1943.....	139.3	135.2	141.1	140.6	143.2	139.4	141.1
May 1943.....	141.4	137.5	143.0	142.7	145.1	142.2	142.7
June 1943.....	142.2	138.3	144.5	142.4	145.6	144.2	143.6
July 1943.....	141.7	137.2	142.4	143.1	145.9	143.4	142.8

¹ Prepared in the Bureau's Cost of Living Division, by Jerome Cornfield. The Bureau wishes to acknowledge advice and assistance from the following persons: S. L. Descartes, chief of the Office of Statistics in the Governor's Office, who collaborated in the development of the methods used in constructing the cost-of-living index and who has acted as adviser since the initiation of the indexes; Jaime Vila, supervisor of the Bureau of Labor Statistics staff in Puerto Rico; Manuel A. Perez, Commissioner of Labor, and first supervisor of the Survey of Wage Earners' Income and Expenditures, upon which the weights for the present index are based; I. W. Jacobs, supervisor of the expenditure survey after Mr. Perez' departure; and Felix Mejias of the University of Puerto Rico and the Insular Minimum Wage Board.

Municipalities Covered

A municipality in Puerto Rico is roughly equivalent to a county in the continental United States, though much smaller in size. It is a small local government unit comprising both a city or town and the surrounding rural areas. In some cases there are villages in the municipality in addition to the central town.

The six municipalities covered in the Bureau's survey of living costs were San Juan, the largest city on the Island; Adjuntas, a highland town in the midst of coffee plantations, with a population of about 3,900 but with some 19,000 persons in the surrounding rural areas; Comerio, a town in the tobacco-growing highlands, with a population of about 2,800 and about 15,800 persons in the adjacent rural area; and Salinas, Cabo Rojo, and Manati, all in the lowlands, where the chief crop is sugar. Salinas, on the southeastern shore of the Island, is a town of 3,200 with about 13,700 people on the neighboring plantations; Cabo Rojo, on the southwestern shore, has a population of 5,300, with 23,300 in the area of which it is the center; and Manati, approximately in the middle of the northern coast, has a population of about 6,800 and 22,600 persons in the nearby rural territory. San Juan is the only municipality covered in the cost-of-living survey which is almost entirely urban. Most wage earners outside the three largest cities in Puerto Rico (San Juan, Ponce, and Mayagüez) work on sugar, coffee, and tobacco plantations and live in very small rural communities. They buy a very large proportion of their foods in small rural stores, but most of their other purchases are made in towns like the five covered in this survey. In order to provide as complete an account as possible of the changes which have occurred in the living costs of the wage earners in the Island, food prices were collected by the Bureau's representatives in the rural areas of the municipalities as well as in the city of San Juan and in Adjuntas, Comerio, Salinas, Cabo Rojo, and Manati.

Economic Background

The survey on which these figures are based was undertaken by the Bureau of Labor Statistics at the request of Region IX of the Office of Price Administration, the Division of Territories and Insular Possessions of the Department of the Interior, and Territorial Governor Rexford G. Tugwell. The requests were occasioned by the need for an accurate measure of the effect of the war situation on the prices being paid by low-income families in the Island.

The dependence of Puerto Rico on shipping to supply a large share of its consumer goods arises from the nature of its economy. Since the early nineteenth century a large section of the working population of Puerto Rico has been engaged in the production of a few staple export crops, the most important of which is now sugar, in exchange for which the Island receives in imports not only the bulk of the manufactured products which it consumes but also about half (by value) of its food. Thus, rice and bread, the two most important sources of calories in the Puerto Rican diet, are almost entirely imported (the latter as wheat flour), while one of the most important sources of animal protein, dried salted codfish, is entirely imported. The Island also normally imports two-thirds of the beans consumed there.

The shortage of shipping space which developed after the outbreak of war materially reduced the volume of imports into Puerto Rico. Imports of foodstuffs steadily declined, and by September 1942 were seriously reduced. In October, the Federal Government, through the Food Distribution Administration, took over the purchasing, shipping, and distribution of foodstuffs for Puerto Rico. The Federal Government continued to control both basic and nonessential foodstuffs until July 1, 1943, at which time the shipping situation had improved to the point where it was possible to turn back the importation of nonbasic items to commercial importers. Since the assumption of Federal control, food shipments have increased, and a stock pile has been built up to supply basic needs should a shipping shortage recur.

Official statistics on the volume of imports into Puerto Rico are prepared by the Office of Statistics, Office of the Governor, Puerto Rico, and by Federal agencies concerned with importation problems; but during the war these data are not available for general publication.

In 1941 and to a less extent in 1942, relatively large numbers of wage earners were employed on defense projects in types of work for which wages are considerably higher than the average for the Island. The consequent rise in money income resulted in an increase of purchasing power and contributed to an advance in prices at that time.

Price control in Puerto Rico was initiated by insular legislation in November 1941, establishing the Food and General Supplies Administration. The OPA General Maximum Price Regulation of March 1942 also applied to the Island, although the base date was later changed to the period from April 10 to May 10. Dollar-and-cent ceilings were first imposed on October 30, 1942, and have now been extended to cover all the important imported foodstuffs. At present, all imported basic foods are purchased by the Food Distribution Administration on the mainland and sold directly to Island wholesalers.

Prices Prior to March 1941

In the Bureau's study, prices were collected beginning with March 1941. Since the study was not undertaken until early in 1943, however, it was not possible to obtain from Island retailers accurate statements of prices charged in earlier months. Independent estimates of price increases, at least for food, indicate that there was a substantial price rise before March 1941. Thus, an estimate based on reports of the Agricultural Experiment Station at Rio Piedras indicates that retail food prices in March 1941 were 24 percent above their level in July 1939.² Similarly, wholesale prices of foodstuffs in Puerto Rico in March 1941 were 23 percent above their level in August 1939.³ It, therefore, seems reasonable to conclude that the total increase in living costs since the outbreak of the war in Europe has been considerably more than twice as great in Puerto Rico as in continental United States, as the greater part of the price rise in the States occurred after March 1941.

² University of Puerto Rico, Agricultural Experiment Station, Report No. 20: The Rise of Retail Food Prices in Puerto Rico, by S. L. Descartes, Rio Piedras, December 1941.

³ Department of Agriculture and Commerce of Puerto Rico, Index numbers of the Wholesale Prices of Foodstuffs in Puerto Rico, San Juan, 1942.

Changes in Costs, March 1941 to July 1943

COST OF FOOD

The total increase in living costs in Puerto Rico summarizes very different rates of change for the various commodities and services which are important in the expenditures of wage-earner families in the Island. The prices of many articles have increased considerably more than the average; others, such as certain drugs, have remained unchanged during the entire period; and a few, such as electricity rates, have actually decreased. The increase in the cost of food, which constituted almost 60 percent of total wage-earner expenditures in Puerto Rico in 1941 (as compared with approximately 35 percent in the States), has had the most pronounced effect on the movement of all living costs.

In July 1943, food costs were 49.5 percent above their level in March 1941; up to December 1942 they had increased by 53.3 percent (table 2), in addition to the substantial rise prior to March 1941. This compares with increases of 41.3 and 34.9 percent respectively for the same periods in continental United States. The increase in food costs reflects increases in the prices of most, though not all, of the principal foodstuffs consumed by wage-earner families in Puerto Rico.

By December 1941, rice had increased 66 percent over its March 1941 level, lard 103 percent, codfish 51 percent, and eggs 138 percent. Imported foods, as a group, showed an increase of 70 percent, as compared with 38 percent for domestically produced foods. The diversion of demand from the restricted supply of imported foodstuffs to the relatively fixed supply of domestically grown foods was in large part responsible for the latter increase. That all of the rise in food prices cannot be attributed, even indirectly, to the shipping crisis, however, is indicated by the rise in the price of sugar (22 percent to December 1942).

Some of the principal foodstuffs for which less-than-average increases occurred were fresh milk, coffee, and bread. Fresh milk which, in the Puerto Rican wage-earner diet, is second in importance only to rice⁴ increased 30 percent, coffee increased 8 percent, and bread increased 9 percent.

July food costs were 2.5 percent below their peak levels in December 1942. Imports of large quantities of basic foods diminished the pressure of demand on locally produced foodstuffs, resulting in price declines for virtually all foods from December to March and a drop in total food costs of 4 percent. After March, food prices advanced again, and by June 1943 they had risen 2.6 percent above March 1943, and 51.0 percent above March 1941. Some of the locally produced foods experienced extremely rapid price increases from March 1943 to June 1943, among them domestic beans, which rose 27.2 percent. Substantially higher prices were also reported

⁴ It should not be assumed from the importance of milk in the Puerto Rican wage-earner diet, that the quantity consumed is sufficient to meet modern nutritive standards. Thus, the National Resources Planning Board has estimated that consumption of milk in Puerto Rico is one-third of the amount actually required. To some extent this is an arbitrary calculation, since the calcium supplied by milk can be supplied by other foods as well (red kidney beans, for example, are at prices now prevailing in Puerto Rico, cheaper sources of calories, protein, calcium, phosphorus, iron, and vitamin B). It is, nevertheless, a rough measure of the general level at which Puerto Rican wage earners are living to find that the second most important food in their diet is two-thirds below its recommended consumption. See National Resources Planning Board, Minimum Decent Living Standards for Puerto Rico (p. 17), San Juan, December 1942

for eggs, tomatoes, and green bananas—all local products. Onions and evaporated milk were the chief imported commodities for which increases were pronounced.

TABLE 2.—*Indexes of Cost of Specified Foods Purchased by Wage-Earner Families in Puerto Rico, March 15, 1941 to July 15, 1943*

Article	Mar. 15, 1941	Dec. 15, 1941	June 15, 1942	Dec. 15, 1942	Jan. 15, 1943	Feb. 15, 1943	Mar. 15, 1943	June 15, 1943	July 15, 1943
All foods.....	100.0	124.2	142.1	153.3	147.5	147.3	147.2	151.0	149.5
Locally produced foods.....	100.0	109.5	121.3	138.2	131.2	131.8	131.5	138.0	135.7
Imported foods.....	100.0	140.9	165.7	170.3	166.0	164.8	164.8	165.7	165.4
Bread.....	100.0	107.8	105.0	109.1	108.8	109.6	109.4	110.5	110.5
Corn meal, locally produced.....	100.0	116.8	168.0	183.5	176.1	180.2	179.8	179.8	183.6
Corn meal, imported.....	100.0	118.3	149.4	149.9	148.3	148.3	148.4	148.8	149.8
Rice, imported.....	100.0	145.9	177.5	166.3	166.3	166.3	166.3	165.9	165.7
Chick-peas.....	100.0	104.0	113.8	114.1	134.4	134.2	133.9	89.7	89.4
Beans, imported.....	100.0	128.6	137.4	146.7	114.9	114.7	114.6	115.0	114.8
Beans, white Idaho.....	100.0	135.2	130.5	110.2	110.2	108.5	108.5	109.6	108.3
Beans, pink.....	100.0	139.5	154.6	139.6	136.2	136.2	136.4	136.8	136.8
Beans, red, New York.....	100.0	109.9	119.3	88.3	86.5	86.5	86.5	86.6	86.5
Beans, domestic.....	100.0	115.4	139.5	165.4	156.7	167.7	178.1	226.6	211.4
Beans, white.....	100.0	118.3	138.4	158.1	148.3	158.0	167.0	207.4	190.8
Beans, red.....	100.0	107.1	142.6	186.5	180.7	195.6	209.8	282.1	270.5
Onions.....	100.0	144.5	121.1	145.2	126.4	127.9	128.3	197.2	197.2
Tomatoes.....	100.0	145.8	233.2	325.4	233.8	213.2	188.7	241.1	230.0
Plantains.....	100.0	92.2	113.6	169.4	134.0	131.6	130.0	123.6	119.2
Yautia, yellow.....	100.0	133.7	146.8	274.8	208.0	195.3	185.1	194.5	193.5
Yautia, white.....	100.0	130.3	151.9	286.9	198.8	176.1	166.8	164.8	164.1
Potatoes, sweet.....	100.0	104.0	156.4	298.8	163.4	149.1	139.9	120.1	111.3
Green bananas.....	100.0	118.6	138.0	174.6	144.7	150.5	152.5	170.5	158.7
Milk.....	100.0	102.1	121.8	130.0	130.4	130.6	128.7	127.6	127.1
Milk, at stores.....	100.0	100.1	124.8	133.3	135.3	135.3	132.4	131.7	131.2
Milk, delivered.....	100.0	106.0	115.8	123.4	120.5	121.3	121.3	119.3	118.8
Evaporated milk.....	100.0	128.6	132.3	132.3	132.3	132.3	132.4	145.3	145.6
Eggs.....	100.0	144.7	164.6	238.4	188.5	176.6	162.3	220.7	213.0
Chickens.....	100.0	100.0	134.4	159.8	176.9	188.8	205.1	208.9	213.3
Table oil.....	100.0	164.2	177.1	204.9	209.6	219.6	216.5	221.8	220.2
Lard.....	100.0	163.0	175.6	203.5	208.0	208.0	208.0	215.8	216.0
Salt pork.....	100.0	161.6	171.6	187.8	201.0	201.0	201.0	198.7	198.7
Tomato sauce.....	100.0	123.5	142.8	154.8	147.8	147.5	148.1	150.5	150.5
Sugar.....	100.0	121.1	121.8	122.3	122.3	123.2	123.4	123.1	122.2
Sugar, refined.....	100.0	120.0	120.8	121.6	121.3	122.4	122.8	122.6	121.5
Sugar, unrefined.....	100.0	124.2	124.7	124.2	125.3	125.5	125.3	124.7	124.5
Coffee.....	100.0	106.6	104.8	108.1	108.8	108.9	109.9	115.6	115.9
Coffee, roasted.....	100.0	106.5	104.9	107.3	108.4	108.4	109.2	115.6	115.8
Coffee, green.....	100.0	106.9	104.7	111.1	110.3	111.0	112.3	115.5	116.0
Beef.....	100.0	103.4	88.7	88.7	88.7	88.7	88.6	88.6	88.6
Pork.....	100.0	100.0	132.0	161.1	178.4	184.1	178.4	178.7	171.2
Ham and ham substitutes.....	100.0	151.2	183.6	185.6	185.8	185.6	191.8	192.0	191.1
Codfish.....	100.0	134.6	160.8	150.9	151.0	151.0	151.7	151.1	151.1

From June to July 1943 the average cost of all foods declined 1.0 percent, chiefly as a result of the 1.7-percent drop in locally produced foods. The most prominent price reductions were for domestic beans, sweetpotatoes, and green bananas, each of which fell 6 percent or more from June to July. A smaller decline (0.2 percent) was reported in the average price of imported foods.

There was some difference in the price movements among the various municipalities (table 3). In December 1942 food costs for the entire Island were 53.3 percent above their March 1941 level. They were 58 percent above this level in San Juan and 49 percent in Salinas. Similarly, although all Island food costs in July were 2.5 percent below their December peak, they were 1.3 percent above it in Salinas and 6.0 percent below it in Comerio. The chief reasons for these variations in changes in food costs are the varying price movements of locally produced foodstuffs and differences in the amounts of each kind of food consumed in the various municipalities.

TABLE 3.—Indexes of Food Costs in 6 Municipalities in Puerto Rico, March 1941 to July 1943

Month	Puerto Rico	San Juan	Adjuntas	Comerio	Salinas	Cabo Rojo	Manati
March 1941	100.0	100.0	100.0	100.0	100.0	100.0	100.0
December 1941	124.2	121.6	128.6	122.3	125.0	123.2	127.7
June 1942	142.1	143.5	142.3	140.4	140.1	140.2	145.8
December 1942	153.3	158.0	157.8	151.1	148.8	149.2	155.9
January 1943	147.5	147.2	150.8	142.3	149.0	143.2	153.8
February 1943	147.3	147.5	151.2	138.6	148.6	145.2	153.3
March 1943	147.2	146.8	152.4	138.3	148.1	146.6	152.4
April 1943	148.5	149.4	152.1	141.1	149.4	146.9	153.0
May 1943	150.6	152.3	154.2	143.4	150.7	149.6	154.0
June 1943	151.0	153.6	154.0	142.6	151.6	149.3	154.5
July 1943	149.5	151.1	150.6	142.5	150.8	147.5	153.5

CLOTHING COSTS

Up to December 1942 clothing costs, which constituted 8 percent of wage-earner expenditures, had increased by 43 percent, or almost as much as food. The Island is dependent almost entirely on imports for its clothing. Although there is some clothing manufactured on the Island, particularly lower-quality work clothing, men's suits, and women's and girls' dresses, all fabrics are imported. Almost the entire supply of certain other important articles of clothing, such as shoes, socks, and hosiery, is imported in finished form. The decline in clothing imports has been much more pronounced than for foodstuffs; from July 1942 to March 1943 virtually no shoes were imported. During this period much of the Island demand for clothing was met from retailers' stocks, supplemented by some clothing brought in small sailing vessels. These vessels are not subject to the jurisdiction of the War Shipping Administration, and consequently are able to bring in commodities which the Administration would not approve for larger vessels. Such a method of transportation is, of course, costly and the goods thus imported command higher prices. As a result of this situation, clothing costs have continued to rise and in July 1943 were almost 8 percent higher than their December level. This compares with an increase of 2 percent over the same period in large cities in the United States. Shipping conditions have greatly improved since April and larger quantities of clothing have been imported. From June to July 1943, clothing costs rose less than one-half of 1 percent.

Every article of clothing included in the index showed some increase during the period covered (table 4). Khaki drill work trousers and work shirts had increased 45 percent and 65 percent respectively by March 1943, cotton dresses by 70 percent, and men's work shoes by 54 percent.

There has been considerable variation in the movement of clothing costs in different parts of the Island (table 5). The small municipalities are supplied by only a limited number of stores; hence, accidental variations in pricing policy and ability to replace stocks are reflected in wide differences in price movements. San Juan, the only municipality covered in which any systematic replacement of stocks has been possible, has shown the largest increase in clothing costs of any

of the cities covered, 65.3 percent from March 1941 to July 1943. Adjuntas and Salinas show only half that increase.

TABLE 4.—Indexes of Cost of Specified Clothing Purchased by Wage-Earner Families in Puerto Rico, March 15, 1941 to March 15, 1943

Article	Mar. 15 1941	Dec. 15 1941	June 15 1942	Dec. 15 1942	Jan. 15 1943	Feb. 15 1943	Mar. 15 1943
Shoes, men's work.....	100.0	110.9	134.8	147.4	152.5	153.4	154.1
Shoes, men's dress.....	100.0	103.4	119.0	126.1	128.7	128.9	128.9
Shoes, women's street.....	100.0	105.2	126.3	127.2	128.0	128.0	126.7
Shoes, children's.....	100.0	106.8	125.8	131.8	137.5	138.7	140.4
Men's clothing:							
Trousers, work:							
Khaki drill.....	100.0	111.2	129.4	136.4	142.8	143.8	144.6
Blue denim.....	100.0	110.3	135.4	147.5	155.9	161.4	161.5
Trousers, dress, inexpensive.....	100.0	106.1	126.8	145.4	148.7	148.7	150.5
Shirts, work, inexpensive:							
Khaki drill.....	100.0	110.5	131.3	155.0	162.4	165.1	165.1
Chambray.....	100.0	116.1	144.7	166.2	176.0	176.0	176.5
Shirts, dress:							
Broadcloth.....	100.0	108.8	134.9	145.1	153.0	154.2	154.5
Percale.....	100.0	113.4	139.5	156.9	158.5	158.5	158.5
Suits, inexpensive.....	100.0	104.9	108.1	115.9	118.1	118.1	118.1
Shorts, imported.....	100.0	106.8	141.8	165.3	170.4	170.4	171.5
Shorts, locally produced.....	100.0	107.3	138.2	151.7	162.0	162.0	164.5
Undershirts:							
Athletic style.....	100.0	108.2	149.9	169.4	169.4	171.3	174.7
Military style.....	100.0	116.2	146.3	161.0	163.1	165.0	170.3
Socks, inexpensive.....	100.0	106.8	134.4	143.8	150.1	152.1	149.9
Straw hats.....	100.0	106.8	123.3	139.6	142.1	142.1	143.8
Women's clothing:							
Dresses, cotton.....	100.0	112.2	131.1	158.8	160.8	162.8	169.9
Dresses, rayon.....	100.0	107.4	124.0	137.4	140.2	140.2	144.0
Slips, cotton.....	100.0	107.2	137.1	155.2	156.3	156.3	159.1
Slips, rayon.....	100.0	103.8	130.7	149.8	154.4	154.4	159.2
Panties, cotton.....	100.0	106.4	132.4	163.7	166.3	166.9	169.3
Panties, rayon.....	100.0	107.6	131.2	149.5	156.0	158.1	159.9
Stockings, cotton.....	100.0	104.8	136.6	148.8	153.3	153.3	158.1
Stockings, rayon.....	100.0	114.2	130.2	146.5	150.4	150.4	152.3

TABLE 5.—Indexes of Clothing Costs in 6 Municipalities in Puerto Rico, March 1941 to July 1943

Month	Puerto Rico	San Juan	Adjun- tas	Comerio	Salinas	Cabo Rojo	Manati
March 1941.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
December 1941.....	108.4	113.3	100.2	104.8	101.2	108.0	113.9
June 1942.....	128.5	135.6	117.2	133.4	107.4	124.1	139.9
December 1942.....	142.7	154.2	125.4	151.0	123.9	142.8	141.6
January 1943.....	146.6	159.5	127.9	154.0	126.9	148.0	144.3
February 1943.....	147.5	159.9	127.9	154.0	129.0	149.8	145.4
March 1943.....	149.4	162.6	128.8	155.3	133.8	150.4	145.5
April 1943.....	151.7	164.1	132.9	156.1	134.8	150.8	152.7
May 1943.....	152.5	164.5	132.0	156.1	134.5	151.7	156.2
June 1943.....	153.5	165.5	132.1	155.3	134.7	156.0	156.4
July 1943.....	153.9	165.3	132.5	156.6	134.8	156.8	156.6

COST OF HOUSEFURNISHINGS

For housefurnishings, which constitute 2 percent of wage-earner expenditures in Puerto Rico, price changes have in general been much the same as for clothing. In March 1943 housefurnishings costs stood at 141.2 percent of their March 1941 level, a rise caused by increases in every article investigated (table 6). Both inexpensive articles like drinking glasses and mosquito netting, and the more expensive articles, such as parlor suites and beds, shared in the increase.

TABLE 6.—Indexes of Cost of Specified Housefurnishings Purchased by Wage-Earner Families in Puerto Rico, March 15, 1941 to March 15, 1943

Article	Mar. 15 1941	Dec. 15 1941	June 15 1942	Dec. 15 1942	Jan. 15 1943	Feb. 15 1943	Mar. 15 1943
Cupboards.....	100.0	103.2	116.7	120.7	122.3	122.3	122.2
Chifforobes.....	100.0	100.5	114.3	118.2	118.2	118.2	118.2
Parlor suites.....	100.0	102.2	119.2	121.8	123.5	124.6	124.6
Breakfast suites.....	100.0	131.8	131.8	135.1	135.1	135.1	135.1
Beds, wooden.....	100.0	100.5	123.5	126.2	126.2	126.2	127.4
Beds, iron.....	100.0	100.3	132.8	137.3	143.6	143.6	143.6
Sheets, cotton.....	100.0	110.1	132.0	146.8	150.8	154.8	158.1
Towels, cotton.....	100.0	109.9	136.9	158.1	165.2	166.3	169.3
Pads.....	100.0	104.4	127.0	142.6	148.2	149.4	148.2
Bedspreads, cotton.....	100.0	112.3	135.0	152.5	160.0	160.3	164.8
Mosquito netting.....	100.0	113.1	138.0	153.9	163.6	163.6	164.9
Blankets, cotton.....	100.0	109.4	129.6	143.0	152.7	152.7	157.6
Glasses, drinking.....	100.0	106.1	119.5	136.9	148.4	148.4	155.1

There were differences in price movements of furnishings in the various municipalities, although these were not so large as for clothing (table 7).

TABLE 7.—Indexes of Cost of Housefurnishings in 6 Municipalities in Puerto Rico, March 1941 to July 1943

Month	Puerto Rico	San Juan	Adjuntas	Comerio	Salinas	Cabo Rojo	Manati
March 1941.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
December 1941.....	104.2	104.9	101.8	103.6	100.7	103.9	106.8
June 1942.....	126.0	126.1	129.3	125.4	128.9	116.3	130.2
December 1942.....	134.7	137.5	132.5	136.8	134.1	129.1	131.0
January 1943.....	139.4	141.3	133.9	144.4	134.7	138.5	137.2
February 1943.....	140.0	142.5	133.9	144.6	134.7	138.6	137.9
March 1943.....	141.2	142.8	135.9	148.2	135.1	139.4	141.0
April 1943.....	143.7	144.9	143.0	148.6	137.7	138.8	147.4
May 1943.....	144.2	145.1	148.7	149.9	136.8	138.6	148.8
June 1943.....	144.5	145.3	150.4	149.9	137.2	139.9	148.8
July 1943.....	145.2	145.5	152.6	149.9	137.7	143.2	149.0

COST OF RENT AND MISCELLANEOUS GOODS AND SERVICES

Compared to food, clothing, and housefurnishings, increases in rentals and the cost of miscellaneous goods and services have been moderate. Rents of low and medium-priced dwellings increased by 4.5 percent from March 1941 to July 1943; miscellaneous costs, a group which includes such items as bus fare, charcoal, kerosene, rum, and cigarettes, rose by 30.8 percent. Miscellaneous items account for 27 percent of the total expenditures of wage-earner families in Puerto Rico.

A few of the commodities in the miscellaneous group have increased as much as some of the principal foodstuffs. By March 1943, laundry soap had increased 74 percent, charcoal 25 percent, local transportation 42 percent. Drugs and medicines showed only a slight increase, newspaper prices remained virtually unchanged, and electricity rates declined 10 percent (table 8).

TABLE 8.—*Indexes of Cost of Miscellaneous Goods and Services Purchased by Wage-Earner Families in Puerto Rico, March 15, 1941 to March 15, 1943*

Article or service	Mar. 15, 1941	Dec. 15, 1941	June 15, 1942	Dec. 15, 1942	Jan. 15, 1943	Feb. 15, 1943	Mar. 15, 1943
Kerosene.....	100.0	105.0	111.9	120.5	119.0	119.6	116.8
Charcoal.....	100.0	100.0	129.3	141.4	126.2	126.2	124.5
Laundry soap.....	100.0	130.5	165.0	176.6	176.6	176.9	173.8
Starch.....	100.0	102.9	109.6	112.1	113.2	113.1	117.0
Bluing.....	100.0	101.2	101.8	111.0	117.7	121.9	124.3
Chicken feed.....	100.0	106.3	131.2	136.9	136.5	135.0	141.1
Rum, in bottles.....	100.0	105.7	120.9	132.8	143.4	156.5	159.9
Rum, in glasses.....	100.0	100.0	100.4	118.9	120.8	133.4	133.8
Soft drinks.....	100.0	100.0	102.1	103.9	104.4	105.0	105.8
Cigars.....	100.0	100.0	100.0	100.0	100.0	100.0	100.4
Cigarettes, domestic.....	100.0	108.3	116.7	124.8	126.2	126.7	131.4
Cigarettes, imported.....	100.0	103.1	110.5	114.6	116.1	116.8	118.1
Matches.....	100.0	102.9	111.1	114.3	114.3	114.3	113.6
Prescription, cold.....	100.0	100.0	103.0	106.2	106.2	108.4	108.4
Prescription, diarrhea.....	100.0	100.0	100.0	102.3	102.3	103.5	101.4
Prescription, fever.....	100.0	100.0	101.2	101.2	102.9	102.9	102.9
Milk of magnesia.....	100.0	100.0	100.5	101.4	102.9	102.9	103.4
Iodine.....	100.0	100.0	100.0	100.0	102.5	102.5	102.5
Aspirin tablets.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Salts, laxative.....	100.0	100.0	103.4	107.2	107.6	107.6	107.6
Vitamin B, complex.....	100.0	100.0	99.2	98.0	98.0	98.0	93.8
Tonic.....	100.0	100.0	102.6	105.3	105.7	106.0	106.0
Toilet soap.....	100.0	101.7	110.9	124.9	126.1	126.1	126.1
Tooth paste.....	100.0	100.0	100.0	100.5	101.0	104.5	104.5
Movies.....	100.0	103.0	107.2	106.3	113.6	118.1	127.6
Haircuts.....	100.0	101.8	106.7	109.8	112.8	114.4	117.4
Electricity (15 KWH).....	100.0	90.2	90.2	90.2	90.2	90.2	90.2
Transportation.....	100.0	100.4	136.4	144.9	142.3	141.1	142.4
Lottery tickets.....	100.0	100.2	100.5	100.5	100.5	100.5	100.5
Newspapers.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tomato seeds.....	100.0	100.0	100.0	182.0	187.4	192.8	192.8

Since March 1943, miscellaneous costs have increased more rapidly than those of any other group, 7.4 percent as compared with 3 percent or less for food, clothing, and housefurnishings. These recent increases are a result of a general upward movement among most of the commodities included in the miscellaneous group, the increases in laundry soap, cigarettes, and local transportation having the most pronounced effect.

There have been substantial variations in the movement of miscellaneous costs among the various municipalities, from the 20-percent increase in San Juan to the 45-percent increase in Salinas (table 9).

TABLE 9.—*Indexes of Cost of Miscellaneous Items in 6 Municipalities in Puerto Rico, March 1941 to July 1943*

Month	Puerto Rico	San Juan	Adjuntas	Comerio	Salinas	Cabo Rojo	Menati
March 1941.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
December 1941.....	102.5	101.5	98.2	101.8	103.0	106.2	102.4
June 1942.....	115.6	108.6	119.4	124.1	124.7	111.0	112.7
December 1942.....	121.2	113.6	118.9	134.6	130.3	118.6	116.0
January 1943.....	120.4	113.2	115.9	134.8	129.7	117.2	115.1
February 1943.....	121.0	114.6	115.8	133.8	130.8	118.1	114.9
March 1943.....	121.8	114.5	115.7	135.5	131.6	120.8	115.3
April 1943.....	128.4	116.6	121.2	136.4	139.0	123.9	119.2
May 1943.....	128.6	119.9	123.4	139.4	142.8	128.1	121.4
June 1943.....	130.3	120.0	128.7	139.9	142.8	133.6	123.2
July 1943.....	130.8	120.0	128.6	142.1	145.1	133.9	122.2

Of the houses for which rents were reported, less than one-fifth were renting for more in May 1943 than they were in March 1941. Considering only those for which rents had been raised, the average increase was about 25 percent. Considering all dwellings, however,

both those with increased and those with unchanged rents, the increase in the total rental bill was 4.5 percent from March 1941 to July 1943 (table 10). Most of the increases in rent occurred when there was a change in occupancy, although there were some cases of increases to established tenants. The greatest part of the rise occurred between December 1941 and June 1942. Since that date rents have gone up by 1.3 percent. Rent is an important part of the wage earner's budget only in urban areas; the rural laborer is usually housed in a hut of his own, on land belonging to someone else but for which he pays no rent.

TABLE 10.—Indexes of Rental Costs in 6 Municipalities in Puerto Rico, March 1941 to July 1943

Month	Puerto Rico	San Juan	Adjuntas	Comerio	Salinas	Cabo Rojo	Menati
March 1941	100.0	100.0	100.0	100.0	100.0	100.0	100.0
December 1941	100.2	100.2	99.8	100.1	100.6	99.2	100.1
June 1942	103.2	103.6	99.6	103.4	101.0	99.4	101.9
December 1942	103.8	104.2	100.0	105.0	101.5	99.5	103.5
January 1943	104.0	104.4	100.0	105.1	101.5	99.6	103.7
February 1943	104.0	104.4	99.6	105.3	101.7	99.6	103.7
March 1943	104.1	104.4	99.6	105.3	101.7	99.6	103.7
April 1943	104.1	104.4	99.7	105.2	101.7	99.7	104.1
May 1943	104.2	104.5	99.8	105.1	101.7	99.8	104.0
June 1943	104.2	104.5	99.4	105.1	101.7	99.8	104.1
July 1943	104.5	105.0	99.4	105.6	101.8	99.8	103.8

Black-Market Prices

The present indexes are based upon prices supplied to the Bureau's agents by established retailers. In some cases, these prices were above the officially determined ceiling of the OPA. It is unlikely, however, that the full effect of sales above the ceiling on the cost of living has been measured. No statistics on the importance of black-market sales in Puerto Rico are, of course, available, but general observation indicates that they have been of some importance. At any one time the number of commodities available on the black market is limited. In February 1943 the goods most commonly sold on the black market were lard, onions, matches, laundry soap, American cigarettes, and (for higher-income families) the choicer cuts of meat. By that time, rice was relatively abundant, but in October and November 1942 black-market quotations for this commodity were reported to be frequent. By August 1943 black-market sales were less frequent than at any time since the fall of 1942. It seems unlikely that the inclusion of all sales at above-ceiling prices would have materially changed the present indexes.

Differences Between Puerto Rico and Continental United States

The present indexes do not measure, and do not provide the basis for measuring, differences in the level of living costs between Puerto Rico and continental United States. The fact that the July index for Puerto Rico indicates an increase from March 1941 of 41.7 percent, as compared with 22.3 percent for continental United States, merely means that living costs have increased more rapidly in Puerto Rico than in the States in this same period. Differences in the level of

living costs could be inferred from these indexes only if something were known about the comparative levels of costs in March 1941. Such a comparison has not been undertaken, and, considering the vast difference in the ways Puerto Rican and continental wage earners live, would be extremely difficult to make.

Methods Used in Study

For all commodities but food, the prices upon which the indexes are based were collected by agents of the Bureau of Labor Statistics for all of the dates reported. For food the prices are based upon a collection by Bureau agents for all dates subsequent to December 1942. Food prices for that and previous dates are based upon prices collected by the Insular Department of Agriculture and Commerce. The stores from which prices are collected are those at which wage earners purchase. Thus, the prices of most locally produced food-stuffs are obtained from open-air market places and peddlers, the two chief sources of such foods.⁵

The weights used to combine the various price changes into a single cost-of-living index were derived from a study of the expenditures of wage-earner families in 1940-41 conducted by the WPA under the sponsorship of the Insular Department of Labor and the technical supervision of the United States Bureau of Labor Statistics. The weight for each municipality is based upon the expenditures of wage-earner families in the region in which the municipality is situated.



Food Costs and Subsidies in Great Britain

FROM September 1939 to April 1941 the British cost-of-living index rose 28 percent; food costs rose 23 percent. According to a summary by the British Information Services,⁶ the Government at the latter time adopted a policy of stabilizing consumer prices and wages at not more than 30 percent above the pre-war level; this policy has been successful, since in April 1943 the cost-of-living index was 30 percent above that of September 1939, and wage rates had increased 32 percent in the same period.⁷

This cost-of-living stabilization was achieved by applying subsidies to the most important articles in the workingman's budget—principally food. Individual food prices have risen very little, some even having dropped since April 1941, with the food index as a whole having fallen from 23 percent to 20 percent above the pre-war level. The

⁵ See S. L. Descartes, S. Diaz Pacheco, and J. R. Noguera, *Food Consumption Studies in Puerto Rico*, Rio Piedras, Agricultural Experiment Station, June 1941 (p. 74).

⁶ Data are from *Labor and Industry in Britain* (British Information Services, New York), June 1943, July 1943.

⁷ The percentage wage increase for industry alone was from 26 to 27 percent (see *Monthly Labor Review* for August 1943). The above percentage represents a wider coverage.

subsidies have reduced consumer prices from what they would have been as follows:

- Bread: a reduction of 2d. per 4-pound loaf.⁸
- Flour: a reduction of 3½d. per 7 pounds.
- Meat: a reduction of 1½d. per pound.
- Potatoes: a reduction of 3½d. per 7 pounds.
- Eggs: a reduction of 1s. 9d. per dozen.
- Milk: a reduction of ½d. per quart.

Thus, without the subsidies the consumer would have paid approximately 20 percent more for flour and bread, 54 percent more for potatoes, and 87½ percent more for eggs.

Based on the returns for one quarter, the cost of food subsidies was \$600,000,000 for the year ending March 31, 1943, over one-fourth of which went to flour, bread, oatmeal, and animal feeding stuffs. Meat, potatoes, and the National Milk Scheme had the next largest subsidies, amounting to \$92,000,000, \$92,000,000, and \$68,000,000, respectively. Food subsidies for the preceding year, ending March 31, 1942, totaled \$548,000,000; for all commodities, the subsidies were \$780,000,000 yearly.

Various methods of applying subsidies are used. The Ministry of Foods is the sole purchaser of many foods produced in Britain and the sole importer of food products. For these foods, which the Ministry buys directly from producers, the subsidy is the difference between the price paid by the Ministry and the lower price at which it sells to wholesalers and retailers.

In certain cases, subsidies are paid directly to producers or dealers to encourage production or to cover special costs. For example, flour millers receive a rebate on wheat bought, to compensate for the low fixed price of flour; and subsidies covering special transportation costs have been paid on potatoes and fish. Subsidies also make possible the National Milk Scheme, permitting distribution of milk to certain groups at less than retail cost.

⁸ The approximate exchange rate was £1=\$4, 1s.=20 cents, 1d.=1¼ cents.

Wholesale Prices

Wholesale Prices in August 1943

LED by continued declines in prices for farm products and foods, particularly fresh fruits and vegetables, the Bureau of Labor Statistics index of prices in primary markets¹ dropped 0.1 percent during August. The decrease brought the all-commodity index to 103.1 percent of the 1926 average, the lowest level reached since February.

Average prices for foods dropped 1.3 percent during the month, largely as a result of a decrease of 9 percent in prices for fruits and vegetables. Farm products declined 1.2 percent. There was a slight upward tendency in industrial commodity markets, as the Office of Price Administration permitted higher prices for certain types of lumber and for cottonseed meal. The index for building materials rose 1.4 percent; miscellaneous commodities, 0.3 percent; and chemicals and allied products, 0.1 percent. Lower realized prices for gas and electricity caused the index for fuel and lighting materials to fall 0.1 percent. Average prices for raw materials fell 0.8 percent, as a result of weakening markets for agricultural commodities. Quotations for manufactured commodities and semimanufactured articles, on the other hand, advanced fractionally. The indexes for "all commodities other than farm products" and "all commodities other than farm products and foods" rose 0.2 percent.

Continued declines in primary market prices for onions, potatoes, and lemons, for corn, rye, cotton, and wool, and for cows and sheep accounted for a decrease of 1.2 percent in average prices for farm products during August. Substantially higher prices were reported for barley, oats, wheat, and alfalfa seed, for hogs and calves, and for eggs.

With a 9-percent decline for fresh fruits and vegetables, the average price for foods dropped 1.3 percent to the lowest point since February. In addition, quotations were also lower for flour and mutton. Higher prices were reported for oatmeal, pretzels, dried fruits, and fresh beef at New York.

Except for slightly higher prices for broadcloth shirting and weakening prices for percale, the textile markets were steady. No changes were reported in prices for shoes and other leather products.

Lower sales realizations for gas and electricity brought the fuel and lighting materials group index down 0.1 percent. Prices were higher for gasoline at most refineries.

The metal markets remained firm.

Office of Price Administration action in allowing higher ceiling prices for certain types of lumber, together with increased prices for paint

¹ The Bureau of Labor Statistics wholesale price data for the most part represent prices prevailing in the "first commercial transaction." They are prices quoted in primary markets, at principal distribution points.

materials and coarse aggregates, brought average prices for building materials up 1.4 percent to the highest level since the spring of 1923.

An increase of 0.1 percent in the index for chemicals and allied products was the result of a sharp increase in cottonseed meal and higher quotations for nicotine sulphate.

A minor decline was reported in prices for office furniture in August. Prices for household furniture were unchanged.

Wholesale prices for cattle feed averaged 4 percent higher in August than in July because of marked increases in quotations for cottonseed meal and linseed meal.

From August 1942 to August 1943, prices for farm products increased over 16 percent and foods rose 5 percent. During the same period, chemicals and allied products, and miscellaneous commodities advanced more than 4 percent; fuel and lighting materials, over 2 percent; and building materials, approximately 2 percent. A fractional advance, 0.1 percent, was recorded in textile products prices. Housefurnishing goods, metals and metal products, and hides and leather products declined from 0.1 percent to 0.3 percent during the 12-month period. Reflecting the increase in prices for agricultural commodities, the raw materials group index rose more than 11 percent over August of last year, while semimanufactured articles and finished products increased less than 1 percent.

During the 4 years of war, August 1939 to August 1943, broad gains have occurred in prices for many commodities. Outstanding among the increases was 151 percent for fats and oils, 128 percent for cattle feed, 127 percent for grains, 115 percent for fruits and vegetables, 114 percent for drugs and pharmaceuticals, over 95 percent for livestock and poultry, more than 70 percent for cotton goods, and from 50 to 60 percent for hides and skins, lumber, and dairy products.

Percentage comparisons of the August 1943 level of wholesale prices with July 1943, August 1942, and August 1939, with corresponding index numbers are given in table 1.

TABLE 1.—Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities, August 1943, with Comparisons for July 1943, August 1942 and August 1939

[1926=100]

Group and subgroup	August 1943	July 1943	Percent of change	August 1942	Percent of change	August 1939	Percent of increase
All commodities.....	103.1	103.2	-0.1	99.2	+3.9	75.0	37.5
Farm products.....	123.5	125.0	-1.2	106.1	+16.4	61.0	102.5
Grains.....	116.8	116.0	+7	89.8	+30.1	51.5	126.8
Livestock and poultry.....	129.5	127.6	+1.5	122.6	+5.6	66.0	96.2
Other farm products.....	120.8	124.8	-3.2	99.9	+20.9	60.1	101.0
Foods.....	105.8	107.2	-1.3	100.8	+5.0	67.2	57.4
Dairy products.....	108.9	108.9	0	100.2	+8.7	67.9	60.4
Cereal products.....	93.8	93.8	0	87.8	+6.8	71.9	30.5
Fruits and vegetables.....	125.6	138.0	-9.0	98.0	+28.2	58.5	114.7
Meats.....	106.0	105.9	+1	115.2	-8.0	73.7	43.8
Other foods.....	98.0	97.1	+9	93.1	+5.3	60.3	62.5
Hides and leather products.....	117.8	117.8	0	118.2	-3	92.7	27.1
Shoes.....	126.4	126.4	0	126.4	0	100.8	25.4
Hides and skins.....	116.0	116.0	0	118.8	-2.4	77.2	50.3
Leather.....	101.3	101.3	0	101.3	0	84.0	20.6
Other leather products.....	115.2	115.2	0	115.2	0	97.1	18.6

TABLE 1.—Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities, August 1943, with Comparisons for July 1943, August 1942 and August 1939—Con.

[1926=100]

Group and subgroup	August 1943	July 1943	Percent of change	August 1942	Percent of change	August 1939	Percent of increase
Textile products.....	97.4	97.4	0	97.3	+0.1	67.8	43.7
Clothing.....	107.0	107.0	0	107.2	-.2	81.5	31.3
Cotton goods.....	112.7	112.6	+0.1	112.9	-.2	65.5	72.1
Hosiery and underwear.....	70.5	70.5	0	69.7	+1.1	61.5	14.6
Rayon.....	30.3	30.3	0	30.3	0	28.5	6.3
Silk.....	(¹)	(¹)		(¹)		44.3	
Woolen and worsted goods.....	112.5	112.5	0	111.7	+1.7	75.5	49.0
Other textile products.....	98.7	98.7	0	97.9	+1.8	63.7	54.9
Fuel and lighting materials.....	80.9	81.0	-.1	79.0	+2.4	72.6	11.4
Anthracite.....	89.6	89.6	0	85.7	+4.6	72.1	24.3
Bituminous coal.....	116.5	116.5	0	110.0	+5.9	96.0	21.4
Coke.....	122.4	122.4	0	122.1	+1.2	104.2	17.5
Electricity.....	(¹)	(¹)		62.2		75.8	
Gas.....	(¹)	77.6		80.4		86.7	
Petroleum and products.....	63.0	62.8	+3.3	60.7	+3.8	51.7	21.9
Metals and metal products.....	103.7	103.7	0	103.8	-.1	93.2	11.3
Agricultural implements.....	96.9	96.9	0	96.9	0	93.5	3.6
Farm machinery.....	98.0	98.0	0	98.0	0	94.7	3.5
Iron and steel.....	97.1	97.1	0	97.2	-.1	95.1	2.1
Motor vehicles.....	112.8	112.8	0	112.8	0	92.5	21.9
Nonferrous metals.....	86.0	86.0	0	85.6	+1.5	74.6	15.3
Plumbing and heating.....	90.4	90.4	0	94.1	-3.9	79.3	14.0
Building materials.....	112.2	110.7	+1.4	110.3	+1.7	89.6	25.2
Brick and tile.....	99.0	99.0	0	98.7	+1.3	90.5	9.4
Cement.....	93.6	93.6	0	94.2	-.6	91.3	2.5
Lumber.....	142.0	137.1	+3.6	133.0	+6.8	90.1	57.6
Paint and paint materials.....	102.8	102.0	+1.8	100.1	+2.7	82.1	25.2
Plumbing and heating.....	90.4	90.4	0	94.1	-3.9	79.3	14.0
Structural steel.....	107.3	107.3	0	107.3	0	107.3	0
Other building materials.....	101.4	101.3	+1.1	103.8	-2.3	89.5	13.3
Chemicals and allied products.....	100.2	100.1	+1.1	96.2	+4.2	74.2	35.0
Chemicals.....	96.5	96.4	+1.1	96.3	+1.2	83.8	15.2
Drugs and pharmaceuticals.....	165.2	165.2	0	129.0	+28.1	77.1	114.3
Fertilizer materials.....	80.1	79.3	+1.0	78.3	+2.3	65.5	22.3
Mixed fertilizers.....	85.8	85.8	0	82.8	+3.6	73.1	17.4
Oils and fats.....	102.0	102.0	0	101.6	+1.4	40.6	151.2
Housefurnishing goods.....	102.6	102.6	0	102.7	-.1	85.6	19.9
Furnishings.....	107.1	107.1	0	107.9	-.7	90.0	19.0
Furniture.....	98.1	98.1	0	97.4	+1.7	81.1	21.0
Miscellaneous.....	92.6	92.3	+1.3	88.9	+4.2	73.3	26.3
Automobile tires and tubes.....	73.0	73.0	0	73.0	0	60.5	20.7
Cattle feed.....	155.7	149.7	+4.0	125.4	+24.2	68.4	127.6
Paper and pulp.....	104.3	104.3	0	98.9	+5.5	80.0	30.4
Rubber, crude.....	46.2	46.2	0	46.3	-.2	34.9	32.4
Other miscellaneous.....	96.3	96.3	0	93.0	+3.5	81.3	18.5
Raw materials.....	112.7	113.6	-.8	101.2	+11.4	66.5	69.5
Semimanufactured articles.....	92.9	92.8	+1.1	92.7	+1.2	74.5	24.7
Manufactured products.....	99.7	99.6	+1.1	98.9	+1.8	79.1	26.0
All commodities other than farm products.....	98.5	98.3	+1.2	97.5	+1.0	77.9	26.4
All commodities other than farm products and foods.....	97.1	96.9	+1.2	95.6	+1.6	80.1	21.2

¹ Data not available.

Index Numbers by Commodity Groups, 1926 to August 1943

Index numbers of wholesale prices by commodity groups for selected years from 1926 to 1942, and by months from August 1942 to August 1943, are shown in table 2.

TABLE 2.—Index Numbers of Wholesale Prices by Groups of Commodities
[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting materials	Metals and metal products	Building materials	Chemicals and allied products	House furnishing goods	Miscellaneous	All commodities
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1929	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	95.3
1932	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	64.8
1933	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.1	75.8	62.5	65.9
1936	80.9	82.1	95.4	71.5	76.2	87.0	86.7	78.7	81.7	70.5	80.8
1937	86.4	85.5	104.6	76.3	77.6	95.7	95.2	82.6	89.7	77.8	86.3
1938	98.5	73.6	92.8	66.7	76.5	95.7	90.3	77.0	86.8	73.3	78.6
1939	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8	77.1
1940	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3	78.6
1941	82.4	82.7	108.3	84.8	76.2	99.4	103.2	84.6	94.3	82.0	87.3
1942	105.9	99.6	117.7	96.9	78.5	103.8	110.2	97.1	102.4	89.7	98.8
1942:											
August	106.1	100.8	118.2	97.3	79.0	103.8	110.3	96.2	102.7	88.9	99.2
September	107.8	102.4	118.1	97.1	79.0	103.8	110.4	96.2	102.5	88.8	99.6
October	109.0	103.4	117.8	97.1	79.0	103.8	110.4	96.2	102.5	88.6	100.0
November	110.5	103.5	117.8	97.1	79.1	103.8	110.1	99.5	102.5	90.1	100.3
December	113.8	104.3	117.8	97.2	79.2	103.8	110.0	99.5	102.5	90.5	101.0
1943:											
January	117.0	105.2	117.8	97.3	79.3	103.8	109.8	100.2	102.5	90.7	101.9
February	119.0	105.8	117.8	97.3	79.8	103.8	110.2	100.3	102.6	90.9	102.5
March	122.8	107.4	117.8	97.3	80.3	103.8	110.4	100.0	102.6	91.4	103.4
April	123.9	108.4	117.8	97.4	80.6	103.8	110.3	100.1	102.6	91.6	103.7
May	125.7	110.5	117.8	97.4	80.8	103.8	110.5	100.2	102.7	91.9	104.1
June	126.2	109.6	117.8	97.4	81.0	103.8	110.6	100.0	102.8	91.8	103.8
July	125.0	107.2	117.8	97.4	81.0	103.7	110.7	100.1	102.6	92.3	103.2
August	123.5	105.8	117.8	97.4	80.9	103.7	112.2	100.2	102.6	92.6	103.1

Index Numbers by Commodity Groups, 1926 to August 1943

The price trend for specified years and months since 1926 is shown in table 3 for the following groups of commodities: Raw materials, semimanufactured articles, manufactured products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Manufactured products" was shown on pages 10 to 12 of Wholesale Prices, December and Year 1941 (Serial No. R. 1434).

TABLE 3.—Index Numbers of Wholesale Prices by Special Groups of Commodities
[1926=100]

Year	Raw materials	Semimanufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods	Year and month	Raw materials	Semimanufactured articles	Manufactured 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	1943					
1929	97.5	93.9	94.5	93.3	91.6	January	108.2	92.8	100.1	98.5	96.0
1932	55.1	59.3	70.3	68.3	70.2	February	109.6	92.9	100.3	98.7	96.2
1933	56.5	65.4	70.5	69.0	71.2	March	112.0	93.0	100.5	99.0	96.5
1936	79.9	75.9	82.0	80.7	79.6	April	112.8	93.1	100.6	99.1	96.6
1937	84.8	85.3	87.2	86.2	85.3	May	114.0	93.0	100.7	99.2	96.7
1938	72.0	75.4	82.2	80.6	81.7	June	114.3	92.8	100.1	98.7	96.8
1939	70.2	77.0	80.4	79.5	81.3	July	113.6	92.8	99.6	98.3	96.9
1940	71.9	79.1	81.6	80.8	83.0	August	112.7	92.9	99.7	98.5	97.1
1941	83.5	86.9	89.1	88.3	89.0						
1942	100.6	92.6	98.6	97.0	95.5						

Weekly Fluctuations

Weekly changes in wholesale prices by groups of commodities during July and August 1943 are shown by the index numbers in table 4. These indexes are not averaged to obtain an index for the month but are computed only to indicate the fluctuations from week to week.

TABLE 4.—Weekly Index Numbers of Wholesale Prices by Commodity Groups, July and August 1943

[1926=100]

Commodity group	Aug. 28	Aug. 21	Aug. 14	Aug. 7	July 31	July 24	July 17	July 10	July 3
All commodities	102.9	102.8	102.7	103.0	102.8	102.9	102.9	103.0	103.0
Farm products	124.0	123.8	122.9	125.0	124.3	124.8	125.0	126.0	125.9
Foods	105.5	105.8	105.1	106.6	106.4	107.0	106.5	107.3	107.6
Hides and leather products	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4
Textile products	97.0	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
Fuel and lighting materials	81.8	81.7	81.7	81.6	81.6	81.8	81.6	81.5	81.5
Metals and metal products	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.9
Building materials	112.1	112.1	112.1	111.9	110.8	110.6	110.6	110.5	110.4
Chemicals and allied products	100.2	100.2	100.2	100.1	100.1	100.1	100.1	100.1	100.2
Housefurnishing goods	104.2	104.2	104.2	104.2	104.2	104.4	104.4	104.3	104.3
Miscellaneous	92.4	92.4	92.4	92.2	92.1	92.1	91.6	91.6	91.6
Raw materials	112.8	112.7	112.3	113.5	113.0	113.3	113.4	114.0	114.0
Semimanufactured articles	92.8	92.8	92.8	92.7	92.7	92.7	92.7	92.7	92.7
Manufactured products	100.0	100.0	100.0	99.9	99.8	99.8	99.6	99.6	99.7
All commodities other than farm products	98.4	98.4	98.4	98.3	98.2	98.3	98.1	98.1	98.1
All commodities other than farm products and foods	97.3	97.3	97.3	97.2	97.1	97.1	97.0	96.9	96.9

Labor Turnover

Labor Turnover in Manufacturing and Mining, July 1943

THE total separation rate for all manufacturing industries in July 1943 was 7.43 per 100 employees, as compared with 7.07 in June 1943 and 6.73 in July 1942. The quit rate rose to 5.52 per 100 employees, the highest point since the war began. Primarily responsible for the increase in the number of quits was the shifting to other jobs, inadequate transportation and housing facilities, general restlessness, and, for women, home duties.

Absenteeism was the predominant reason advanced by firms for the abnormally high discharge rate of 0.66 per 100 employees. Other recurring reasons were incompetence and infraction of the rules.

In each of the selected industries for which turnover data for women are compared with those for men, quit rates are considerably higher for women than for men. However, the industry which reported the highest quit rate for men, aluminum and magnesium smelting and refining, was also at the top of the list for women, while the communication-equipment industry, which had the lowest quit rate for men, also reported most favorably on the quit rate for women.

TABLE 1.—Monthly Labor Turnover Rates in Manufacturing Industries ¹

Class of turnover and year	January	February	March	April	May	June	July	August	September	October	November	December
Separation:												
1942	5.10	4.82	5.36	6.12	6.54	6.46	6.73	7.06	8.10	7.91	7.09	6.37
1943	7.11	7.04	7.69	7.54	6.57	7.07	² 7.43					
Quit:												
1942	2.36	2.41	3.02	3.59	3.77	3.85	4.02	4.31	5.19	4.65	4.21	3.71
1943	4.45	4.65	5.36	5.41	4.81	5.20	² 5.52					
Discharge:												
1942	.30	.29	.33	.35	.38	.38	.43	.42	.44	.45	.43	.46
1943	.52	.50	.57	.53	.55	.61	² .66					
Lay-off: ³												
1942	1.61	1.39	1.19	1.31	1.43	1.21	1.05	.87	.68	.78	.65	.70
1943	.74	.54	.52	.64	.45	.50	² .49					
Military and miscellaneous:												
1942	.83	.73	.82	.87	.96	1.02	1.23	1.46	1.79	2.03	1.80	1.50
1943	1.40	1.35	1.24	.96	.76	.76	² .76					
Accession:												
1942	6.87	6.02	6.99	7.12	7.29	8.25	8.28	7.90	9.15	8.69	8.14	6.92
1943	8.28	7.87	8.32	7.43	7.18	8.40	² 7.68					

¹ Turnover rates are not comparable to the employment and pay-roll reports issued monthly by the Bureau of Labor Statistics, as the former are based on data for the entire month, while the latter refer only to pay periods ending nearest the middle of the month. In addition, labor turnover data refer to all employees whereas the employment and pay-roll reports relate only to wage earners. Certain seasonal industries, such as canning and preserving, are not covered by the labor turnover survey and the sample is not as extensive as that of the employment survey which includes a larger number of small plants.

² Preliminary.

³ Including temporary, indeterminate, and permanent lay-offs.

In both anthracite and bituminous-coal mining the total separation rates were considerably below the rate for all manufacturing. The separation rate for metalliferous mining was much above the coal-mining rates and only slightly lower than that for all manufacturing. In each of the mining groups the accession rates were even lower than the separation rates and were, therefore, insufficient to maintain the level of employment.

TABLE 2.—Monthly Labor Turnover Rates by Major Industry Group, July 1943

Industry group	Separation										Total accession	
	Total		Quit		Discharge		Lay-off		Military and miscellaneous		July 1943 ¹	June 1943
	July 1943 ¹	June 1943	July 1943 ¹	June 1943	July 1943 ¹	June 1943	July 1943 ¹	June 1943	July 1943 ¹	June 1943		
<i>Durable goods</i>												
Iron and steel and their products.....	5.41	5.43	3.87	3.84	0.38	0.38	0.24	0.25	0.92	0.96	5.33	6.03
Machinery, except electrical.....	6.08	5.58	4.12	3.83	.74	.69	.40	.30	.82	.76	5.50	6.31
Automobiles.....	5.93	5.58	3.96	3.70	.71	.77	.42	.26	.84	.85	9.68	9.52
Nonferrous metals and their products.....	8.33	7.59	6.20	5.54	.78	.68	.50	.41	.85	.96	9.51	9.92
Lumber and timber products.....	8.70	8.17	6.66	6.06	.48	.51	.78	.86	.78	.74	8.73	8.67
Furniture and finished lumber products.....	10.31	10.54	8.26	8.47	.69	.73	.76	.65	.60	.69	9.62	11.37
Stone, clay, and glass products.....	6.57	6.64	4.82	4.73	.41	.37	.61	.84	.73	.70	6.33	7.98
Electrical machinery.....	5.15	5.39	3.88	4.05	.51	.53	.13	.17	.63	.64	6.74	7.24
Ordnance.....	8.06	7.78	4.97	4.58	.75	.79	1.57	1.69	.77	.72	8.03	8.67
Transportation equipment, except automobiles.....	7.97	7.18	5.58	4.97	1.09	.97	.40	.35	.90	.89	8.94	9.71
<i>Nondurable goods</i>												
Textile-mill products.....	7.75	7.77	6.35	6.35	.48	.41	.40	.43	.52	.58	6.78	7.55
Apparel and other finished textile products.....	7.46	7.30	6.27	6.13	.31	.25	.72	.73	.16	.19	6.72	7.05
Leather and leather products.....	7.28	7.62	5.97	6.04	.37	.40	.42	.66	.52	.52	5.68	6.85
Food and kindred products.....	11.39	10.73	8.75	8.05	.81	.68	.77	.88	1.06	1.12	12.06	13.06
Paper and allied products.....	7.21	8.07	5.59	6.24	.55	.54	.27	.44	.80	.85	7.30	9.26
Chemicals and allied products.....	6.63	5.82	4.84	4.29	.62	.54	.47	.36	.70	.63	7.02	8.04
Petroleum and coal products.....	3.45	2.94	2.38	2.06	.35	.19	.13	.15	.59	.54	3.78	4.95
Rubber products.....	6.42	6.61	5.36	5.41	.32	.41	.11	.12	.63	.67	8.15	8.20
Tobacco manufactures.....	9.70	8.12	8.74	6.75	.38	.30	.33	.76	.25	.31	10.20	8.18
Miscellaneous industries.....	4.47	4.19	3.21	2.96	.40	.43	.14	.10	.72	.70	5.52	5.45

¹ Preliminary.

TABLE 3.—Monthly Turnover Rates in Selected Manufacturing Industries, July 1943

Industry	Total separation		Quit		Total accession	
	July 1943 ¹	June 1943	July 1943 ¹	June 1943	July 1943 ¹	June 1943
Iron and steel and their products:						
Blast furnaces, steel works, and rolling mills	3.96	4.04	2.65	2.68	3.70	4.00
Gray-iron castings	9.20	8.41	7.10	6.30	8.15	7.76
Steel castings	8.87	7.96	7.04	6.20	9.41	8.13
Cast-iron pipe and fittings	7.74	7.06	5.23	3.95	7.29	5.75
Tin cans and other tinware	15.17	11.83	11.99	9.63	15.13	18.13
Wire products	4.35	4.62	2.98	3.21	3.01	3.75
Cutlery and edge tools	5.91	5.77	5.04	4.90	6.97	7.23
Tools (except edge tools, machine tools, files, and saws)	6.03	6.79	4.68	5.26	5.64	7.33
Hardware	7.06	5.83	5.92	4.43	6.41	7.73
Plumbers' supplies	5.62	5.15	4.04	3.71	4.36	5.12
Stoves, oil burners, and heating equipment	10.13	9.31	6.32	6.47	11.52	10.93
Steam and hot-water heating apparatus and steam fittings	8.11	5.57	5.27	4.28	7.28	6.11
Stamped and enameled ware and galvanizing	9.41	8.95	7.39	6.40	10.72	12.48
Fabricated structural metal products	8.14	8.35	5.52	5.58	8.91	12.26
Bolts, nuts, washers, and rivets	6.51	6.19	4.69	4.64	7.58	8.05
Forgings, iron and steel	5.19	5.50	3.73	4.03	6.59	7.54
Firearms (60 caliber and under) ²	5.76	6.71	4.13	5.18	-----	-----
Machinery, except electrical:						
Engines and turbines ²	6.89	5.24	4.82	3.84	-----	-----
Agricultural machinery and tractors	4.54	4.29	3.21	3.08	8.22	7.20
Machine tools ²	6.35	4.66	3.91	2.94	-----	-----
Machine-tool accessories ²	6.59	6.99	4.07	3.72	-----	-----
Metalworking machinery and equipment, not elsewhere classified ²	5.09	4.92	3.42	3.61	-----	-----
Textile machinery	4.63	3.59	3.78	2.83	2.60	7.22
General industrial machinery, except pumps	6.67	6.77	4.72	4.94	7.10	8.48
Pumps and pumping equipment	6.03	5.67	4.22	4.04	5.08	6.26
Automobiles:						
Motor vehicles, bodies, and trailers	5.88	5.27	4.09	3.63	10.75	10.95
Motor-vehicle parts and accessories	5.96	5.83	3.87	3.76	8.86	8.40
Nonferrous metals and their products:						
Aluminum and magnesium products ²	8.41	8.05	6.21	5.72	-----	-----
Aluminum and magnesium smelting and refining ²	13.48	12.35	10.45	9.27	-----	-----
Primary smelting and refining, except aluminum and magnesium ²	5.11	4.84	3.50	3.49	-----	-----
Primary smelting and refining, including aluminum and magnesium	10.18	8.97	7.70	6.67	12.36	11.90
Rolling and drawing of copper and copper alloys ²	6.10	4.93	4.98	4.07	-----	-----
Lighting equipment	7.07	6.89	4.80	4.40	12.01	6.86
Lumber and timber basic products:						
Sawmills	8.65	8.21	6.72	6.09	8.60	8.37
Planing and plywood mills	8.21	7.66	6.02	5.57	8.85	8.77
Furniture and finished lumber products:						
Furniture, including mattresses and bedsprings	10.04	10.35	7.86	8.30	9.41	10.71
Stone, clay, and glass products:						
Glass and glass products	6.87	6.71	5.00	4.62	7.20	9.49
Cement	4.05	4.84	3.25	3.00	3.71	3.78
Brick, tile, and terra cotta	8.37	7.66	5.70	5.95	5.79	7.13
Pottery and related products	6.88	7.64	4.90	5.17	6.77	7.56
Electrical machinery:						
Electrical equipment for industrial use ²	4.45	4.46	3.28	3.22	-----	-----
Radios, radio equipment, and phonographs ²	7.11	7.35	5.58	5.67	-----	-----
Communication equipment, except radios ²	3.79	4.88	2.89	3.84	-----	-----
Ordnance:						
Guns, howitzers, mortars, and related equipment ²	6.36	5.33	4.29	3.52	-----	-----
Ammunition, except for small arms ²	9.48	9.66	5.99	5.42	-----	-----
Tanks ²	8.58	8.01	4.57	4.69	-----	-----
Transportation equipment, except automobiles:						
Aircraft ²	6.64	5.91	5.23	4.55	-----	-----
Aircraft parts ²	5.72	4.84	3.87	3.23	-----	-----
Shipbuilding and repairs ²	10.25	9.36	6.80	6.20	-----	-----
Textile-mill products:						
Cotton	8.79	8.57	7.23	7.07	7.64	8.11
Silk and rayon goods	7.81	8.57	6.57	7.30	6.76	8.77
Woolen and worsted, except dyeing and finishing	5.50	6.32	4.18	4.52	4.65	5.25
Hosiery, full-fashioned	5.65	4.98	4.81	4.20	4.89	5.70
Hosiery, seamless	7.08	8.02	6.01	6.91	6.65	8.09
Knitted underwear	8.76	7.71	7.86	6.80	7.36	7.82
Dyeing and finishing textiles, including woolen and worsted	7.67	6.69	5.75	5.28	5.63	7.05
Apparel and other finished textile products:						
Men's and boys' suits, coats, and overcoats	5.71	5.86	4.63	4.52	5.06	5.60
Men's and boys' furnishings, work clothing, and allied garments	8.19	7.88	6.81	6.94	7.10	7.52
Women's clothing, except corsets	6.99	7.30	6.03	5.76	7.47	7.04

See footnote at end of table.

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TABLE 3.—Monthly Turnover Rates in Selected Manufacturing Industries, July 1943—Continued

Industry	Total separation		Quit		Total accession	
	July 1943 ¹	June 1943	July 1943 ¹	June 1943	July 1943 ¹	June 1943
Leather and leather products:						
Leather.....	5.77	5.48	4.22	4.22	2.65	4.13
Boots and shoes.....	7.55	8.01	6.29	6.37	6.25	7.33
Food and kindred products:						
Meat products.....	11.36	10.59	8.12	7.31	11.80	12.26
Grain-mill products.....	10.41	9.24	8.31	7.72	11.79	11.12
Paper and allied products:						
Paper and pulp.....	5.68	6.65	4.25	5.06	5.74	7.42
Paper boxes.....	11.66	11.53	9.58	8.99	11.60	13.81
Chemicals and allied products:						
Paints, varnishes, and colors.....	5.62	6.55	3.83	4.75	6.45	8.15
Rayon and allied products.....	5.31	4.26	3.34	3.13	5.66	5.54
Industrial chemicals, except explosives.....	4.74	4.48	3.37	3.05	5.44	6.45
Explosives ²	4.51	4.16	2.97	3.26	-----	-----
Small-arms ammunition ²	8.50	6.79	6.36	5.20	-----	-----
Products of petroleum and coal:						
Petroleum refining.....	3.22	2.82	2.23	1.97	3.47	4.67
Rubber products:						
Rubber tires and inner tubes.....	4.55	4.46	3.52	3.39	8.92	8.00
Rubber footwear and related products.....	7.04	9.59	6.21	8.48	10.07	11.06
Miscellaneous rubber industries.....	7.26	6.98	6.12	5.72	7.39	7.62

¹ Preliminary.² Publication of accession data restricted.

TABLE 4.—Monthly Labor Turnover Rates in Nonmanufacturing Industries, July 1943

Industry	Total separation		Quit		Total accession	
	July 1943 ¹	June 1943	July 1943 ¹	June 1943	July 1943 ¹	June 1943
Bituminous-coal mining.....	4.56	3.30	3.51	2.46	3.76	2.98
Anthracite mining.....	3.18	2.20	2.37	1.50	2.49	1.97
Metalliferous mining.....	7.28	6.45	5.40	4.55	5.12	6.17
Telephone ²	3.64	3.46	3.12	2.92	4.70	6.15

¹ Preliminary.² Included this month for the first time.

TABLE 5.—Monthly Total Separation and Quit Rates for Men and Women in Selected Groups and Industries Engaged in War Production, July 1943

Industry	Total separation				Quit			
	Men		Women		Men		Women	
	July 1943 ¹	June 1943	July 1943 ¹	June 1943	July 1943 ¹	June 1943	July 1943 ¹	June 1943
Iron and steel and their products:								
Blast furnaces, steel works, and rolling mills.....	5.01	5.12	8.59	8.23	3.45	3.48	7.08	7.07
Gray-iron castings.....	3.70	3.83	7.08	7.38	2.38	2.45	5.92	6.37
Steel castings.....	9.12	8.36	10.47	9.27	7.01	6.25	8.55	7.12
Cast-iron pipe and fittings.....	8.80	8.01	9.78	7.34	6.93	6.16	8.84	6.71
Firearms (60 caliber and under).....	7.71	6.96	8.13	8.71	5.06	3.75	7.71	6.99
Machine tools.....	4.98	6.38	9.36	8.02	3.49	4.80	7.10	6.71
Machinery, except electrical:								
Engines and turbines.....	5.58	5.07	8.19	7.95	3.56	3.30	6.45	6.31
Machine tools.....	6.67	4.99	7.67	6.80	4.36	3.49	6.54	6.01
Machine-tool accessories.....	5.81	4.30	9.56	6.75	3.55	2.52	6.08	5.38
Miscellaneous.....	6.13	6.47	8.18	8.83	3.41	2.78	6.22	6.99

¹ Preliminary.

TABLE 5.—Monthly Total Separation and Quit Rates for Men and Women in Selected Groups and Industries Engaged in War Production, July 1943—Continued

Industry	Total separation				Quit			
	Men		Women		Men		Women	
	July 1943 ¹	June 1943	July 1943 ¹	June 1943	July 1943 ¹	June 1943	July 1943 ¹	June 1943
Machinery, except electrical—Continued.								
Metalworking machinery and equipment, not elsewhere classified.....	4.67	4.59	7.78	6.90	2.96	3.19	6.32	6.15
General industrial machinery, except pumps.....	6.00	5.96	9.05	9.76	3.96	4.25	7.41	7.49
Pumps and pumping equipment.....	6.07	5.45	5.86	7.09	4.03	3.77	5.42	5.70
Nonferrous metals and their products.....	8.06	7.44	9.58	8.40	5.96	5.32	7.33	6.83
Aluminum and magnesium products.....	7.86	7.82	13.24	11.58	6.00	5.47	8.05	9.50
Aluminum and magnesium smelting and refining.....	13.46	12.30	13.87	13.10	10.39	9.18	11.20	10.42
Primary smelting and refining, except aluminum and magnesium.....	4.89	4.74	9.91	6.84	3.28	3.37	8.28	6.03
Rolling and drawing of copper and copper alloys.....	5.40	4.63	8.17	6.06	4.07	3.62	7.66	5.71
Electrical machinery.....	3.92	4.44	6.69	6.81	2.51	3.19	5.61	5.35
Electrical equipment for industrial use.....	3.56	3.65	6.04	6.10	2.22	2.41	5.18	4.83
Radios, radio equipment, and phonographs.....	4.49	6.42	8.68	8.27	2.77	4.86	7.25	6.47
Communication equipment, except radios.....	2.85	3.68	4.65	5.95	1.90	3.07	3.78	4.54
Ordnance.....	7.37	7.23	9.95	9.42	4.09	3.76	7.38	6.95
Guns, howitzers, mortars, and related equipment.....	5.77	4.70	8.58	7.44	3.72	2.91	6.42	5.60
Ammunition, except for small arms.....	8.26	9.24	11.42	10.34	4.52	4.23	8.33	7.47
Tanks.....	8.67	7.81	7.25	11.10	4.47	4.39	5.99	9.40
Transportation equipment, except automobiles.....	7.69	6.99	8.92	7.90	5.11	4.51	7.16	6.56
Aircraft.....	5.59	5.03	8.27	7.15	3.94	3.33	7.26	6.30
Aircraft parts.....	5.04	4.24	7.70	6.75	3.14	2.60	6.00	5.29
Shipbuilding and repairs.....	9.98	9.08	12.89	12.33	6.62	5.92	8.49	9.29
Chemicals and allied products.....	5.46	5.25	8.96	7.09	3.72	3.56	7.08	5.90
Industrial chemicals, except explosives.....	4.42	4.26	6.58	5.79	3.04	2.80	5.28	4.61
Explosives.....	3.65	2.80	6.06	6.52	2.06	1.64	4.61	6.09
Small-arms ammunition.....	7.23	6.23	10.01	7.48	5.07	4.41	7.89	6.18

¹ Preliminary.

Building Operations

Building Construction in Urban Areas, August 1943

THE dollar volume of building construction work started in urban areas in August 1943 showed a decrease of only 1 percent, when compared with July 1943. The increase of 12 percent in the volume of private work started practically offset the 24-percent decline in the value of Federal construction awards. While the value of all new non-residential building started during August decreased 25 percent, new residential building and additions, alterations, and repairs showed increases of 14 and 4 percent, respectively.

When compared with the same month a year ago, the total August dollar volume of building construction started reflects a decrease of 32 percent. Private construction alone was 2 percent more than in August 1942, while the value of Federally financed construction contracts was reduced by almost one-third. New residential building showed a gain of 5 percent over the August 1942 total, new nonresidential construction a decline of 66 percent, and additions, alterations, and repairs decreased 2 percent.

Comparison of August 1943 with July 1943 and August 1942

The volume of Federally financed and other building construction in urban areas of the United States in July and August 1943 and August 1942 is summarized in table 1.

TABLE 1.—*Summary of Building Construction in All Urban Areas, August 1943*

Class of construction	Number of buildings			Valuation		
	August 1943	Percent of change from—		August 1943 (in thousands)	Percent of change from—	
		July 1943	August 1942		July 1943	August 1942
All building construction.....	63, 208	+7.3	+2.5	\$100, 262	-1.0	-31.5
New residential.....	12, 867	+4.7	- .9	51, 480	+14.2	+5.4
New nonresidential.....	7, 609	+7.7	-21.5	25, 399	-24.6	-65.5
Additions, alterations, and repairs.....	42, 732	+8.1	+9.7	23, 383	+3.9	-2.1

The number of new dwelling units in urban areas for which permits were issued or contracts awarded during August 1943 and the estimated valuation of such new housekeeping residential construction are presented in table 2.

TABLE 2.—Number and Valuation of New Dwelling Units in All Urban Areas, by Type of Dwelling, August 1943

Type of financing and dwelling	Number of dwelling units			Valuation		
	August 1943	Percent of change from—		August 1943 (in thousands)	Percent of change from—	
		July 1943	August 1942		July 1943	August 1942
All dwellings	17, 142	+15. 8	+1. 0	\$51, 125	+18. 1	+5. 0
Privately financed	13, 088	+18. 1	-2. 3	42, 792	+20. 3	+9. 4
1-family	7, 251	-3. 3	-28. 1	24, 398	-6. 2	-19. 3
2-family ¹	1, 934	+37. 4	+143. 9	5, 995	+51. 7	+165. 4
Multifamily ²	3, 903	+79. 0	+55. 1	12, 399	+121. 1	+87. 0
Federally financed	4, 054	+9. 2	+13. 3	8, 333	+8. 1	+16. 3

¹ Includes 1- and 2-family dwellings with stores.
² Includes multifamily dwellings with stores.

Comparison of First 8 Months of 1942 and 1943

Permit valuations and contract values reported in the first 8 months of 1942 and 1943 are compared in table 3.

TABLE 3.—Valuation of Building Construction in All Urban Areas, by Class of Construction, First 8 Months of 1942 and 1943

Class of construction	Valuation (in thousands of dollars) of—					
	All construction: First 8 months			Federal construction: First 8 months		
	1943	1942	Percent of change	1943	1942	Percent of change
All construction	845, 816	2, 120, 638	-60. 1	414, 164	1, 261, 378	-67. 2
New residential	388, 155	677, 741	-42. 7	142, 989	207, 914	-31. 2
New nonresidential	314, 740	1, 229, 726	-74. 4	260, 525	1, 025, 439	-74. 6
Additions, alterations, and repairs	142, 921	213, 171	-33. 0	10, 650	28, 005	-62. 0

The number and valuation of new dwelling units for which permits were issued and contracts awarded during the first 8 months of 1943 are compared with similar data for 1942 in table 4.

TABLE 4.—Number and Valuation of New Dwelling Units in All Urban Areas, by Source of Funds and Type of Dwelling, First 8 Months of 1942 and 1943

Type of financing and dwelling	Number of dwelling units			Valuation (in thousands)		
	First 8 months of—		Percent of change	First 8 months of—		Percent of change
	1943	1942		1943	1942	
All dwellings	144, 392	203, 944	-29. 2	\$381, 114	\$669, 066	-43. 0
Privately financed	79, 094	142, 925	-44. 7	244, 516	475, 280	-48. 6
1-family	51, 900	108, 142	-52. 0	169, 920	374, 072	-54. 6
2-family ¹	10, 595	11, 272	-6. 0	29, 364	30, 292	-3. 1
Multifamily ²	16, 599	23, 511	-29. 4	45, 232	70, 916	-36. 2
Federal	65, 298	61, 019	+7. 0	136, 598	193, 786	-29. 5

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

Construction from Public Funds, August 1943

The value of contracts awarded and force-account work started during July and August 1943 and August 1942 on all construction projects, and shipbuilding financed wholly or partially from Federal funds and reported to the Bureau, is shown in table 5. This table includes all other types of construction as well as building construction, both inside and outside urban areas of the United States.

TABLE 5.—*Value of Contracts Awarded and Force-Account Work Started on Construction Projects and Shipbuilding Financed from Federal Funds, August 1943*

Source of funds	Contracts awarded and force-account work started (in thousands)		
	August 1943 ¹	July 1943 ²	August 1942 ²
Total.....	\$110,332	\$584,136	\$3,879,307
War public works.....	2,630	5,668	1,740
Regular Federal appropriations.....	89,161	557,560	3,864,329
Federal Public Housing Authority.....	18,541	20,908	13,238

¹ Preliminary; subject to revision.

² Revised.

Coverage and Method

The Bureau of Labor Statistics recently revised its methods of summarizing reports on building permits. Through January 1943, the figures covered a specified number of reporting cities which varied from month to month. Beginning with the February comparisons, the data cover all building construction in the urban area of the United States which, by Census definition, includes all incorporated places with 1940 populations of 2,500 or more and, by special rule, a small number of unincorporated minor civil divisions. The principal advantage of the change is that figures for every month are comparable, since estimates are made for any cities in the urban area which fail to report in a particular month. As in the past, the value of building construction contracts awarded by the Federal Government is combined with information obtained from building-permit reports. The contract value of this Federally financed building construction in urban areas as reported to the Bureau was \$26,982,000 in August 1943, \$35,601,000 in July 1943, and \$74,078,000 in August 1942.

The valuation figures represent estimates of construction costs made by prospective private builders when applying for permits to build, and the value of contracts awarded by Federal and State governments. No land costs are included. Unless otherwise indicated, only building construction within the corporate limits of cities in the urban area is included in the tabulations.

Trend of Employment and Unemployment

Summary of Reports For August 1943

THE total number of employees in nonagricultural establishments was 38,295,000 in August and, although war production employment increased, total employment was 88,000 less than in July. In spite of the decline, employment was almost 500,000 above August 1942. With the exception of manufacturing, all the industry divisions contributed to the decline over the month.

Industrial and Business Employment

The increase of 29,000 wage earners in the durable-goods group of manufacturing industries and the decline of 9,000 in the nondurable-goods group resulted in a net increase of 20,000 wage earners in all manufacturing industries.

Employment in seven of the nine durable-goods groups was practically the same as in July. The only sizable changes were in the transportation and automobile groups. Considerable expansion in the aircraft industry, which was only partially offset by declines in shipbuilding employment, resulted in an increase of 9,000 wage earners in the transportation group. The increase of 24,000 wage earners in the automobile group also reflects the further expansion of the aircraft industry, as well as increased employment in the production of other war material. (The automobile industry converted to the production of war goods in 1941 and 1942 and is now on a complete wartime footing.)

Among the nondurable-goods groups, only the food group showed a sizable increase in employment. A seasonal increase in the canning industry and a contraseasonal increase in slaughtering and meat packing raised employment in the food group to 1,033,000 wage earners, 17,000 above July. The leather, chemicals, and textiles groups, with employment declines of 5,000, 8,000 and 13,000, respectively, were responsible for the decline in nondurable-goods employment.

Employment in bituminous-coal mining and in metal mining were each 13 percent below the level in August 1942. The bituminous-coal-mining industry employed only 378,000 wage earners in August 1943 as compared with 435,000 in August 1942. Although each of the components of the metal-mining group employed fewer wage earners in August 1943 than a year ago, the decline of 10,600 wage earners in gold and silver mining was primarily responsible for reducing employment in this group by 13,800.

TABLE 1.—Estimated Number of Wage Earners and Indexes of Wage-Earner Employment in Manufacturing Industries, by Major Industry Group¹

[Subject to revision]

Industry group	Estimated number of wage earners (thousands)				Wage-earner indexes (1939=100)	
	August 1943	July 1943	June 1943	August 1942	August 1943	July 1943
All manufacturing	13,915	13,895	13,826	12,869	169.9	169.6
Durable goods.....	8,315	8,286	8,251	7,192	230.3	229.5
Nondurable goods.....	5,600	5,609	5,575	5,677	122.2	122.4
Iron and steel and their products	1,709	1,711	1,718	1,620	172.4	172.6
Electrical machinery	707	709	703	564	272.9	273.5
Machinery, except electrical	1,247	1,246	1,251	1,114	236.0	235.9
Transportation equipment, except automobiles	2,319	2,310	2,288	1,673	1461.2	1455.3
Automobiles.....	718	694	676	534	178.5	172.6
Nonferrous metals and their products.....	414	414	415	387	180.4	180.6
Lumber and timber basic products.....	481	484	482	561	114.5	115.1
Furniture and finished lumber products.....	360	360	358	369	109.8	109.8
Stone, clay, and glass products.....	360	358	360	370	122.6	122.1
Textile-mill products and other fiber manufactures.....	1,206	1,219	1,233	1,283	105.5	106.5
Apparel and other finished textile products.....	834	833	853	915	105.6	105.6
Leather and leather products.....	325	330	333	367	93.7	95.0
Food.....	1,033	1,016	953	1,125	120.9	118.9
Tobacco manufactures.....	87	89	89	97	93.5	95.1
Paper and allied products.....	316	316	316	298	119.0	118.9
Printing, publishing, and allied industries.....	337	339	334	325	102.8	103.4
Chemicals and allied products.....	734	742	743	623	254.5	257.4
Products of petroleum and coal.....	126	126	125	129	119.4	119.1
Rubber products.....	193	192	189	158	159.5	158.9
Miscellaneous industries.....	409	407	407	357	167.3	166.4

¹ The estimates and indexes presented in this table have been adjusted to final data for 1941 and preliminary data for the second quarter of 1942 made available by the Bureau of Employment Security of the Federal Security Agency and are not comparable with December 1942 data shown in the monthly Labor Review for February 1943 and earlier months. Estimates and indexes for the period January 1939 to November 1942 comparable with the data in the above table are available upon request.

Public Employment

The personnel reduction of 91,000 during August 1943 in the regular Federal services—executive, legislative, and judicial—brought total Federal employment to 3,017,000. The largest reduction took place in the War Department, but small reductions of staff occurred in the War Manpower Commission, Office of Price Administration, and Veterans' Administration. The Post Office Department added 3,800 employees during the month, while employment in all other agencies remained practically the same. Continuing the trend started in March, employment in the Washington metropolitan area declined 1,800.

The number of wage earners on building construction and shipbuilding and repair projects, financed wholly or partially from Federal funds, declined 65,000 during the month ending August 15, 1943. The types of projects mainly affected were nonresidential building, war production facilities, and airport construction; smaller declines occurred on housing and war public-works construction projects.

The increase (over August 1942) in monthly pay rolls on these construction programs of \$36,349,000, as contrasted with a decrease in employment of 275,000, is accounted for by shifts in the importance of the various types of projects and the need on the expanding projects for more highly skilled workers.

Although the work-relief program on the continent was brought to a close at the end of June, projects are still in operation in Puerto Rico and the Virgin Islands. In June 1943, there were 42,000 project workers there but reports have not yet been received for subsequent months.

For the regular Federal services, data for the legislative and judicial services and for force-account employees in the executive service are reported to the Bureau of Labor Statistics; data for other executive-service employees are reported through the Civil Service Commission. The Bureau of Labor Statistics receives monthly reports on employment and pay rolls for the various construction projects financed wholly or partially by Federal funds directly from the contractors and subcontractors, and for the WPA program, from its Washington office.

A summary of employment and pay-roll data for the regular Federal services, for construction projects financed wholly or partially from Federal funds, and for the Work Projects Administration program is given in table 2.

TABLE 2.—*Employment and Pay Rolls in Regular Federal Services and on Projects Financed Wholly or Partially From Federal Funds*

[Subject to revision]

Service or program	Employment			Pay rolls		
	August 1943	July 1943	August 1942	August 1943	July 1943	August 1942
Regular Federal services:						
Executive ¹	3,007,795	3,098,582	2,510,364	\$555,244,000	\$571,304,000	\$398,180,000
War agencies ²	2,211,972	2,306,273	1,676,931	396,665,000	413,423,000	258,964,000
Other agencies.....	795,823	792,309	833,433	158,579,000	157,881,000	139,216,000
Judicial.....	2,651	2,651	2,578	777,200	767,800	641,300
Legislative.....	6,221	6,091	6,517	1,520,300	1,510,700	1,390,800
Construction projects:						
Financed from regular Federal appropriations³.....						
War.....	2,040,160	2,083,162	2,336,600	484,956,087	489,335,440	463,397,000
Other.....	1,990,560	2,027,862	2,232,300	475,165,087	478,419,440	445,472,000
Public housing.....	49,600	55,300	104,300	9,791,000	10,916,000	17,925,000
War public works.....	89,800	91,900	87,000	16,850,000	17,253,000	13,372,000
Financed by RFC.....	12,750	13,200	13,200	1,872,200	2,031,700	1,562,300
War.....	166,688	186,141	147,600	36,360,300	41,158,500	25,358,000
Other.....	166,500	186,000	145,400	36,329,000	41,138,000	24,966,000
Other.....	188	141	2,200	31,300	20,500	392,000
Work Projects Administration projects.....	(⁴)	(⁴)	447,267	(⁴)	(⁴)	31,604,000
War.....	(⁴)	(⁴)	167,746	(⁴)	(⁴)	12,218,000
Other.....	(⁴)	(⁴)	279,521	(⁴)	(⁴)	19,386,000

¹ Includes employees in United States navy yards and on force-account construction who are also included under construction projects. Data for August 1942 are not strictly comparable with the series starting June 1943 because of the inclusion of employees on terminal leave in the earlier figure and the inclusion beginning June 1943 of approximately 7,000 employees of the War Shipping Administration who were previously unreported.

² Covers War and Navy Departments, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, Office for Emergency Management, Office of Censorship, Office of Price Administration, Office of Strategic Services, Office of Economic Warfare, and the Petroleum Coordinator for War.

³ Includes ship construction and repair in United States navy yards and the Federally financed part thereof in private shipyards.

⁴ Projects are in operation under the work-relief program for Puerto Rico and the Virgin Islands, but data for them are not yet available.

Detailed Reports for Industrial and Business Employment, July 1943

Estimates of Nonagricultural Employment

ESTIMATES of civil employees in nonagricultural establishments by major groups are given in table 1. With the exception of the trade and finance-service-miscellaneous groups, they are not comparable with estimates published in the September 1942 or earlier issues of the Monthly Labor Review. Comparable figures for the months from January 1939 to July 1942 are given in the October 1942 issue of the Monthly Labor Review.

The estimates are based on reports of employers to the United States Bureau of Labor Statistics, on data made available by the Bureau of Employment Security and the Bureau of Old-Age and Survivors Insurance of the Federal Security Agency, and on information supplied by other Government agencies, such as the Interstate Commerce Commission, Civil Service Commission, and the Bureau of the Census. They do not include military personnel, emergency employment (such as WPA, NYA, and CCC), proprietors or self-employed persons, unpaid family workers, and domestics.

Estimates of employees in nonagricultural establishments, by States, are given each month in the Bureau of Labor Statistics mimeographed release on employment and pay rolls.

Industrial and Business Employment

Monthly reports on employment and pay rolls are available for 152 manufacturing industries and for 16 nonmanufacturing industries, including private building construction, water transportation, and class I steam railroads. The reports for the first 2 of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics. The figures on water transportation are based on estimates prepared by the Maritime Commission, and those on class I steam railroads are compiled by the Interstate Commerce Commission.

The employment, pay-roll, hours, and earnings figures for manufacturing, mining, laundries, and dyeing and cleaning cover wage earners only; but the figures for public utilities, brokerage, insurance, and hotels relate to all employees except corporation officers and executives; while for trade they relate to all employees except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum production they cover wage earners and clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from approximately 25 percent for wholesale and retail trade, dyeing and cleaning, and insurance, to approximately 80 percent for public utilities and 90 percent for mining.

The general manufacturing indexes are computed from reports supplied by representative establishments in the 152 manufacturing industries surveyed. These reports cover more than 65 percent of the total wage earners in all manufacturing industries of the country and about 80 percent of the wage earners in the 152 industries covered.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and the amount of pay rolls for the pay period ending nearest the 15th of the month.

The average weekly earnings for individual industries shown in table 6 are computed by dividing the weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As not all reporting establishments supply information on man-hours, the average hours worked per week and average hourly earnings shown in that table are necessarily based on data furnished by a slightly smaller number of reporting firms. Because of variation in the size and composition of the reporting sample, the average hours per week, average hourly earnings, and average weekly earnings shown may not be strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movement of earnings and hours over the period shown. The average weekly hours and hourly earnings for the manufacturing groups are weighted arithmetic means of the averages for the individual industries, estimated employment being used as weights for weekly hours and estimated aggregate hours as weights for hourly earnings. The average weekly earnings for these groups are now computed by multiplying the average weekly hours by the corresponding average hourly earnings, and are not comparable with figures published in the November 1942 or earlier issues of the Monthly Labor Review. Formerly, weekly earnings for the groups were computed by dividing the total weekly pay roll by total employment, without any formal weighting of figures for the component industries.

EMPLOYMENT AND PAY-ROLL INDEXES, AVERAGE HOURS, AND EARNINGS

Employment and pay-roll indexes, as well as average hours worked per week, average hourly earnings, and average weekly earnings for May, June, and July 1943, are presented in tables 3, 5, and 6.

The revised manufacturing indexes and aggregates in tables 2 and 3 are not comparable with the indexes published in the November 1942 or earlier issues of the Monthly Labor Review, as a result of changes in definitions, a change in the index base period, and adjustments in levels. Revised figures for the major manufacturing groups are available in mimeographed form by months from January 1939 through October 1942 and for individual manufacturing industries from January 1939 through August 1942.

The figures relating to all manufacturing industries combined, to the durable- and nondurable-goods divisions, and to the major industry groups, have been adjusted to conform to levels indicated by final data for 1941 and preliminary data for the second quarter of 1942 released by the Bureau of Employment Security of the Federal Security Agency. The Bureau of Employment Security data referred to are (a) employment totals reported by employers under State unemployment-compensation programs, and (b) estimates of the number of employees not reported under the programs of some of these States, which do not cover small establishments. The latter estimates were obtained from tabulations prepared by the Bureau of Old-Age and Survivors Insurance, which obtains reports from all employers regardless of size of establishment.

Not all industries in each major industry group are represented in the tables, since minor industries are not canvassed by the Bureau, and others cannot be shown because of their close relationship to the war program. Furthermore, no attempt has been made to allocate



among the separate industries the adjustment to unemployment-compensation data. Hence, the estimates for individual industries within a group may not add to the total estimate for that group.

TABLE 1.—Estimated Number of Employees in Nonagricultural Establishments, by Industry Division

Industry division	Estimated number of employees (in thousands)			
	July 1943	June 1943	May 1943	July 1942
Total estimated employment ¹	² 38,383	38,484	38,262	37,234
Manufacturing.....	16,136	16,056	15,911	14,641
Mining.....	830	835	837	923
Contract construction and Federal force-account construction.....	1,218	1,277	1,299	2,108
Transportation and public utilities.....	3,683	3,653	3,587	3,519
Trade.....	6,290	6,371	6,331	6,504
Finance, service, and miscellaneous.....	4,359	4,355	4,349	4,355
Federal, State, and local government, excluding Federal force-account construction.....	² 5,867	5,937	5,948	5,184

¹ Estimates exclude proprietors of unincorporated businesses, self-employed persons, domestics employed in private homes, public emergency employees, and personnel in the armed forces.

² Preliminary.

TABLE 2.—Estimated Number of Wage Earners in Manufacturing Industries ¹

Industry ²	Estimated number of wage earners (in thousands)			
	July 1943	June 1943	May 1943	July 1942
All manufacturing.....	13,895	13,826	13,700	12,564
Durable goods.....	8,286	8,251	8,159	7,003
Nondurable goods.....	5,609	5,575	5,541	5,561
<i>Durable goods</i>				
Iron and steel and their products.....	1,711	1,718	1,718	1,612
Blast furnaces, steel works, and rolling mills.....	517.9	521.3	522.4	545.6
Gray-iron and semisteel castings.....	80.9	81.9	82.2	88.8
Malleable-iron castings.....	26.2	26.8	26.9	27.8
Steel castings.....	84.1	84.0	84.1	75.2
Cast-iron pipe and fittings.....	15.6	16.6	17.3	21.0
Tin cans and other tinware.....	35.2	32.6	30.6	35.4
Wire drawn from purchased rods.....	35.7	36.6	36.9	31.4
Wirework ³	32.9	32.8	32.3	31.9
Cutlery and edge tools.....	21.5	21.3	21.6	20.6
Tools (except edge tools, machine tools, files, and saws).....	27.6	28.1	28.0	26.9
Hardware.....	45.7	45.7	44.6	43.9
Plumbers' supplies.....	23.8	23.5	23.5	20.6
Stoves, oil burners, and heating equipment, not elsewhere classified.....	53.8	53.2	53.1	47.3
Steam and hot-water heating apparatus and steam fittings.....	59.2	59.9	59.4	48.1
Stamped and enameled ware and galvanizing.....	91.2	89.8	88.9	73.5
Fabricated structural and ornamental metalwork.....	69.7	69.4	69.4	62.4
Metal doors, sash, frames, molding, and trim.....	13.2	12.6	12.2	10.8
Bolts, nuts, washers, and rivets.....	29.2	29.2	28.9	24.7
Forgings, iron and steel.....	40.2	40.4	40.3	35.2
Wrought pipe, welded and heavy riveted.....	26.7	26.9	26.6	16.3
Screw-machine products and wood screws.....	49.1	49.6	49.1	45.9
Steel barrels, kegs and drums.....	8.5	8.1	7.3	7.6
Electrical machinery.....	709	703	695	542
Machinery, except electrical.....	1,246	1,251	1,243	1,094
Machinery and machine-shop products.....	492.3	492.5	490.9	424.7
Tractors.....	52.3	50.6	49.5	45.7
Agricultural machinery, excluding tractors.....	38.9	37.8	36.0	34.7
Textile machinery.....	28.4	28.1	28.2	30.6
Pumps and pumping equipment.....	76.6	77.2	76.2	66.6
Typewriters.....	11.9	11.9	12.1	12.7
Cash registers, adding and calculating machines.....	34.9	34.8	34.6	28.7
Washing machines, wringers, and driers, domestic.....	14.1	13.5	12.5	8.2
Sewing machines, domestic and industrial.....	10.7	10.5	10.5	9.8
Refrigerators and refrigeration equipment.....	54.2	53.8	52.9	33.1

See footnotes at end of table.

TABLE 2.—Estimated Number of Wage Earners in Manufacturing Industries¹—Continued

Industry ²	Estimated number of wage earners (in thousands)			
	July 1943	June 1943	May 1943	July 1942
<i>Durable goods—Continued</i>				
Transportation equipment, except automobiles.....	2,310	2,288	2,241	1,559
Motorcycles, bicycles, and parts.....	9.6	9.5	9.8	9.9
Automobiles.....	694	676	660	513
Nonferrous metals and their products.....	414	415	410	381
Smelting and refining, primary, of nonferrous metals.....	46.8	46.2	45.0	37.0
Clocks and watches.....	24.8	25.1	24.5	26.4
Jewelry (precious metals) and jewelers' findings.....	15.7	16.3	16.3	16.7
Silverware and plated ware.....	11.7	11.9	11.8	11.2
Lighting equipment.....	24.0	23.8	23.5	21.9
Sheet-metal work, not elsewhere classified.....	30.4	30.4	29.8	28.0
Lumber and timber basic products.....	484	482	479	559
Sawmills and logging camps.....	264.5	264.1	262.5	312.9
Planing and plywood mills.....	82.7	81.9	81.1	88.0
Furniture and finished lumber products.....	360	358	356	374
Mattresses and bedsprings.....	18.2	18.2	17.9	18.1
Furniture.....	168.6	167.4	166.9	171.7
Wooden boxes, other than cigar.....	29.4	29.5	29.5	32.4
Caskets and other morticians' goods.....	11.8	12.2	11.8	11.4
Wood preserving.....	10.6	10.4	10.7	13.1
Wood, turned and shaped.....	22.7	22.0	21.7	24.5
Stone, clay, and glass products.....	358	360	357	369
Glass and glassware.....	88.4	88.5	86.9	80.5
Glass products made from purchased glass.....	11.4	11.2	11.1	11.9
Cement.....	24.1	24.4	24.5	30.1
Brick, tile, and terra cotta.....	51.2	51.5	51.2	65.9
Pottery and related products.....	42.2	42.9	43.7	43.8
Gypsum ³	4.6	4.6	4.5	4.9
Wallboard, plaster (except gypsum), and mineral wool.....	11.0	11.6	11.3	11.1
Lime.....	9.5	9.6	9.5	10.7
Marble, granite, slate, and other products.....	12.3	12.3	12.1	13.8
Abrasives.....	24.6	23.8	23.2	16.4
Asbestos products ³	22.3	22.1	21.8	21.5
<i>Nondurable goods</i>				
Textile-mill products and other fiber manufactures.....	1,219	1,233	1,239	1,293
Cotton manufactures, except smallwares.....	484.2	487.8	489.9	508.8
Cotton smallwares.....	16.6	17.0	17.2	18.0
Silk and rayon goods.....	95.0	95.8	96.0	105.2
Woolen and worsted manufactures, except dyeing and finishing.....	164.8	168.0	169.8	182.8
Hosiery.....	115.6	117.0	117.6	124.5
Knitted cloth.....	11.7	11.9	11.9	12.1
Knitted outerwear and knitted gloves.....	32.7	33.2	32.4	30.5
Knitted underwear.....	41.7	42.4	42.6	45.3
Dyeing and finishing textiles, including woolen and worsted.....	67.4	68.2	68.7	67.9
Carpets and rugs, wool.....	22.4	23.2	23.4	23.0
Hats, fur-felt.....	9.8	10.0	10.2	10.3
Jute goods, except felts.....	3.7	4.0	4.0	3.9
Cordage and twine.....	17.2	17.2	17.2	16.5
Apparel and other finished textile products.....	833	853	865	866
Men's clothing, not elsewhere classified.....	227.7	231.0	233.7	240.8
Shirts, collars, and nightwear.....	59.3	60.5	60.9	68.1
Underwear and neckwear, men's.....	12.9	12.9	12.9	13.7
Work shirts ³	18.3	18.7	18.8	19.0
Women's clothing, not elsewhere classified.....	229.2	238.6	240.9	230.9
Corsets and allied garments.....	16.0	16.4	16.5	16.4
Millinery.....	18.4	17.0	19.5	16.2
Handkerchiefs.....	3.7	3.7	3.7	4.5
Curtains, draperies, and bedspreads.....	16.5	17.0	17.7	15.9
Housefurnishings, other than curtains, etc.....	14.0	14.5	15.0	15.2
Textile bags.....	14.4	14.5	14.8	15.0
Leather and leather products.....	330	333	337	374
Leather.....	45.1	46.3	46.9	49.6
Boot and shoe cut stock and findings.....	17.1	17.3	17.6	18.2
Boots and shoes.....	184.2	185.2	187.3	212.9
Leather gloves and mittens.....	14.5	14.5	14.6	14.9
Trunks and suitcases.....	13.1	13.6	13.5	15.4

See footnotes at end of table.

TABLE 2.—Estimated Number of Wage Earners in Manufacturing Industries¹—Continued

Industry ²	Estimated number of wage earners (in thousands)			
	July 1943	June 1943	May 1943	July 1942
<i>Nondurable goods—Continued</i>				
Food.....	1,016	953	914	1,052
Slaughtering and meat packing.....	160.7	159.1	154.0	179.7
Butter ³	23.9	23.7	23.1	23.3
Condensed and evaporated milk.....	14.6	14.6	13.5	14.6
Ice cream.....	17.8	17.2	15.5	19.3
Flour.....	28.3	28.0	27.6	25.3
Feeds, prepared.....	21.7	22.1	22.3	18.8
Cereal preparations.....	10.0	10.1	9.9	8.8
Baking.....	253.0	251.2	247.2	253.8
Sugar refining, cane.....	14.9	14.3	13.2	12.9
Sugar, beet.....	5.0	4.7	4.4	5.7
Confectionery.....	51.9	52.3	53.2	50.7
Beverages, nonalcoholic.....	30.2	28.4	26.6	25.9
Malt liquors.....	48.1	46.8	44.6	43.3
Canning and preserving.....	159.4	107.5	91.7	191.4
Tobacco manufactures.....	89	89	90	94
Cigarettes.....	33.2	32.2	32.3	29.6
Cigars.....	41.8	43.3	43.9	50.4
Tobacco (chewing and smoking) and snuff.....	8.1	8.1	8.0	7.6
Paper and allied products.....	316	316	312	302
Paper and pulp.....	149.9	150.4	149.0	154.6
Paper goods, other.....	48.5	-8.9	48.2	44.3
Envelopes.....	10.4	10.5	10.4	9.6
Paper bags.....	12.3	12.1	12.1	12.1
Paper boxes.....	84.8	84.3	83.4	71.8
Printing, publishing, and allied products.....	339	334	329	325
Newspapers and periodicals.....	112.0	113.6	113.5	114.2
Printing, book and job.....	134.7	130.4	127.1	125.7
Lithographing ³	25.8	25.2	24.8	22.5
Bookbinding.....	30.4	29.5	29.1	28.3
Chemicals and allied products.....	742	743	739	613
Paints, varnishes, and colors.....	30.0	29.8	29.0	29.1
Drugs, medicines, and insecticides.....	46.6	45.8	44.2	37.2
Perfumes and cosmetics.....	11.5	11.0	11.0	10.6
Soap.....	12.8	12.9	13.0	13.4
Rayon and allied products.....	52.6	52.4	51.9	51.3
Chemicals, not elsewhere classified.....	117.0	115.6	113.5	111.5
Compressed and liquefied gases.....	6.4	6.3	6.4	6.5
Cottonseed oil.....	12.0	12.7	14.1	10.0
Fertilizers ³	17.9	19.2	24.9	16.6
Products of petroleum and coal.....	126	125	124	129
Petroleum refining.....	81.8	80.8	79.9	80.4
Coke and byproducts.....	24.6	25.2	25.0	27.1
Paving materials.....	1.6	1.7	1.6	2.1
Roofing materials.....	9.8	9.5	9.4	10.6
Rubber products.....	192	189	186	153
Rubber tires and inner tubes.....	87.5	85.0	83.3	65.6
Rubber boots and shoes.....	22.1	22.2	21.7	18.4
Rubber goods, other.....	73.1	72.7	72.1	61.2
Miscellaneous industries.....	407	407	406	360
Photographic apparatus.....	30.8	29.7	28.2	23.8
Pianos, organs, and parts.....	10.3	10.0	9.9	7.0
Games, toys and dolls.....	15.7	15.8	15.6	17.8
Buttons.....	10.8	10.8	10.7	12.6

¹ Estimates for the major industry groups have been adjusted to final data for 1941 and preliminary data for the second quarter of 1942 made available by the Bureau of Employment Security of the Federal Security Agency, and are not comparable with data in issues of the Monthly Labor Review prior to March 1943. Comparable series for earlier months are available upon request. Estimates for individual industries have been adjusted to levels indicated by the 1939 Census of Manufactures, but not to Federal Security Agency data. For this reason, together with the fact that this Bureau has not prepared estimates for certain industries, and does not publish wage earners in war industries, the sum of the individual industry estimates will not agree with totals shown for the major industry groups.

² Unpublished information concerning the following war industries may be obtained by authorized agencies upon request: Aircraft engines; aircraft and parts, excluding engines; alloying; aluminum manufactures; ammunition; cars, electric and steam-railroad; communication equipment; electrical equipment; engines and turbines; explosives and safety fuses; fire extinguishers; firearms; fireworks; locomotives; machine-tool accessories; machine tools; optical instruments and ophthalmic goods; professional and scientific instruments and fire-control equipment; radios and phonographs; and shipbuilding.

³ Revisions have been made as follows in the data for earlier months:

Wirework.—January 1943 to April 1943 wage earners to 31.8, 31.8, 32.5, and 32.2.

Gypsum.—March and April 1943 wage earners to 4.3 and 4.4.

Asbestos products.—December 1942 to April 1943 wage earners to 22.0, 21.9, 21.8, 22.0, and 21.8.

Work shirts.—January 1943 to April 1943 wage earners to 17.9, 18.7, 18.8, and 19.0.

Butter.—January 1943 to April 1943 wage earners to 19.7, 19.8, 20.9, and 21.9.

Lithographing.—October 1942 to April 1943 wage earners to 24.4, 24.9, 25.6, 25.3, 25.3, 24.8, and 25.0.

Fertilizers.—February, March, and April 1943 wage earners to 26.5, 30.4, and 29.7.

TABLE 3.—Indexes of Wage-Earner Employment and of Wage-Earner Pay Roll in Manufacturing Industries¹

[1939 average=100]

Industry ²	Wage-earner employ- ment				Wage-earner pay roll			
	July 1943	June 1943	May 1943	July 1942	July 1943	June 1943	May 1943	July 1942
All manufacturing.....	169.6	168.8	167.2	158.4	315.5	317.3	313.5	242.7
Durable goods.....	229.5	228.5	225.9	193.9	439.5	441.9	437.1	323.9
Nondurable goods.....	122.4	121.7	121.0	121.4	194.3	195.6	192.6	163.3
<i>Durable goods</i>								
Iron and steel and their products.....	172.6	173.3	173.2	162.5	299.7	305.6	303.5	245.7
Blast furnaces, steel works, and rolling mills.....	133.3	134.2	134.5	140.4	225.7	225.7	222.2	197.2
Gray-iron and semisteel castings.....	138.5	140.1	140.7	152.0	246.2	261.4	264.8	236.8
Malleable-iron castings.....	145.0	148.4	148.9	154.1	257.2	273.7	274.0	228.7
Steel castings.....	279.6	279.0	279.4	249.9	480.1	498.3	495.1	383.7
Cast-iron pipe and fittings.....	94.4	100.4	104.9	126.9	161.8	173.6	180.6	202.4
Tin cans and other tinware ³	110.7	102.6	106.4	111.5	172.6	162.3	151.7	145.8
Wire drawn from purchased rods.....	162.6	166.3	168.1	142.7	247.6	253.9	254.9	197.4
Wirework ⁴	108.2	107.9	106.3	104.9	204.3	202.4	199.4	163.1
Cutlery and edge tools.....	139.7	138.2	140.2	133.9	272.0	274.5	270.5	215.6
Tools (except edge tools, machine tools, files, and saws).....	180.1	183.7	182.9	175.5	319.3	338.0	337.2	288.9
Hardware.....	128.1	128.1	125.2	123.2	241.5	249.0	242.1	199.7
Plumbers' supplies.....	96.7	95.3	95.2	83.4	164.8	165.9	161.8	114.5
Stoves, oil burners, and heating equipment, not elsewhere classified.....	116.6	115.3	115.1	102.6	192.7	195.6	194.1	146.6
Steam and hot-water heating apparatus and steam fittings.....	195.3	197.7	196.0	158.6	360.9	362.6	358.9	260.9
Stamped and enameled ware and galvanizing.....	164.2	161.6	160.0	132.4	297.0	298.5	299.0	202.7
Fabricated structural and ornamental metal- work.....	196.2	195.3	195.5	175.7	356.4	362.0	356.1	264.2
Metal doors, sash, frames, molding, and trim.....	170.0	162.8	157.9	139.1	297.2	287.1	277.3	210.6
Bolts, nuts, washers, and rivets ⁵	204.2	203.8	201.7	173.0	359.4	377.1	376.7	267.3
Forgings, iron and steel.....	261.4	263.1	262.2	229.3	454.1	493.6	501.1	372.2
Wrought pipe, welded and heavy riveted.....	319.4	321.6	317.5	195.3	583.2	603.3	597.2	320.9
Screw-machine products and wood screws.....	290.1	293.3	290.2	271.2	535.5	547.4	553.2	455.5
Steel barrels, kegs, and drums.....	140.1	133.8	120.6	125.0	242.8	254.4	222.2	168.9
Electrical machinery.....	273.5	271.1	268.3	209.1	459.1	463.9	458.9	325.7
Machinery, except electrical.....	255.9	236.7	235.2	207.0	417.4	428.0	427.2	339.1
Machinery and machine-shop products.....	243.3	243.4	242.6	209.9	423.9	435.1	432.5	337.1
Tractors.....	167.1	161.8	158.2	146.0	254.0	247.6	244.9	199.1
Agricultural machinery, excluding tractors.....	140.1	135.9	129.4	124.8	269.3	264.5	246.5	179.0
Textile machinery.....	129.6	128.3	128.5	139.6	223.2	229.2	225.2	218.2
Pumps and pumping equipment.....	316.0	318.5	314.6	274.7	629.9	647.4	645.3	521.3
Typewriters.....	73.4	73.1	74.4	78.3	142.8	143.8	144.7	120.6
Cash registers, adding and calculating machines.....	177.4	177.0	175.6	146.0	337.8	342.3	338.1	240.0
Washing machines, wringers, and driers, domes- tic.....	188.4	181.3	166.8	109.9	298.9	298.8	289.1	185.2
Sewing machines, domestic and industrial.....	136.7	134.3	134.4	125.5	283.7	280.6	278.1	223.6
Refrigerators and refrigeration equipment.....	154.1	152.9	150.5	94.0	259.1	254.5	250.3	136.0
Transportation equipment, except automobiles.....	1455.3	1441.6	1412.0	982.5	2798.3	2768.0	2736.7	1753.2
Motorcycles, bicycles, and parts.....	137.8	136.9	139.9	141.5	238.9	250.4	255.0	224.8
Automobiles.....	172.6	167.9	164.0	127.4	314.3	305.8	297.1	202.5
Nonferrous metals and their products.....	180.6	180.9	178.8	166.3	321.1	325.0	322.0	260.0
Smelting and refining, primary, of nonferrous metals.....	169.3	167.2	162.9	134.0	294.5	285.5	276.5	189.9
Clocks and watches.....	122.2	123.9	120.7	130.0	229.4	236.4	233.9	227.8
Jewelry (precious metals) and jewelers' findings.....	108.6	112.6	113.2	115.7	151.4	170.9	170.6	143.1
Silverware and plated ware.....	96.7	98.1	96.9	92.2	164.6	171.4	167.1	130.0
Lighting equipment.....	117.3	116.2	114.7	107.0	200.2	203.5	204.6	168.1
Sheet-metal work, not elsewhere classified.....	162.4	162.3	159.0	149.3	266.4	284.1	288.4	213.9
Lumber and timber basic products.....	115.1	114.8	114.0	133.0	193.3	200.8	196.1	189.4
Sawmills and logging camps.....	91.8	91.7	91.2	108.7	156.2	163.8	160.4	157.4
Planing and plywood mills.....	113.8	112.8	111.7	121.2	179.3	181.1	175.5	161.7
Furniture and finished lumber products.....	109.8	109.1	108.6	114.0	178.6	181.1	178.9	157.1
Mattresses and bedsprings.....	99.4	99.0	97.6	98.6	155.4	156.6	152.9	124.6
Furniture.....	105.9	105.1	104.9	107.9	171.8	174.2	171.5	149.8
Wooden boxes, other than cigar.....	116.1	116.3	116.4	127.8	199.1	201.4	204.9	187.4
Caskets and other morticians' goods.....	94.5	97.6	94.4	91.9	147.3	153.9	148.5	115.9
Wood preserving.....	94.7	92.6	95.1	116.9	175.5	178.6	183.4	181.6
Wood, turned and shaped.....	103.0	100.1	98.6	111.4	165.6	167.1	163.7	153.4

See footnotes at end of table.

TABLE 3.—Indexes of Wage-Earner Employment and of Wage-Earner Pay Roll in Manufacturing Industries—Continued

Industry ¹	Wage-earner employ- ment				Wage-earner pay roll			
	July 1943	June 1943	May 1943	July 1942	July 1943	June 1943	May 1943	July 1942
<i>Durable goods—Continued</i>								
Stone, clay, and glass products.....	122.1	122.5	121.5	125.7	184.4	189.6	187.7	163.2
Glass and glassware.....	126.6	126.7	124.5	115.3	181.9	185.2	182.8	140.7
Glass products made from purchased glass.....	114.0	111.6	110.8	119.2	165.0	163.9	160.5	143.7
Cement.....	101.3	102.3	102.8	126.4	144.9	146.3	145.3	162.2
Brick, tile, and terra cotta ²	90.1	90.8	90.3	116.1	135.0	137.8	136.2	152.6
Pottery and related products.....	127.6	129.4	131.9	132.2	179.3	190.4	191.2	163.1
Gypsum ³	93.3	93.4	90.6	98.8	161.1	163.2	154.6	138.5
Wallboard, plaster (except gypsum), and min- eral wool.....	136.0	143.2	139.6	136.5	199.7	231.4	231.3	182.3
Lime.....	100.3	101.1	100.2	112.8	173.2	176.3	180.2	157.8
Marble, granite, slate, and other products.....	66.5	66.4	65.5	74.4	87.1	88.2	92.1	86.1
Abrasives.....	318.2	307.6	300.5	211.5	482.7	500.0	474.5	313.3
Asbestos products ⁴	140.2	139.1	137.5	135.6	253.7	258.1	252.7	210.2
<i>Nondurable goods</i>								
Textile-mill products and other fiber manufactures.....	106.5	107.8	108.3	113.0	173.7	179.4	180.7	162.0
Cotton manufactures, except smallwares.....	122.3	123.2	123.7	128.5	207.0	211.3	216.0	193.0
Cotton smallwares.....	124.8	127.4	128.9	135.2	206.8	215.8	223.3	212.3
Silk and rayon goods.....	79.3	79.9	80.1	87.8	130.6	135.3	135.4	126.2
Woolen and worsted manufactures, except dyeing and finishing.....	110.5	112.6	113.8	122.5	198.2	206.8	205.0	200.6
Hosiery.....	72.7	73.6	73.9	78.3	101.9	107.5	108.2	91.4
Knitted cloth.....	107.1	108.6	108.8	111.1	166.0	172.7	173.8	149.3
Knitted outerwear and knitted gloves.....	116.4	118.0	115.3	108.4	208.3	214.0	203.4	142.5
Knitted underwear.....	108.3	110.1	110.6	117.6	173.6	183.6	184.1	165.5
Dyeing and finishing textiles, including woolen and worsted.....	100.9	102.0	102.8	101.5	154.7	158.6	158.8	135.4
Carpets and rugs, wool.....	87.4	90.8	91.3	89.9	138.2	143.8	146.9	125.0
Hats, fur-felt.....	67.6	69.0	70.3	70.9	111.8	113.8	118.9	86.6
Jute goods, except felts.....	103.7	111.9	111.9	109.2	185.4	197.2	199.1	160.3
Cordage and twine.....	141.9	141.8	141.9	136.5	233.6	236.6	237.9	201.7
Apparel and other finished textile products.....	105.6	108.0	109.6	109.7	155.8	161.7	164.3	135.2
Men's clothing, not elsewhere classified.....	104.1	105.6	106.9	110.1	151.3	159.1	162.8	138.6
Shirts, collars, and nightwear.....	84.2	85.9	86.4	96.6	131.0	138.2	136.0	134.6
Underwear and neckwear, men's.....	80.0	80.2	79.6	84.8	133.3	138.4	137.9	117.2
Work shirts ⁵	136.4	138.8	139.5	141.5	216.8	230.3	236.7	211.4
Women's clothing, not elsewhere classified.....	84.4	87.8	88.7	85.0	125.3	130.6	131.0	101.2
Corsets and allied garments.....	85.0	87.4	88.2	87.3	128.5	136.5	137.3	106.8
Millinery.....	75.7	70.1	80.2	66.7	98.3	80.0	96.7	64.4
Handkerchiefs.....	76.0	76.5	77.4	93.2	122.1	123.1	126.1	126.6
Curtains, draperies, and bedspreads.....	97.8	100.8	104.9	93.8	149.3	163.0	168.0	126.6
Housefurnishings, other than curtains, etc.....	131.9	136.8	141.3	143.1	223.4	235.5	240.6	190.6
Textile bags.....	119.8	120.8	123.3	124.9	179.0	180.4	181.9	157.0
Leather and leather products.....	95.0	96.0	97.0	107.7	145.9	150.8	153.0	148.7
Leather.....	95.5	97.9	99.2	105.0	141.7	149.0	150.3	146.5
Boot and shoe cut stock and findings.....	90.8	91.8	93.5	96.7	132.5	137.7	137.7	125.6
Boots and shoes.....	84.5	84.9	85.9	97.6	131.4	134.4	137.3	136.9
Leather gloves and mittens.....	144.7	144.8	146.0	148.8	223.0	227.0	222.4	190.2
Trunks and suitcases.....	157.4	163.5	162.5	184.6	233.0	259.2	256.1	210.0
Food.....	118.9	111.5	106.9	123.1	175.7	167.4	158.5	153.7
Slaughtering and meat packing.....	133.4	132.1	127.8	149.1	205.2	200.9	190.5	175.4
Butter ⁶	133.2	132.1	128.8	130.0	186.9	185.8	174.3	162.7
Condensed and evaporated milk.....	150.1	150.9	139.1	150.3	231.8	233.1	202.7	199.3
Ice cream.....	113.6	109.2	98.9	122.6	152.8	142.6	127.1	144.9
Flour.....	114.3	113.2	111.3	102.3	170.7	171.1	164.0	130.5
Feeds, prepared.....	140.7	143.7	144.8	122.0	218.3	230.7	235.7	168.6
Cereal preparations.....	133.9	135.4	132.2	118.0	225.3	219.5	218.1	155.8
Baking.....	109.7	108.9	107.1	110.0	153.4	151.6	147.8	135.2
Sugar refining, cane.....	105.1	101.2	92.9	91.0	156.2	141.4	124.6	110.2
Sugar, beet.....	48.0	45.6	42.1	54.8	67.8	66.0	59.8	72.8
Confectionery.....	104.4	105.2	106.9	101.9	149.5	158.7	158.0	127.3
Beverages, nonalcoholic.....	142.2	133.6	124.9	121.7	177.1	166.1	148.9	140.5
Malt liquors.....	133.2	129.8	123.6	120.0	189.0	181.8	165.3	150.4
Canning and preserving.....	118.5	79.9	68.2	142.3	197.0	135.3	117.0	213.7
Tobacco manufactures.....	95.1	95.7	96.3	100.2	153.5	149.3	144.4	133.8
Cigarettes.....	121.2	117.6	117.8	108.0	182.3	158.7	155.3	150.4
Cigars.....	82.2	85.1	86.2	98.9	137.7	147.8	141.0	126.0
Tobacco (chewing and smoking) and snuff.....	87.8	88.1	87.4	83.4	126.9	124.7	122.7	112.4

See footnotes at end of table.

TABLE 3.—Indexes of Wage-Earner Employment and of Wage-Earner Pay Roll in Manufacturing Industries—Continued

Industry ²	Wage-earner employment				Wage-earner pay roll			
	July 1943	June 1943	May 1943	July 1942	July 1943	June 1943	May 1943	July 1942
<i>Nondurable goods—Continued</i>								
Paper and allied products.....	118.9	119.0	117.7	113.7	176.3	180.9	178.0	144.1
Paper and pulp.....	109.1	109.4	108.4	112.5	168.8	172.9	170.3	147.1
Paper goods, other.....	129.0	129.9	128.0	117.6	180.6	187.2	181.4	139.5
Envelopes.....	119.9	121.0	119.4	110.7	167.2	173.9	169.5	128.7
Paper bags.....	111.3	109.0	109.3	109.5	175.3	172.0	166.9	143.0
Paper boxes.....	122.7	121.9	120.6	103.8	174.2	179.5	178.5	126.0
Printing, publishing, and allied industries.....	103.4	101.8	100.4	99.3	127.0	126.4	123.0	110.0
Newspapers and periodicals.....	94.4	95.7	95.7	96.3	112.4	112.0	110.7	104.4
Printing, book and job.....	106.6	103.2	100.6	99.5	132.7	131.4	126.1	110.9
Lithographing ³	99.2	96.8	95.5	86.7	122.4	125.1	119.4	94.4
Bookbinding.....	118.1	114.3	112.7	109.6	174.1	174.2	170.7	141.8
Chemicals and allied products.....	257.4	257.7	256.4	212.8	432.0	432.5	425.2	317.2
Paints, varnishes, and colors.....	106.8	106.1	103.2	103.2	157.5	160.6	155.0	127.8
Drugs, medicines, and insecticides.....	170.1	167.0	161.4	135.6	231.6	233.8	227.8	160.0
Perfumes and cosmetics.....	110.6	105.9	105.8	102.7	143.1	143.0	141.9	119.5
Soap.....	94.1	94.8	95.5	98.8	138.1	140.1	136.3	121.7
Rayon and allied products.....	108.9	108.5	107.5	106.3	168.6	166.9	162.7	140.6
Chemicals, not elsewhere classified.....	168.2	166.2	163.2	160.2	277.0	274.0	265.4	224.6
Compressed and liquefied gases.....	161.7	159.2	160.4	165.3	270.1	266.3	265.7	233.2
Cottonseed oil.....	78.7	83.3	93.1	66.0	133.0	142.3	151.2	87.0
Fertilizers ³	95.3	102.1	132.8	88.5	188.9	195.0	252.6	140.5
Products of petroleum and coal.....	119.1	118.5	117.3	121.5	191.9	189.2	182.3	154.0
Petroleum refining.....	112.3	111.0	109.7	110.3	179.9	175.2	170.5	137.6
Coke and byproducts ³	113.3	116.2	115.2	124.8	184.0	191.2	179.7	162.8
Paving materials.....	66.0	67.8	66.2	84.7	107.3	120.0	107.0	122.3
Roofing materials.....	121.9	118.2	117.1	131.2	200.6	196.0	184.5	189.6
Rubber products.....	158.9	156.4	153.9	126.3	256.1	264.0	250.9	176.3
Rubber tires and inner tubes.....	161.7	157.1	153.9	121.2	253.3	256.5	243.9	166.8
Rubber boots and shoes.....	149.3	149.7	146.5	124.5	246.5	259.7	247.9	172.1
Rubber goods, other.....	141.3	140.5	139.2	118.2	228.1	241.0	228.7	168.8
Miscellaneous industries.....	166.4	166.3	166.0	147.0	293.7	298.2	297.1	213.3
Photographic apparatus.....	178.1	171.8	163.1	138.1	265.9	271.0	256.6	189.4
Pianos, organs, and parts.....	135.0	130.7	130.5	91.6	257.2	257.6	261.8	131.3
Games, toys, and dolls.....	84.0	84.4	83.7	95.6	130.2	143.1	148.6	126.7
Buttons.....	98.9	98.8	97.6	115.2	169.1	174.2	171.5	169.7

¹ Indexes for the major industry groups have been adjusted to final data for 1941 and preliminary data for the second quarter of 1942 made available by the Bureau of Employment Security of the Federal Security Agency, and are not comparable with data in issues of the Monthly Labor Review prior to March 1943. Comparable series for earlier months are available upon request. Indexes for individual industries have been adjusted to levels indicated by the 1939 Census of Manufactures, but not to Federal Security Agency data.

² Unpublished information concerning the following war industries may be obtained by authorized agencies upon request: Aircraft engines; aircraft and parts, excluding engines; alloying; aluminum manufactures; ammunition; cars, electric- and steam-railroad; communication equipment; electrical equipment; engines and turbines; explosives and safety fuses; fire extinguishers; firearms; fireworks; locomotives; machine-tool accessories; machine tools; optical instruments and photograms; and shipbuilding.

³ Revisions have been made as follows in the data for earlier months:

Tin cans and other tinware.—April 1943 pay-roll index to 144.8.

Wirework.—January 1943 to April 1943 employment indexes to 104.6, 104.7, 107.0, and 106.1; pay-roll indexes to 184.0, 185.4, 194.9, and 198.7.

Bolts, nuts, washers, and rivets.—March and April 1943 pay-roll indexes to 360.4 and 365.3.

Brick, tile, and terra cotta.—February and March 1943 pay-roll indexes to 135.9 and 134.3.

Gypsum.—February, March, and April 1943 employment indexes to 86.7, 87.7, and 89.3; February 1943 pay-roll index to 131.3.

Asbestos products.—December 1942 to April 1943 employment indexes to 138.3, 137.6, 137.3, 138.4, and 137.4; August 1942 and November 1942 to April 1943 pay-roll indexes to 221.2, 230.6, 242.1, 242.0, 237.4, 247.6, and 249.5.

Work shirts.—January 1943 to April 1943 employment indexes to 133.0, 139.4, 139.6 and 141.3; pay-roll indexes to 215.6, 225.8, 233.2, and 240.6.

Butter.—January 1943 to April 1943 employment indexes to 109.6, 110.2, 116.4, and 121.8; January to March pay-roll indexes to 144.9, 145.6, and 154.4.

Lithographing.—October 1942 to April 1943 employment indexes to 93.7, 95.7, 98.5, 97.2, 97.1, 95.4, and 96.2; pay-roll indexes to 104.6, 115.3, 119.9, 114.1, 113.7, 119.3, and 121.2.

Fertilizers.—February, March, and April 1943 employment indexes to 141.1, 162.0, and 158.4; pay-roll indexes to 229.0, 272.0, and 298.8.

Coke and byproducts.—September 1942 to April 1943 pay-roll indexes to 173.1, 162.6, 165.1, 163.5, 169.2, 170.4, 171.3, and 171.5.

TABLE 4.—Estimated Number of Wage Earners in Selected Nonmanufacturing Industries

Industry	Estimated number of wage earners (in thousands)			
	July 1943	June 1943	May 1943	July 1942
Anthracite mining.....	71.4	71.6	72.3	77.0
Bituminous-coal mining.....	379	381	385	439
Metal mining.....	95.4	97.6	97.9	108.9
Iron.....	33.7	33.8	33.4	32.6
Copper.....	29.9	30.9	31.4	31.4
Lead and zinc.....	18.3	18.8	18.9	19.6
Gold and silver.....	6.7	7.3	7.6	18.3
Miscellaneous metal mining.....	6.8	6.8	6.6	7.0
Hotels ¹	347	344	341	331
Power laundries.....	268	270	267	281
Dyeing and cleaning.....	84.5	87.0	85.4	85.0
Class I steam railroads ²	1,388	1,382	1,351	1,317

¹ Data include salaried personnel.² Source: Interstate Commerce Commission. Data include salaried personnel.

TABLE 5.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries

[1939 average=100]¹

Industry	Employment indexes				Pay-roll indexes			
	July 1943	June 1943	May 1943	July 1942	July 1943	June 1943	May 1943	July 1942
Coal mining:								
Anthracite.....	86.2	86.5	87.3	93.0	133.1	99.3	127.1	117.2
Bituminous.....	102.2	102.7	103.8	118.4	190.4	144.0	176.4	161.6
Metal mining.....	108.2	110.6	110.9	123.5	163.8	172.2	170.2	164.5
Iron.....	167.2	167.9	166.2	162.1	261.7	271.0	261.5	229.4
Copper.....	125.6	129.7	131.9	132.1	200.6	212.6	213.2	188.0
Lead and zinc.....	117.9	120.7	121.7	126.5	195.3	204.3	202.6	190.5
Gold and silver.....	27.2	29.3	30.6	73.9	33.0	37.0	38.5	78.3
Miscellaneous.....	170.6	172.5	166.1	174.4	262.2	266.1	263.6	245.8
Quarrying and nonmetallic mining.....	98.8	98.8	98.2	116.5	169.4	169.5	166.3	171.3
Crude-petroleum production ²	82.3	82.6	81.7	86.8	120.3	117.4	111.9	102.3
Public utilities:								
Telephone and telegraph.....	126.8	124.7	123.2	123.4	148.2	145.0	143.8	131.8
Electric light and power.....	86.3	86.5	86.4	97.6	110.5	107.7	106.5	112.9
Street railways and busses.....	117.6	117.7	117.5	108.4	156.1	155.9	153.8	130.9
Wholesale trade.....	96.0	95.8	95.1	100.6	127.1	126.5	124.3	119.3
Retail trade.....	96.6	98.9	98.5	99.5	119.9	121.1	117.1	112.5
Food.....	104.2	105.7	105.6	112.0	131.6	130.2	125.8	127.7
General merchandising.....	108.6	112.7	112.5	104.2	131.4	133.3	129.7	117.1
Apparel.....	100.3	111.8	110.3	95.7	124.4	139.6	129.0	110.4
Furniture and housefurnishings.....	66.7	67.7	67.3	80.7	86.3	88.0	85.5	93.1
Automotive.....	63.7	63.1	62.5	66.5	84.6	84.8	84.1	79.1
Lumber and building materials.....	92.6	92.0	91.2	98.8	122.7	122.8	119.5	120.4
Hotels (year-round) ³	107.6	106.8	105.8	102.6	139.7	137.7	134.5	118.9
Power laundries.....	118.6	119.6	118.4	124.3	152.3	154.6	153.8	141.7
Dyeing and cleaning.....	125.2	128.9	126.5	125.9	170.6	182.5	177.8	149.0
Class I steam railroads ⁴	140.5	139.9	136.6	133.3	(5)	(5)	(5)	(5)
Water transportation ⁶	152.5	143.0	131.8	85.7	345.3	326.7	307.7	171.3

¹ Mimeographed report showing revised data (1939=100) January 1939–December 1942 for each industry available on request.² Does not include well drilling or rig building.³ Cash payments only; additional value of board, room, and tips not included. Data include salaried personnel.⁴ Source: Interstate Commerce Commission. Data include salaried personnel.⁵ Not available.⁶ Based on estimates prepared by the U. S. Maritime Commission covering employment on steam and motor merchant vessels of 1,000 gross tons or over in deep-sea trade only.

TABLE 6.—Hours and Earnings in Specified Months

MANUFACTURING

Industry	Average weekly earnings ¹			Average weekly hours ¹			Average hourly earnings ¹		
	July 1943	June 1943	May 1943	July 1943	June 1943	May 1943	July 1943	June 1943	May 1943
All manufacturing.....	\$42.76	\$43.35	\$43.08	44.4	45.2	45.2	Cents 96.3	Cents 95.9	Cents 95.3
Durable goods.....	48.81	49.33	49.25	46.0	46.8	46.9	106.1	105.4	105.0
Nondurable goods.....	34.01	34.41	34.07	42.2	42.8	42.8	80.6	80.4	79.6
<i>Durable goods</i>									
Iron and steel and their products.....	47.27	48.03	47.61	45.5	46.5	46.4	103.9	103.3	102.6
Blast furnaces, steel works, and rolling mills ²	49.97	49.62	49.12	43.9	44.6	44.1	114.8	112.8	112.0
Gray-iron and semisteel castings ³	45.46	47.73	48.13	45.9	47.9	48.2	100.2	100.7	100.6
Malleable-iron castings ³	44.01	45.96	45.72	44.8	46.7	46.5	98.3	98.6	98.5
Steel castings ²	47.43	49.61	49.18	44.9	46.9	46.9	106.2	105.9	104.8
Cast-iron pipe and fittings ³	36.80	37.09	36.96	43.1	43.9	43.7	85.7	84.5	84.5
Tin cans and other tinware ³	35.95	36.50	36.32	43.7	44.5	44.4	82.2	81.9	81.6
Wirework ³	47.05	47.17	47.15	47.6	47.9	48.0	99.5	98.6	98.5
Cutlery and edge tools.....	41.31	42.13	40.75	46.2	47.2	46.2	89.5	89.2	88.1
Tools (except edge tools, machine tools, files, and saws).....	43.04	44.67	44.60	46.9	48.6	48.4	91.9	92.1	92.4
Hardware ²	41.40	42.78	42.65	46.3	48.1	48.1	89.3	89.0	88.4
Plumbers' supplies.....	43.88	44.84	43.87	46.1	47.8	47.5	95.2	93.8	92.4
Stoves, oil burners, and heating equipment not elsewhere classified.....	40.87	42.36	42.11	45.2	46.2	46.2	91.7	91.8	91.2
Steam and hot-water heating apparatus and steam fittings.....	47.59	47.33	47.14	48.3	48.2	48.5	98.6	98.3	97.4
Stamped and enameled ware and galvanizing.....	43.05	43.96	44.48	45.2	46.7	47.0	94.8	93.7	94.2
Fabricated structural and ornamental metalwork.....	51.25	52.31	51.43	48.7	49.7	49.4	105.1	105.1	103.9
Bolts, nuts, washers, and rivets ³	44.55	46.63	47.09	45.7	47.8	48.4	97.4	98.0	97.7
Forgings, iron and steel.....	51.82	55.96	56.87	45.0	48.0	48.6	114.6	116.7	117.1
Firearms ²	55.97	56.93	56.45	46.7	48.3	48.4	119.8	117.5	116.3
Electrical machinery.....	44.72	45.59	45.64	46.1	47.0	47.3	97.0	97.0	96.5
Electrical equipment ²	46.84	48.01	48.02	46.5	47.4	47.8	100.9	101.1	100.6
Radios and phonographs.....	38.89	39.48	39.42	45.4	46.0	46.3	85.6	85.6	85.1
Communications equipment ²	41.21	41.57	41.26	45.4	46.2	46.2	90.7	90.0	89.2
Machinery, except electrical.....	51.14	52.27	52.48	48.2	49.4	49.7	106.1	105.8	105.6
Machinery and machine-shop products ²	50.21	51.21	51.16	47.9	49.2	49.3	104.5	104.0	103.7
Engines and turbines ²	57.68	58.11	58.52	49.8	50.4	50.9	116.4	116.1	115.8
Agricultural machinery, excluding tractors ²	51.18	51.81	50.50	47.1	48.2	47.9	108.7	107.6	105.5
Tractors ²	50.97	51.34	51.93	46.5	46.8	47.2	109.7	109.7	110.1
Machine tools.....	52.63	54.09	54.76	49.8	51.1	51.8	105.0	105.8	105.7
Textile machinery.....	45.13	46.60	45.71	48.7	50.6	50.3	92.7	92.4	90.9
Typewriters.....	46.81	47.31	46.78	49.0	49.5	49.4	95.5	95.6	94.7
Cash registers, adding and calculating machines.....	57.58	58.78	58.41	49.6	50.2	50.1	117.4	118.1	117.5
Transportation equipment, except automobiles.....	55.90	55.84	56.29	46.7	47.0	47.5	119.7	118.8	118.5
Locomotives.....	59.65	59.68	58.39	48.3	48.7	47.8	123.5	122.5	122.2
Cars, electric- and steam-railroad.....	47.52	48.26	50.99	43.0	43.8	45.6	110.2	110.0	111.5
Aircraft and parts, excluding aircraft engines.....	48.76	49.78	49.67	45.6	46.5	46.8	107.3	107.0	106.3
Aircraft engines ²	58.77	58.66	61.16	46.1	46.3	48.8	127.5	126.6	125.2
Shipbuilding and boatbuilding.....	60.62	59.80	60.04	47.7	47.6	47.8	126.6	125.3	125.5
Automobiles.....	57.18	57.10	57.00	46.0	46.2	46.3	124.3	123.6	123.1
Nonferrous metals and their products.....	47.03	47.51	47.76	46.2	46.9	47.1	101.8	101.3	101.4
Smelting and refining, primary, of nonferrous metals.....	46.64	45.77	45.51	45.1	45.0	44.7	104.4	102.7	102.9
Alloying and rolling and drawing of nonferrous metals, except aluminum ²	52.63	52.24	52.12	48.1	48.0	48.1	110.7	110.0	109.2
Clocks and watches.....	39.25	39.51	40.19	44.7	45.8	46.4	87.1	86.3	86.6
Jewelry (precious metals) and jewelers' findings ²	36.04	39.26	38.96	42.7	45.5	45.5	83.0	84.9	84.3
Silverware and plated ware.....	44.78	45.93	45.09	46.2	46.6	46.8	97.1	98.7	96.4
Lighting equipment.....	44.40	45.39	46.06	44.7	46.1	46.0	99.3	98.6	100.2
Aluminum manufactures.....	49.02	49.55	49.74	46.9	47.6	47.7	104.4	104.2	104.3

See footnotes at end of table.

TABLE 6.—Hours and Earnings in Specified Months—Continued

MANUFACTURING—Continued

Industry	Average weekly earnings ¹			Average weekly hours ¹			Average hourly earnings ¹		
	July 1943	June 1943	May 1943	July 1943	June 1943	May 1943	July 1943	June 1943	May 1943
<i>Durable goods—Continued</i>									
Lumber and timber basic products.....	\$31.51	\$32.78	\$32.28	42.7	44.3	43.8	73.8	74.0	73.7
Sawmills and logging camps.....	30.43	31.97	31.49	42.0	44.0	43.4	72.4	72.7	72.6
Planing and plywood mills.....	34.49	35.34	34.68	44.7	45.5	45.1	77.9	77.9	77.1
Furniture and finished lumber products.....	32.36	33.05	32.74	43.5	44.6	44.6	74.4	74.1	73.4
Furniture.....	33.05	33.68	33.14	43.4	44.4	44.3	76.5	76.1	75.2
Stone, clay, and glass products.....	35.40	36.29	36.16	41.8	43.0	42.9	84.7	84.4	84.3
Glass and glassware.....	36.15	36.87	36.96	39.8	41.4	41.6	91.1	89.1	88.9
Cement.....	38.31	38.22	37.73	42.6	43.0	42.7	89.9	89.0	88.4
Brick, tile, and terra cotta ³	30.27	30.73	30.56	40.4	40.8	40.2	74.8	74.8	75.3
Pottery and related products.....	32.35	33.91	33.27	39.6	41.5	40.9	81.4	81.7	81.5
Marble, granite, slate, and other products.....	34.44	35.04	37.08	41.5	41.8	43.1	82.9	82.9	84.8
Asbestos products ^{2,3}	43.73	44.65	44.22	47.4	47.8	47.6	92.3	93.3	92.8
<i>Nondurable goods</i>									
Textile-mill products and other fiber manufactures.....	27.16	27.66	27.82	40.9	41.6	41.9	66.4	66.5	66.4
Cotton manufactures, except smallwares.....	24.15	24.33	24.78	40.9	41.3	41.9	59.0	58.9	59.1
Cotton smallwares.....	30.87	31.56	32.24	42.8	43.8	44.2	72.2	72.2	72.9
Silk and rayon goods.....	26.49	26.99	27.05	41.1	41.9	42.1	64.0	64.4	64.2
Woolen and worsted manufactures, except dyeing and finishing.....	33.35	33.97	33.56	41.3	42.0	41.7	80.9	80.9	80.4
Hosiery.....	25.86	26.75	26.76	37.1	38.6	38.9	69.5	69.6	68.9
Knitted cloth.....	30.68	31.57	31.73	42.0	43.2	43.6	72.7	72.7	72.5
Knitted outerwear and knitted gloves.....	29.51	29.90	29.07	41.9	42.5	41.2	68.5	68.8	68.5
Knitted underwear.....	23.74	24.65	24.66	40.5	41.8	41.7	58.3	58.8	59.0
Dyeing and finishing textiles, including woolen and worsted.....	31.80	32.20	32.03	43.8	44.5	44.4	72.6	72.3	72.0
Carpets and rugs, wool.....	36.46	36.50	37.01	42.2	42.3	43.3	86.7	86.5	85.7
Hats, fur-felt.....	37.99	37.69	38.86	40.1	40.4	41.6	95.3	93.6	93.5
Apparel and other finished textile products.....	26.05	26.67	26.61	36.9	38.1	38.4	70.6	70.0	69.3
Men's clothing, not elsewhere classified.....	27.62	28.66	28.93	36.9	38.3	38.8	74.7	74.6	74.6
Shirts, collars, and nightwear ²	21.41	22.13	21.63	37.0	38.0	37.4	57.9	58.3	57.6
Underwear and neckwear, men's ^{2,3}	22.72	23.63	23.66	35.8	37.3	38.2	63.4	63.3	61.9
Work shirts ^{2,3}	17.43	18.30	18.64	36.1	37.7	38.4	48.0	48.4	48.1
Women's clothing, not elsewhere classified.....	31.59	31.64	31.45	36.5	37.7	38.1	84.4	82.4	80.8
Corsets and allied garments.....	26.35	27.25	27.08	40.5	41.3	41.6	65.2	66.1	65.3
Millinery.....	31.58	27.74	29.31	32.1	29.7	31.6	83.9	81.5	80.9
Leather and leather products.....	29.13	29.81	29.95	39.1	39.7	40.1	74.5	75.1	74.7
Leather.....	36.57	37.52	37.41	42.0	42.9	42.9	87.2	87.6	87.5
Boots and shoes.....	27.43	27.90	28.24	38.3	38.7	39.3	71.4	71.8	71.7
Food.....	35.52	36.01	35.55	44.4	44.9	44.6	80.0	80.2	79.7
Slaughtering and meat packing.....	42.07	41.90	41.09	48.2	47.8	47.3	88.0	87.8	87.1
Butter ³	30.83	30.96	29.74	48.0	47.9	46.4	63.6	63.3	63.3
Ice cream.....	36.65	35.56	35.06	47.9	46.8	45.8	73.4	73.4	73.4
Flour.....	37.90	38.37	37.28	47.6	48.7	47.7	79.7	78.8	78.3
Baking.....	35.98	35.76	35.40	44.9	44.7	44.7	80.4	80.1	79.3
Sugar refining, cane.....	35.57	33.56	32.08	42.8	41.4	40.1	83.1	81.0	80.0
Sugar, beet.....	35.07	36.04	35.24	37.0	37.9	37.1	94.9	95.0	95.0
Confectionery.....	26.52	27.91	27.34	40.2	42.0	41.4	66.5	67.0	66.6
Beverages, nonalcoholic ²	32.98	32.92	31.72	44.8	44.2	43.4	74.0	75.0	73.7
Malt liquors ²	49.36	48.75	46.66	46.7	46.5	44.7	106.5	105.6	105.1
Canning and preserving.....	26.45	26.95	27.45	38.2	39.0	39.9	69.5	69.6	69.7
Tobacco manufactures.....	27.37	26.45	25.29	42.1	41.0	40.2	65.0	64.5	62.9
Cigarettes ²	32.24	28.72	27.99	44.4	40.6	40.1	71.9	70.7	69.8
Cigars ²	24.04	24.98	23.49	40.7	41.7	40.5	59.1	60.0	57.9
Tobacco (chewing and smoking) and snuff.....	25.52	25.00	24.64	39.4	39.1	39.2	64.7	63.9	62.9
Paper and allied products.....	35.59	36.47	36.21	44.6	45.7	45.6	79.8	79.8	79.4
Paper and pulp.....	39.02	39.83	39.58	45.8	46.8	46.8	85.2	85.1	84.5
Paper boxes.....	31.37	32.48	32.53	42.9	44.4	44.6	73.2	73.4	73.2
Printing, publishing, and allied industries.....	40.02	40.38	39.82	40.1	40.1	39.9	99.8	100.7	99.8
Newspapers and periodicals.....	45.58	44.66	44.29	37.7	37.1	37.0	119.7	118.8	117.7
Printing, book and job.....	37.27	38.12	37.63	41.3	41.5	41.3	90.3	92.0	91.2

See footnotes at end of table.

TABLE 6.—Hours and Earnings in Specified Months—Continued

MANUFACTURING—Continued

Industry	Average weekly earnings ¹			Average weekly hours ¹			Average hourly earnings ¹		
	July 1943	June 1943	May 1943	July 1943	June 1943	May 1943	July 1943	June 1943	May 1943
<i>Nondurable goods—Continued</i>									
Chemicals and allied products.....	\$42.04	\$42.00	\$41.54	45.3	45.6	45.7	Cents	Cents	Cents
Paints, varnishes, and colors.....	42.42	43.74	43.41	46.3	47.0	46.8	92.4	92.1	90.9
Drugs, medicines, and insecticides ²	32.25	33.19	33.63	42.3	43.0	44.0	92.4	93.1	93.0
Soap.....	41.82	42.15	40.69	44.7	44.7	43.7	76.6	77.0	76.3
Rayon and allied products.....	37.57	37.32	36.74	42.7	41.4	42.4	93.6	94.3	93.1
Chemicals, not elsewhere classified.....	49.18	49.23	48.53	46.0	46.3	46.0	88.0	90.1	86.6
Explosives and safety fuses ²	47.66	48.04	47.74	46.4	47.5	47.2	107.5	106.4	105.5
Ammunition, small-arms ²	42.25	41.99	42.07	46.4	46.5	46.5	102.6	101.2	101.1
Fireworks ²	(⁵)	(⁵)	34.50	(⁵)	(⁵)	43.1	(⁵)	(⁵)	(⁵)
Cottonseed oil.....	23.04	23.31	22.00	47.2	48.8	47.6	91.1	90.3	90.4
Fertilizers.....	28.69	27.23	26.83	44.8	43.6	44.0	80.0	47.5	46.2
.....							64.1	62.4	61.0
Products of petroleum and coal.....	51.73	51.21	49.93	45.5	45.4	44.5	113.7	112.8	112.2
Petroleum refining.....	54.74	54.03	53.42	45.5	45.0	44.6	121.0	120.2	119.6
Rubber products.....	45.00	47.10	45.63	44.2	46.0	45.4	101.8	102.4	100.5
Rubber tires and inner tubes.....	52.48	54.60	53.15	44.5	46.2	45.6	118.1	118.3	116.7
Rubber boots and shoes.....	37.56	39.18	38.25	44.1	45.3	45.4	84.8	86.4	84.1
Rubber goods, other.....	38.01	40.56	38.88	43.8	45.9	45.1	87.1	88.6	86.4
Miscellaneous industries.....	40.17	40.97	40.92	45.6	46.5	46.4	88.1	88.1	88.2
Professional and scientific instruments and fire-control equipment ²	51.40	51.43	51.44	50.8	51.5	51.1	101.1	99.9	100.6

NONMANUFACTURING

Coal mining:							Cents	Cents	Cents
Anthracite.....	\$39.69	\$29.52	\$37.39	37.7	28.2	36.1	106.3	104.3	103.7
Bituminous.....	42.76	31.92	39.12	37.1	28.4	35.2	115.0	112.4	112.0
Metal mining.....	43.30	44.39	43.43	43.6	44.9	44.3	98.7	98.3	98.4
Quarrying and nonmetallic mining.....	36.72	36.90	36.34	46.5	47.3	46.4	79.1	78.1	78.5
Crude-petroleum production.....	49.51	48.21	46.32	43.3	42.6	41.0	111.7	109.9	110.0
Public utilities:									
Telephone and telegraph.....	35.94	35.88	35.94	42.2	42.1	42.2	85.5	85.7	85.4
Electric light and power ³	44.86	43.77	42.98	42.5	41.7	40.8	105.2	103.8	105.1
Street railways and busses.....	44.30	44.40	43.52	49.0	49.5	49.0	88.3	87.9	87.6
Wholesale trade.....	39.44	39.22	38.86	42.4	42.5	41.7	93.3	92.6	93.4
Retail trade.....	25.48	25.13	24.42	42.3	41.6	40.9	67.5	67.3	66.3
Food ²	31.22	30.46	29.26	43.8	43.1	42.0	69.2	68.3	67.6
General merchandising ²	21.26	20.78	20.44	38.5	37.5	36.6	55.8	55.3	54.6
Apparel ³	26.59	26.90	24.92	38.3	37.0	36.6	70.3	71.7	68.4
Furniture and housefurnishings ³	35.17	35.18	34.63	44.0	44.0	44.2	82.4	81.9	81.1
Automotive ³	36.64	37.08	37.12	47.4	47.5	47.4	78.0	78.9	79.0
Lumber and building materials ³	34.76	34.65	34.09	43.9	44.1	43.3	81.5	81.2	81.2
Hotels (year-round) ³	20.18	20.00	19.91	44.6	44.6	44.6	45.5	45.1	44.3
Laundries.....	23.47	23.64	23.87	43.9	44.1	44.4	54.9	54.4	54.5
Dyeing and cleaning ³	27.55	28.61	28.59	44.2	45.3	45.1	64.4	64.9	64.8
Brokerage.....	51.10	54.25	50.89	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
Insurance.....	42.81	41.77	41.35	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
Building construction.....	47.97	48.65	47.46	39.0	39.5	38.1	123.1	123.0	124.0

^a Not previously published. Comparable series back to January 1939 available on request.

¹ These figures are based on reports from cooperating establishments covering both full- and part-time employees who worked during any part of one pay period ending nearest the 15th of the month. As not all reporting firms furnished man-hour data, average hours and average hourly earnings are based on a smaller sample than are weekly earnings. Data for the current and immediately preceding months are subject to revision.

² Comparable series for earlier months, which may include minor revisions in previously published data, available on request.

³ Revisions have been made as follows in the data for earlier months:

Cast-iron pipe and fittings.—January 1943 to April 1943 average weekly hours to 42.6, 43.0, 44.5, and 43.5; February 1943 average weekly earnings to \$34.77; April 1943 average hourly earnings to 83.5 cents.

Tin cans and other tinware.—January and February 1943 average weekly earnings to \$34.06 and \$34.24; average hourly earnings to 79.7 cents and 79.8 cents.

Wirework.—January 1943 to April 1943 average weekly earnings to \$44.15, \$44.58, \$46.09, and \$47.38; average hourly earnings to 94.0, 94.9, 96.7, and 98.5 cents.

Bolts, nuts, washers, and rivets.—December 1942 to April 1943 average weekly hours to 46.3, 46.5, 47.2, 47.8, and 47.5; average hourly earnings to 93.7, 95.7, 94.5, 95.6, and 96.4 cents; February, March, and April 1943 average weekly earnings to \$44.54, \$45.64 and \$45.70.

Brick, tile, and terra cotta.—February and March 1943 average weekly earnings to \$28.98 and \$29.46; March 1943 average weekly hours to 39.4.

Asbestos products.—August 1942 and March 1943 average weekly earnings to \$39.14 and \$43.03; January

Civilian Labor Force, August 1943

THE civilian labor force declined seasonally by 600,000 persons between July and August 1943 to a total of 54,900,000, according to the Bureau of the Census Monthly Report on the Labor Force. At the same time, unemployment dropped by 200,000 to a level of 1,000,000, while employment declined by 400,000.

TABLE 1.—Estimated Civilian Labor Force, by Employment Status and Sex, in Selected Months, August 1940–August 1943¹

[Source: U. S. Department of Commerce, Bureau of the Census]

Sex and employment status	Estimated number (millions of persons)				
	August 1943	July 1943	August 1942	August 1941	August 1940
Both sexes	54.9	55.5	56.2	56.4	56.6
Unemployed ²	1.0	1.2	2.2	5.4	8.9
Employed	53.9	54.3	54.0	51.0	47.7
Nonagriculture	41.9	42.2	42.8	40.8	37.6
Agriculture	12.0	12.1	11.2	10.2	10.1
Males	37.5	37.8	41.1	42.4	42.9
Unemployed ²	.5	.6	1.4	3.6	6.0
Employed	37.0	37.2	39.7	38.8	36.9
Nonagriculture	27.3	27.4	30.2	29.9	27.7
Agriculture	9.7	9.8	9.5	8.9	9.2
Females	17.4	17.7	15.1	14.0	13.7
Unemployed ²	.5	.6	.8	1.8	2.9
Employed	16.9	17.1	14.3	12.2	10.8
Nonagriculture	14.6	14.8	12.6	10.9	9.9
Agriculture	2.3	2.3	1.7	1.3	.9

¹ All data exclude persons in institutions.

² Includes persons on public emergency projects prior to July 1943.

The decrease in the civilian labor force was concentrated almost entirely among persons 14–19 years of age. Although the usual seasonal pattern has prevailed this summer, the sex composition of teen-age participants in the civilian labor force has changed con-

Footnotes (table 6)—Continued.

1943 to April 1943 average weekly hours to 47.3, 46.5, 47.4, and 47.6; August 1942 and December 1942 average hourly earnings to 86.2 and 89.0 cents.

Underwear and neckwear, men's.—April 1943 average weekly hours and average hourly earnings to 38.1 hours and 61.1 cents.

Work shirts.—March and April 1943 average weekly earnings to \$18.34 and \$18.71.

Butter.—January, February, and March 1943 average weekly earnings to \$29.10, \$29.10, and \$29.21; January and February average weekly hours to 45.7 and 45.3; March and April average hourly earnings to 62.1 and 62.9 cents.

Electric light and power.—March average weekly hours 41.0, average hourly earnings 102.0 cents.

Retail trade:

Food group.—Average weekly earnings, January \$27.93, April \$28.62; average weekly hours January 41.6, April 41.2; average hourly earnings, January 64.6 cents.

General merchandise group.—Average hourly earnings, January 53.7 cents; average weekly earnings, March \$20.51, April \$20.43.

Apparel group.—Average weekly earnings, January \$24.80, March \$25.28, April \$24.64; average weekly hours, January 37.7, April 36.3; average hourly earnings, January 67.3 cents, April 68.0 cents.

Furniture group.—Average weekly hours, February 43.5; average weekly earnings, March \$33.43, April \$34.62; average hourly earnings, February 77.4 cents.

Automotive group.—Average weekly earnings, January \$33.83; average weekly hours, January, February, and April, each 47.3; average hourly earnings, January 72.2 cents, February 74.3 cents.

Lumber group.—Average weekly hours, February 42.6; average hourly earnings, February 79.1 cents; April 80.5 cents.

Hotels.—April, average weekly earnings, \$19.54; average weekly hours, 44.7; average hourly earnings, 43.7 cents.

Dyeing and cleaning.—Average weekly earnings, March \$26.30, April \$28.57; average weekly hours, March 43.5, April 45.7; average hourly earnings, March 61.9 cents, April, 64.1 cents.

⁴ April 1943 average weekly earnings for firearms, as published in table 2, page 5, of mimeographed release dated August 16, 1943, should have been \$57.36 instead of \$47.36.

⁵ Not available.

siderably during the past year. The number of boys aged 14-19 in August 1943 was 1,300,000 lower than the August 1942 figure, a development reflecting the entrance of many boys into the armed forces. On the other hand, the number of teen-age girls in August 1943 exceeded the August 1942 level by 500,000 to offset partially the exodus of boys.

Extensive changes also took place in the agricultural and non-agricultural composition of the employed group. The seasonal decline of 100,000 in agricultural employment between July and August 1943 was low compared to a 500,000 decrease for the corresponding period in both 1942 and 1941. Moreover, nonagricultural employment decreased by 300,000 between July and August 1943, in contrast to increases during this interval of 500,000 in 1942 and 600,000 in 1941.

TABLE 2.—Estimated Civilian Labor Force, Employment and Unemployment, by Age and Sex, in July and August 1943 and August 1942¹

[Source: U. S. Department of Commerce, Bureau of the Census]

Employment status and age	Estimated number (millions of persons)								
	Total			Male			Female		
	August 1943	July 1943	August 1942	August 1943	July 1943	August 1942	August 1943	July 1943	August 1942
Total civilian labor force.....	54.9	55.5	56.2	37.5	37.8	41.1	17.4	17.7	15.1
14-19 years.....	7.2	7.8	8.0	3.9	4.2	5.2	3.3	3.6	2.8
20-24 years.....	5.0	5.0	6.4	2.1	2.1	3.6	2.9	2.9	2.8
25-34 years.....	11.2	11.3	12.1	7.4	7.5	8.6	3.8	3.8	3.5
35-44 years.....	12.2	12.0	11.7	8.6	8.5	8.9	3.6	3.5	2.8
45-54 years.....	10.1	10.0	9.5	7.8	7.7	7.6	2.3	2.3	1.9
55-64 years.....	6.4	6.6	6.1	5.3	5.4	5.1	1.1	1.2	1.0
65 years and over.....	2.8	2.8	2.4	2.4	2.4	2.1	.4	.4	.3
Total persons employed.....	53.9	54.3	54.0	37.0	37.2	39.7	16.9	17.1	14.3
14-19 years.....	6.9	7.3	7.4	3.8	4.0	4.8	3.1	3.3	2.6
20-24 years.....	4.8	4.9	6.1	2.0	2.1	3.5	2.8	2.8	2.6
25-34 years.....	11.0	11.2	11.8	7.3	7.4	8.5	3.7	3.8	3.3
35-44 years.....	12.1	11.9	11.4	8.5	8.5	8.7	3.6	3.4	2.7
45-54 years.....	9.9	9.9	9.1	7.7	7.6	7.3	2.2	2.3	1.8
55-64 years.....	6.4	6.4	5.9	5.3	5.3	4.9	1.1	1.1	1.0
65 years and over.....	2.8	2.7	2.3	2.4	2.3	2.0	.4	.4	.3
Total persons unemployed ²	1.0	1.2	2.2	.5	.6	1.4	.5	.6	.8
14-19 years.....	.3	.5	.6	.1	.2	.4	.2	.3	.2
20-24 years.....	.2	.1	.3	.1	(3)	.1	.1	.1	.2
25-34 years.....	.2	.1	.3	.1	.1	.1	.1	(3)	.2
35-44 years.....	.1	.1	.3	.1	(3)	.2	(3)	.1	.1
45-54 years.....	.2	.1	.4	.1	.1	.3	(3)	(3)	(3)
55-64 years.....	(3)	.2	.2	(3)	.1	.2	(3)	(3)	(3)
65 years and over.....	(3)	.1	.1	(3)	.1	.1	(3)	(3)	(3)

¹ All data exclude persons in institutions.

² Persons on public emergency work projects are included with the unemployed prior to July 1943.

³ Less than 50,000.

Recent Publications of Labor Interest

OCTOBER 1943

Agriculture and Agricultural Workers

Legal rights of farm workers. By K. T. Sutton and H. L. Mitchell. Memphis, Tenn., Southern Tenant Farmers Union, [1943]. 6 pp.; mimeographed.

They saved the crops. By Carey McWilliams. (In *Inter-American*, Washington, August 1943, pp. 10-14; illus. 25 cents.)

Observations on and results of the United States-Mexican project to bring agricultural workers to the United States from Mexico. The article includes statistics as to number of workers transported and wages received, and discusses reception of the workers, their reactions, and opportunities offered them.

Agricultural reconstruction in China. By Owen L. Dawson. (In *Foreign Agriculture*, U. S. Department of Agriculture, Office of Foreign Agricultural Relations, Washington, June 1943, pp. 123-134; map. 10 cents.)

The author discusses the basic problems of Chinese agriculture, the measures adopted by the Chinese National Government to meet these problems, and agricultural reconstruction measures in which the United Nations may lend aid to China.

Agriculture in the Dominican Republic. By Jane Swift Powell. Washington, Pan American Union, Division of Agricultural Cooperation, 1943. 27 pp., bibliography, illus.; mimeographed. (American agriculture series, No. 2.)

Survey of agricultural conditions and policy in the Dominican Republic. Social and economic aspects discussed include rural housing, health, education, wages, land tenure and utilization, and credit.

Breve reseña de política agraria en el Paraguay. By Nicasio Martínez Díaz. (In *Véritas*, Buenos Aires, April 1, 1943, pp. 364-367.)

Brief analysis of recent agricultural relief measures in Paraguay including those relating to colonization, education, minimum prices, credit, and other matters.

Education and Training

Labor and education in 1942. Washington, American Federation of Labor, 1943. 31 pp.

Reports of the Executive Council, American Federation of Labor, and the annual convention of the Federation in October 1942, on the subject of education.

Pre-induction training in vocational schools, vocational departments, and trade schools. Prepared jointly by the War Department and the U. S. Office of Education. Washington, U. S. War Department, 1943. 29 pp., illus. (P. I. T. 330.)

Training war production workers: Biennial report of the Michigan program of vocational training for war production workers, vocational training for rural war production workers, and training for youth employed on NYA work projects, for the biennium ended June 30, 1942. Lansing, State Board of Control for Vocational Education, 1942. 64 pp., illus. (Bull. No. 285.)

EDITOR'S NOTE.—Correspondence regarding the publications to which reference is made in this list should be addressed to the respective publishing agencies mentioned. Where data on prices were readily available, they have been shown with the title entries. The amounts do not include postage, and also they are subject to change.

Dominion-Provincial youth training program; Dominion-Provincial war emergency training program: Report of the Dominion Supervisor of Training for the fiscal year ending March 31, 1943. Ottawa, Department of Labor, 1943. 24 pp.

Factory training manual. Edited by Reginald Pugh. Bath, England, Management Publications Trust, Ltd., 1942. 316 pp., diagrams, illus.

Second edition of a practical textbook, by a group of engineers, for use in connection with the British Ministry of Labor scheme for training skilled and semiskilled operatives.

Employment and Unemployment

Development and operation of employment stabilization programs. (In Labor Market, U. S. War Manpower Commission, Bureau of Program Requirements, Washington, March–April 1943, pp. 10–17.)

Brief account of the employment-stabilization programs promoted in various areas by the U. S. War Manpower Commission.

Freedom from fear and want: A study of the unemployment problem. By Basil Smallpeice. Potters Bar, Middlesex, England, Gee & Co. (Publishers), Ltd., 1942]. 47 pp. 1s. 6d.

Full employment. London, Economist Newspaper, Ltd., 1943. 28 pp. (Reprint of articles in the Economist, October 3, 10, 17, and November 28, 1942, and January 2, 1943.)

Discussion of the possibility of full employment, the means to attain it, and the cost.

Principles of employment supervision in war and peace. By Elizabeth M. Johnstone. (In International Labor Review, International Labor Office, Montreal, September 1943, pp. 277–307. 60 cents.)

The article covers one aspect of employment organization—principles governing supervision over entries into and changes of employment—in Australia, Canada, Great Britain, New Zealand, Union of South Africa, and the United States. Wartime controls of employment in Germany are briefly noted.

Proceedings of the thirtieth annual convention of the International Association of Public Employment Services, held at Louisville, Ky., May 5–8, 1942. [Cleveland, Ohio, B. C. Seiple, Secretary-Treasurer, 1242 West Third Street, 1943?] 99 pp.

Annual review of employment and pay rolls in Canada, 1942. Ottawa, Department of Trade and Commerce, Dominion Bureau of Statistics, 1943. 71 pp., charts.

Shows employment and pay rolls, in both actual numbers and index numbers, and gives information by industries and by economic and geographic areas.

Food and Nutrition

Food management and inflation. By Mary J. Bowman and Albert H. Hart. Ames, Iowa, Iowa State College Press, 1943. 39 pp. 20 cents. (Iowa State College, Department of Economics and Sociology, Wartime farm and food policy series, pamphlet No. 8.)

Deals with the effect of food management in stimulating or checking inflationary rises in money incomes, and the handicaps imposed on food management by leaving consumers with a huge excess of spending power over supplies of consumption goods.

Food strategy. By Margaret G. Reid. Ames, Iowa, Iowa State College Press, 1943. 40 pp. 20 cents. (Iowa State College, Department of Economics and Sociology, Wartime farm and food policy series, pamphlet No. 1.)

Examines the necessity for planning food production, for rationing, and for building adequate reserves.

Food supply. By Harold Kellock. Washington, Editorial Research Reports, 1013 Thirteenth Street NW., 1943. 18 pp. (Vol. 2, 1943, No. 3.) \$1.

Subjects considered are food-supply dislocations in time of war, food control and the problem of subsidies, food supplies and controls in World War I, and present problems of demand and supply.

A guide to practical nutrition. Edited by Michael G. Wohl, M. D., and John H. Willard, M. D. Philadelphia, Philadelphia County Medical Society, 1943. 98 pp., bibliography.

A series of articles on nutrition, sponsored by Committee on Nutrition and Deficiency Diseases, Philadelphia County Medical Society, reprinted from issues of Philadelphia Medicine, 1941-42.

Mexico's dinner guests. By Belle Fligelman. (In Inter-American, Washington, July 1943, pp. 28, 29; illus.)

Description of the Comedor Familiar (Family Dining-Room) No. 1, and story of its 1½ years' operation in low-cost feeding of families in Mexico City.

United Nations Conference on Food and Agriculture, Hot Springs, Virginia, May 18-June 3, 1943—final act and section reports. Washington, Government Printing Office, 1943. 61 pp. 20 cents. (Department of State publication 1948, Conference series 52.)

Contains a summation of the work of the Conference, its recommendations, and section reports as follows: Section I, Consumption levels and requirements; Section II, Expansion of production and adaptation to consumption needs; Section III, Facilitation and improvement of distribution. This material was also published by His Majesty's Stationery Office, London, in official documents (Cmd. 6451, 9d., and Cmd. 6461, 6d.).

Health and Industrial Hygiene

Industrial hygiene and plant efficiency through good lighting. Washington, U. S. Department of Labor, Division of Labor Standards, 1943. 51 pp., bibliography, illus. Limited free distribution.

Reprint of "American recommended practice of industrial lighting" approved by American Standards Association and published in 1942 by the Illuminating Engineering Society (New York).

Industrial manganese poisoning. By Lawrence T. Fairhall and Paul A. Neal, M. D. Washington, U. S. National Institute of Health, 1943. 24 pp., bibliography. (Bull. No. 182.) 10 cents, Superintendent of Documents, Washington.

Covers industrial exposure to manganese, symptoms of poisoning, and treatment of chronic industrial manganese poisoning.

The principles and practice of industrial medicine. Edited by Fred J. Wampler, M. D. Baltimore, Williams & Wilkins Co., 1943. 579 pp. \$6.

Collection of articles by 33 contributors on various phases of industrial medicine and industrial health hazards. One purpose of the volume is to provide information for the many practicing physicians who have not had experience in industrial medicine but are being asked to take on the medical care of industrial workers.

Report of a committee appointed to consider methods of suppression and removal of dust containing silica in the tile making and the electrical porcelain fittings sections of the pottery industry. London, Ministry of Labor and National Service, Factory Department, 1943. 19 pp., illus.

Studies on the duration of disabling sickness: IV, Duration of disability from the nonrespiratory-nondigestive diseases among male employees with particular reference to the older worker. By William M. Gafafer and Rosedith Sitgreaves. (In Public Health Reports, Federal Security Agency, U. S. Public Health Service, Washington, June 25, 1943, pp. 969-979; charts. 5 cents, Superintendent of Documents, Washington.)

Industrial Accidents and Workmen's Compensation

Accident facts, 1943 edition. Chicago, National Safety Council, Inc., 1943. 96 pp., charts. 50 cents.

Data on all types of accidents, including occupational injuries, in 1942 and earlier years.

Annual statistical number, Accident Prevention Magazine, Portland Cement Association, Chicago, June 1943. 15 pp., charts.

This number of the Accident Prevention Magazine gives summary figures on the accident experience of the cement industry in 1942 with comparative figures for the 4 previous years. Detailed data for individual plants are given in a

separately published table accompanying the magazine. The frequency rate in 1942 for all reporting plants combined was 7.58 per million man-hours of exposure as compared with 5.99 in 1941, an increase of 27 percent, against an increase of only 5 percent in man-hours of exposure; the severity rate increased from 2.22 to 5.11.

Annual summary of injuries in the petroleum industry, for 1942. New York, American Petroleum Institute, Department of Accident Prevention, 1943. 18 pp., chart.

Coal dust explosions. London, Safety in Mines Research Board, 1943. 14 pp. (Cmd. 6450.)

Special report on the colliery explosions in Great Britain in the last few years, and the plans and progress of the researches of the Safety in Mines Research Board into the causes and prevention of coal-dust explosions.

Salvando vidas en la industria Portorriqueña. By Pedro Montes Hernández. (In *Véritas*, Buenos Aires, April 1, 1943, pp. 382, 383.)

Discussion of the 1939 industrial safety act of Puerto Rico and measures taken under it for the prevention of industrial accidents.

Os acidentes do trabalho e os institutos de previdência social [Brazil]. By Helvecio Xavier López. (In *Boletim do Ministério do Trabalho, Indústria e Comércio*, Rio de Janeiro, November 1942, pp. 231-247.)

Digest of legislation providing compensation for industrial accidents in various American Republics, and a detailed examination of Brazilian legislation on the subject.

Workmen's compensation in Canada—a comparison of provincial laws. Ottawa, Department of Labor, July 1943. 29 pp.; mimeographed.

Industrial Relations

Collective bargaining. By R. D. Bundy. New York, Chicago, etc., National Foremen's Institute, Inc., 1942. 59 pp. 2d rev. ed.

Dedicated to the proposition that the interests of management and labor lie in the same direction.

Liberty concepts in labor relations. By Byron R. Abernethy. Washington, American Council on Public Affairs, 1943. 119 pp. \$2.50.

A study of the meaning of the ideas of liberty as held by employers and employees in relation to the conflicts between the two groups. Industrial conflict is viewed as the struggle by employers to retain their power and privileged position and by employees to obtain a share in the power of management and to assert greater influence in determining labor conditions. Chapters relating particularly to the ideas and struggles of workers deal with freedom of association, freedom to bargain collectively, freedom to strike, and freedom of expression.

Protecting management's rights in labor relations. New York, International Statistical Bureau, Inc., 1943. 32 pp. \$2.50.

Rulings and decisions of the War Labor Board, the National Labor Relations Board, and various courts. These rulings and decisions pertain to the rights and duties of management and to unfair labor practices.

Reinstatement of employees under the Fair Labor Standards Act. By George W. Crockett, Jr. (In *Michigan Law Review*, Ann Arbor, August 1943, pp. 25-50. \$1.)

Advances the idea that although the Fair Labor Standards Act does not expressly provide for the reinstatement of employees with or without back pay, the Federal courts possess inherent power to compel the reinstatement of employees discharged in violation of section 15(a) (3). This section makes unlawful the discharge of any employee because he "has filed any complaint or instituted or caused to be instituted any proceeding under or related to this Act, or has testified or is about to testify in any such proceeding, or has served or is about to serve on an industry committee."

Representatives of their own choosing. By Louis B. Boudin. (In *Illinois Law Review*, Chicago, March-April 1943, pp. 385-417; May-June 1943, pp. 41-78.)

Evaluation of the National Labor Relations Act and of the work of the National War Labor Board, based largely on the decisions of the U. S. Supreme Court in the Consolidated Edison and the Amalgamated Utility cases. The author con-

siders the possible effects of those decisions upon the future of labor, the National Labor Relations Act, and the War Labor Board.

El contrato de trabajo colectivo obligatorio, en una rama industrial, como medio para mantener la estabilidad de las empresas, proteger los derechos obreros, e impulsar la economía nacional, [México]. By José Lorenzo Cossío. (In Proceedings of the Eighth American Scientific Congress, held in Washington, May 10-18, 1940, Vol. XI, Economics and sociology, pp. 81-91. Washington, U. S. Department of State, 1943.)

Reproduction of provisions of the Mexican labor code that pertain to collective labor agreements, and discussion of the principal characteristics and benefits of collective labor agreements in Mexico.

Labor Organizations and Congresses

Censo sindical do Brazil em 1939. (In Boletim do Ministério do Trabalho, Indústria e Comércio, Rio de Janeiro, December 1942, pp. 85-103.)

Results of the 1939 census of labor organizations in Brazil, including organizations of employees, employers, persons in liberal professions, and independent workers. For each category are shown the number of members, by State, by industry, and by sex and nationality; and the economic situation by industry and by State.

Três flagrantes da sindicalização. By Luiz Augusto de Rego Monteiro. (In Boletim do Ministério do Trabalho, Indústria e Comércio, Rio de Janeiro, February 1943, pp. 145-156.)

Rulings of the general director of the Brazilian National Labor Bureau on the following questions concerning labor organizations: Exercise by labor organizations of functions and activities of an economic nature; union tax and employees of the Government; the position in the labor organization of shareholders of enterprises and of managers of stock companies.

Forty-eighth annual report of the Irish Trade Union Congress. Dublin, National Executive of the Irish Trade Union Congress, 1942. 183 pp.

Report of the national executive of the organization for 1941-42 and the proceedings of the annual conference held in July 1942.

Union membership and collective bargaining by foremen. Washington, U. S. Bureau of Labor Statistics, 1943. 11 pp. (Bull. No. 745; reprinted from Monthly Labor Review, June 1943, with additional data.) 5 cents, Superintendent of Documents; Washington.

Manpower

Experience in the use of part-time workers. (In Labor Market, U. S. War Manpower Commission, Bureau of Program Requirements, Washington, March-April 1943, pp. 22-31.)

The article discusses types of part-time workers, fields in which employed, and some of the problems connected with the use of part-time workers, in the United States.

Manpower problems—a selected and annotated list of references. Compiled by John P. Umbach. Washington, U. S. Library of Congress, Legislative Reference Service, March 1943. 22 pp.; mimeographed. (War service bulletins, series H-5.) Limited free distribution.

Maximum utilization of employed manpower—a check list of company practice. Princeton, N. J., Princeton University, Industrial Relations Section, 1943. 46 pp., bibliography. (Research report series, No. 68.) \$1.

New manpower through better utilization. By Frank H. Sparks and others. New York, American Management Association, 1943. 28 pp. (Production series No. 144.)

Manpower situation in Great Britain, 1943. Washington, U. S. Bureau of Labor Statistics, 1943. 14 pp. (Serial No. R. 1550; reprinted from Monthly Labor Review, July 1943.) Free.

West Indian workers in Britain. By Arnold R. Watson. London, Hodder & Stoughton, 1942. 24 pp. 6d.

Deals with the scheme for bringing West Indian workers into Great Britain to perform war work and the problems of work and welfare among them.

Minimum Wage

From maximum wages to minimum wages: Six centuries of regulation of employment contracts. By E. Merrick Dodd. (In *Columbia Law Review*, New York, July 1943, pp. 643-687. 85 cents.)

Sketches the development of the Anglo-American law of employment contracts. Particular attention is paid to the increase in governmental regulation of matters affecting labor in England and the United States and to the change in labor legislation from laws fixing maximum wages to those providing for minimum wages.

Progress of State minimum-wage legislation in 1942. By Louise Stitt and Loretta Sullivan. Washington, U. S. Bureau of Labor Statistics, 1943. 8 pp. (Serial No. R. 1519; reprinted from *Monthly Labor Review*, March 1943.) Free.

Economic factors bearing on the establishment of minimum wages in the logging, lumber and timber, and related products industries. New York, U. S. Department of Labor, Wage and Hour and Public Contracts Divisions, 1943. 48 pp.; mimeographed. Free.

Economic factors bearing on the establishment of minimum wages in the wholesaling, warehousing, and other distribution industries. New York, U. S. Department of Labor, Wage and Hour and Public Contracts Divisions, 1943. 60 pp.; mimeographed. Free.

El salario mínimo en el Brasil. By Oscar Egidio de Araujo. (In *Veritas*, Buenos Aires, April 1, 1943, pp. 236-238.)

Account of gains to Brazilian labor from adoption of minimum-wage legislation, with statistics from studies of wages in several different States of the country.

Negro in Industry

How management can integrate Negroes in war industries. By John A. Davis. New York City, New York State War Council, Committee on Discrimination in Employment, 1942. 43 pp., bibliography.

Subjects dealt with include selection, placement, and handling of the Negro worker, and the position of the trade union in the integrating situation. A list of corporations and persons that have had important experience with Negro personnel is appended to the report.

The Negro and unionism in the Birmingham, Ala., iron and steel industry. By Herbert R. Northrup. (In *Southern Economic Journal*, Chapel Hill, N. C., July 1943, pp. 27-40. \$1.)

Organized labor and Negro workers. By Herbert R. Northrup. (In *Journal of Political Economy*, Chicago, June 1943, pp. 206-221. \$1.)

Old-Age Retirement and Assistance

Employee retirement plans: Social security in private enterprise. (In *Journal of Commerce*, New York, July 15, 1943, second section. 60 pp.)

The report contains discussions, by different writers, of various aspects of the problem, and of fundamentals, types and operation, and the future of employee-retirement plans. There is a section on Treasury Department regulations which affect the plans.

State and local employees covered by Government retirement systems. By Dorothy McCamman. (In *Social Security Bulletin*, Federal Security Agency, Social Security Board, Washington, July 1943, pp. 31-41. 20 cents, Superintendent of Documents, Washington.)

Report on coverage and types of retirement systems for public employees in the United States, based on a questionnaire study made for the Social Security Board by the Division of State and Local Government of the Bureau of the Census.

Minnesota directory of licensed hospitals and related institutions, 1943. Minneapolis, Minnesota Department of Health, Division of Child Hygiene, 1943. 31 pp.

Includes, among the institutions listed, homes for aged which provide care for convalescent and chronic cases.

El sistema jubilatorio Argentino. By Juan D. Ramírez Gronda. (In *Derecho del Trabajo*, Buenos Aires, April 1943, pp. 145-152.)

The legislative bases of the respective Argentine retirement funds for employees of the Government, railways, public service, banks, and merchant marine, for journalists, and for employees of the city of Buenos Aires, are cited, with brief summaries of provisions as to administration, coverage, contributions, and benefits. The coordination of the various schemes is also outlined.

Labor's fight for the old folk. London, Labor Party, 1942. 14 pp.

Review of the work of the British Labor Party towards improvement of the national pension system and of the demands of the party for increased pensions.

Post-War Reconstruction

Demobilization and readjustment: Report of Conference on Postwar Readjustment of Civilian and Military Personnel. Washington, U. S. National Resources Planning Board, 1943. 106 pp., charts.

Contains proposals for the orderly handling of the demobilization and readjustment of men coming out of the armed forces and from war industry at the close of the war.

Economic problems of the post-war—bibliography, selected and annotated. Washington, Chamber of Commerce of the United States, August 1943. 22 pp.

Plan for reconstruction: A project for victory in war and peace. By W. H. Hutt. London, Kegan Paul, Trench, Trubner & Co., Ltd., 1943. 328 pp. 18s.

The author's plan is for the enactment of special laws, drafts of which are given and explained. Full instead of restrained production is basic to the program.

The transition from war to peace economy: Report of the Delegation on Economic Depressions, Part I. Geneva, League of Nations, 1943. 118 pp. \$1, Columbia University Press, New York.

Defines what the Delegation considers should be the objectives of post-war economic policy and analyzes the probable effects of war economy and the problems of the transition from war to peace economy. Measures to avert world depression and to establish an enduring and peaceful world economic order are recommended. Attainment of full employment is one of the major problems considered. The portions of the report most directly concerning industry and labor are analyzed in the *International Labor Review* for July 1943.

Britain's town and country pattern—a summary of the Barlow, Scott, and Uthwall reports. Prepared by the Nuffield College Social Reconstruction Survey. London, Faber & Faber, Ltd., 1943. 111 pp., map. (Rebuilding Britain series, No. 2.) 2s. 6d.

The three reports which are summarized are considered by the director of the survey, G. D. H. Cole, to be basic to post-war planning of both industry and agriculture.

Price Control and Rationing

Fourth report of the Office of Price Administration, covering the period ended January 31, 1943. Washington, 1943. 90 pp., charts. (House doc. No. 248, 78th Cong., 1st sess.)

Reviews the rationing program in general, rationing of specific commodities, price control, price movements, and rent control.

Food rationing and morale. By C. Arnold Anderson. Ames, Iowa, Iowa State College Press, 1943. 40 pp. 20 cents. (Iowa State College, Department of Economics and Sociology, Wartime farm and food policy series, pamphlet No. 4.)

Stresses the importance of morale in wartime and outlines the essentials of a food-rationing program that will maintain a high level of morale.

Observations on rationing and price control in Great Britain. By Dexter M. Keezer. (In *American Economic Review*, 722 Jackson Place NW., Washington, June 1943, pp. 264-282. \$1.25.)

Point rationing, with particular reference to British experience. By Dorothy Campbell Tompkins. Berkeley, University of California, Bureau of Public Administration, December 1942. 6 pp.; mimeographed. (War bibliography No. 4.)

Productivity and Technological Changes

Cosecha mecánica del algodón. By Rafael García Mata and Rómulo A. Franchelli. Buenos Aires, Ministerio de Agricultura, Junta Nacional del Algodón, 1942. 126 pp., diagrams, illus.

A report on experiments with mechanical cotton harvesters in Argentina and the United States from 1937-1942, with information on social, economic, and technological problems connected with the mechanization of cotton picking.

Work performed with principal farm machines. By A. P. Brodell and James W. Brickhead. Washington, U. S. Department of Agriculture, Bureau of Agricultural Economics, 1943. 44 pp.; mimeographed. (F. M. 42.)

Summary of more than 27,000 reports from crop correspondents of the Department of Agriculture. Information is given for the several geographic divisions regarding such items as the average amount of work done with the principal farm machines in a 10-hour day, the total work performed in 1941, and the amount of labor required to operate the various kinds of machines in the performance of a given amount of work. This study is described as designed to throw light on problems of machinery and manpower under war conditions. An earlier summary of other data from the same reports was published under the title "Age and Size of Principal Farm Machines" (F. M. 41).

Labor aspects of machine and hand milking. By A. P. Brodell and M. R. Cooper. Washington, U. S. Department of Agriculture, Bureau of Agricultural Economics, 1943. 13 pp.; mimeographed. (F. M. 43.)

Based on information received in February 1943 from crop correspondents. It is stated that about one-half of the milking machines are less than 4 years old and that shortage of labor has greatly stimulated the demand for new machines, and also has increased the use of old machines.

Indexes of man-hour requirements for Liberty vessels. Washington, U. S. Bureau of Labor Statistics, Employment and Occupational Outlook Branch, 1943. 4 pp.; mimeographed. Free.

Productivity and unit labor cost in selected mining industries, 1935-42. Washington, U. S. Bureau of Labor Statistics, 1943. 9 pp.; mimeographed. Free.

Productivity and unit labor cost in the telephone and telegraph industries, 1935-42. Washington, U. S. Bureau of Labor Statistics, 1943. 3 pp.; mimeographed. Free.

Enquiry into joint production committees, being the third report on production (PE/429). [London?], Amalgamated Engineering Union, 1943. 97 pp., mimeographed.

The results of a check to ascertain the effect of joint-production-committee agreements on production in Great Britain.

Sickness Insurance and Medical Care

Medical care and costs in relation to family income—a statistical source book including selected data on characteristics of illness. By Helen Hollingsworth and Margaret C. Klem. Washington, U. S. Social Security Board, Bureau of Research and Statistics, 1943. 219 pp. (Bureau memorandum No. 51.)

In addition to data on medical care and its costs, the report contains information on the prevalence, frequency, severity, and duration of illness, primarily in relation to family income, in the United States.

El seguro de enfermedad en el Ecuador. (In Boletín de Informaciones y de Estudios Sociales y Económicos, Instituto Nacional de Previsión, Quito, March 1943, pp. 8-29.)

Résumé of sickness insurance in Ecuador, with some statistics by years from 1938 to 1942.

The British health services in wartime. New York, British Information Services, 1943. 20 pp. (I. D. 416.) Free.

Describes the framework of the health services, the emergency hospital scheme, organization of supplies and personnel, air-raid precautions, and child-health services, and discusses nutrition, industrial health, and general health of the population.

Health insurance in England. Chicago, American Medical Association, Bureau of Medical Economics, 1942. 31 pp.

Review of the conditions and forces that led to the adoption of the British health-insurance system and a discussion of the extent to which it has attained its avowed objectives, considered from the standpoint of the movement in the United States for the introduction of compulsory health insurance.

Social Security

Panorama of social insurance in the Americas. Montreal, International Labor Office, 1943. 37 pp. (Inter-American Committee on Social Security, Provisional bull. No. 1.)

Review of the progress of the social-insurance movement in the Americas from the middle of 1940 to the end of 1942. A table showing the scope of social insurance in the various American countries is included.

Report of the Social Security Commission of Puerto Rico, February 5, 1943. San Juan, 1943. 70 pp.

The report covers the first year's work of the Commission and deals with the establishment of a general program for social assistance in the Island.

Origens e tendências do seguro social. By Bezerra de Freitas. (In Boletim do Ministério do Trabalho, Indústria e Comércio, Rio de Janeiro, December 1942, pp. 210-226.)

This article deals mainly with social insurance in Brazil, from the adoption of the law for railwaymen in 1923 through 1939, but certain figures are given on social insurance in Argentina in 1936 and 1937.

Operaciones de la Caja de Previsión de Empleados Particulares durante los años 1939 a 1942, [Chile]. (In Previsión Social, Ministerio de Salubridad, Previsión y Asistencia Social, Santiago de Chile, October-December 1942, pp. 176-194.)

Brief listing of legislation, through December 1942, relating to the Chilean Welfare Fund for Employees of Private Enterprises, and financial statement for the period 1939-42 (two fiscal years) showing assets and liabilities, receipts, and expenditures.

Anteproyecto de ley del seguro social. México, D. F., Secretaría del Trabajo y Previsión Social, 1942. Various paging, chart.

Report of a study of all phases of social security, made prior to adoption, on December 31, 1942, of the social-insurance law in Mexico; text of the proposed law; and various financial and actuarial tables. The tables include statistics of industrial distribution, and wages and hours of workers.

The Beveridge plan and the Italian legislation on social security. By Giorgio Tagliacozzo. Washington, Bureau of Latin American Research, 1943. 31 pp.; mimeographed.

Factual comparison of the Italian social-insurance system with the Beveridge social-security plan for Great Britain, to refute the propaganda claims of the Italians that the fascist system is far in advance of the British plan.

Welfare outside the factory and seamen's welfare in port, August 1941-August 1942. London, Ministry of Labor and National Service, 1942. 12 pp. (Cmd. 6411.) 2d.

Wages and Hours of Labor

Earnings in aircraft-parts plants, November 1942. Washington, U. S. Bureau of Labor Statistics, 1943. 15 pp. (Bull. No. 744; reprinted from Monthly Labor Review, June 1943.) 5 cents, Superintendent of Documents, Washington.

Earnings in the manufacture of industrial machinery, 1942 (part 3). Washington, U. S. Bureau of Labor Statistics, 1943. 42 pp. (Bull. No. 720-B; reprinted from Monthly Labor Review, February, March, and April 1943.) 10 cents, Superintendent of Documents, Washington.

Five branches of the industrial and electrical-machinery manufacturing industry are covered in this bulletin—machine-tool accessories, domestic-laundry equipment, refrigerating equipment, electrical appliances, and carbon products for the electrical industry.

Union wages and hours in the printing trades, June 1, 1942. Washington, U. S. Bureau of Labor Statistics, 1943. 73 pp., charts. (Bull. No. 739; reprinted from Monthly Labor Review, March 1943, with additional data.) 10 cents, Superintendent of Documents, Washington.

Some current factors in wage disputes—work of the War Labor Board. (In Iowa Law Review, Iowa City, May 1943, pp. 671–682. \$1.)

Discusses the meaning that the National War Labor Board has given to the bases for authorizing increases above September 15, 1942, wages. Those bases, contained in Executive Order No. 9250, are to correct maladjustments or inequalities; to eliminate substandards of living; to correct gross inequities (largely eliminated by Executive Order No. 9328 of April 8, 1943); and to aid in the effective prosecution of the war.

Square meals and square deals. By Ernest Bevin. London, Labor Party, 1943. 13 pp. 2d.

Presents the points at issue on the passage of the British catering wages bill and discusses its scope and the effect that wage protection would have in building up the efficiency of employees in the industry.

Los salarios en el Perú. By Jorge Ramírez Otárola. Lima, Biblioteca de la Revista de Economía y Finanzas, 1941. 14 pp. (Cuadernos monográficos útiles, primera serie, No. 3.)

Detailed wage statistics of approximately 24,500 workers in 70 industrial establishments in Peru, showing maximum, minimum, and most frequent wage rates; and statistics of employment and average wages paid in cotton, sugar, rice, wheat, and mining industries in various years, 1936 to 1938.

Women in Industry

Wartime employment of women in manufacturing industries, June 1943. Washington, U. S. Bureau of Labor Statistics, 1943. 19 pp., charts; mimeographed. Free.

Wartime opportunities for women. By Evelyn Steele. New York, E. P. Dutton & Co., Inc., 1943. 181 pp., bibliography, illus. \$2.50.

Surveys the numerous fields of war work for women. Occupations are appraised not only on the basis of the present emergency, but also upon the possibilities offered for permanent and satisfying careers.

Women in war: A complete guide to service in the armed forces and war industries. By Herbert Burstein. New York, Service Publishing Co., 1943. 166 pp., illus. \$1.50.

In addition to the chapters giving accounts of various war organizations of women, other sections of the volume deal with the need for women in industry, mobilization of womanpower, policies as to registration of women, jobs at which women now work, employment of women in other countries, etc.

An abstract of laws governing the employment of women in New York State. Albany, New York State Department of Labor, Division of Women in Industry and Minimum Wage, 1943. 20 pp.; mimeographed.

Punch in, Susie! A woman's war factory diary. By Nell Giles. New York and London, Harper & Bros., 1943. 143 pp., illus. \$1.50.

A lively account of the experiences of a newspaper woman who took a war job with an electric company.

General Reports

A short history of labor conditions under industrial capitalism: Volume II, The United States of America, 1789 to the present day. By Jürgen Kuczynski. London, Frederick Muller, Ltd., 1943. 228 pp. 10s. 6d.

Annual report of the Commissioner of Labor, submitted to the Governor of Puerto Rico, for the fiscal year ended June 30, 1942. San Juan, 1942. 108 pp.

The report covers the work of the industrial supervision service, children's bureau, employment service, homestead division, mediation and conciliation service, and workmen's compensation service of the Puerto Rican Department of Labor, and lists collective agreements entered into during the year between labor organizations and employers. The social legislation enacted during the special 1941 session and the regular 1942 session of the legislature is listed.

Labor trends and social welfare in Latin America, 1941 and 1942. By Ernesto Galarza. Washington, Pan American Union, Division of Labor and Social Information, 1943. 153 pp., illus.; mimeographed. 25 cents.

Subjects covered include labor organizations and their activities; governmental measures to regulate prices, rents, etc.; cost of living; wage and salary situation; migration of workers; colonization and land-settlement programs; cooperatives; public housing programs; food distribution and nutrition; maternity and child care; social-security programs; and effects of the war on the various countries.

Las condiciones sociales y económicas de la clase obrera Argentina. By José Figuerola. (In Proceedings of the Eighth American Scientific Congress, held in Washington, May 10-18, 1940, Vol. XI, Economics and sociology, pp., 171-180; charts. Washington, U. S. Department of State, 1943.)

An examination of Argentine cost-of-living and price indexes for various years to and including 1939, and unemployment indexes for 1932, 1935, and 1936; and for the Federal Capital only, indexes showing employment levels for various years including 1939, and wage statistics for certain industries and professions.

Labor problems in Bolivia: Report of the Joint Bolivian-United States Labor Commission. Montreal, International Labor Office, 1943. 48 pp., illus. 50 cents.

Reproduction of the Commission's report as originally issued in mimeographed form by the U. S. Department of State, with the addition of a foreword by the International Labor Office, illustrations, and a page by page translation into Spanish.

Quinto censo general de población levantado el 7 de abril de 1940, [Guatemala]. Guatemala, Secretaría de Hacienda y Crédito Público, Dirección General de Estadística, 1942. 887 pp.

Gainful workers are classified by industry, occupation, sex, and political division of the Republic.

Labor conditions in Greece. Washington, U. S. Bureau of Labor Statistics, 1943. 18 pp. (Serial No. R. 1561; reprinted from Monthly Labor Review, August 1943.) Free.

Department of Labor Bulletin, No. 1. Jerusalem, Palestine, October-December 1942. 28 pp.

This is the first issue of a bulletin to be published quarterly by the Palestine Department of Labor. It contains a list of the objectives of the new Department, which was established in July 1942.

