

Monthly

JAN 6 1945

DECEMBER 1944

LABOR

Review

VOL. 59 • NO. 6

REHABILITATION



In this Issue . . . Reconversion problems in Buffalo area . . .
Effect of escape clause . . . Wages in rayon
industry . . . Prices, third quarter 1944 . . .

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

UNITED STATES DEPARTMENT OF LABOR

FRANCES PERKINS, Secretary



BUREAU OF LABOR STATISTICS

ISADOR LUBIN, *Commissioner* (on leave)

A. F. HINRICHS, *Acting Commissioner*

HENRY J. FITZGERALD, Chief, Business Management Branch	N. ARNOLD TOLLES, Chief, Working Conditions and Industrial Relations Branch
HUGH S. HANNA, Chief, Editorial and Research	
WALTER G. KEIM, Director of Field Operations	ARYNESS JOY WICKENS, Chief, Prices and Cost of Living Branch
HUGH B. KILLOUGH, Acting Chief, Employment and Occupational Outlook Branch	SIDNEY W. WILCOX, Chief Statistician

JOHN H. G. PIERSON, Consultant on Post-War Adjustment
FAITH M. WILLIAMS, Consultant on Prices and Living Standards

DIVISIONS

Construction and Public Employment, Herman B. Byer	Industrial Relations, Florence Peterson, assistant chief, Working Conditions and Industrial Relations Branch
Consumers' Prices, Ethel D. Hoover	Labor Information Service, Boris Stern
Cost of Living, Dorothy S. Brady	Machine Tabulation, Joseph Drager
Employment Statistics, Alexander Sturges (acting chief)	Occupational Outlook, Charles Stewart
General Price Research (vacancy)	Productivity and Technological Development, W. Duane Evans
Industrial Hazards, Max D. Kossoris	Wage Analysis, Robert J. Myers
Industrial Prices, Jesse M. Cutts	

Copies of Bureau of Labor Statistics publications and further information may be obtained from the several field offices, a list of which appears on the inside back cover of this issue. The services of the Bureau's Regional Directors and their technical staffs are available to labor organizations, management, and the general public for consultation on matters with which the Bureau deals, as, for example, employment, prices, wages, absenteeism, labor turnover, and industrial accidents.

The MONTHLY LABOR REVIEW is for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Price, 30 cents a copy. Subscription price per year in the United States, Canada, and Mexico, \$3.50, other countries, \$4.75.



WAZOO PUBLIC LIBRARY

MONTHLY LABOR REVIEW

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

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

CONTENTS

DECEMBER 1944, Vol. 59, No. 6.

Cover illustration: Rehabilitation—Using an artificial arm.

<i>Special articles:</i>	Page
Reconversion problems in the Buffalo industrial area.....	1117
Effect on union membership of "escape period" in renewed maintenance-of-membership agreements.....	1137
Wages in the rayon industry, May 1944.....	1141

<i>Employment conditions:</i>	
Current developments in manpower requirements and labor supply..	1158
Measures relating to labor in Italy.....	1162
Industrial employment in Mexico, 1943.....	1163
Unemployment in Spain, February 1944.....	1165

<i>Wartime policies:</i>	
WMC program to reduce migration of labor.....	1167
Procedure for borrowing workers in New York area.....	1168
Full military status for Army Nurse Corps.....	1169
Land for workers in Colombia.....	1169

<i>Industrial injuries:</i>	
Injuries and accident causes in the foundry industry in 1942.....	1170
Industrial injuries, July 1944.....	1180

<i>Social security:</i>	
British Government social-insurance proposals.....	1183

<i>Labor organizations:</i>	
Convention of hosiery workers, 1944.....	1190
United Mine Workers' convention, 1944.....	1195

<i>Industrial relations:</i>	
Union agreements in fruit and vegetable canning.....	1203

<i>Industrial disputes:</i>	
Strikes in October 1944.....	1217
Activities of U. S. Conciliation Service, September 1944.....	1219

<i>Cooperation:</i>	
Status of labor banks, June 30, 1944.....	1220

<i>Labor laws and decisions:</i>	
Legislative sessions in 1945.....	1222
Recent decisions of interest to labor.....	1223

<i>Women in industry:</i>	Page
Women in wartime labor force in Illinois, July 1944.....	1234
Women's expanding employment in Iowa, 1940-44.....	1234
Occupations of women workers injured in Michigan industries.....	1235
<i>Education and training:</i>	
Training of war workers under various programs.....	1237
Schools for skilled workers in Dominican Republic.....	1238
British Education Act, 1944.....	1238
<i>Immigration and emigration:</i>	
Immigration and emigration, 1943-44.....	1240
<i>Wages and hour statistics:</i>	
Earnings in Detroit tool and product engineering plants, April 1944..	1242
Union wages and hours of motortruck drivers and helpers, July 1, 1944..	1245
Trend of factory earnings, 1939 to September 1944.....	1252
Per capita income of wage-earner families, 1939.....	1254
Chile—Wages of textile workers in Province of Concepción.....	1255
Hungary—Wartime agricultural wages.....	1257
<i>Cost of living and retail prices:</i>	
Prices in the third quarter of 1944.....	1258
Cost of living in large cities, October 1944.....	1268
Retail prices of food in September 1944.....	1271
Prices of electricity and gas, September 1944.....	1277
Prices and cost of living in Brazil.....	1280
Wartime prices and wages in Switzerland.....	1282
<i>Wholesale prices:</i>	
Wholesale prices in October 1944.....	1283
<i>Labor turnover:</i>	
Labor turnover in manufacturing, mining, and public utilities, September 1944.....	1289
<i>Building operations:</i>	
Building construction in urban areas, October 1944.....	1294
<i>Trend of employment, earnings, and hours:</i>	
Summary of reports for October 1944.....	1297
Industrial and business employment.....	1297
Public employment.....	1298
Construction employment.....	1299
Detailed reports for industrial and business employment, September 1944:	
Estimates of nonagricultural employment.....	1301
Industrial and business employment.....	1301
Indexes of employment and pay rolls.....	1302
Average earnings and hours.....	1311
Civilian labor force, October 1944.....	1315
<i>Labor chronology:</i>	
Chronology of labor events, July-September 1944.....	1316
<i>Labor conditions in Latin America</i>	1163, 1169, 1238, 1255, 1280
<i>Recent publications of labor interest</i>	1323

This Issue in Brief

Reconversion problems in Buffalo industrial area.

Manufacturing plants in the Buffalo (N. Y.) area, a center of diversified heavy industries, will face a variety of problems in resuming civilian production, but most company officials foresee no serious reconversion difficulties if the transition from war to peace production is made in an orderly manner. Company officials generally recommend gradual reductions in war orders, advance notice of contract revisions, quick settlement of financial claims, and prompt removal of unusable Government-owned equipment. Union representatives urge planning to insure full employment. Most companies have already made some plans for post-war operations. About half anticipate the same volume of business as before the war, some expect moderate gains, and only a few foresee substantial increases. Present plans imply a post-war employment total, for the industries represented, about 30 percent higher than the 1939 figure, if the surveyed plants are typical. Page 1117.

Wages in the rayon industry, May 1944.

In May 1944, according to a survey by the Bureau of Labor Statistics, first-shift factory workers in the rayon industry had straight-time earnings averaging 84.0 cents per hour. The highest earnings were those of lead burners (\$1.472 per hour) and the lowest those of cleaners (59.1 cents). Office workers' hourly earnings ranged from 83.1 cents for class A stenographers to 49.6 cents for office boys and girls. Page 1141.

Effect on union membership of "escape" clause.

Union members have not taken advantage of "escape periods" ordered by the War Labor Board following a year's experience under a maintenance-of-membership agreement. This conclusion is based on a field study, made at the request of the Board, to determine the effect on union membership of "escape periods" granted by Board action in connection with the renewal of maintenance-of-membership awards. In the majority of cases, resignations represented less than 1 percent of the total union's strength in the plant; and in no case over 6 percent. Such resignations as occurred appear to have been due to personal grievances of the individual employees, while in only 1 case were resignations prompted by the organizing efforts of a rival union. Page 1137.

Injuries and accident causes in the foundry industry, 1942.

Foundry work, especially the casting of iron and steel, has long been considered one of the most hazardous manufacturing activities. Typifying the experience of the industry, the frequency of disabling industrial injuries has consistently been more than double that for all manufacturing. An article on page 1170 gives an analysis of industrial injuries in three groups of foundries—ferrous job, nonferrous job, and non-job (i. e., foundry departments in other industries)—and of the accident causes.

Proposed social-insurance plan in Great Britain.

The British Government has framed proposals for a liberalized social-insurance system whereby employers, employees, and the Exchequer, in varying proportions, share the cost of broadened protection against hazards arising between birth and death. Under the terms of the plan, coverage is extended to the entire population; benefits are standardized at the same level for single men and women; and allowances are prescribed for all but the first child—for whom the family is normally expected to make financial provision. Compensation for industrial injuries and specific industrial diseases is to become the responsibility of employers, employees

and the Government, and not solely that of the employer; flat-rate benefits are advocated to replace those based on estimated loss of earning capacity. Page 1183.

Vocational training under various programs.

Nearly 13¼ million workers have been trained for war work, since the beginning of the war, under six training programs carried out by the War Manpower Commission and U. S. Office of Education. These programs include pre-employment training of less-than-college level, agricultural training for food production, engineering science, training within industry, apprenticeship training, and NYA vocational training. Page 1237.

Earnings in Detroit tool and product engineering plants.

Because of its responsibility for designing machine tools and other implements necessary for manufacturing metal products, tool and product engineering is of great importance in the organization of war production as well as in the post-war reconversion of industry. The special skill and long training and experience required in this industry places it among the highest paid in manufacturing. A study of 44 establishments in the Detroit area reveals that wages for male workers (except apprentices) ranged from \$1.35 an hour for tool detailers to \$2.43 for product checkers. Women were employed in only one key occupation studied—tool detailer—and their average earnings were \$1.12 an hour. Page 1242.

Union wages and hours of motortruck drivers, July 1, 1944.

Average hourly wage rates on July 1, 1944, were 98.3 cents for union motor-truck drivers, 81.4 cents for helpers, and 96.0 cents for the combined groups. This represented an advance in wage rates of 1.7 percent for drivers and of 2.5 percent for helpers, compared with July 1, 1943. Normal workweeks provided in union agreements averaged 46.0 hours for drivers and 45.3 for helpers. Paid vacations were provided in agreements covering over three-fourths of the union members. Page 1245.

Prices in the third quarter of 1944.

The general level of prices showed little change in the third quarter of 1944. Retail prices of living essentials rose 0.9 percent and prices in primary markets dropped 0.3 percent. The principal increases were for textiles and for retail costs of clothing and furniture. Improved supplies brought lower prices for some industrial goods, such as scrap steel and chemicals. Problems of reconversion pricing policies and of supplies of certain kinds of consumer goods claimed attention during the quarter. These problems, as well as the most significant price changes in recent months, are discussed in the article on page 1258.

Current Labor Statistics

V

Current Statistics of Labor Interest in Selected Periods ¹

Item	Unit	1944			1943: October	1939: average for year
		October	September	August		
<i>Employment</i>						
Civilian labor force: Total (BC)	Thousands	52,870	53,030	54,010	53,080	² 54,230
Male	do	34,410	34,590	35,570	35,310	² 40,950
Female	do	18,460	18,440	18,440	17,770	² 13,280
Employed	do	52,240	52,250	53,170	52,170	² 46,930
Male	do	34,100	34,190	35,140	34,820	² 35,600
Female	do	18,140	18,060	18,030	17,350	² 11,330
Nonagricultural	do	43,490	43,580	44,600	43,770	² 37,430
Agricultural	do	8,750	8,670	8,570	8,400	² 9,500
Unemployed, total	do	630	780	840	910	² 7,300
Employment in nonagricultural establishments:						
Total ³	do	38,481	38,593	38,741	39,718	30,353
Manufacturing	do	15,724	15,873	16,020	17,194	10,078
Mining	do	813	825	834	873	845
Construction ⁴	do	637	679	700	1,002	1,753
Transportation and public utilities	do	3,768	3,793	3,818	3,689	2,912
Trade	do	7,172	6,996	6,918	7,076	6,618
Finance, service, and miscellaneous	do	4,433	4,480	4,582	4,037	4,160
Federal, State, and local government, excluding Federal force-account construction	do	5,934	5,946	5,869	5,847	3,988
Wage-earner employment:						
Manufacturing	do	12,660	12,802	12,942	13,965	8,192
Bituminous-coal mining	do	343	348	352	373	371
Class I steam railroads, including salaried employees (ICC)	do	1,410	1,428	1,449	1,367	988
Hired farm workers (BAE)	do	2,911	2,817	2,694	3,104	⁵ 3,280
<i>Hours of labor</i>						
Average hours per week of wage earners:						
Manufacturing	Hours		44.9	45.2	⁶ 44.7	37.7
Bituminous-coal mining	do		42.0	44.0	⁶ 39.4	27.1
Retail trade	do		41.8	43.3	⁶ 40.3	43.0
Building construction (private)	do	40.2	40.1	40.0	39.7	32.4
<i>Weekly earnings</i>						
Average weekly earnings of wage earners:						
Manufacturing			\$46.25	\$45.86	⁶ \$44.39	\$23.86
Bituminous-coal mining			\$50.95	\$52.22	⁶ \$45.96	\$23.88
Retail trade			\$27.09	\$27.64	⁶ \$25.35	\$21.17
Building construction (private)		\$53.42	\$53.71	\$52.90	\$50.54	\$30.24
<i>Hourly or daily earnings</i>						
Average hourly earnings of wage earners:						
Manufacturing			\$1.031	\$1.016	⁶ \$0.993	\$0.633
Bituminous-coal mining			\$1.216	\$1.190	⁶ \$1.168	\$0.886
Retail trade			\$0.712	\$0.706	⁶ \$0.684	\$0.536
Building construction (private)		\$1.329	\$1.339	\$1.323	\$1.273	\$0.933
Average straight-time hourly earnings in manufacturing, using—						
Current employment by industry			\$0.961	\$0.944	⁶ \$0.925	\$0.622
Employment by industry, as of January 1939			\$0.886	\$0.871	⁶ \$0.843	\$0.622
Quarterly farm wage rate, per day without board (BAE)		\$4.08			\$3.51	⁵ \$1.57
<i>Industrial injuries, labor turnover, and absences from work</i>						
Industrial injuries in manufacturing, per million man-hours worked						
				7 19.6	7 20.8	15.4
Labor turnover in manufacturing:						
Total separations, per 100 employees			7.5	7.8	⁶ 8.16	(⁸)
Quits, per 100 employees			6.0	6.2	⁶ 6.29	(⁸)
Lay-offs, per 100 employees			0.6	0.5	⁶ 0.53	(⁸)
Total accessions, per 100 employees			6.0	6.3	⁶ 7.73	(⁸)
Absence rates (workdays lost as percent of total scheduled):						
Manufacturing, selected industries		6.2	6.3	6.6	6.2	(⁸)
Bituminous-coal mining		12.5	12.1	11.5	11.1	(⁸)

See footnotes at end of table.

Current Statistics of Labor Interest in Selected Periods—Continued

Item	Unit	1944			1943: October	1939: average for year
		October	September	August		
<i>Strikes</i>						
Strikes beginning in month:						
Number of strikes.....		440	390	485	287	218
Number of workers involved.....	Thousands..	220	185	190	121	98
Man-days idle during month (all strikes):						
Number.....	do.....	690	660	935	1,013	1,484
Percent of available working time.....		0.09	0.09	0.12	0.14	0.28
<i>Cost of living</i>						
Cost-of-living index (wage earners in large cities):						
All items ⁹	1935-39=100	126.4	126.5	126.4	124.4	99.4
Food.....	1935-39=100	136.4	137.4	137.7	138.2	95.2
Clothing.....	1935-39=100	141.7	141.4	139.4	133.3	100.5
Rent.....	1935-39=100	108.2	108.2	108.2	108.0	104.3
Fuel, electricity, and ice.....	1935-39=100	109.8	109.8	109.8	107.8	99.0
Housefurnishings.....	1935-39=100	141.3	140.7	109.3	126.7	101.3
Miscellaneous.....	1935-39=100	122.7	122.4	122.3	117.6	100.7
<i>Retail food prices (large cities)</i>						
Retail price index: All foods.....	1935-39=100	136.4	137.0	137.7	138.2	95.2
Cereals and bakery products.....	1935-39=100	108.6	108.6	108.5	108.3	94.5
Meats.....	1935-39=100	129.4	129.0	129.0	130.6	96.6
Dairy products.....	1935-39=100	133.7	133.6	133.6	133.5	95.9
Eggs.....	1935-39=100	179.0	168.0	159.4	190.1	91.0
Fruits and vegetables.....	1935-39=100	162.9	169.9	175.7	166.4	94.5
Beverages.....	1935-39=100	124.3	124.3	124.3	125.1	95.5
Fats and oils.....	1935-39=100	123.1	123.0	122.7	126.5	87.7
Sugar and sweets.....	1935-39=100	126.4	126.3	126.5	126.8	100.6
<i>Wholesale prices</i>						
Wholesale price index: All commodities.....	1926=100	104.1	104.0	103.9	103.0	77.1
All commodities other than farm products.....	1926=100	99.8	99.7	99.7	98.7	79.5
All commodities other than farm products and foods.....	1926=100	98.7	98.6	98.6	97.3	81.3
Farm products.....	1926=100	123.4	122.7	122.6	122.2	65.3
Foods.....	1926=100	104.2	104.2	104.8	105.1	70.4
<i>National income and expenditures</i>						
National income payments, total (BFDC).....	Millions.....		\$13,659	\$12,605	\$12,452	\$6,092
Consumer expenditures for goods and services, total (BFDC).....	do.....		\$8,298	\$8,015	\$7,672	\$5,293
Retail sales, total (BFDC).....	do.....		\$5,899	\$5,645	\$5,457	\$3,647
<i>Production</i>						
Industrial production index, unadjusted (FR):						
Total.....	1935-39=100	232	234	235	249	109
Manufacturing.....	1935-39=100	248	250	251	269	109
Minerals.....	1935-39=100	145	146	147	140	106
Bituminous coal (BM).....	Thousands of short tons	51,500	50,010	54,180	49,303	32,905
Construction expenditures, all types (excluding maintenance except in farm construction) ¹⁰	Millions.....	\$393	\$407	\$428	\$571	\$631
Building construction started in urban areas.....	do.....	\$91	\$81	\$85	\$115	(⁸)
New family-dwelling units in nonfarm areas.....		11,200	10,400	12,300	28,600	\$42,900
Carloadings index, unadjusted (FR).....	1935-39=100	148	150	146	147	101

¹ Source: Bureau of Labor Statistics unless otherwise indicated. Abbreviations used: BC (Bureau of the Census); ICC (Interstate Commerce Commission); BAE (Bureau of Agricultural Economics); BFDC (Bureau of Foreign and Domestic Commerce); FR (Federal Reserve); BM (Bureau of Mines). Most of the current figures are preliminary. Copies of this table are available upon request.

² 10-month average—March to December 1940.

³ Differs from employed nonagricultural workers in civilian labor force above, mainly because of exclusion of such groups as self-employed and domestic and casual workers.

⁴ Includes workers employed by construction contractors and Federal force-account workers (nonmaintenance construction workers employed directly by the Federal Government). Other force-account non-maintenance construction employment is included under manufacturing and the other groups.

⁵ October. ⁶ September. ⁷ Cumulative frequency rate, January to August.

⁸ For the coverage of this index, see p. 1268.

⁹ Not available.

¹⁰ Data for 1943 and 1944 revised because of new BAE farm construction data.

MONTHLY LABOR REVIEW

DECEMBER 1944

Reconversion Problems in the Buffalo Industrial Area¹

Summary

ANTICIPATED reconversion problems and post-war production and employment plans of manufacturers in the Buffalo (N. Y.) area were studied recently by the Bureau of Labor Statistics. Buffalo is a center of diversified heavy industry which has faced a labor shortage throughout the war period. The survey, covering 40 companies which now provide about half of all jobs in manufacturing in the area, brings into relief many types of readjustment problems which must be met in the future.

More than half of the surveyed plants can resume civilian production without delay, as their war products are substantially the same as their peacetime items. In the case of such firms, the principal delay in providing employment may arise from market deficiencies rather than technical reconversion problems. Only about one-fifth of the plants will have to do a great amount of retooling, but some of the largest employers are in this group. However, even where retooling may take from 6 to 9 months, partial production can continue in some instances.

Most company officials prefer that war orders be reduced gradually, believing that this procedure will facilitate the orderly resumption of civilian production and reduce the number of lay-offs necessary during reconversion. About three-fourths of the plants can utilize economically, for the supply of civilian demands, any capacity released by small cuts in war orders, but a few must be released from all war contracts before conversion can be undertaken. All companies plan to reduce working hours when the war is over, and only one small firm contemplates a workweek in excess of 40 hours. Plants with subcontractors will cushion the impact of declines in production by curtailing or eliminating such outside work.

More than a third of the companies have formulated marketing plans or completed designs for civilian products. Six are planning entirely new products, but in no case will pre-war items be entirely supplanted. Although only a few plants need additional plant space to carry on peacetime production, about half need some new machinery or equipment, and several companies are definitely interested in purchasing Government-owned equipment now in use.

Nearly all the companies expect production costs to be below present levels but higher than during 1940. It is believed that wage rates will

¹ Prepared by Celia Star Gody and Allan D. Searle, of the Bureau's Productivity and Technological Development Division.

remain at or near wartime figures but that overtime payments will decline. Wartime increases in material prices are considered less important than increased labor costs. At the same time, a number of technological improvements which will partially offset higher labor costs are reported.

About half of the companies anticipate the same volume of business as before the war, some expect moderate gains, and only a few foresee substantial increases. The outlook for several plants constructed during the war is doubtful.

The surveyed companies were principally in the transportation equipment, machinery, metals, chemicals, and stone, clay, and glass industries. In 1939 these industries employed 74,000 workers in the Buffalo area. Jobs for about 96,000 in these same industries after the war are implied by the post-war plans of the surveyed companies, as they are now formulated. This figure represents a substantial increase from the pre-war level, but it is 26,000 under the goal of 122,000 jobs in the same industries set as an objective by the Niagara Frontier Post-War Planning Council to insure full employment.

Women now constitute about one-third of the labor force in the plants surveyed, but after the war the proportion is expected to be only slightly above the pre-war level of 11 percent. Plants which did not employ women before the war will generally not retain them afterwards. Many women are expected to leave the labor market voluntarily, and others will be displaced by returning veterans or laid off in accordance with company and union seniority agreements.

All companies are planning to reemploy the men now with the armed services. Some firms intend to go beyond legal requirements in giving veterans special training, relaxing seniority rules, and making special placement efforts, but many problems will arise. In several plants, the number of former employees now in the armed services exceeds total pre-war employment. Companies which have had experience with returned veterans state that careful placement and follow-up are necessary.

The firms surveyed are unanimous in recommending substantial advance notice of contract reductions or revisions. All agree that quick settlement of financial claims is essential; those with subcontracts are especially concerned over possible delays. Prompt removal of unusable Government-owned equipment and materials is urged. Rapid but orderly removal of price, rationing, material, and manpower controls is also recommended. Union representatives in the area urge planning to insure full employment, including use of industry's tax refunds to meet this objective, and unemployment-insurance programs to meet interim needs. They also suggest credits to foreign nations to aid heavy industry in the United States.

Companies in the area will face a variety of problems in converting to civilian production. Nevertheless, management officials state that serious reconversion difficulties will not arise if the transition from war to peace production is planned in an orderly manner. At the same time, post-war employment may fall short of full-employment levels if present company plans are not modified. Since this area is one of diversified industry, its post-war position will probably be more favorable than that of many other areas. This case study, therefore, indicates the need for immediate Nation-wide planning if the generally accepted goals of full employment of labor and resources are to be

achieved. Evidently, full employment will not be attained without a departure from thinking in terms of pre-war production volume and a concerted attempt to develop policies which will promote a high level of post-war production.

Buffalo Industrial Area

Manufacturing employment in the Buffalo region has doubled during the war period. The area is a center of heavy industry and produces a variety of basic products vital to the war program. In addition, the automobile industry, always an important segment of the area's economy, has expanded greatly as a consequence of its conversion to the manufacture of war goods—aircraft engines and parts for aircraft, ships, tanks, trucks, and shells. Finally, two very large aircraft plants are situated in the area.

Because of the great expansion in employment during the war period and because of the diversification of industry, this region furnishes an interesting case study of the problems which will be faced during reconversion and afterwards. The Bureau of Labor Statistics, therefore, at the request of the Statistics Division of the War Production Board, undertook in June and July 1944 a study of the reconversion problems and post-war outlook anticipated for the area. Information was supplied by executives of 40 important manufacturing plants, representing about half of all manufacturing employment in the area, and by officials of trade-unions, employers' associations, and Government agencies.

The Buffalo industrial area, consisting of Erie and Niagara Counties in New York State, had a population of 958,000 in 1940. About 60 percent (576,000) of the total was in the city of Buffalo, which is an important center for the manufacture of steel, automobiles, and machinery. Niagara Falls (population 78,000), with its abundance of electric power, has large chemical and electrometallurgical plants. Other communities in the area are Lockport (24,000), Lackawanna (24,000), North Tonawanda (20,000), Tonawanda (13,000), and Kenmore (19,000).

INDUSTRIAL COMPOSITION OF THE AREA

In peacetime, manufacturing enterprises provided nearly 40 percent of all employment in this area. Most important were the manufacture of iron and steel, which employed about 25,000 workers in 1939; chemicals (13,000); machinery, including electrical (12,000); and automobiles (10,000). Employment was also substantial in the manufacture of paper products and stone, clay, and glass products. Buffalo is a large flour-milling center and has other sizable food industries.

In 1940, more than 40 percent of the workers in the area were employed in trade and service industries serving local needs, and nearly 10 percent were in transportation and utilities. Agriculture was relatively unimportant and accounted for less than 4 percent of total employment in 1940.

Although local residents take pride in the fact that Buffalo's industries are not "war babies," the employment in new war plants is very large. The area's two largest aircraft plants alone employ a

substantial proportion of the total in all manufacturing and, in addition, there are several smaller new war plants which manufacture machine guns, landing craft, and other direct war products.

WARTIME CHANGES IN EMPLOYMENT AND LABOR FORCE

Figures compiled by the New York State Department of Labor from unemployment-insurance reports show that total insured employment in manufacturing industries jumped from an average of 138,000 during the year 1940 to 256,000 for the year 1943. No adequate statistics are available for nonmanufacturing employment, but the indications are that the increase during the war period has been small.

Despite the great advance in employment from peacetime levels, there has been scarcely any increase in the civilian population of the area. Estimates of the civilian population in November 1943, based on registrations for War Ration Book 4, were only 4,000 above the figure reported in the 1940 Census of Population. It is believed that persons moving into the area have numbered about 70,000, of whom 30,000 were in the labor force. The U. S. Employment Service estimates that about half of these in-migrants will remain in the area after the war.

The Negro population of this region is small, but there has been some increase during the war period. In 1940 the number was 21,000. The latest available estimate (generally considered a maximum) is 27,000, or less than 3 percent of the total.

Buffalo has expanded its industrial activity largely by recruiting women into the labor force, and its record in this respect is noteworthy. In March 1940, about 26 percent of all women over 14 were in the labor force. The U. S. Employment Service estimates that, in March 1944, 51 percent of all women over 14 were gainfully employed. Women have gone into lighter work in war plants, for the most part. The heavy industries have not been able to draw on this source of labor to the same extent, but some women are employed even in the open-hearth and blast-furnace departments of steel mills, and substantial numbers are in chemicals, rubber, and machinery plants.

LABOR SUPPLY AND DEMAND

The Buffalo area has suffered an acute labor shortage throughout the war period, and the War Manpower Commission established a controlled-referral plan as early as July 1943. Women were exempt from the original plan, but were included after June 4, 1944, when labor controls were tightened to provide a system of labor priorities with definite plant employment ceilings.

The local U. S. Employment Service office estimates that in June 1944 the labor shortage amounted to 12,000 workers, excluding the requirements of agriculture and construction. This figure is somewhat less than those given for earlier months, and there are other indications that the situation is becoming less critical. The shortage is more pronounced in the heavy industries—especially steel foundries and to some extent chemicals plants—than it is in the so-called “glamor plants” (such as aircraft) where the work is light and wages are relatively high. Most of the manpower reserves—the unemployed, women, in-migrants, and older workers—have already been utilized

and some workers are transferring to nonwar occupations or leaving the labor market. The Employment Service estimates that approximately 700 women per month are currently leaving war industries, about half for nonwar jobs and the other half to return to their homes.

Composition of Sample Covered in Study

This report is based largely on interviews with representatives of 40 manufacturing plants, 36 of which were in existence in 1939. In that year, the 36 plants accounted for 39 percent of the total number of employees in manufacturing establishments reported by the Census of Manufactures for the area. The 40 sample plants represented approximately half of total manufacturing employment in May 1940.

The plants in the sample employed nearly 60 percent of all the workers in the important metals and machinery industries in 1939. The study's coverage, in terms of 1939 employment, was virtually complete for the automobile industry and amounted to 46 percent for other transportation equipment. In the manufacture of iron and steel, normally the largest industry group in the area, the sample plants represented 56 percent of total 1939 employment; in nonferrous metals, 47 percent; and in machinery (including electrical), 42 percent. There was also substantial coverage in the manufacture of chemicals (57 percent of 1939 total employment), and stone, clay, and glass products (55 percent).

No companies were included in industries producing goods largely for local use or in industries (such as those producing food, clothing, leather, and wood products) in which wartime conditions have not required substantial changes. Most of the plants canvassed were fairly large employers. Among the sample plants, as in the area as a whole, there were few producers of consumer durable goods other than automobiles. Since reconversion problems for such producers are different from those of plants producing basic materials and from those of new war plants, the problems anticipated in this area may not be completely typical of those which will arise in other sections of the country.

Current Production and Production Plans

TYPE OF PRODUCT

Practically all of the plants included in the survey are producing goods which directly or indirectly are for war use. Prime contractors manufacture aircraft, guns, aircraft engines, and landing craft. Other companies manufacture components for war items or supply industrial equipment vitally needed in war plants. Among such products are steel ingots and rolled steel, copper and copper-base alloys, ferro-alloys, heat-transfer units (for ships, aircraft, and tanks), aircraft parts, basic industrial chemicals, and war chemicals.

Although the products manufactured are essential in the war production program, in the majority of plants they are similar to those produced before the war. In general, plants producing chemicals, rubber, stone, clay, and glass products, and basic metal products have not changed their output substantially. Fabricators of metal products and producers of machinery have changed specifications

somewhat, but are not making entirely new types of product. In many cases, designs have been changed or war goods have been added to other production.

The greatest changes in output have occurred in establishments which produced automobiles and other transportation equipment before the war and in the one plant which produced radios. Two automobile plants are producing aircraft engines; a manufacturer of automobile accessories has continued the manufacture of its peacetime product but is also producing gun components. The radio company is now producing radio transmitters and receivers for military use instead of receivers for automobiles and homes.

EXPECTATIONS AS TO WAR PRODUCTION

Most of the plant officials interviewed believed production schedules would remain unchanged through the end of 1944. Commitments were extremely variable, however, since some companies had long-term contracts while others had a number of small contracts ending at different dates. In many plants, definite production schedules are not set in advance.

In six plants it was expected that production would decline substantially during 1944 or early in 1945. Most of these plants, which together employ about 7,500 workers, are engaged in the manufacture of components for ships. The largest company of the group, a producer of aircraft parts, had already experienced cutbacks in production schedules and anticipated further reductions.

Although most plants expected no substantial change in production schedules during the remainder of 1944, the outlook for 1945 was, in many cases, uncertain at the time of the interviews. However, two producers of basic metals expected that there would be no change in the volume of output for some time to come and a number of plants producing nonwar commodities (paper, rayon, stone, clay, and glass products) also expected that production levels would remain unaltered. Many plants reported that more war business was available to them than could be handled with their facilities, and frequently the lack of manpower was the most important factor limiting production.

Reconversion Plans

RESUMPTION OF CIVILIAN PRODUCTION

Approximately three-fourths of the plants included in the sample can utilize economically, to supply peacetime markets, the capacity released by any small cut in war orders. The majority of these plants are making their pre-war products, and hence no problem of allocation of capacity between war and peace production is involved. A few plants which have devoted all or part of their capacity to new war items would also be able to schedule some civilian production if war production declined even a small amount. One manufacturer of automobile components could use the manpower freed by a 10 to 15 percent cutback in war orders to establish 3-shift operation on its commercial assembly line. If the reduction in war output at this plant amounted to 25 to 40 percent, however, civilian production could not be undertaken for 90 days, and if the cut were larger, for 8 or 9 months.

One-fourth of the plants would not find it financially profitable to convert any part of their facilities to civilian production unless war production were substantially reduced. In one case, a 75-percent reduction in war demand would be necessary to make feasible the production of peacetime items, as the entire plant would have to be rearranged and new equipment acquired. Two shipbuilding companies would not "break even" with less than a 50-percent drop in war work, but would undertake the production of civilian goods with a smaller decline in war output in order to obtain good will. In two plants whose continued operation after the war is uncertain, all war production would have to cease before civilian items could be scheduled.

INDUSTRY PLANS

The managements of almost all plants visited have devoted some thought to problems that may arise as war demand tapers off. There is considerable variation, however, in the degree to which actual plans have been formulated for resumption of peacetime production. More than half of the plants need no definite programs for reconversion, since their war products are essentially the same as their pre-war products. In some of these companies, although no definite plans have been made for post-war production, research staffs are engaged in developmental work on new products. The principal firms in this category are the chemicals plants, whose major post-war problem will be that of markets. Establishments normally dependent on the automobile industry will generally have to retool in order to resume civilian production, but they are unable to make definite reconversion plans until the situation in the automobile industry is clarified. They are proceeding on the assumption that the first post-war cars will be replicas of pre-war models.

Approximately a third of the plants have taken definite steps either to develop new products or to plan marketing methods and develop sales outlets. Only 6 companies expect to enter into the production of brand-new items, and in no case will new items entirely supplant pre-war products. Engineering is well advanced for such items as steel desks, automatic window raisers for automobiles, and air-conditioning equipment. Among other items planned are aluminum bus and passenger-car bodies, and specialized cargo vessels and tugs.

Reconversion plans are not limited to the development of new types of products, however. One radio company has completed a survey of pre-war material suppliers to ascertain possible post-war prices. Another plant has completed engineering on a new type of diesel engine for post-war use and is attempting to get orders for post-war deliveries of this and other engines. A small shipyard is designing a line of power cruisers similar to its pre-war pleasure craft; it expects to begin experimental building soon, having already obtained clearance on materials. Marketing plans have been discussed and plans made to level off seasonality of production and to maintain steady employment and high weekly earnings.

RECONVERSION PROBLEMS

Retooling will be a significant factor in only about a fifth of the plants included in the sample, but some of the largest employers are

included in this group. Most of the plants in the automobile industry will be compelled to do considerable retooling before production of automobiles or parts can be resumed to any significant extent. Other plants will have to retool before new products can be made.

In addition, there are problems involving disposition of Government-owned material, equipment, and facilities; acquisition of scarce materials and components; and recruitment of sufficient manpower. In one large war plant, almost all facilities are owned by the Defense Plant Corporation, a factor which inhibits post-war planning. Several other companies, including two shipyards, have Government-owned machinery or materials which will have to be removed before civilian production can be resumed. Availability of such materials as rubber, steel, tools, fractional-horsepower motors, lumber, and boat accessories will determine when some companies can resume peacetime operations. Apparently, advance notice concerning availability of materials would facilitate planning of civilian production. Recruitment of manpower is expected to be a problem only if civilian production is resumed during the war; adequate labor supplies will be available afterward.

Company officials generally emphasized that reconversion will not present serious problems if there is a gradual transition from war to peace production. If all war production were ended suddenly, difficult readjustment problems would arise.

TIME REQUIRED FOR RECONVERSION

Plant estimates of the time required to reconvert vary, ranging up to several years. Average reconversion time, in cases in which retooling is necessary, will probably be about 6 to 9 months, but some plants could continue production during this period. Plants in the automobile group can reconvert in from 3 to 9 months. Production of certain new items contemplated by a few companies would require a considerably longer period. In general, reconversion for the manufacture of pre-war items will require substantially less time than the change to production of new products; for example, one plant which can produce its pre-war item in 3 weeks would require 6 months for a new product—steel desks.

Plants manufacturing their pre-war items during the war could, of course, schedule civilian deliveries without delay and production would be limited primarily by markets. Almost all plants in the heavy industries (steel and chemicals), as well as several others, can continue uninterrupted production. The shipbuilding companies can resume normal production about 2 weeks after the yards are cleared of Government-owned materials. The producers of nonferrous metals would require a few weeks for reconversion, but one of them could make the transition to civilian production with no delay if foundry patterns for civilian products were made while war production continued.

COMMUNITY PLANNING

Post-war planning on a community basis has been initiated by business and civic organizations and by several labor unions. The Niagara Frontier Post-War Planning Council includes representatives of local government, business, and social agencies, and has prepared

a comprehensive study of the employment goals necessary for each industry if full employment is to be attained. The Buffalo Chamber of Commerce has a post-war planning committee which works closely with the Niagara Frontier Planning Council and the local Committee for Economic Development. Some city improvements are also being considered, and a study of housing needs has been made.

Post-war planning by labor unions takes the form of adapting national plans to local conditions. The national office of one C. I. O. union is distributing questionnaires to all locals, requesting information on reconversion and post-war problems. The locals in Buffalo are cooperating and, in addition, have formed a subcommittee to work with the union's New York State committee on post-war planning. Other union plans include the drive to obtain annual wage guaranties and efforts to maintain weekly "take-home" pay after the length of the workweek is reduced. The Industrial Union Council of the C. I. O. was contemplating the organization of a post-war planning committee, but plans were still in the initial stages at the time of the survey.

Post-War Production Prospects

As already indicated, the types of products which will be manufactured in the post-war period will generally be the same as those made before the war, and only a few companies plan to enter into the manufacture of completely new items. New designs and new models will, however, eventually be introduced, and several companies report that improvements will be made in the quality of their products.

SPACE AND EQUIPMENT

Very few of the companies surveyed expect to expand plant space after the war, and, in these, the additions will apparently be modest. On the other hand, 22 of the 35 companies which are in a position to assess their post-war needs report that some new equipment will be acquired. In some cases, these purchases will represent only normal or accumulated replacement needs. A few companies, however, plan fairly extensive additions. One metals plant expects to install a new bar mill; another may add a rod mill. Other plants will purchase machine tools, foundry equipment, and welding instruments.

A number of companies indicated that they would have a definite interest in purchasing some of the Government-owned equipment now in their plants, if prices were satisfactory. One large company would prefer to rent Government-owned equipment, with the fee based on the number of hours the equipment is used, since it would not be in a position to pay full rental value immediately following the war.

LEVEL OF PRODUCTION

Among the plants which provided estimates of the level of post-war production, those whose normal products are automobiles and parts, machinery, and radios were the most optimistic on the probable outlook. An automobile company, for example, indicated that operations may be maintained at the present rate, even though employment has nearly doubled during the war period. Plants manufacturing chemicals and metal products foresee moderate advances in produc-

tion over pre-war records. Companies in the remaining industry groups generally anticipate that post-war operations will be at about the same rate as in 1940.

In all, 31 plants were able to furnish rough estimates of post-war production levels. Sixteen of these plants anticipate that production will be about the same as in the pre-war period, and 13 expect increases of varying amounts: 3 anticipate advances of 20 to 25 percent over pre-war levels, 5 expect even larger increases, and 5 state only that production will be "greater" than in 1940. Two plants which were not in operation in 1939 expect to continue production after the war, with sharply reduced volume.

Three of the plants visited may not remain in operation when war production ends. The plant space used by one small company is leased and will be returned to the owner company after the war. In the other two cases, all facilities are Government-owned, and the prospects for post-war operations are indefinite.

PRODUCTION COSTS

Nearly all the plant officials interviewed expressed the opinion that post-war production costs would be above pre-war levels, but few were able to estimate the extent of the increase. The most important factor contributing to higher costs is expected to be the rise in wage rates. It is generally believed that there will be no decline in wage rates after the war, and several management representatives expressed the opinion that there should be no such reductions. Costs of materials were also reported to have advanced substantially, although the increase is generally considered to be less important than the rise in wage rates. In several cases, administrative expenses have risen during the war period.

In most plants, production costs will probably be below present levels, however. Premium payments for overtime work and for the second and third shifts will be eliminated or substantially reduced. In addition, company officials believe that the efficiency of the available labor force will be increased. On the other hand, a few plants reported that the expected reduction in volume will result in higher costs per unit of output, since overhead costs are a significant proportion of total costs. These companies maintain that prices will have to rise above present levels.

In only 4 plants is it anticipated that costs will be below the 1940 level, and in only one of these is a substantial reduction foreseen. The declines are expected because of improvements in efficiency made during the war period.

WARTIME TECHNOLOGICAL DEVELOPMENTS

Part of the increase in wage rates and materials costs over peacetime levels will be offset by improved efficiency resulting from wartime technical developments. Although not all wartime developments will be applicable to civilian production, moderate advances in efficiency are expected in some instances. The improvements reported have reduced labor requirements, lowered the costs of materials, or made possible an improvement in the quality of the product.

Most significant have been the innovations in metalworking. Improvements in welding techniques and substitution of welding for

riveting have resulted in improved efficiency. Alloys have been improved and experience has been gained in welding alloyed materials. Several companies state that quality control has been improved by the use of electronic devices, including magna flux, gamma ray, and X-ray. Experience gained in working to the close tolerances necessary on war items will probably also prove of benefit in post-war production. Other developments mentioned include greater use of tungsten carbide cutting tools, stack drilling, the installation of automatic safety devices on presses, the elimination of metal top dies by the use of rubber forming blocks, and increased use of automatic machinery. In one machinery plant which is producing essentially the same type of product as in peacetime, output per man-hour has advanced 15 percent since 1940. The rise is attributed to improved tooling, more complete jiggling, and the use of tungsten carbide cutting tools, as well as to improved training of workers.

Knowledge of methods of working the light metals has made great strides during the war period. A magnesium company reports that labor requirements have been reduced and the amount of scrap decreased by the development of superior molding machines and better sand mixtures. In addition, better methods have been developed to control the hazard of fire.

Improvements have also been made in processes other than metal-working. Several chemicals plants, for example, report that there have been technical developments which will carry over into peacetime production, but few details are available.

A few companies stated that no significant technical developments had occurred in their plants during the war period, but that they hoped to make progress in this respect after the war. Some company representatives believe that the machine tools available after the war will be more efficient than those they now have, and expect increased efficiency when new equipment is purchased. Research work being conducted in some plants is expected, eventually, to be of benefit. In at least one establishment, normal technical progress has been interrupted during the war period because of the shortage of technical personnel and the difficulty of obtaining equipment and materials.

Not all wartime developments will be applicable to peacetime production, however. Thus, very substantial gains have been made in output per man-hour at one war plant, but most of the advance is attributed to the large scale of production.

SUBCONTRACTING

A large number of the plants canvassed have been subcontracting some of their work. In most cases, subcontracting will be eliminated or sharply reduced after the war, and only two companies plan to maintain the present proportion of subcontracting. Wherever possible, companies expect to reduce subcontracting, to weaken the impact of future cutbacks, and some have already effected such reductions.

In many plants, subcontracting plays but a minor role in present operations. The work sent out is usually machine-shop work which could and would be done in the plant if facilities and manpower were available. Such subcontracting will generally be discontinued or substantially curtailed when war production ends. Even some companies which now subcontract a substantial part of all work will retain

only an inconsequential volume of subcontracting when war production ends. Thus, one company which had subcontracted 70 percent of all work, at the height of its production program, had reduced the proportion to 30–40 percent as cutbacks were made; it is improbable that any subcontracting at all will be continued by this plant after the war. Similarly, a plant which now subcontracts work accounting for 75 percent of all expenditure on labor will continue very little subcontract work after the war.

Two companies expressed an interest in taking subcontract work for new items after the war, if such work were available. In neither case, however, had any definite plans for such work been made.

Post-War Employment Problems

SIZE OF THE POST-WAR LABOR FORCE

Estimates of post-war employment prepared by plant officials are necessarily tentative, depending as they do on expectations as to general business conditions. Some of the company officials interviewed were prepared to make rather definite estimates of their post-war work force. Others, particularly those whose product is manufactured for sale to industrial users rather than to ultimate consumers, were reluctant to express any judgment on the size of their post-war labor force.

Rough estimates of post-war employment were available for 35 of the 40 plants included in the sample survey. Plants in the transportation-equipment group (including automobiles and aircraft) expect the greatest rise over 1939 employment—63 percent—although employment in aircraft will, of course, drop sharply from present levels. Large advances over peacetime employment are also expected by companies in the machinery (except electrical) group (49 percent) and the stone, clay, and glass group (42 percent). The chemicals, non-ferrous-metals, and electrical-machinery plants expect increases of 20 to 25 percent over 1939 employment levels. Iron and steel, the area's largest manufacturing industry in peacetime, will apparently have a post-war labor force only 7 percent larger than before the war.

Spokesmen for local groups are generally optimistic about the post-war employment outlook for the area. It is assumed that the "war babies" will present the only serious adjustment problems and that the departure of women from the labor force will be sufficient to prevent any widespread unemployment. Many other plants have expanded enormously during the war period, however, and most of them anticipate substantial reductions in force after the war.

It is interesting to compare the views on probable post-war employment expressed by plant officials with the estimates made by the Niagara Frontier Post-War Planning Council on the employment goals needed in manufacturing to provide full employment.² The Planning Council stated that 175,000 jobs would be required in manufacturing if full employment were to be achieved, and presented a distribution by major industry groups.

In several of the industry groups, the surveyed plants represented a substantial proportion of total 1939 employment. For each of these groups, the relative change in employment from 1939 to the post-war

² Niagara Frontier Post-War Employment Goals (Buffalo, May 1943).

period, as judged on the basis of the plant interviews, was applied to the total 1939 employment figure for the entire industry group as given by the Census of Manufactures. The resulting estimates of the numbers of post-war jobs implied by the present plans of employers in each industry group, compared with 1939 employment and with the Niagara Frontier full-employment goals, are shown in the accompanying table.

Employment in Manufacturing, in Buffalo Industrial Area

[All figures in thousands]

Industry	Employment in 1939 ¹	Post-war employment implied by plant interviews ²	Full-employment goals ³
Transportation equipment (automobiles and other).....	15.6	25.5	29.1
Electrical machinery.....	4.9	5.9	9.0
Machinery, except electrical.....	6.9	10.3	12.2
Iron and steel.....	24.9	26.8	31.9
Nonferrous metals.....	2.9	3.5	8.5
Chemicals.....	12.8	16.1	20.4
Stone, clay, and glass.....	5.6	8.0	11.0
Total.....	73.6	96.1	122.1
Other industries:			
Paper.....	5.5		6.2
Printing and publishing.....	6.3		6.4
Food.....	13.7		15.7
Textiles and apparel.....	6.3		6.3
Wood products.....	3.3		4.7
Rubber.....	2.8		4.1
Petroleum, coal, and leather.....	2.0		2.7
Miscellaneous.....	3.7		7.2
Total.....	43.6		53.3

¹ Census of Manufactures, 1939.

² Obtained by applying to the figures shown in the preceding column the relative change in employment, between 1939 and the post-war period, expected by the sample plants in each industry group. The sample plants in the machinery (except electrical) group accounted for 28 percent of total employment in the group in 1939. In the other industry groups employment in the reporting plants ranged from 46 to 65 percent of the group totals reported by the Census of Manufactures for 1939.

³ Niagara Frontier Post-War Employment Goals (Buffalo, May 1943).

It is apparent that the current plans of manufacturers, if carried into effect without change, will yield greater employment in each industry group than was recorded in 1939. For the surveyed industries taken together, the estimated post-war figure is 96,000 compared with a 1939 total of 74,000. On the other hand, it does not appear that in any of the groups will present plans lead to employment totals as great as those considered necessary by the Niagara Frontier Post-War Planning Council to insure full employment.

Several qualifications regarding these comparisons should be noted. First, the plants were combined in broad industry groups and only a sample number was canvassed in each. To the extent that other plants may have differing plans and expectations, the comparisons may be unrepresentative. New plants may come into existence after the war which will provide additional employment opportunities not taken into account above. On the other hand, there is some evidence that the estimates made by plant officials tended to be optimistic and that the plants with the best post-war prospects were those most willing to furnish estimates. Finally, all the estimates are based on company plans as they are now formulated, and these plans may be modified at any time as circumstances justify such changes.

Even with these limitations, however, it appears clear that post-war employment in the industries represented by the sample plants is likely to exceed substantially the pre-war level. Whether this increase will meet the objective of jobs for all those in the area seeking employment is less certain. The Niagara Frontier Post-War Planning Council estimates of the number of jobs required in these industry groups are interrelated with its estimates of employment goals for trade and service and for other manufacturing industries. The goal set for total employment is based on assumptions regarding the number of persons withdrawing from the labor force and migrating from the area. To the extent that these assumptions are realized, current plans may have to be revised, if the desired goals are to be reached.

EMPLOYMENT DURING RECONVERSION

The technical problems of reconversion will not be serious in most of the plants visited. Most companies envision the possibility, even the probability, of a smooth transition in employment from wartime to post-war operations. A few companies, however, anticipate substantial reductions in force for periods varying from a few weeks to several months. One company, for example, estimates that during a 60-day reconversion period employment will be only 700, compared with a full-production total of 2,200. Reductions in force of 50 percent are foreseen by a few other companies which will have to do a great amount of retooling. Technical requirements will not be the sole determiners of the size of the work force during reconversion, however. In several plants the volume of employment immediately following the completion of war production may depend more on the amount of business in sight than on the technical problems of retooling.

LAY-OFF PROCEDURE

As lay-offs become necessary, seniority will generally determine the order of termination. It is probable, however, that seniority will be much less important in the chemicals industry than in other industries, as most of the chemicals plants in the survey either have no union agreements or have agreements with independent unions that do not stress seniority to the same degree as do nationally affiliated unions.

Practically all of the plants included in the survey are covered by union agreements. Of the 40 plants, 22 have agreements with C. I. O. unions (2 were being negotiated); 4 have agreements with A. F. of L. unions; 7 with independent unions; 2 with District 50 of the United Mine Workers of America; 1 has a C. I. O. union in the office and an A. F. of L. union in the plant; and 1 plant recognizes both an independent and an A. F. of L. union. In general, the agreements with nationally affiliated unions specify that seniority shall determine lay-offs, while those with independent unions give management more latitude to use qualifications or ability as a criterion, although a few of the companies concerned have adopted seniority as a matter of management policy.

Almost all plants will reduce hours before significant lay-offs are made; only one small company expressed a desire to maintain the 48-hour week to provide high "take-home" pay. Other companies will return to a workweek of 40 or fewer hours as soon as permitted, as an economy measure and to sustain employment.

SKILLS AND RETRAINING

When reductions in force occur, there will be many transfers from job to job, and some retraining will be necessary. Management officials anticipate few difficulties in effecting the transfers. On-the-job training will probably be the primary method used, and retraining is expected to require from a few days to several months.

The skills required for post-war operations will be essentially the same as those needed at present, since the nature of the product will not change radically in most of the plants with the shift to civilian production. Plants which have to do extensive retooling for peacetime production will, of course, require toolmakers and skilled machinists, but in most cases the necessary workers are available. Where shifts in skill requirements occur, they will sometimes be in the direction of greater skill, sometimes of lesser skill.

Although no special retraining of the work force will generally be necessary, a number of plants expect to continue training programs introduced during the war period. Some are planning to maintain the essential features of the Training Within Industry courses after the war, and some will continue other training programs. A number of companies anticipate the need for special training programs for returning veterans. One plant expects to retrain veterans in the wartime training school established in the pattern shop. This school has been used very successfully during the war to train vocational-school graduates as patternmakers and machinists.

EMPLOYMENT OF WOMEN

Women employees constituted 32 percent of the work force in the 40 sample plants in May 1944. In those plants in operation in 1939, the proportion was only 11 percent. Among the plants in the sample, the change between 1939 and May 1944 in the percentage of women was from 15.3 to 38.6 in transportation equipment, from 6.5 to 18.1 in chemicals, from 2.0 to 16.2 in iron and steel, from 3.3 to 13.2 in nonferrous metals, from 5.7 to 19.3 in machinery (except electrical), from 17.3 to 37.5 in stone, clay, and glass, and from 33.9 to 37.5 in electrical machinery.

Practically all companies expect very great reductions in the employment of women after the war. In nearly half the plants, management officials would prefer to have a smaller proportion employed after the war than at present. In these establishments, management officials generally consider the work performance of men superior to that of women. The work involved in the manufacture of chemicals, metals, and machinery is believed to be too heavy for women, except as a war-emergency measure. Other deterrents to employment of women are also noted. Most important is the fact that while women are suitable for certain operations, they cannot be transferred easily from one job to another if the necessity arises. If the size of the labor force is reduced substantially after the war, it will be necessary to have employees who can perform several different jobs. A few plants pointed out that turnover or absenteeism was higher among women than among men. State laws setting up special standards relating to the employment of women are also cited as reasons for discontinuing their use, particularly in chemicals, where heavy lifting or use of dangerous chemicals is involved.

Even in companies which report that the performance of women has been satisfactory, a reduction in the proportion of women is expected because of voluntary withdrawals from the labor market and the return of veterans. In some of these plants, the percentage of women will probably remain somewhat above the pre-war figure, particularly where new operations have been developed during the war to make possible a greater utilization of women. The management of one company would like to have women employees to the extent of 25 percent of the total and will keep this proportion if the union will agree. A company whose peacetime product is automobile accessories finds that women are better than men on small assemblies.

It seems clear that many women will be released as the labor force is cut and as veterans return, whether as a result of management policy or seniority arrangements. Most of the women employees have little seniority and, in addition, a few of the union agreements permit or require the release of women regardless of seniority. One agreement states that women are to be employed in the plant only for the duration. Another permits the employment of women on men's jobs only during the war, and thereafter the consent of the union is required. At a few plants, the union agreements provide for separate seniority lists for men and women.

The proportion of women employees after the war, therefore, may be only slightly greater than in the pre-war period. Of the plants sampled, the most favorable employment opportunities will exist in those industries which employed substantial numbers of women in peacetime—paper, electrical machinery (especially radio), and, to a less extent, automobiles. The Niagara Frontier Post-War Planning Council estimates that after the war 34 percent of all women over 14 will be in the labor force, as compared with 26 percent in 1940. Apparently, the manufacturers canvassed do not expect to offer very greatly increased employment opportunities for women.

EMPLOYMENT OF NEGROES

Although the Negro population of this area is small, several plants, particularly foundries and chemicals plants, employ substantial numbers. In some companies, no Negroes were employed before the war and, in others, the number has increased during the war period. These employees generally have little seniority and may be displaced by returning veterans. Most plant officials reported that the work performance of the Negro employees was satisfactory and that it would not be company policy to release them. Of 11 management representatives who ventured to make estimates of post-war employment of Negroes, 5 stated that there would be no great change and the other 6 expected some decreases because of the necessity for reemploying veterans.

EMPLOYMENT OF VETERANS

Local agencies and company officials are devoting increasing attention to the problem of reemploying veterans. Since a satisfactory employment adjustment is not always reached immediately, the local office of the U. S. Employment Service has been working with employer groups on the problem. Conferences of employment

managers with a psychiatrist, who speaks on the problems of reemploying ex-servicemen, have been arranged. Practically every plant official interviewed was emphatic in his conviction that everything possible would be done to reemploy veterans when they returned.

A number of plants expect to go beyond any legal requirements in rehiring employees who return from the service. In some cases, the company will not insist that the application for reemployment be made within 40 days after discharge, as provided by law, or it will be favorably disposed toward hiring veterans even if they are not former employees of the company. The union local at one plant expressed its desire to help rehabilitate any veterans who might need aid, even to the extent of abrogating seniority arrangements. Plans are being made by another company not only to rehire veterans but to train them for better jobs if they are qualified, since the management recognizes that morale problems may arise if men with good service experience are placed in menial tasks.

An example of detailed advance planning on reemployment of veterans is provided by a company which is considering the employment of a full-time coordinator to place and follow up war veterans. A card index is being prepared, giving the case history of each man in service and including any new skills learned since he entered the armed forces.

It is recognized that a number of problems will arise. In some plants, the number of employees in the armed forces is equal to or greater than the total pre-war employment; in others, as many as 6 or 7 men now in the armed forces held the same job prior to induction. In some establishments most of the work is heavy, and the jobs which disabled veterans can fill are limited in number. Plants which have already had experience with returning veterans agree that careful placement and follow-up are essential, and many companies expect that some retraining program will be necessary for returning veterans.

In one company, it was anticipated that very serious problems would arise if the Selective Service Act were interpreted to give veterans absolute preference. Management here believes that veterans should accumulate seniority while in the service but should have no other special preference. It was reported that the union's position agreed with that taken by management.

Effects of Cutbacks

RECENT EXPERIENCE

While cutbacks in war production have not yet been serious, the experience thus far serves to indicate the problems which may arise when war production generally declines. At the time of the survey, 16 of the plants included in the sample of 40 had already had cutbacks in production owing to cancellation or revision of war contracts. (One company had had no cutback in the usual sense, but had finished a large war program and reverted to its normal peacetime activity.) Of the 16 plants, 11 were compelled to lay off workers; the others were able to avoid terminations by transferring employees to other work.

In all, some 5,000 workers had been laid off by June 1944. About two-thirds of those terminated had been working in 5 plants producing items for the aircraft program. Over 60 percent of the workers laid

off were women. Most of the lay-offs were temporary (for retooling) and some workers had already been recalled by June 1944.

Notice of cutbacks varied from advance warning of several months to orders for immediate cessation of work. In one instance, a subcontract for half-tracks was eliminated almost entirely, without advance notice from the prime contractor, who had himself received no notice from the procurement agency. Plant officials generally expressed the opinion that advance notice should be given whenever possible, and the indications are that those plants which received notice a month or more in advance were able to readjust both employment and production more effectively.

LAY-OFFS AND TRANSFERS

Ten of the 11 plants in which lay-offs were necessary selected the workers to be terminated on the basis of seniority. Plant-wide seniority was the criterion used in half of these plants, and departmental seniority or seniority by noninterchangeable occupational groups in the rest. In nine cases seniority provisions were incorporated in union agreements; one company used plant-wide seniority as a matter of company policy. In addition, one company laid off workers as the operations on which they were engaged were completed, in accordance with the provisions of a master contract with various A. F. of L. unions.

Transfers of workers usually followed the same plan as lay-offs; in some plants transfers were an important part of the employment-adjustment process. One plant eliminated its third shift, laid off 50 workers, and transferred 400; another laid off 100 and transferred 100; a third laid off 400 and transferred 200. In most instances, transfers were made at the same rates of pay. In two plants in which wage decreases were the rule, there was a tendency for workers to quit rather than to accept lower wages, as further lay-offs were anticipated and little security could be offered.

Transfers required training of workers in some instances. On-the-job training was most prevalent, lasting from 2 or 3 days up to 5 months. In general, no new skills were required and in most plants the training period took only a few weeks.

Notice of lay-offs was inadequate in a number of plants, partly because the employer had received insufficient advance notice of cutbacks. Some of the plants gave only 1 day's notice and one plant gave notice at the beginning of the shift that lay-offs were effective at the end of the shift. On the other hand, two companies gave a week's notice whenever possible.

Unions generally received notice of lay-offs farther in advance, and in some cases the unions participated in implementing the lay-off procedure. Most companies discussed the cutbacks and lay-off procedures with the unions or with the labor-management committees, but one company merely informed the union that there would be lay-offs.

Effect on morale.—The effect of cutbacks on the morale of workers apparently varied both with the nature of the cutback—whether temporary or permanent—and with the degree of union-management cooperation attained. In two plants with labor-management committees, morale did not suffer and at one of these plants production

per worker actually increased. The most serious effect of cutbacks on morale was found at a plant where there had been no word to workers concerning the cutbacks, the union did not participate, and there was no labor-management committee.

Effect in the community.—There are indications that the cutbacks already experienced have resulted in some decrease in community purchasing power, as well as in withdrawal of workers from the labor market. Union representatives expressed the opinion that lack of planning for transfers of workers from plants which had reduced production to plants which needed workers had resulted in lower morale and the return of women to their homes.

Suggestions for Government Action

Plant suggestions.—Management representatives were unanimous in their emphasis on the desirability of speedy audit or settlement of contract claims; one subcontractor recommended settlement on a plant-wide rather than on an individual contract basis. Companies also indicated the need for adequate advance notice from Government to prime contractors, and from prime contractors to subcontractors, of changes in specifications and of contract terminations. In general, gradual tapering off of war demand was considered preferable to abrupt termination. Such gradual reduction would alleviate surplus material problems, allow adequate notice to subcontractors, unions, and workers, and permit more orderly planning for civilian production. Two companies suggested that cutbacks be made first in plants which are able to convert to other production.

Generally, wherever Government-owned equipment or material cannot be utilized for peacetime production, plants desire its removal from the premises as soon as possible. Sale of usable Government property at reasonable prices is desired by plants having such equipment, but one plant would prefer to rent the plant space and equipment from the Defense Plant Corporation. Some plants believe that the price of Government-owned equipment should be maintained, as its cheap disposal to competitors would foster "unfair competition."

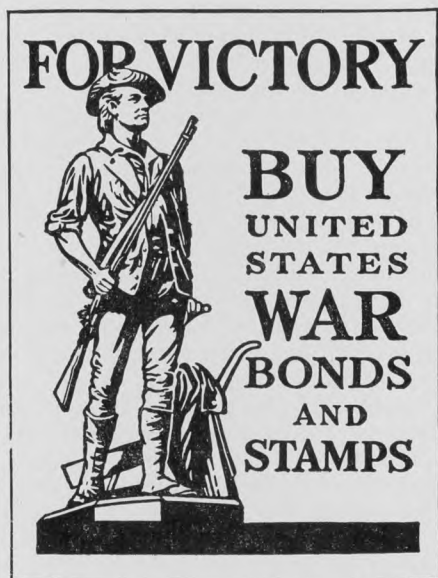
Almost all of the plants making suggestions recommend that war-time material, manpower, and price controls be removed as soon as possible, but that relaxation be gradual. Rapid release of materials to plants receiving cutbacks was suggested, and one plant recommended that certain standard surplus materials be earmarked for post-war use.

Among other suggestions were recommendations for Federal aid for municipal public works, improvement of the New York State Barge Canal, and relaxation of restrictions on industrial and municipal power projects. In addition, interest was expressed in modification of present policies of contract renegotiation, so that the normal product of a company would be exempt. Elimination of the excess-profits tax was recommended, to enable industry to accumulate reserves with which to finance reconversion.

Union suggestions.—Union representatives, like management officials, stressed the importance of a smooth transition from war to peace production. A C. I. O. union suggested closer integration of Army and Navy plans for cutbacks with manpower controls, so that persons released in one plant could be quickly transferred to plants where workers were needed. A representative of an A. F. of L. union

suggested that the Government make immediate plans for reemployment of workers laid off by small plants—particularly machine shops—since these workers may be laid off before the large prime contractors are cut back.

Practically all union representatives emphasized the need to plan for full employment. Legislation was urged to provide for adequate unemployment compensation during reconversion, retraining programs, and payment of travel costs of workers from war centers to their homes. The need of heavy industry for post-war markets was stressed, and long-term reconstruction credits to other nations to stimulate demand for steel and other products of basic industry were suggested. The regional office of one union expressed the opinion that industries should be able to finance reconversion from tax refunds and that the Government should see that such funds are used to assure maximum employment.



Effect on Union Membership of "Escape Period" in Renewed Maintenance-of-Membership Agreements¹

Summary

UNION membership losses as a result of "escape periods" recently ordered by the National War Labor Board to be incorporated in renewed union agreements of those plants which have already operated a year or more under maintenance-of-membership clauses have been negligible. Out of a total reported union membership of about 75,000 in the 21 plants visited, only 395, or about one-half of 1 percent, resigned from the union during the escape period.

These findings are the result of a survey made by the Bureau of Labor Statistics during August and September 1944, on behalf of the National War Labor Board, to determine the effect on union membership of "escape periods" established by Board action in connection with the renewal of maintenance-of-membership awards. In 17 of the 21 cases, this represented the parties' second experience with an escape period; in 4 of these cases the first escape period had been voluntarily agreed upon, while in 13 both escape periods had been ordered by the Board. In the remaining 4 cases, the parties were operating under the first escape provision.

The study covered plants in the shipbuilding and ship-repair, textile, radio, automobile-parts, chemical, electrical-machinery, steel-products, transportation-equipment, and cigar industries. Ten unions—7 affiliated with the C. I. O., 1 with the A. F. of L., and 2 independent—were parties to the agreements containing these provisions. At each plant visited, interviews were held with company and union officials. In addition, wherever possible, the union membership rolls or books were checked to verify statements on union membership, and copies of the local union's official journal or company organ were examined.

Resignations During Escape Period

In no case did resignations exceed 6 percent of the total union membership at the time of the award, and in only 3 cases did resignations exceed 1 percent of the union membership.

No resignations were reported in 7 instances. In 11 cases (including that in which resignations accounted for 6 percent of the union membership), the maximum number of resignations ranged from 1 to 15 persons, and in one other, 23 persons. In the 2 remaining cases, covering large shipyards, the number of resignations totaled 122 and 200, respectively, and accounted for about 1 percent of the total union membership.

Comparable figures on the number of resignations were available in 14 of the 17 cases in which the escape period represented the second opportunity to resign, under the maintenance-of-membership clause. The total number of resignations during each of the escape periods was about the same. In 7 of these cases, the number of resignations during the second escape period exceeded that during the first period;

¹ Prepared in the Bureau's Industrial Relations Division by Abraham Weiss, assisted by Bettina Conant.

in 3 cases, the reverse was true; and in 4 instances, no resignations occurred during either escape period.

Notification of Employees

In almost all cases the parties followed the procedure outlined in the directive orders of the Board with respect to giving notice of the escape provision. Copies of the Board's order and/or its explanatory statement were posted on plant bulletin boards. In a few instances a brief notice was carried in union journals.

In two cases, notice of the maintenance-of-membership award and escape provision was not posted, and no resignations were reported. In one case, the company had agreed with the union to omit such notification; in the other, failure to post the notice was due to uncertainty over the effective date of the award, since part of the directive order had been appealed.

Resignation Procedure

Resignations of union members were usually effected by sending written notices to the union, although a number of workers also notified the company.

In a number of instances the Board found that, although maintenance of membership had been provided for under the old agreement, delinquent members had been allowed to work because of nonenforcement of the clause. Although the Board granted a new escape clause, it did not absolve delinquents of their obligations under the old agreement, nor consider their union membership terminated by such delinquency. In 13 of the 21 cases, the Board's directive order required delinquent members to pay up back dues before they could resign, and it was found that the unions generally enforced payment of back dues before honoring resignations during the escape period.

Reasons for Resignation

In general, resignations within any single plant did not represent any single group of employees or job classification. Unions could not provide sufficient information to determine whether resignations were primarily those of delinquents or of members in good standing.

In the majority of instances, the reasons given by union officials to account for the resignations were based on personal and petty grievances. In 1 case, resignations were prompted by the desire of some of the members to seek affiliation with another union which was conducting an organizing campaign. In one other case, it was stated that internal union friction and poor administration were responsible for a number of resignations. Promotions to supervisory positions outside the bargaining unit accounted for some withdrawals. Encouragement from supervisors was cited in 2 instances as responsible for resignations.

Check-Off of Dues

Twelve of the 21 plants were operating under an automatic dues check-off system—10 as the result of WLB directives and 2 others as a result of collective bargaining. Voluntary dues deductions, upon the

written request of individual workers, were found in 6 plants, while 3 others had no provision for check-off of union dues.

The check-off was seldom listed as a reason for withdrawals, and initial objections tended to die out after the practice had been in operation for some time.

Where the previous maintenance-of-membership award contained no check-off or a voluntary check-off, delinquencies in several cases were considerable. In one case the number of delinquencies (12,000) represented almost 2½ times the total good-standing membership. The unions in most of these cases were experiencing great difficulty in collecting back dues from members who had become delinquent under the old agreement, although their current dues, under the new agreement, were automatically deducted by virtue of the Board's directive order. In one plant, however, an agreement had been reached whereby the company agreed to check off back dues in small amounts.

Activity in Connection With Escape Period

In addition to the number and effect of resignations during the "escape period," the Bureau sought information with respect to activities by the union which would tend to hinder resignations, as well as to employer activities which would tend to encourage withdrawals, during the escape period.

In no case did management representatives claim that the union had engaged in any unusual activity during the escape period, and in only two instances did the union charge that the company had provided some form of direct encouragement to resignations. In one case, the union alleged that the company furnished mimeographed forms and advice to employees who came to the company's office to resign. The company denied preparing resignation forms, but foremen had been instructed to advise men who wished to resign and direct them to the office. Although the number of resignations at this plant was the highest of all those reported in the plants visited, they accounted for less than 1.5 percent of the union membership. In the other case, the union claimed that various company employees (but not those on the supervisory level) canvassed the members on company premises during the escape period to encourage withdrawals.

Several unions reported that they had conducted special membership drives, and had lowered or waived initiation fees or had cancelled back dues in order to facilitate and encourage reinstatement of delinquent members.

Attitudes and Opinion

Without exception, management representatives supported the inclusion of an escape period at the beginning of each maintenance-of-membership agreement, as a matter of principle; namely, to permit their employees to exercise the "democratic right" of free choice. The unions, with but 2 exceptions, were opposed to a second (or, for that matter, any) escape period. In one of the exceptions, a very small plant, 100 percent organized, the local union president stated that the escape period served as a test and proof of the union's strength—in a sense, a "vote of confidence"—and he was willing to have an escape period at any time. In the other case the union representative

expressed no opposition to the escape period, because no resignations had occurred during either of the escape periods.

The objection to a second escape period most frequently voiced by the union officials was that it is, or could be, a threat to the union's security either through the organized opposition of a rival union or anti-union pressure exerted by the company. Also, union representatives argued that a second escape period allowed a person to drop his membership after he had taken advantage of the benefits gained by the union during both the old and new contracts.

Among the reasons given for retention of membership, even though the individual might wish to withdraw, were the disapproval of other union members with whom the person worked (which might take the form of social ostracism), refusal of assistance on the work, and "unexplained" loss of tools. Some company representatives expressed the opinion that employees would rather pay monthly dues than submit to union pressure. A long local tradition of unionism, in the town in which the plant was situated, was another factor cited.

Wages in the Rayon Industry, May 1944¹

Summary

FACTORY workers on the first shift in the rayon industry had straight-time average hourly earnings of 84.0 cents in May 1944. These earnings are based on data for 30,605 factory workers in 58 representative occupations in 25 plants. Earnings varied from 59.1 cents for women working as cleaners to \$1.472 for men working as lead burners. The earnings of office workers varied from 49.6 cents an hour for office boys and girls to 83.1 cents for class A stenographers.

Nature of the Industry

Rayon is by far the most important of the synthetic textile fibers, from the standpoint both of production and of number of workers employed. The survey that is summarized in the present article was limited to plants engaged principally in the manufacture of rayon filaments² and rayon staple fiber,³ from cellulose or a cellulose base. The manufacture of nylon, the next most important synthetic textile fiber, is controlled by a single company. Synthetic textile fibers other than rayon and nylon are as yet comparatively unimportant commercially.

Rayon is a synthetic fiber or yarn made by extruding a solution of modified cellulose through minute perforations into an acid bath or warm air, which causes the solution to coagulate. Cellulose, the basic raw material of rayon, is derived principally from wood pulp and cotton linters,⁴ although straw, grass, bamboo, vegetable cells, etc., are other sources of cellulose. Wood pulp is much more extensively used in the manufacture of rayon than are cotton linters, the ratio being approximately 3 to 1.

DEVELOPMENT OF THE INDUSTRY

Although European scientists predicted, nearly 300 years ago, that silk filaments similar to those produced by silkworms would be produced artificially, it was not until the middle of the 19th century that practical experiments were actually undertaken. Rayon did not become a commercial success until near the close of the 19th century.

In the United States, the manufacture of rayon was first introduced at the turn of the century, but it was not a successful commercial enterprise until 1910. In that year a plant was established at Marcus Hook, Pa., to produce a rayon-filament yarn by the viscose method. The industry developed rapidly during the first World War, owing largely to the heavy demand for textile fibers, and the United States assumed a leading role in world production of rayon. By 1923 this country was producing about a third of all rayon-filament yarn. The growth of the industry in this country during the last two decades

¹ Prepared in the Bureau's Division of Wage Analysis by Willis C. Quant, under the supervision of Victor S. Baril. Additional detail will appear in the bulletin which will be published later on the findings of this survey. The results of an earlier survey of the industry appear in Bulletin No. 587: Wages and Hours of Labor in Rayon and Other Synthetic Yarn Manufacturing, 1932.

² I. e., threadlike fibers.

³ Rayon tow, cut into short lengths.

⁴ Short fibers obtained after the second ginning of cottonseed.

has been phenomenal, indicating wide acceptance of this new synthetic yarn by the textile industry. In 1943, rayon represented fully 10 percent of all textile fibers consumed in the United States.

Rayon was first produced in the form of filament yarn and was used either by itself or in combination with other yarns to produce a wide variety of textile products. When used in combination with other yarns, rayon-filament yarns remained clearly distinguishable. Rayon staple fiber was developed and extensively used in Germany as a substitute for cotton during the first World War. Unlike rayon-filament yarn, staple fiber is combined with other textile fibers to produce a mixed yarn, and in the process loses its identity. Production of rayon staple fiber increased rapidly after the war, Germany accounting for over two-thirds of the world output in 1930. The manufacture of rayon staple fiber was started on a small scale in the United States in the late twenties, but increased slowly until the middle thirties. Since then production of staple fiber has increased rapidly in this country. Despite this increase, however, rayon staple fiber produced in this country in 1942 accounted for only one-fourth of the domestic production. In that same year, slightly more than half of all rayon produced abroad was staple fiber.

Practically all rayon-filament yarn and staple fiber produced in the United States has been for domestic consumption. Despite the superior quality of American-made rayon, its exports have been limited, because of the lower prices in other rayon-producing countries. American-manufactured rayon finished products are preferred in foreign markets, even though the foreign-made rayon products may be had at lower prices. Imports of rayon-filament yarn dropped sharply after 1929, declining from somewhat more than a tenth of the total domestic consumption in that year to less than a tenth of 1 percent of the total in 1939. Imports of staple fiber have also fallen off sharply in recent years.

Since the beginning of the rayon industry in the United States, the most important consumers of its products have been manufacturers of hosiery, knit goods other than hosiery, and broad woven goods. At the start, the hosiery industry consumed the greatest amount of rayon, but was displaced in the early twenties by the knit-goods industry. During the past two decades, manufacturers of broad woven goods have accounted for from one-half to three-fourths of the rayon consumed. The present war has developed many new uses for rayon, principally in the manufacture of tires, parachutes, insulating materials, filters, linings, belts, and other materials needed in modern warfare.

Much of the success of rayon in this country is undoubtedly due to the very sharp drop in the price of that product since the first World War, a drop made possible by technological improvements and mass-production techniques. In 1919, the average spot price of rayon was \$4.77 per pound. By 1924, rayon had dropped to \$2.11 per pound, and by 1930 it had dropped to \$1.06 per pound. In 1941, the average spot price of rayon was 54 cents a pound. During the same period, the spot price of silk dropped from \$9.64 to \$2.94. Despite this decline, the price of silk was still $1\frac{1}{2}$ times as high as that of rayon in 1941. Between 1919 and 1941 the average spot price of cotton dropped from 32.5 to 13.9 cents per pound and that of wool from \$1.74 to \$1.09.

AMERICAN RAYON INDUSTRY TODAY

At the time of the present study, May 1944, there were 28 plants engaged in the manufacture of rayon-filament yarn and rayon staple fiber in the United States. These plants employed approximately 55,000 workers in all departments and occupations. Since 1925, the first year for which the Census of Manufactures reported separate figures for the rayon industry, the number of rayon plants has doubled and the number of workers nearly trebled.

There is a very marked concentration of production facilities in this industry. Four companies own and operate more than half of all the plants and employ slightly more than two-thirds of all the workers in the industry.

The rayon plants are situated in 13 States in the eastern half of the United States, extending from Massachusetts in the North to Georgia in the South and as far West as Ohio and Tennessee. The greatest concentration of plants is in Virginia, where there are 6 rayon-producing establishments. Other concentrations are in Tennessee with 4 plants, and in Pennsylvania and Ohio with 3 plants each.

Of the 28 plants, 12 have collective-bargaining agreements with the Textile Workers of America (a C. I. O. affiliate), 3 have agreements with the United Textile Workers (an A. F. of L. affiliate), and 3 additional plants have agreements with both of these unions. Five plants have agreements with independent unions and 5 are unorganized. Approximately three-fourths of all workers in the rayon industry are employed in union plants.

Twenty of the 28 rayon-producing mills use the viscose process, 5 use the acetate process, 2 use the cupra-ammonium process, and 1 uses both the viscose and acetate processes. Until 1934, rayon was also produced by the nitrocellulose method. This method is now extinct as far as the production of rayon for commercial purposes is concerned. The viscose and cupra-ammonium processes accounted for about two-thirds of all the rayon yarn produced in this country in 1943, the remaining third being made by the acetate process. Figures are not available for the viscose and cupra-ammonium processes separately because of the limited number of plants using the latter process. Rayon staple fiber, which represented approximately one-fourth of all the rayon produced in the United States in 1943, is generally made by the viscose process, although a small amount is produced in mills using the acetate method.

In principle, the three rayon-production methods or processes in use in the United States today have much in common. Each includes the conversion of wood pulp or cotton linters to a chemical solution (cellulose or cellulose base), the extrusion of the chemical through minute perforations, the coagulation of the liquid in an acid bath or in warm air, and the finishing of the solid substance into filament yarn or staple fiber. In actual practice, however, the mechanics of the operations are quite different, resulting in substantially different occupational structures in the processing departments. These differences are indicated in the description of each of the three processes in the following paragraphs.

Viscose process.—This process involves the use of two basic cellulose raw materials, namely, wood pulp and cotton linters. As a rule, these two materials are mixed or blended according to established

formulas. The wood pulp is obtained primarily from spruce and hemlock logs and is of a higher grade than that ordinarily used by paper mills. Cotton linters are the short fibers obtained after the second ginning of cottonseed.

Under the viscose method, the raw materials are first converted into an alkali-cellulose by steeping them in a caustic solution. The alkali-cellulose is shredded, aged, and then mixed with carbon bisulphide to form a cellulose-xanthate solution. This solution is then forced or extruded through the fine openings of the spinning cup, commonly referred to as the "spinneret," into an acid bath which causes the extruded liquid to coagulate into a threadlike fiber or filament. This filament is then wound on a bobbin or spun in "cake" form in a pot or spinning box.

The filament is then finished as a yarn by washing, skeining, drying, bleaching, re-drying, spooling, twisting, coning, inspecting, and packing. Some of these operations may be eliminated or may take place in a sequence differing from that outlined.

Extruded filaments which are to be finished as staple fiber are handled somewhat differently from filament yarn. The spun filaments are not wound onto bobbins or in pots, but are collected in rope-like form, treated (washed, bleached, and dried) and then cut into pieces of desired length or, in certain plants, first cut into lengths and then treated.

The viscose method includes three distinct systems of spinning, namely, the pot system, which is the most common; the spool system, which is the next most common; and, finally, the continuous system found in only two mills. In the pot spinning system, the filament passes over a wheel and into a pot, which spins at a high speed. A twist is imparted to the yarn as it enters the pot and the yarn is forced against the inside wall of the pot to form a cake. The spool system differs from the pot system in that the filament is wound directly onto a spool or bobbin and no twist is imparted to the yarn; the twisting is done later in a separate operation. Under the continuous system the filament is spun, washed, bleached, twisted, dried, and wound onto spools, in a single continuous operation.

Acetate process.—This process is the most recent of the three processes now in use and is steadily increasing in importance. Formerly, cotton linters were used exclusively in this operation, but recent developments now also permit the use of wood pulp. The acetate process differs from the viscose process in that the extruded spinning solution coagulates as it passes through a flow of warm air, making it unnecessary to wash, bleach, or dry the filament after spinning. The viscose spinning solution, it will be recalled, coagulates in an acid bath, with the result that the filament must be washed, bleached, and dried before it can be finished.

The initial step in the acetate method is the chemical preparation of the cellulose-acetate, which involves washing, extracting, and drying into a flake form. This is followed by the dissolution of the flake cellulose acetate in pure acetone, and then by spinning. The rayon yarn is next either twisted and packaged for fabric-making mills or cut to form staple fiber which is shipped to other mills to be made into spun rayon yarns by much the same method as is used in spinning cotton, wool, etc.

Cupra-ammonium process.—In this process, cotton linters are the basic raw material used. After washing and bleaching, the cotton linters are dissolved in a copper-oxide solution and filtered to produce the spinning solution. This solution is then forced through the spinneret into an acid bath, which neutralizes the copper oxide and produces a continuous cellulose fiber which, in the case of yarn, is generally wound on reels, although some mills use the bobbin system, similar to that used in the viscose method. The yarn is then washed, dried, and prepared for packing either in skein form or on bobbins, cones, etc. Some of the yarn may also be twisted, depending on the needs of the trade, but most of the cupra-ammonium yarn is sold untwisted. Rayon processed by the cupra-ammonium method may also be finished as a staple fiber in the same manner as in the viscose process.

The Labor Force

The skill requirements in the rayon manufacturing industry are, on the whole, comparatively high. In the chemical-preparation department, great care must be taken at all times in order to insure the proper preparation of the spinning fluid. The timing of operations and the temperature control are all-important in this department. Equally exacting are the various operations in the spinning and finishing of rayon filaments. Manual dexterity and alertness are prime requisites in the textile department, where the yarn is twisted, wound, inspected, wrapped, and packed for shipment.

Among the more highly skilled workers are the chemical-department workers, who prepare the spinning solution, the various maintenance crafts, powerhouse engineers, and generator-switchboard operators.

Of the moderately skilled occupations, the more important, numerically, are the following: Spinners, who regulate the flow of the spinning solution through the spinneret, the coagulation of the solution in an acid bath or in warm air, and the winding of the filament on bobbins or into cakes; doffers, who remove cakes and bobbins of filament from the spinning machine; operators of washers, wringers, and driers in the treating department; product inspectors and routine laboratory testers, who inspect and test the product at various stages of production; reelers, throwers, and winders, who prepare the yarn for shipment; and craftsmen's helpers in the maintenance department.

Among the least-skilled jobs in the industry are those of hand truckers, clean-up workers, and general laborers, accounting for a substantial number of workers. New workers with no particular experience in the rayon industry are generally placed in one of these unskilled occupations and advanced to the more skilled and responsible occupations as they become more experienced.

Slightly more than three out of every five workers in rayon plants are men. This rather high ratio is due to the nature of the industry, which, in the early stages of manufacture, involves working with chemicals. Somewhat more than four-fifths of all the women covered in the Bureau's study were employed in the finishing department and well over half were either throwers (twisters) or yarn winders. In plants using the viscose and cupra-ammonium processes, virtually all workers who were employed in the chemical preparation and spinning departments were men, but more than a third of the workers in the

treating department were women. In acetate plants, no women were found in the chemical-preparation department, but approximately 20 percent of the workers in the spinning department were women. In the latter department, women worked as doffers and jetmen. A substantial number of women also worked as hand truckers, routine laboratory testers, and cleaners. Men constituted virtually the entire force in the maintenance department as well as in the powerhouse.

The workers are concentrated in comparatively few occupations. Thus, four-fifths of the workers were in 18 of the 58 representative occupations for which figures are presented. One-fourth of the workers were either throwers (twisters) or yarn winders, while slightly over 15 percent were spinners, doffers, or topmen, and nearly 10 percent were in the broad group of chemical-department workers. Of the 58 occupations, 18 had fewer than 100 workers and 5 fewer than 50 workers.

Variations in occupational structure.—The occupational structure varies considerably from plant to plant, owing to differences in process, product, and type of equipment. As was pointed out earlier, certain occupations are peculiar to specific processes. For example, the occupations of washer operator, drier operator, and wringer operator found in the viscose and cupra-ammonium processes do not have counterparts in acetate plants, as acetate yarn is not treated. Similarly, plants producing staple fiber have fewer occupations than do yarn mills; for instance, staple-fiber plants do not have textile departments. Finally, variations in type of equipment exert a profound influence on the occupational structure as well as on the content of the jobs. Some mills are only partially mechanized and retain a number of hand operations, whereas other mills are highly mechanized, and a few even employ the continuous spinning process in which spun filaments are washed, bleached, twisted, dried, and wound onto spools in one continuous operation.

Equally wide variations among plants are found in their method of work assignment. For example, in the chemical-preparation departments of some plants workers are assigned to specific tasks; among these are the acetone recovery man, acid-correction man, churn man, filter man, shredder operator, soda dialyzer, etc. In other plants, the entire chemical-preparation department force works as a group, performing all of the duties incidental to the preparation of the spinning fluid. For that reason, it was necessary in this study to combine all chemical-department workers and to present a single figure for the group as a whole.

The plants also showed substantial variations in the duties of workers in certain occupations in the production departments, particularly in the spinning department. In 10 of the 20 viscose and cupra-ammonium plants, spinners did nothing but tend the spinning machines; in 8 plants they also doffed the machines. Similarly, in the acetate plants, some spinners tended the spinning machines only; others performed the work of both the spinner and the topman, and still others combined the duties of spinner, topman, and doffer. Because of these variations, the wage data which appear later in this report are presented separately for production workers under each process and for each significant occupational group.

Scope and Method of Survey

The figures presented in this report are based on data obtained from 25 of 28 rayon mills in operation at the time of the survey. Of the 3 mills not represented in this study, 1 is a comparatively small New England mill and 2 are medium-size Southern mills. The omission of the two Southern plants from the survey does not appreciably influence the general level of wages indicated by this survey. It is estimated that the general level indicated by the 25 plants actually studied is approximately 1 cent higher than it would have been had all Southern rayon plants been studied. Owing to the small size of the New England plant, its omission has but a negligible effect on the figures presented.

Occupational wage-rate data and general plant information were obtained from each of the 25 plants studied. Field representatives of the Bureau visited over half of the establishments and obtained the desired information directly from pay rolls and other pertinent records. Data for the remaining plants were compiled by the firms themselves, under the direction of representatives of the Bureau. The data for these plants were carefully checked by Bureau representatives to insure the accuracy and representative character of the figures.

Wage data were obtained for 58 selected key occupations, which are believed to be fully representative of the different skill and earnings levels in the industry. These occupations account for approximately two-thirds of all plant workers in the 25 establishments studied.

In order to insure as full comparability of occupational wage data as possible among the plants, standard job descriptions were used. Any significant deviations from the duties listed in these descriptions were reported in detail and were given careful consideration in classifying workers in the proper occupation. Full information on job content made it possible to overcome, to a large extent, interplant variations in duties of workers and to arrive at significant occupational classifications. In a number of cases, it was possible to refine further the data for certain occupations in which substantial interplant variations in job content were found.

The occupational wage data presented in this report for selected key occupations are straight-time average hourly earnings of first-shift workers and, as such, reflect the basic wage structure of the industry. Premium-overtime and shift-differential payments were excluded from these earnings. Incentive earnings, however, whether based on piecework or production bonuses, are included in the earnings. The averages were also adjusted to reflect payments for lunch periods. The earnings data relate to May 1944.

It should be pointed out that two types of occupational averages are presented in this report. The first are straight-time average hourly earnings, which were arrived at by weighting the individual rates of qualified workers in each occupation by the number of workers receiving each rate. These figures reflect the rates actually received by first- or day-shift workers. The second set of occupational figures represents the "going rates" of the various selected key occupations. For purposes of this survey, the "going rate" was defined as, the rate

paid to a fully qualified worker who has served the required time in an occupation. In union plants, this rate is also known as the "union rate" for the job. In plants having a rate range in occupations, the going rate is the upper limit of that range, while in plants having a single rate, the going rate is the rate paid to all workers in the occupation. In arriving at the average going rate for an occupation for the industry, the going rate for each occupation was weighted by the total number of workers in that occupation in each plant.

Hourly Earnings

FACTORS AFFECTING EARNINGS LEVEL OF WORKERS

The level of earnings of workers in the rayon industry is determined not only by the basic rates of pay for the various occupations, but also by a number of other factors, such as entrance rates, provisions for automatic advancement, extra pay for overtime work and for work on late shifts, incentive methods of wage payment, and paid lunch periods. In addition, most workers in the rayon industry not only receive paid vacations, but also benefit from a number of other plans, such as insurance plans financed wholly or in part by the companies, sick-benefit plans, and retirement plans. These various factors are discussed briefly in the following paragraphs.

Entrance rates.—Entrance rates of adult male common laborers varied from 47.5 cents in one plant to 78 cents in another plant (table 1). Thirteen of the 25 plants had entrance rates of 70 cents or more an hour, while 4 plants had entrance rates below 55 cents an hour. Three of the 4 companies operating plants in both North and South paid somewhat lower entrance rates in their southern plants than in their northern plants. A fourth firm paid the same rate in both regions.

TABLE 1.—Entrance Rates of Adult Male Common Laborers and Automatic Advancement Provisions in the Rayon Industry, May 1944

Number of plants	Entrance rate	Provision for automatic increases
1 plant.....	\$0.78	None.
1 plant.....	.75	None.
1 plant.....	.75	Increased to 85 cents after 6 weeks and to 95.5 cents after 4 months.
1 plant.....	.75	None.
1 plant.....	.745	None.
6 plants.....	.73	None.
1 plant.....	.70	None.
1 plant.....	.70	Merit increases only.
1 plant.....	.645	Increased by 10 percent of base rate, after 2 weeks.
1 plant.....	.633	Merit increases only.
1 plant.....	.60	Do.
1 plant.....	.58	Increased to 63 cents after 4 weeks, to 68 cents after 8 weeks, and to 70 cents after 12 weeks.
2 plants.....	.55	Increased to 60 cents after 3 months and to 67 cents after 6 months.
1 plant.....	.55	Increased by 5 cents after 6 weeks and by another 5 cents after 12 weeks; merit increases thereafter.
1 plant.....	.55	Increased to 60 cents after 12 weeks and to 65 cents after another 12 weeks.
1 plant.....	.53	Increased to 56 cents after 2 months, to 60 cents after 3 months, and to 63 cents after 6 months.
1 plant.....	.505	Increased to 55 cents after 2 months.
1 plant.....	.495	Increased to 54.5 cents after 3 months.
1 plant.....	.475	Increased to 51 cents after 13 weeks and to 62 cents after 26 weeks.

Advancement beyond the common-labor entrance rate in most plants was on a merit rather than an automatic basis. In only 11 of the 25 plants reporting on advancement provisions did workers receive automatic increases. These increases varied from a 3.0-cent an hour increase after 2 months of service in one plant to two increases aggregating 14.5 cents an hour after 6 months of service in another plant. Most of the plants having automatic-advancement provisions also had substantially lower entrance rates than the plants which had no automatic-advancement provisions beyond the entrance rate.

Occupation rate range.—Most rayon plants have rate ranges, rather than single rates, for certain jobs. Workers generally advance automatically within these ranges. The spread of the rate range and the rate of advance vary by occupation and also among plants. For example, in Plant A, doffers start at 86 cents an hour, advance to 91 cents after 6 months and to 96 cents after 12 months. In Plant B, truck drivers start at 74 cents an hour and, over a period of 48 weeks, receive three automatic advances to reach a going rate of 89 cents an hour.

Overtime provisions.—Twenty-three of the 25 plants paid for overtime at the rate of time and a half after 8 hours a day and 40 hours a week. One plant paid day workers time and a half after 8 hours a day and 40 hours a week and paid late-shift workers time and a half after 6 hours a day and 36 hours a week. Another plant paid time and a half after 40 hours a week.

Most plants paid time and a half for work on recognized holidays and double time for work on the seventh consecutive day. In most cases, the holidays on which premium rates were paid were the six holidays specified in Executive Order No. 9240.⁵ Two plants paid premium rates for work on the following day when a holiday fell on Sunday.

Incentive-wage plans.—A relatively small number of workers in the rayon industry are paid on an incentive basis. Piece work, although found in 16 of the 25 plants studied, was almost invariably limited to the textile departments and generally applied to such operations as coning, winding, reeling, and, in a few plants, to inspecting, wrapping, and packing.

Only four plants had production-bonus plans; in three of these, most workers participated in a plan under which a bonus was paid for production above fixed standards, while in the fourth plant only a few workers participated in such a plan. Two plants (one with piece work and one with production bonus) also reported so-called "make-up for outage" plans, under which workers in any processing group may elect to work short-handed and receive all or part of the potential earnings of absent workers. In one of these plants, the working members of the group were paid the full potential earnings of the absent members; in the other plant they received only two-thirds of such earnings, the remaining third being retained by the company.

Shift differentials.—Because of the continuous nature of rayon manufacturing operations, a high proportion of workers in this industry work on shifts, most of whom rotate from one shift to another. Varying shift differentials were paid in 21 of the 25 plants studied. In a number of plants, the differentials were averaged over all three shifts

⁵ Christmas, New Year's Day, Labor Day, Fourth of July, Thanksgiving Day, and either Memorial Day or one other such holiday of greater local importance.

and workers on these shifts received the same rate of pay. Thus, all workers on rotating shifts received a 10-percent differential above day rates in 11 plants and in 6 plants they were paid amounts varying from 4 to 7 cents for men and from 2½ to 5 cents for women. Workers on oscillating day and evening shifts received amounts varying from 3 percent in 7 plants to 10 percent in 2 other plants. In other plants, differentials were paid only to workers on the second and third shifts. These differentials varied from 3 cents to 10 percent for second-shift workers and from 5 cents to 20 percent for third-shift workers. In arriving at straight-time average hourly earnings, differentials averaged over all three shifts were eliminated from the rates paid to workers on the first shift. Thus, if shift workers in a given occupation, whether or not on rotating shifts, received \$1.10 per hour and this rate reflected a 10-percent shift differential, the rate was reduced by one-eleventh in order to eliminate this differential and the rate of \$1.00 instead of \$1.10 was used. In plants paying a differential only to second- and third-shift workers, the rate for day-shift workers was used.

Paid lunch periods.—Workers on rotating shifts were granted paid lunch periods in 23 of the 25 plants studied. The lunch period of day-shift workers or of most workers on oscillating day and evening shifts was not paid for. Of the 23 plants having paid lunch periods, 2 had a 15-minute period, 5 had a 20-minute period, 1 a 25-minute period, 14 a 30-minute period, and in 1 plant women had a 30-minute period and men a 20-minute period. Seven plants also paid workers for travel to and from the lunchroom, this time having been determined by company and union representatives. In the earnings presented in this report, correction has been made for paid lunch periods. Thus, if a worker with a rate of \$1.00 an hour was paid for 8 hours on a shift but actually worked only 7½, the other half-hour representing a paid lunch period, the hourly rate of this worker was adjusted upward to \$1.067 (his average hourly earned rate for 7½ hours of work at \$8.00) and the rate of \$1.067 was used.

Paid vacations.—Paid vacations were granted to factory workers in all but one of the 25 plants studied. The length of the vacation period, the conditions under which granted, and the number of plants with each type of paid vacation are listed below:

Provisions for paid vacations

10 plants.....	1 week after 1 year of service and 2 weeks after 5 years of service.
4 plants.....	2 weeks after 1 year of service with satisfactory attendance record.
4 plants.....	1 week after 1 year of service.
2 plants.....	1 week after 1 year of service and 2 weeks after 2 years of service.
1 plant.....	1 week after 6 months of service.
1 plant.....	1 week after 1 year of service; proportionate amount after 3 months of service.
1 plant.....	1 week for less than 5 years of service and 2 weeks after 5 years or more of service.
1 plant.....	1 week for over 1 year but less than 5 years of service and 2 weeks for 5 years or more of service.
1 plant.....	None (plan pending before regional War Labor Board).

Workers generally received vacation pay for their scheduled hours of work at their regular rate of pay or, in some cases, at their straight-time average hourly earnings over a specified period of time. Some plants paid a percentage of the worker's earnings for the previous year.

Insurance and related plans.—Workers in the rayon industry also derive substantial benefits from insurance and related plans⁶ in effect in many plants. Perhaps the most common of these plans is the insurance plan—either life or accident and health. Twenty of the 25 plants have life-insurance plans, the cost of which is borne wholly or in part by the plants. Seven plants assumed the entire cost of the premiums after 6 months of service, one plant after 3 months of service, and four other plants after 1 year of service. Group health and accident plans paid for in part by the employees and in part by the firm were found in 18 plants. Twelve plants had pension and retirement plans which were largely maintained by the companies.

EARNINGS OF FACTORY WORKERS

The straight-time average hourly earnings of factory workers in the rayon industry amounted to 84.0 cents an hour in May 1944 (table 2). These earnings are based on data for 58 representative occupations in which two-thirds of the workers were employed. These occupations are believed to be representative of the skill and earnings levels found in the industry as a whole.

As a group, men earned an average of 91.8 cents an hour, or 20.5 cents more than women. This difference is due largely to the fact that men were generally employed in the better-paid processing, maintenance, and service occupations, while women were very largely confined to the finishing or textile department, where the lowest wages were generally paid. Wherever both men and women were employed in the same occupation in any one plant and performed the same duties, they received, as a rule, the same rate of pay. Therefore, substantially different wage levels indicated for males and females within the same occupation (e. g. 91.5 cents for male doffers and 76.5 cents for female doffers in acetate plants) typically reflect interplant variations in wages paid and not sex differentials within occupations in the same plant.

Wide variations are found in the average hourly earnings of male workers, the range being from 69.1 cents for clean-up workers to \$1.472 for lead burners. Within this range, there are definite concentrations at certain wage intervals which reflect in general the respective levels of pay in the various departments. Skilled maintenance men and engineers, firemen, and generator-switchboard operators in the powerhouse averaged \$1.00 or more an hour, whereas virtually all workers in the chemical-preparation and spinning departments had earnings within the 20-cent range from 85 cents to \$1.05. Maintenance helpers and such miscellaneous occupations as stock clerks, stockmen, truck drivers, and watchmen earned between 80 and 90 cents an hour. Earnings below 80 cents an hour were reported for a majority of the textile occupations as well as for hand truckers, clean-up men, and general laborers.

There was much less dispersion in the earnings of women than in those of men. The lowest earnings, 59.1 cents an hour, were for clean-up workers, and the highest, 84.3 cents, were for wringer operators. Nine-tenths of these workers were in occupations averaging between 65 and 80 cents an hour. Throwers (twisters) and yarn

⁶ These plans will be discussed in greater detail in a later report.

TABLE 2.—Straight-Time Average Hourly Earnings and Going Rates of First-Shift Workers in Selected Key Occupations in the Rayon Industry, May 1944

Occupational classification by process, department, and sex	Hourly earnings					Going job rate				
	Number of plants	Number of workers	Industry average	Plant average		Number of plants	Number of workers	Industry average	Plant average	
				Min-imum	Max-imum				Min-imum	Max-imum
Total selected occupations.....	25	30,605	\$0.840	-----	-----	25	23,290	\$0.883	-----	-----
<i>Viscose process</i> ¹										
Chemical preparation—Male workers:										
Chemical department.....	20	1,849	.940	\$0.825	\$1.126	19	1,817	.956	\$0.825	\$1.136
Filter cleaners.....	13	88	.884	.745	1.061	12	80	.874	.745	1.000
Pulp handlers.....	16	142	.824	.665	1.065	16	142	.838	.665	1.065
Spinning—Male workers:										
Doffers.....	8	985	.999	.866	1.110	7	971	1.010	.943	1.112
Jetmen.....	18	123	.940	.641	1.287	15	91	.947	.641	1.242
Spinners.....	10	844	1.025	.875	1.239	10	844	1.027	.875	1.239
Spinners, including doffers.....	8	848	.965	.886	1.080	4	177	.957	.924	1.003
Spinners, including doffers, continuous process.....	2	129	1.012	(?)	(?)	2	129	1.012	(?)	(?)
Washing, bleaching, and drying:										
Male workers:										
Cake wrappers.....	3	49	.933	.755	.966	-----	-----	-----	-----	-----
Drier operators.....	11	62	.913	.787	1.135	11	62	.913	.787	1.135
Washer operators.....	13	885	.886	.787	.954	11	653	.925	.787	1.008
Wringer operators.....	7	96	.873	.688	.915	6	92	.885	.688	.960
Female workers:										
Cake wrappers.....	12	518	.811	.600	.970	5	124	.839	.600	.945
Drier operators.....	4	18	.672	.569	1.135	3	9	.666	.569	1.133
Wringer operators.....	4	79	.843	.687	.951	2	65	.867	(?)	(?)
<i>Acetate process</i>										
Chemical preparation—Male workers:										
Chemical department.....	5	1,005	1.002	.993	1.073	5	1,005	1.014	.994	1.095
Spinning:										
Male workers:										
Doffers.....	2	229	.915	(?)	(?)	2	229	.934	(?)	(?)
Jetmen.....	4	30	.957	.850	.991	4	30	.956	.850	.991
Spinners, including topmen.....	3	385	.915	.870	1.022	3	385	.979	.960	1.025
Spinners, including topmen and doffers.....	2	1,036	.942	(?)	(?)	2	1,036	.983	(?)	(?)
Female workers:										
Doffers.....	3	407	.765	.753	.870	3	407	.824	.811	1.024
Jetmen.....	2	30	.775	(?)	(?)	2	30	1.005	(?)	(?)
<i>Viscose¹ and acetate processes</i>										
Finishing:										
Male workers:										
Inspectors, product.....	2	55	.922	(?)	(?)	2	55	.923	(?)	(?)
Packers.....	8	48	.730	.489	.870	8	48	.774	.620	.870
Shippers.....	16	65	.856	.749	1.250	14	63	.858	.750	1.040
Shipping laborers.....	13	183	.794	.548	1.015	13	183	.828	.620	1.015
Throwers (twisters).....	6	469	.754	.735	.944	2	190	.776	(?)	(?)
Weighers.....	6	22	.874	.736	1.023	5	20	.868	.736	1.023
Yarn winders.....	4	192	.745	.741	.795	2	87	.751	(?)	(?)
Female workers:										
Inspectors, product.....	18	1,060	.708	.623	.898	13	667	.724	.630	.919
Inspectors and wrappers.....	10	247	.687	.617	.957	6	193	.648	.625	.690
Packers.....	9	114	.636	.510	.760	7	79	.651	.570	.710
Reelers.....	9	983	.706	.603	.818	1	3	(?)	(?)	(?)
Throwers (twisters).....	11	2,541	.722	.612	.779	7	2,167	.756	.645	.939
Yarn winders.....	21	4,666	.701	.608	.806	5	1,933	.730	.645	.782
Yarn wrapp rs.....	8	100	.676	.580	.810	7	94	.675	.580	.693
Maintenance—Male workers:										
Blacksmiths.....	15	18	1.097	.897	1.292	15	18	1.117	.897	1.280
Blacksmiths' helpers.....	10	14	.815	.726	.910	10	14	.827	.726	.930
Carpenters, class A.....	17	188	1.111	1.000	1.210	17	188	1.117	1.000	1.295
Carpenters, class B.....	16	53	1.067	.835	1.285	15	52	1.081	.835	1.285
Carpenters' helpers.....	11	42	.842	.729	1.093	10	40	.851	.750	1.108
Electricians, class A.....	25	264	1.147	.833	1.550	24	263	1.155	.800	1.550
Electricians, class B.....	19	66	1.010	.725	1.285	18	56	1.035	.800	1.285
Electricians' helpers.....	20	127	.822	.630	1.000	19	126	.832	.750	1.015
Humidity men.....	15	99	1.043	.847	1.425	14	94	1.061	.847	1.425

See footnotes at end of table.

TABLE 2.—Straight-Time Average Hourly Earnings and Going Rates of First-Shift Workers in Selected Key Occupations in the Rayon Industry, May 1944—Continued

Occupational classification by process, department, and sex	Hourly earnings					Going job rate				
	Number of plants	Number of workers	Industry average	Plant average		Number of plants	Number of workers	Industry average	Plant average	
				Minimum	Maximum				Minimum	Maximum
<i>Viscose¹ and acetate processes—Con.</i>										
Maintenance—Male workers—Con.										
Lead burners.....	14	97	\$1.472	\$1.090	\$1.750	14	97	\$1.478	\$1.090	\$1.750
Machinists, class A.....	24	270	1.143	1.027	1.400	23	269	1.162	1.037	1.400
Machinists, class B.....	15	87	.973	.834	1.172	14	85	1.000	.870	1.198
Machinists' helpers.....	12	77	.807	.729	.885	12	77	.819	.750	.885
Mechanics, maintenance, class A.....	23	455	1.124	.975	1.343	23	455	1.137	.975	1.343
Mechanics, maintenance, class B.....	21	833	1.012	.775	1.280	20	820	1.025	.775	1.280
Mechanics' helpers, maintenance.....	22	748	.807	.682	1.096	21	744	.847	.750	1.110
Millwrights, class A.....	12	208	1.118	.988	1.291	12	208	1.140	1.088	1.295
Millwrights, class B.....	9	144	1.006	.864	1.285	8	142	1.015	.875	1.285
Oilers.....	20	191	.896	.689	1.006	19	187	.907	.701	1.015
Pipe fitters, class A.....	21	278	1.110	.976	1.417	21	278	1.122	.976	1.417
Pipe fitters, class B.....	16	55	1.083	.725	1.280	15	53	1.087	.750	1.285
Pipe fitters' helpers.....	20	231	.822	.710	1.000	19	228	.836	.750	1.015
Water filterers.....	19	58	1.017	.645	1.196	17	54	1.038	.821	1.196
Power—Male workers:										
Ashmen.....	9	55	.713	.544	1.035	7	43	.646	.550	1.015
Engineers, stationary.....	20	86	1.214	1.040	1.391	18	77	1.209	1.040	1.406
Firemen, stationary boiler.....	23	116	1.038	.720	1.223	21	106	1.021	.720	1.223
Generator-switchboard operators.....	13	54	1.154	.720	1.347	13	54	1.155	.730	1.347
General:										
Male workers:										
Clean-up workers.....	23	534	.691	.548	.968	21	491	.707	.602	.968
Laboratory testers, routine.....	10	116	.852	.735	.997	6	106	.927	.884	1.008
Laborers, general.....	25	1,329	.699	.548	.903	24	1,311	.709	.552	.955
Stock clerks.....	16	90	.854	.750	1.100	15	88	.865	.750	1.100
Stockmen.....	13	61	.889	.730	1.015	13	61	.894	.730	1.015
Tool clerks.....	12	16	.897	.780	.995	12	16	.906	.780	.995
Truck drivers.....	19	118	.834	.636	1.082	18	117	.851	.636	1.173
Truckers, hand.....	20	1,177	.733	.574	.954	18	1,163	.787	.587	.904
Watchmen.....	21	297	.842	.574	.978	9	78	.811	.616	.976
Working leaders.....	16	430	1.050	.856	1.242					
Female workers:										
Clean-up workers.....	13	201	.961	.514	.917	12	183	.627	.559	.917
Laboratory testers, routine.....	16	204	.796	.507	1.003	10	166	.850	.672	1.008
Truckers, hand.....	9	536	.685	.539	.826	8	532	.702	.570	.855

¹ Includes data for viscose and cupra-ammonium plants combined in order not to disclose identity of individual plants.

² Number of plants and/or workers insufficient to justify presentation of figures.

winders, which together accounted for well over half of all the women, earned 72.2 and 70.1 cents an hour, respectively.

The general range in plant occupational straight-time hourly earnings is on the whole quite wide. Thus, of the 71 occupational classifications for which such figures are shown, 10 had a spread in plant earnings of less than 20 cents; for 37 the spread was between 20 and 40 cents; for 12, between 40 and 50 cents; and for 12, 50 cents or more. In general, the differences between the minimum and maximum plant earnings were somewhat greater for maintenance and powerhouse occupations than for processing occupations. It should be borne in mind, however, that these figures indicate the greatest possible difference in interplant earnings, and that many of the plants actually pay wages within a more limited range. For example, the total spread in plant averages for class A electricians was from 83.3 cents in one plant to \$1.55 in another. Actually, for 22 of the 25 plants, the spread in earnings was less than 40 cents (between 95 cents and \$1.35) and for 16 it was less than 15 cents (between \$1.05 and \$1.20).

On the basis of the data obtained from the 25 plants studied, there appears to be no consistent regional pattern of variation in wages. The highest wages are not confined to plants in the Northern States, neither are the lowest wages paid only in southern plants. Although some firms operating plants in both Northern and Southern States pay somewhat lower wages in their southern plants, others have the same basic wage structure in all their plants, regardless of location.

A comparison of earnings in occupations in which both time and incentive methods of wage payment were found reveals somewhat more dispersion in earnings as well as a slightly higher wage level for incentive than for time workers. In 16 plants in which women winders were paid on a piece-work basis, earnings varied from 56.0 cents in one plant to 80.6 cents in another, while in 5 plants in which winders worked on a time basis, earnings varied from 64.1 to 71.5 cents. Seven of the 16 plants paying on an incentive basis had averages which were higher than the highest average for plants paying winders on a time basis. It should be remembered, however, that these differences in earnings of time and incentive workers may also be due in part to interplant variations in wage levels.

GOING JOB RATES

In addition to straight-time average hourly earnings the going hourly rate is also shown in table 2 for most of the selected key occupations. As previously pointed out, this rate, or the "union rate" as it is called in union plants, is the time rate paid to a fully qualified worker who has served the required time in a given occupation. It is generally the highest rate when more than one rate is paid within an occupation, and in rate ranges it is generally the upper limit of the range.

The going rate is to be distinguished from the straight-time average hourly rate. The former is generally a single rate in a given plant, whereas the latter may be an average of several rates. In such cases the going rate will usually be higher than the weighted average of the several rates within the range. No going rate is shown for occupations in which workers are primarily paid on an incentive or salaried basis. For this reason, the going-rate figures presented in table 2 are generally based on fewer plants and fewer workers than are the straight-time average hourly earnings. These differences in coverage should be kept in mind in comparing hourly earnings and going rates.

The average going job rate in the rayon industry in May 1944 was 88.3 cents an hour. This compares with an average straight-time rate of 84.0 cents an hour for the same month. The 4.3-cent variance between the two rates is only an approximate measurement of their difference, because of differences in the size of the groups covered. The straight-time hourly rate is based on data for 30,605 workers, whereas the average going rate is based on data for 23,290 workers in occupations which are primarily on a time basis of wage payment. The same is true for individual occupations, as in most cases the going job rate is based on data for fewer plants and fewer workers than the average straight-time hourly rate. This is especially true of occupations in the textile department in which incentive methods of pay are often found.

In general, the differences between the average going rate and the average straight-time rate were small. In 65 of the 73 occupational classifications for which these two figures are shown the variation was less than 5 cents, and in 52 classifications less than 2.5 cents. These observations lead to the conclusion that the pay of a large proportion of the workers actually equaled or closely approached the going rate. In 60 of the 73 cases, the average going rate was higher, and in only 11 was it lower; in two cases there was no difference. The inclusion of incentive earnings in the straight-time average hourly rate for a few occupations undoubtedly reduced the difference between the two rates and may account for the fact that in a few cases the straight-time average hourly earnings were higher than the going rate of the job. Variations in coverage may also affect the results in some instances, particularly when the two figures are based on substantially different groups of plants and workers.

As in the case of straight-time average hourly earnings, the total range in average plant going rates is rather wide. The difference between the minimum and maximum going rates varied from less than 10 cents in three occupations to 75 cents in another occupation. On the whole, the differences were much larger for maintenance and powerhouse occupations than for most processing occupations. Of the 65 occupational classifications for which minimum and maximum going job rates are presented in table 2, 56 had a spread in average plant going rates of more than 10 but less than 55 cents, and 37 had a spread in plant rates of more than 20 but less than 40 cents an hour.

TREND IN EARNINGS OF FACTORY WORKERS

The general level of wages in the rayon industry was substantially higher during the summer of 1944 than in January 1941. According to data compiled by the Bureau's Employment Statistics Division from reports submitted monthly by cooperating firms in the industry, gross average hourly earnings (including premium payments for overtime and shift differentials) increased from 69.9 cents in January 1941 to 90.2 cents in July 1944, an advance of 29 percent (see table 3). Most of the increase occurred prior to June 1943 and was due very largely to a number of general wage increases granted by most plants in the industry. Automatic increases in a number of plants and individual merit increases in other plants also account for part of the increase in earnings. Premium payments for overtime have also had some influence on the general level of gross hourly earnings, particularly during 1943 and 1944, as the average time worked increased by approximately 3 hours during that period.

Straight-time earnings increased by 26 percent between January 1941 and April 1944—from 68.4 to 86.2 cents. These earnings do not include premium payments for overtime, but do include shift-differential earnings. The actual increase in straight-time earnings of first-shift workers would be somewhat lower.⁴

Gross weekly earnings, which rose from \$27.40 in January 1941 to \$39.45 in May 1943, primarily reflected changes in gross hourly earn-

⁴ The over-all straight-time average hourly earnings based on data for workers in the selected key jobs studied are remarkably consistent with the adjusted average based on the monthly reports from cooperating firms, the respective figures being 84.0 and 85.9. The slightly higher average based on the monthly reports is due partly to the fact that this figure includes shift-differential payments, whereas the average based on the current survey excludes shift-differential earnings. Differences in plant coverage may also account for some of the difference.

ings, although the lengthening of the workweek also resulted in higher weekly earnings. Throughout 1941 and most of 1942, weekly hours remained practically unchanged, averaging slightly less than 40 per week. Weekly hours increased slowly in 1943 and 1944, reaching a high of 43.4 in May of the latter year.

TABLE 3.—Weekly Hours and Hourly and Weekly Earnings of Workers in Manufacture of Rayon and Allied Products, by Months, January 1941 to July 1944¹

Year and month	Average weekly hours	Average hourly earnings		Average weekly earnings
		Unadjusted ²	Adjusted ³	
1941:				
		<i>Cents</i>	<i>Cents</i>	
January	39.2	69.9	68.4	\$27.40
February	38.4	70.2	68.9	26.94
March	38.9	70.0	68.6	27.28
April	39.0	70.6	69.2	27.54
May	39.5	71.2	69.6	28.16
June	39.3	72.2	70.6	28.35
July	39.8	72.9	71.1	29.06
August	39.3	72.8	71.2	28.60
September	39.2	74.6	73.0	29.29
October	39.4	77.3	75.6	30.42
November	39.4	77.5	75.8	30.50
December	39.1	79.7	78.0	31.13
1942:				
January	39.6	80.0	78.2	31.71
February	39.3	81.2	79.4	31.95
March	39.6	81.2	79.3	32.15
April	39.5	81.2	79.3	32.05
May	39.8	80.3	78.3	32.13
June	39.7	80.8	78.9	32.07
July	39.1	82.4	80.7	32.20
August	39.7	82.7	80.7	32.85
September	39.5	84.5	82.6	33.38
October	39.5	83.4	81.5	32.96
November	39.4	82.9	81.1	32.68
December	40.7	84.0	81.3	34.18
1943:				
January	40.5	84.6	82.0	34.27
February	40.9	84.5	81.6	34.54
March	41.3	84.8	81.6	35.01
April	41.4	86.3	82.9	35.73
May	42.4	86.6	82.5	36.74
June	41.4	90.1	86.6	37.32
July	42.7	88.0	83.7	37.57
August	42.5	88.3	84.1	37.60
September	42.2	90.5	86.4	38.15
October	42.2	88.2	84.2	37.22
November	42.7	88.4	84.1	37.76
December	41.8	88.6	84.9	37.07
1944:				
January	42.2	89.4	85.4	37.68
February	42.5	89.4	85.1	38.01
March	42.8	90.0	85.5	38.56
April	42.6	90.5	86.2	38.59
May	43.4	90.9	85.9	39.45
June	43.2	90.5	85.6	39.12
July	43.0	90.2	85.5	38.78

¹ Compiled by the Bureau's Division of Employment Statistics from employment, man-hour, and pay roll totals submitted monthly by cooperating firms.

² Gross earnings including both premium-overtime and shift-differential earnings.

³ Net earnings excluding premium-overtime earnings but including shift-differential earnings.

Earnings of Office Workers

During the course of the survey, wage data were collected also for 1,307 office workers in 10 selected key occupations. All of these occupations are below the top executive and administrative levels. Most of the workers in these occupations are women, and for that reason it is not feasible to show separate figures by sex.

The average hourly earnings of office workers varied from 49.6 cents for office boys or girls to 83.1 cents for class A stenographers, (table 4). Despite this wide range, nearly a half (48.6 percent) of the workers studied were in three occupations averaging 80 cents or more an hour, and nearly another fifth were in three other occupations which averaged between 70 and 80 cents an hour.

Individual plant averages indicate wide interplant variations in earnings. Accounting clerks show the greatest spread in earnings (from 59.0 cents in one plant to \$1.051 in another) and office boys and girls show the least spread (from 40.7 cents in one plant to 60.0 cents in another). For 3 of the 10 selected occupations, the total spread in plant average hourly earnings was over 40 cents; for 3, between 30 and 40 cents; for 3, between 20 and 30 cents; and for 1, slightly less than 20 cents.

TABLE 4.—*Straight-Time Average Hourly Earnings of Workers in Selected Key Office Occupations, May 1944*

Occupation	Number of plants	Number of workers	Hourly earnings		
			Industry average	Plant average	
				Minimum	Maximum
Accounting clerks.....	17	345	\$0.816	\$0.590	\$1.051
Clerk-typists.....	12	133	.608	.500	.798
General clerks.....	8	213	.800	.608	.832
Office boys or girls.....	15	53	.496	.407	.600
Order clerks.....	9	50	.708	.572	.907
Pay-roll clerks.....	13	157	.719	.591	.923
Stenographers, class A.....	14	77	.831	.665	1.093
Stenographers, class B.....	19	138	.678	.558	.804
Switchboard operators.....	14	40	.723	.575	.978
Typists.....	14	101	.623	.481	.873

Employment Conditions

Current Developments in Manpower Requirements and Labor Supply¹

Summary

APPRAISAL of current manpower needs in the munitions industries and of the personnel demands of the armed forces indicates that there is no general manpower shortage but there are urgent needs for workers in certain types of war production.

The decline in employment in the munitions industries of approximately 10 percent between the peak in November 1943 and September 1944 was due largely to downward revisions in many programs and increased output per worker in many industries; there is no indication that any appreciable part of this decline was due to voluntary shifts to nonwar work. The critical production shortages from now until the end of the war in Europe will be due in most cases to rapidly increased demands for certain products.

The total labor force, including the armed forces, expanded in the 12 months ending in September 1944 by half a million more than the normally expected increase. During every month of 1944 the number of women in nonagricultural activities was greater than that in the same month of 1943.

The armed forces, according to present plans, will cause a net withdrawal of 400,000 persons from civilian activities during the 6-month period between November 1944 and March 1945. These withdrawals should have no appreciable effect on the labor force now employed in war activities.

Recent Changes in Munitions Production and Employment

November 1943 marked the peak of both output and employment in the munitions industries. Thereafter, production declined about 5 percent, from an annual rate of 66.7 billion dollars in November to 63.6 billion dollars in September. During the same period employment dropped by 10 percent, from 10.4 million to 9.3 million workers. This decrease in production followed largely the downward revisions in many of the major programs. The more than proportionate decrease in employment was due primarily to the increased output per worker as a result of improved utilization of labor and growing experience in munitions production. In some specific segments of munitions production, manpower problems continue to be serious. With the exception of foundries, many of the production bottlenecks have

¹ This is the sixth of a series of periodic statements on manpower requirements and labor supply published jointly by the Bureau of Labor Statistics of the United States Department of Labor and the Reports and Analysis Service of the War Manpower Commission. The present figures were released on November 11, 1944.

arisen not because of labor shortages but because of schedules that were accelerated at an extremely rapid rate as, for example, in heavy field artillery and ammunition. Some of the so-called labor bottlenecks were actually caused by frequent changes in design, such as air-borne radar, which made it impossible for such programs to reach scheduled production levels.

Although total output in the munitions industries since November 1943 has declined 5 percent, there have been significant differences in the trend of both production and employment in certain components of the munitions industries. One of the most impressive developments is that which has occurred in the aircraft industry where the combined effects of sharp increases in output per worker and reductions in program have resulted in significant declines in employment. After November 1943, employment decreased continuously, so that by the end of September 1944 it was lowered by more than 300,000, or approximately 15 percent. Production, on the other hand, continued upward until March 1944 and then started to decline as a result of program cuts. However, in September 1944, output in these industries was still 5 percent above the November 1943 level. In the shipbuilding industry employment in September 1944 was under that of November 1943 by about 200,000, or approximately 11 percent. The decrease in production in this industry between these 2 months was 12 percent. In line with program reductions, production of small-arms ammunition in September 1944 was almost two-thirds less than that of November 1943.

As the result of combat experience, major upward revisions were made in the programs for a number of items. For example, after a decrease in production of heavy artillery in the early part of 1944, production was pushed up in the latter half of the year. The production of large-size ammunition and aerial bombs, reflecting the increased use of such ammunition in combat, was over one-fourth greater in September 1944 than in November 1943.

Labor Requirements in the Munitions Industries

Official production schedules, based on the continuation of the war in Europe, call for continuing sharp decreases in aircraft employment, small rises in communication and electronic equipment, and large rises in artillery ammunition, aerial bombs, new model tanks, and heavy trucks. Employment in shipbuilding in March 1945 is scheduled to be at current levels.

If these schedules are maintained, and if they are met, there will be no net change in munitions employment before March 1945. Attainment of many of the scheduled goals in the critical items may well be considered problematical in view of shortages of facilities and needed components for new products which are wanted in large volume. Numerous technical difficulties also stand in the way of sharp increases in the production of specific items needed. These problems are now hampering the production of such items as heavy artillery, artillery ammunition, aerial bombs, and air-borne radar. Therefore, although the present downward trend in total munitions employment may continue, the basic reason will not be a general manpower shortage. Nevertheless, shortages of workers for certain types of production will continue to present a problem.

Labor-Force Changes, September 1943–September 1944

Except for seasonal changes, the total labor force (including the armed forces) continued to increase from the high level reached in 1943. The increase of 1.1 million workers from September 1943 to September 1944 (see table) was about double the "normal" increment in the labor force that could have been expected during this period. Although the total labor force increased, the civilian labor force showed a net loss of 900,000 workers from September 1943. The addition of 1.1 million workers to the total labor force was not sufficient to offset an increase of 2 million in the net strength of the armed forces, from 9.8 million to 11.8 million.

The September 1944 level of 800,000 persons reported as unemployed equaled the low point reached in April 1944. This represented a decline of 200,000 from September 1943.

Employment in September 1944 in nonagricultural activities showed a net decline of 300,000 persons from September 1943. Employment of men in these activities was 800,000 under that of September 1943, but there was an increase of 500,000 women in such employment. Agricultural employment declined by 400,000 in this period.

It is significant to note that every month during 1944 the number of women in nonagricultural activities was greater than that of the same month in 1943. It is apparent that the number of women entering the labor force has been sufficiently large to more than offset the withdrawals of women from the labor market.

For certain components of nonagricultural activities, significant changes in employment were shown between September 1943 and September 1944. The decrease in munitions employment amounted to 900,000 during this period (1.1 million between November 1943 and September 1944). Other manufacturing activities decreased by 400,000. Similarly, there was a 400,000 drop in construction employment. These declines were partially offset by an increase of 500,000 in trade and service; the greater part of this rise was in service activities.

The data are not sufficiently refined to permit a clear indication as to the movement of workers leaving the munitions industries. It is clear, however, that the reduction in munitions employment was not the result of a mass exodus from the labor force. Large numbers of those who left munitions industries employment went into the military services. In view of the large differences in weekly earnings between the munitions industries and those which gained in employment, it is questionable whether any large numbers of workers left the munitions industries for such employment voluntarily.

The Armed Forces, September 1944–March 1945

The effect of military needs, September 1944 to March 1945, will be mostly that of a continued drain of young men from civilian employment and schools. On September 1, 1944, the armed forces included 11.8 million persons. Present plans call for an additional 700,000 persons to be withdrawn from civilian life in the next 6 months at a monthly rate of approximately 115,000. The Army, which appears

to have reached peak strength, plans to utilize its new additions as replacements for anticipated battle casualties and attrition. The Navy, in addition to needs for replacements, will recruit personnel to bring its net strength up to a goal of 4 million by July 1, 1945.

It is estimated that 50,000 veterans will continue to return to the labor force each month until VE-day and will constitute a partial offset to the new recruits into the armed forces. Thus, the net withdrawals from civilian activities during the next 6 months into the armed forces will not be more than 400,000 persons.

As the Army and Navy approached their goals and sufficient strength was built up for the invasions, sharp curtailments took place in the numbers of those who went into the armed forces. The rate of withdrawals in the latter part of 1943 and the early months of 1944 was over twice the present monthly rate of 115,000.

Armed force withdrawals between September 1944 and March 1945 should have no appreciable effect on the labor force employed in war activities. About 60 percent of the new recruits, or over 400,000 men, to meet the stated requirements will come from enlistments or inductions of those 17-18 years old. An additional 50,000 will be female enlistments. The remaining 250,000 are available from among Selective Service registrants 18-26 years of age now classified in 1-A. On the basis of these military requirements, there appears to be no need for the induction of any substantial number of males over 26 years of age or the reclassification of those presently deferred because of essentiality in industry.

*Growth and Distribution of the Labor Force, September 1940-September 1944*¹

Classification	Number of workers (in millions)				
	September 1940	September 1941	September 1942	September 1943	September 1944
Total labor force, including armed forces.....	54.9	57.0	59.0	63.7	64.8
Males.....	41.3	42.7	43.5	45.4	46.2
Females.....	13.6	14.3	15.5	18.3	18.6
Armed forces.....	.5	2.0	4.6	9.8	11.8
Civilian labor force.....	54.4	55.0	54.4	53.9	53.0
Unemployed.....	6.2	4.2	1.5	1.0	.8
Employed.....	48.2	50.8	52.9	52.9	52.2
Agricultural.....	10.3	9.3	8.9	9.0	8.6
Nonagricultural.....	37.9	41.5	44.0	43.9	43.6
Munitions industries ²	4.4	6.1	8.4	10.2	9.3
Other manufacturing ³	6.9	7.9	7.8	7.4	7.0
Federal war agencies.....	.1	.3	1.1	1.6	1.6
Other government ⁴	4.0	4.0	4.0	3.8	3.9
Transportation and public utilities.....	3.1	3.4	3.5	3.7	3.8
Construction.....	2.0	2.6	2.3	1.1	.7
Mining.....	.9	1.0	1.0	.9	.8
Trade and service.....	11.4	12.0	11.5	11.0	11.5
Other ⁵	5.1	4.2	4.4	4.2	5.0

¹ Sources: Data for civilian labor force, unemployment, and agricultural and nonagricultural employment are from Monthly Report on the Labor Force, Bureau of the Census; data for components of nonagricultural employment, from Bureau of Labor Statistics.

² Includes all metal-using industries, rubber industries, and selected chemical industries and Government manufacturing arsenals and navy yards.

³ Includes tobacco, paper and allied products, printing, publishing, lumber, furniture, finished lumber products, stone, clay and glass industries, food, textiles, apparel, leather, and parts of chemicals and miscellaneous manufacturing.

⁴ Includes State and local government; Federal Government (except war agencies, navy yards and manufacturing arsenals).

⁵ Includes self-employed, proprietors, domestic servants, and adjustment for statistical differences between Bureau of Labor Statistics and Census series.

Measures Relating to Labor in Italy¹

AFTER the Allied penetration of Italy, conditions affecting the workers were placed under the supervision of the Allied Military Government, the Allied Control Commission, and the Ministry of Industry, Commerce, and Labor of the newly created Italian Government. A Directorate of Labor was established to organize and develop a labor program. Through the cooperation of these agencies, by September 1944, collective agreements and labor and wage laws and regulations had been reestablished and enforced. The labor policy of the Italian Government, in areas under its control, is under the supervision of the Allied Control Commission. Labor reforms, instituted by the Allied Control Commission and the Italian Government, are being carried out on the basis of military orders in Commission-controlled territory and by agreement of the Italian Government in Italian-controlled territory.

Fascist control over labor and Fascist labor syndicates have been abolished, and the rights of the workers to organize, hold meetings, and select representatives for collective bargaining have been established. Labor disputes are settled by arbitration or conciliation without the use of compulsion. Regional and Provincial offices have been created, to provide placement service and to serve as field offices for the Ministry of Industry, Commerce, and Labor in industrial relations, collection of statistics, and performance of other administrative functions. Fascist officials in charge of the social-security agencies have been removed from office, and the agencies themselves, with their functions and procedures revised, have been coordinated with the labor offices. The social-security system is operating, but the Italian Government has appointed a committee to reform it.

An attempt has been made to curb inflation and raise wages in order to balance the workingman's budget. Supplementary rations of food have been provided for laborers on heavy work.

A general Confederation of Italian Labor has been organized in Rome by three political parties under which unions and federations had previously been formed. A few new and independent unions have been organized, but in other cases the members of the dissolved Fascist syndicates have merely elected new leaders and changed the names of the organizations, which now function as unions. Another important labor confederation is the so-called Party for Action. All of these groups have been invited to join the General Confederation of Italian Labor.

German-Controlled Northern Italy

The part of Italy still controlled by the German Nazis is known as the Italian Social Republic. Governmental labor functions are under the Ministry for Corporative Economy, under which the National Commissariat for Labor functions. Industry has been nationalized. Publishing firms and newspapers were the first to come under such control. A legislative decree of February 12, 1944, which nationalized industry, went into effect on June 30, 1944. The Minister of Corporative Economy was given the responsibility of administer-

¹ Data are from advance release of Office of War Information (NB-2838) for Friday afternoon papers October 27, 1944; *Der BUnd* (Bern, Switzerland), June 5, 1944.

ing the decree, but reports indicate that some difficulty was encountered in carrying out its provisions.

In order to relieve the food situation, Mussolini on June 2 sent the heads of the Provinces a telegram containing a number of instructions, the most important of which were as follows: The representatives of the workers and employees, together with the local Provincial authorities, were to deal with the food supply in all the Provinces; employers were to open communal kitchens in the various cities, with uniform prices for meals; all workers were to be entitled to buy the most necessary foodstuffs at special canteens inside the factories or workplaces; restaurants in hotels were in future to serve low-priced "standard meals," and penalties were authorized for violations of this provision; in all Provinces, workers were to form cooperatives to supply their families with foodstuffs. These instructions were followed by further measures to take care of specific food shortages and excessive prices in various industrial centers.

In the early part of September 1944 the Commissariat for Labor worked out the first wage regulations for metallurgical engineering, cotton, silk, chemical, and building industries. Under these regulations, wages for unskilled workers are placed on an hourly basis, and the principle of the guaranteed wage is confirmed in relation to the wage rates of the various categories. As soon as wage regulations for all vocations have been prepared, the remainder of the labor agreements will be subject to examination, especially as to holidays, dismissal, and indemnities.



Industrial Employment in Mexico, 1943¹

INDUSTRIAL employment in Mexico increased 28 percent in 1943, the number of workers employed in 129 industries rising from 406,986 on December 31, 1942, to 520,712 on the same date of 1943. The number of enterprises increased from 8,497 to 15,191, or by 78.8 percent, during the year.

The accompanying table shows, for the 23 industries employing more than 5,000 persons each at the close of 1943, the number of enterprises, the total number of workers, and distribution by sex (with comparable figures for 1942, except for distribution by sex).

In 1943, by far the largest number of enterprises were found in the grain-milling and bakery industries, but these were small establishments, with an average labor force per plant of only 2.6 and 6.5 persons respectively, as compared with 34.3 persons for all 129 industries covered and 37.1 persons for the 23 industries having the largest total employment. Railways, metal mines, cotton fabric and yarn manufacture, sisal-hemp processing, and the manufacture of sugar, alcohol, etc., together accounted for 245,333 workers, or 47.1 percent of all employees in the 129 industries. Moreover, the 1,059 enterprises in these 5 industries employed an average of 231.7 persons each.

¹ Data are from special report No. 5 from W. K. Ailshie, second secretary, United States Embassy at Mexico City, September 15, 1944.

Of the larger industries, building construction showed the greatest increase in employment from 1942 to 1943—from 381 to 5,266, or 1,282 percent; highways and paving an increase from 1,430 to 10,356, or 624 percent; forestry products an increase from 6,700 to 14,636, or 118 percent; and bakeries and pastry an increase from 4,147 to 8,420, or 103 percent; chemicals, an increase of 57 percent; and printing, bookbinding, and related industries, also 57 percent. The greatest increase in the smaller industries not separately shown in the table occurred in truck and autobus transportation, in which employment rose from 239 in 1942 to 2,391 in 1943, or 900 percent; other industries in this group showing considerable increases were carpentry (91 percent) and fishing (73 percent).

Employment in Mexican Industrial Enterprises, as of December 31, 1943

Industrial groups	Number of enterprises		Employment			
	1942	1943	1942	1943		
				Total	Men	Women
All groups	8, 497	15, 191	406, 986	520, 712	470, 350	50, 362
Bakeries and pastry	383	1, 300	4, 147	8, 420	7, 487	933
Bananas (cultivation, exploitation and processing)		2		15, 119	15, 103	16
Building construction	3	10	381	5, 266	5, 255	11
Chemicals	105	204	3, 575	5, 600	3, 195	2, 405
Clothing manufacture	369	508	7, 345	8, 884	2, 752	6, 132
Construction materials	146	266	5, 373	6, 540	6, 440	100
Cotton fabrics and yarns	295	360	52, 630	54, 794	50, 224	4, 570
Electrical energy (generation)	291	397	10, 076	10, 130	9, 681	449
Footwear	172	351	3, 355	5, 317	4, 460	857
Forestry products	84	163	6, 700	14, 636	13, 701	935
Grain mills	3, 243	5, 312	9, 260	13, 653	8, 711	4, 942
Highways and paving	5	12	1, 430	10, 356	10, 342	14
Metal mines	104	219	44, 827	58, 162	57, 848	314
Metalware	442	752	9, 820	12, 620	11, 813	807
Millinery	123	148	4, 644	5, 087	1, 646	3, 441
Petroleum and derivatives	1	1	16, 999	16, 999	16, 826	173
Printing, binding, and related industries	205	354	3, 724	5, 865	5, 134	731
Railways	21	24	58, 164	58, 770	58, 010	760
Sisal hemp processing	202	199	44, 986	44, 815	44, 156	659
Smelters	10	41	4, 034	5, 910	5, 862	48
Sugar, alcohol, etc.	157	257	25, 006	28, 792	28, 424	368
Telephone, telegraph, and radio broadcasting (nonofficial)	5	59	60	5, 396	4, 426	970
Wool fabrics and yarns	99	109	8, 779	8, 317	7, 035	1, 282
Other	2, 032	4, 143	81, 671	111, 264	91, 819	19, 445

Industries employing a greater number of women than men were clothing manufacture and millinery. In these, women constituted 69.0 and 67.6 percent, respectively, of the total.

Unemployment in Spain, February 1944¹

THE Spanish Interministerial Board for Unemployment-Relief Works (*Junta Interministerial de Obras para Mitigar el Páreo*) reported as of February 1944 that 211,140 persons were registered as unemployed. (The total population of Spain is estimated at about 26,000,000.) Although this figure indicated an increase in unemployment of 3.4 percent over that recorded in January, by the end of March the same reports showed only 194,000 unemployed. The registered unemployed reported at the end of 1940 totaled slightly over 511,000, and at the end of 1941 approximately 405,000. No information is available regarding the interpretation in Spain of the terms "unemployment" and "unemployed"—whether they refer strictly to persons without jobs, or whether they include those both employed and unemployed who register for jobs at the employment exchanges.

A system of employment exchanges, which provided for the registering of all applications for work in the mayoralty offices of the various municipal councils, was inaugurated by a law of November 27, 1931. According to legislation of June 25, 1935, these local registers were to be used in obtaining employees for public works. The numbers of unemployed reported under this system on December 31, 1934, and December 31, 1935, respectively, were 687,930 and 674,161. The regulations "hitherto in force" for the local registers and employment exchanges were continued by a law of May 3, 1940, which, however, placed the local organization under the direct supervision of the Trade Union Office of the Traditionalist Spanish Phalanx and the National-Syndicalist Shock Brigades.

The unemployed persons registered in the Province of Madrid, in February 1944, numbered 78,579, or 37.2 percent of all registered unemployed in the country; in the Province of Seville the number was 16,890, or 8.0 percent of all unemployed. Next to these Provinces came Cádiz, Málaga, and Barcelona, each having only about half as many registered unemployed as were shown for Seville. These five provinces accounted for a total of 122,025 unemployed, or 57.8 percent of all registered unemployment in Spain.

The total registered unemployment in February 1944, classified by age and sex, was as follows:

	Number	Percent of total
Total unemployed-----	211, 140	100. 0
Males-----	152, 629	72. 3
Under 20 years-----	13, 910	6. 6
20 to 50 years-----	115, 570	54. 7
Over 50 years-----	23, 149	11. 0
Females-----	58, 511	27. 7
Under 20 years-----	5, 855	2. 8
20 to 50 years-----	47, 718	22. 6
Over 50 years-----	4, 938	2. 3

¹ Data are from Spain, Boletín del Ministerio de Trabajo, Sanidad, y Previsión (Madrid), July 1935, January, February, and March 1936; Anuario de Legislación Social (Dirección General de Trabajo, Ministerio de Trabajo, Sanidad, y Previsión, Madrid), vol. I, 1935; Revista de Trabajo (Ministerio de Trabajo, Madrid), April 1944; Portugal, Commissariado do Desemprego, Ministério das Obras Públicas e Comunicações, Boletim Número 23, ano de 1941 (Lisbon, 1942) and May and June 1942; International Labor Office, Legislative Series, 1931-Spain 17, 1935-Spain 3, and 1940-Spain 3; and report of Robert E. Whedbee, economic analyst, United States Embassy, Madrid, August 22, 1944 (No. 192).

The following table shows unemployment in February 1944, by industry and sex.

Number of Unemployed in Spain, February 1944, by Industry and Sex

Industry	Total number	Males	Fe- males	Industry	Total number	Males	Fe- males
All industries.....	211, 140	152, 629	58, 511	Graphic arts.....	2, 049	1, 693	356
Agriculture and forestry..	41, 969	38, 624	3, 345	Railway transportation..	853	597	256
Maritime.....	1, 527	1, 403	124	Other land transporta- tion.....	8, 088	7, 991	97
Food.....	11, 108	6, 186	4, 922	Sea and air transporta- tion.....	2, 461	2, 452	9
Extractive.....	1, 915	1, 836	79	Water, gas, electricity....	1, 400	1, 377	23
Metallurgy.....	1, 730	1, 427	303	Communications.....	211	111	100
Small metal works.....	4, 560	4, 104	456	Commerce in general.....	7, 951	5, 133	2, 818
Electrical and scientific materials.....	593	383	210	Hotels, restaurants, etc..	7, 276	5, 954	1, 322
Chemicals.....	5, 337	1, 511	3, 826	Health services.....	16, 233	1, 439	14, 794
Construction.....	44, 125	43, 908	217	Banks, insurance, and offices.....	16, 990	11, 016	5, 974
Woodworking.....	3, 637	3, 411	226	Amusements.....	3, 403	2, 363	1, 040
Textiles.....	4, 323	1, 078	3, 245	Other industries and professions.....	17, 643	6, 843	10, 800
Ready-to-wear clothing and millinery.....	5, 758	1, 789	3, 969				

Placement statistics as recorded by the exchanges in February 1944 are presented below.

Applications, total.....	35, 040
Males.....	32, 214
Females.....	2, 826
Placements, total.....	37, 265
Males.....	33, 218
Females.....	4, 047
Excess of placements over applications.....	2, 225

Wartime Policies

WMC Program to Reduce Migration of Labor¹

THE War Manpower Commission has developed a program to reduce migration from labor-shortage areas and to encourage the movement of workers from surplus-labor regions into sections having a shortage of manpower. The program has two aspects: (1) Conducting publicity on a normal and area basis, and (2) tightening the procedures for the referral of in-migrants under existing regulations.

The publicity programs are to emphasize the fact that all migrant workers now require a statement of availability in order to be referred in the area of in-migration. Workers are to be urged to consult local offices of the U. S. Employment Service in the area they are leaving, in order to facilitate their referral when they reach their destination.

For a person who does not normally require a statement of availability in his present work,² publicity is to be directed toward stimulating him to consult the local employment office, before he migrates, in order to obtain information about employment opportunities and to procure the necessary evidence of his availability. In addition, every effort is to be made to induce such a prospective migrant to take a local job in essential industry. If this cannot be done, effort is to be made to persuade him to go to an area where there is a shortage of workers. If such an individual finally decides to migrate, the local office is to issue a "statement of availability" after such investigation as may be necessary or feasible to establish the facts as presented by the worker. When such a statement is issued, it is not to be limited in any way to a specific area even though the worker himself has indicated the community to which he is going.

After reaching his destination, a worker who was employed in an essential or locally needed activity during the preceding 60 days must present a statement of availability from his employer or the USES in the area he left. In the absence of this statement, or other evidence of availability, no referrals are to be made of such workers unless they have migrated to labor-shortage areas. In such case a temporary referral may be made if the worker is willing to accept it, pending receipt of information from the area he left concerning his availability for referral. If this statement is not forthcoming the USES is to require the worker's immediate release from employment, and he may not be referred, except as the result of a successful appeal for such a statement, for 60 days from the date of leaving his last employment in essential or locally needed activity.

If the worker is unwilling to accept temporary referral to a job opening, he is to be offered any other referral either temporary or otherwise until he furnishes a statement of availability or until the

¹ War Manpower Commission, Field Instruction No. 552, September 30, 1944.

² By reason of being in less-essential employment, of being a new entrant, etc.

expiration of 60 days from the date of leaving his last employment in essential or locally needed activity, whichever occurs first.

In the area of in-migration, the worker who has been in less-essential employment or who for other reasons has not been required heretofore to have a statement of availability, is to be offered immediate referral upon furnishing the statement required under the new program.



Procedures for Borrowing Workers in New York Area¹

BORROWING employees for "must" war plants is covered by an agreement made recently between the Regional War Manpower Commission and the Regional War Labor Board for the New York area. The Commission is to furnish the Board with a certification that a specified "borrowing" employer suffers from a war manpower shortage which cannot be met by the available supply of workers in his area or through clearance.

In addition, the Board is to receive from the Commission a document signed by each "lending" employer. That paper is to list the name of each "available" employee, his job classification, and rate of pay, and must state that after the "loan" each worker shall be reemployed by the lending employer at his listed rate, with full seniority for the period of the loan, which in no case is to exceed 90 days. Also necessary for the completion of this phase of the undertaking is the written assent of each available employee to his proposed loan. The Commission is also to furnish the Board with a second document, signed by each borrowing employer, covering the same points (where applicable) as that of a lending employer.

The Board is also to receive from the Commission a statement signed by an authorized representative of a duly recognized or certified collective-bargaining agent of the "lending" employer's employees consenting to each "loan." A similar statement is to be furnished by the collective-bargaining agent of a "borrowing" employer with regard to each "borrowing." It also is to include assent to the right of each borrowed employee (if he is a member) to maintain the union membership he held immediately preceding the borrowing, without interference from such agent.

On receipt of the foregoing data from the Commission, the Board is to authorize the borrowing employer to pay to each borrowed employee, during the period of the loan, the wage rate properly established in the plant for employees of similar skill and productive ability within the classification in which the borrowed worker is employed, or the wage rate he was receiving just prior to the loan, whichever is higher. However, the borrowing employer is not authorized to increase, without prior Board approval, the rates paid his other employees nor is he to be warranted, in seeking such approval, to cite the action of the Board as a precedent to justify increases in such rates.

¹ WMC-WLB (Region 2) Agreement With Reference to "Must" Programs.

Full Military Status for Army Nurse Corps¹

SOME 40,000 nurses have become officers, with full military status, in the United States Army, in accordance with an Executive order based on Public Law 350, 78th Congress, approved June 22, 1944. The net effect of the new law was to eliminate the last of a series of legislative limitations which had prevented the Army Nurse Corps, an Army auxiliary, from becoming a coordinate branch of the Army. Army nurses now have the same standing as members of the WAC.

Under the Executive order, commissions in their existing grades will be issued to all Army Corps nurses unless appointment is expressly declined. Through the law of June 22 and the Executive order, women dietitians and physical-therapy aides of the Medical Department of the Army will be commissioned similarly.

When Pearl Harbor was attacked, the nurses in the Army Nurse Corps numbered only 403. Within a year there were 10,000 and by July 1944 there were 40,000, with more needed. Authorization has been given for 50,000.

In December 1942, Army nurses were given the same pay as male officers of equivalent rank. In October 1943, a new plan of organization made it possible for members of the Nursing Corps to receive more rapid promotions. The Superintendent of the Corps is a colonel.



Land for Workers in Colombia²

A COLOMBIAN decree for the development of agricultural production and land colonization issued (under emergency powers of the President) on October 4, 1944, contains provisions designed to put land into the possession of workers.

A tenant renting land is given the right to a contract of at least 2 years; if he is to perform labor for the landlord, an additional contract is to be presumed to exist, under the labor decree of September 30, 1944 (regarding maximum hours for agricultural workers).

Workers may purchase plots of arable land, ranging generally from 25 to 100 hectares³ in size, which may be paid for at one time, in installments, by amortization, or by quotas from crop income, according to terms of the contract. Each such plot is to constitute a family estate which, when all members of the family have reached their majority, may be awarded to one heir, on his application, provided he makes a settlement with the other heirs. Implements, houses, and other equipment are to be procured by the Government directly or through the Agricultural, Industrial, and Mining Credit Fund.

The allotment of land is to be made by the Minister of National Economy by means of administrative orders registered in the land registry offices, such registrations to constitute part of the legal title. Public documents used in the procedure are to be free from registration and stamp taxes, etc., and the first 5,000 pesos of value of land and equipment are to be free from income, inheritance, and excess profits taxes. Mines and deposits of petroleum on or under the lands allotted are excluded from adjudications affecting these plots of land.

¹ War Department, Bureau of Public Relations, Press Branch, Release (Washington), July 12, 1944.

² Data are from report of John A. Hopkins, agricultural adviser, United States Embassy, Bogotá, Colombia, October 7, 1944 (No. 433), enclosing decree No. 2365 of October 4, 1944.

³ Hectare = 2.47 acres.

Industrial Injuries

Injuries and Accident Causes in the Foundry Industry in 1942¹

The Industry Record

IT HAS long been recognized that foundry work includes some of the most hazardous operations found in any manufacturing activity. Reflecting these occupational hazards, the frequency of disabling industrial injuries in independent² iron and steel foundries, for which the Bureau of Labor Statistics regularly compiles accident statistics, has consistently been more than double the national average for all manufacturing. A comparison of the records for this group and for all manufacturing, for the 5 years 1939 to 1943, follows:

	Injury-frequency rates ¹	
	Independent iron and steel foundries	All manufacturing
1939-----	35.9	14.9
1940-----	36.1	15.3
1941-----	47.0	18.1
1942-----	49.7	19.9
1943-----	47.6	20.0

¹ Average number of disabling injuries per million man-hours worked.

In 1942, the year selected for detailed study, nearly 50 workers in independent iron and steel foundries experienced disabling industrial injuries in the course of every million employee-hours worked. This rate, which represents about 1 disabling injury for every 9 full-year employees, was exceeded in only 4 of the 109 other manufacturing industries for which data were available.³

Coverage, in the present detailed study, was extended to include not only the independent iron and steel foundries, but also foundries using nonferrous metals and the foundry departments of establishments which are normally considered part of other industry groups. The participating foundries were classified into three major groups: Ferrous job foundries, nonferrous job foundries, and other than job (or non-job) foundries. For more specific comparisons the ferrous job foundries were further divided into gray-iron foundries, malleable-iron foundries, steel foundries, and cast-iron pipe foundries.

¹ Prepared in the Bureau's Industrial Hazards Division by Frank S. McElroy and George R. McCormack. A detailed report of the Bureau's study, of which this is a summary, will appear in a forthcoming bulletin. The bulletin will contain all statistical tables on which this text is based.

² Independent in the sense that they are exclusively foundry establishments. Both job and production foundries are included, but foundry departments which constitute a part of a larger manufacturing establishment are not included in this group.

³ Manufacturing industries with 1942 frequency rates higher than that of iron and steel foundries were logging 89.6, sawmills 61.7, fiber boxes 55.3, and wooden containers 50.2. (See Bureau of Labor Statistics Bulletin No. 758: Industrial Injuries in the United States During 1942.)

The reporting units included 850 ferrous job foundries, 441 non-ferrous job foundries, and 897 non-job foundries, most of which were departments of larger manufacturing plants. In the aggregate these 2,188 foundries had nearly 246,000 employees who worked more than 553 million employee-hours in the course of the year. The total volume of disabling injuries reported was 25,363, of which 92 resulted in death, 30 resulted in permanent total disabilities which will prevent the injured persons from ever again engaging in any normal occupation, 680 caused permanent physical impairments, and 24,561 resulted in temporary disabilities involving an average time loss of 15 days each. In the ferrous job foundries, approximately 1 in every 8 employees experienced a disabling injury during the year. In the nonferrous job foundries and also in the non-job foundries the ratio was about 1 disabling injury for every 12 employees.

Reflecting the inclusion of additional types of operations, the average injury-frequency rate for the entire group of reporting foundries was 45.8, as compared with the previously mentioned frequency rate of 49.7 for independent iron and steel foundries. For purposes of analysis, however, the variations among the different types of foundry operations are much more enlightening than the general averages.

The nonferrous job foundries, with an average of 35.3 disabling injuries for each million employee hours worked, had the best injury record among the several groups. It should be noted, however, that even though this was the lowest of the foundry averages it was still 75 percent higher than the average for all manufacturing.

The non-job foundries, consisting mostly of foundry departments of plants primarily devoted to other activities, had the next highest average frequency rate, 37.3. It was characteristic of the departmental foundries that those which were attached to industries which normally have low injury-frequency rates had better safety records than similar foundry departments of the industries with higher rates. As the operations performed were generally quite comparable, it seems reasonable to infer that these differences were the result of variations in the amount of attention devoted to safety rather than differences in the prevailing hazards.

The entire group of ferrous job foundries included in this study had an average frequency rate of 52.0. Within this group, however, the gray-iron foundries had an average of 55.8 disabling injuries per million employee-hours worked, the highest for any type of foundry operations; the steel foundries had an average of 50.8, the malleable-iron foundries 49.3, and the cast-iron pipe foundries 46.2.

In addition to reporting the lowest injury frequency, the nonferrous job foundries also reported a much lower proportion of fatal cases than either of the other foundry groups. In part, the lower frequency rate as well as the lower proportion of serious injuries in the nonferrous job foundries probably was due to the lighter type of work done there. The highest proportion of serious injuries, both fatalities and permanent impairments, occurred in the non-job foundries, but no specific reason for this tendency was noted. As between the ferrous job foundries and the non-job foundries, there was little difference in frequency rates for serious injuries. The ferrous job foundries, on the other hand, had a much higher frequency of temporary disabilities than the non-job foundries.

A possible explanation of the difference in the frequency of injuries causing temporary total disability is that many of the non-job foundries were departments of larger plants which have medical units that give treatment for injuries on the premises and on company time. In such plants many injured workers have their injuries treated and return to work without chargeable absence from the plant. Such injuries would not be reported as disabling under the standard definition of a disabling injury, as they involve no lost time beyond the day of injury. Among the ferrous job foundries, on the other hand, many are of insufficient size to maintain a medical office, and treatment for injuries must be obtained outside the plant. As a result, in numerous cases injuries which merely need redressing or observation on days following the day of injury may require the employee to remain away from work in order to obtain treatment. Consequently, certain injuries must be counted as disabling and therefore be included in the frequency rates of some plants, whereas identical cases in other plants are classed as nondisabling and are excluded from the frequency rates, depending entirely upon the availability of medical attention at the workplace. It is possible therefore that, as the frequency of fatalities and permanent impairments (which is not affected by the factor of lost time) was approximately the same for both the ferrous job foundries and the non-job foundries, the considerable difference in the frequencies of temporary total disabilities for the two groups may have been due at least in part to differences in plant medical facilities and not entirely to differences in the actual number of injuries.

Although the group averages present a relatively unfavorable picture of safety achievement in the foundry industry, the individual plant records indicate that safety is not an impossible goal in any foundry. Over 24 percent of the ferrous job foundries, 63 percent of the nonferrous job foundries, and 29 percent of the non-job foundries had no disabling injuries in 1942. It is true that most of the plants which had zero frequency rates were small, but among them there were a number of plants which regularly employed over 250 workers each. An additional 10 percent of the ferrous job foundries, 6 percent of the nonferrous job foundries, and 14 percent of the non-job foundries had frequency rates which were lower than the 1942 national average of 19.9 for all manufacturing.

In sharp contrast, a considerable number of plants in each of the groups had frequency rates of over 100. Most of these plants were also small, but there were some plants which employed over 500 workers in this extremely high rate group. Generally speaking, however, the very small foundries with fewer than 24 employees and large foundries employing 500 or more employees had the lowest average frequency rates.

In all three classes of foundries the most hazardous departments were shake-out, melting, and cleaning, chipping, and finishing. The record of the molding departments was about average in each group. Pattern shops and core rooms had the lowest injury-frequency rates among the principal operating departments.

In addition to providing summary reports, which were included in the general study of injury-frequency rates, 66 of the ferrous job foundries also supplied details concerning each of their reported accidents. The 4,600 cases reported were analyzed according to the

"American Recommended Practice for Compiling Industrial Accident Causes" as approved by the American Standards Association. Strictly speaking, the conclusions drawn from this analysis apply only to gray-iron, malleable-iron, and steel job foundries, as no other types of foundries participated in this part of the study. In general, however, it appears safe to say that the experience of these three types of job foundries is fairly representative of all ferrous foundries and, to a somewhat less extent, may be considered as similar to that of the nonferrous foundries.

The detailed analysis indicated that 26 percent of the disabling foundry injuries were foot and toe cases, 23 percent were hand and finger injuries, 10 percent were eye injuries, 12 percent were back injuries, and 10 percent were other trunk injuries. The greater part of the injuries to toes, feet, hands, and fingers consisted of cuts, sprains, bruises, or fractures resulting from mishandling of heavy materials. Most of the eye injuries were cuts or lacerations inflicted by flying particles, and nearly all of the back injuries were strains or sprains resulting from lifting excessive weights or lifting improperly. Burns, however, were quite numerous and affected all parts of the body.

Accident Causes

It is generally recognized that every accident may be traced to the existence of an unsafe working condition, to the commission of an unsafe act by some individual, or to a combination of these accident-producing factors. The correction of unsafe working conditions generally is entirely within the powers of management. The avoidance of unsafe acts, on the other hand, requires cooperation and understanding by both management and workers. Management must take the lead, however, by providing safety-minded supervision and by making sure that all workers are acquainted with the hazards of their operations and are familiar with the means of overcoming those hazards.

Over 90 percent of the foundry accidents which were analyzed in this study were found to involve both an unsafe working condition and an unsafe personal act. It is apparent, therefore, that any successful foundry safety program must include measures designed to eliminate both of these accident-producing factors.

UNSAFE WORKING CONDITIONS

Foundry operations undoubtedly present a wide variety of inherent hazards, and the problem of achieving safe working conditions in foundries may seem more difficult than in most other industries. There are, however, obvious and well-known methods of overcoming practically all foundry hazards, and the existence of unsafe working conditions generally may be taken as an indication of slack supervision.

The great majority of the unsafe conditions revealed by the accident analysis fell into five general categories. Within individual plants the relative importance of these categories of unsafe conditions varied widely. It is apparent, however, that foundries generally should—

(1) Improve housekeeping conditions in and around all work-places;

(2) Provide and require the use of adequate personal safety equipment in all operations presenting hazards which such equipment can overcome;

(3) Provide mechanical equipment or sufficient assistance when heavy or bulky materials are to be lifted or moved;

(4) Regularly inspect all tools, material, and equipment for defects, and immediately repair or replace all defective items; and

(5) Provide and require the use of proper guards for machinery and equipment.

Hazardous Arrangements or Procedures

The importance of good housekeeping and of the closely allied condition of safe plant lay-out as a means of avoiding accidents cannot be overemphasized in any foundry safety program. Thirty percent of all the foundry accidents for which full details were available were directly related to poor housekeeping conditions or unsafe work lay-out. In the gray-iron and steel foundries this group of unsafe conditions outranked all others, and in the malleable-iron foundries it was the third most important category of unsafe conditions.

Materials and equipment placed in irregular and unstable piles, stored materials which encroached upon aisles and workplaces, loose materials and equipment left in aisles and workplaces, and congestion of materials in small spaces were outstanding among the poor housekeeping conditions which led to accidents. Many workers were struck by materials which fell from improperly built piles; others bumped into the projecting corners of uneven or improperly placed piles of materials; and still others slipped on loose sand on the floor or tripped over tools, materials, vehicles, and debris lying in walkways or workplaces. A not unusual example of the accidents included in this group was described in a report covering an injury experienced by a worker in the course of taking a coreplate from a pile. The pile, which extended above his head, was composed of various sizes of plates and at the time of the accident a small plate was on top. This small plate, however, was pushed back and was not visible to him. As the worker pulled off what he thought was the top plate, the small plate slid from the pile and struck his head. In another instance three flasks, weighing approximately 10 tons, had been piled on rails, which were resting upon a large casting, bearing upon the cement core of the casting which had not been removed. Vibrations from an air drill caused the cement core to crumble and the flasks toppled on the worker who was using the drill.

Lack of adequate plant space, arising from expanded wartime activities, was the source of many of the poor housekeeping conditions. Similarly, lack of space was the underlying reason for many of the unsafe conditions which were classified as hazardous procedures or poor plant lay-out. The latter group primarily included such unsafe conditions as the placement of workers in close proximity to one another so that they interfered with each other's movements, or to the placement of operations so that the workers were exposed to the danger of being struck by cranes, crane loads, or passing vehicles.

Lack of Personal Safety Equipment

Many foundry operations involve inherent hazards which cannot be successfully eliminated or guarded at the point of operation, but

which can be overcome through the use of proper personal safety equipment. In these circumstances the use of such equipment is recognized as an essential condition for the safe performance of the work, and its absence constitutes an unsafe working condition. About 1 in every 4 of the disabling injuries in the gray-iron and malleable-iron foundries, and 1 in every 6 in the steel foundries, resulted from unsafe working conditions of this type.

The most common unsafe condition in this group was the lack of goggles in the performance of work which presented obvious eye hazards, such as grinding, chipping, or handling molten metal. There were, however, many instances of unsafe conditions which involved a lack of other types of safety equipment, such as handling hot materials without gloves, handling molten metal without leggings or molder's shoes, handling acid or alkaline chemicals without gloves or other protective clothing, and other operations performed without specifically prescribed safety equipment.

Unsafe Lifting Conditions

In this category of unsafe working conditions are included accidents resulting from manual lifting of objects which should have been lifted mechanically, from individuals lifting objects which should have been lifted by a team, and from the lifting of objects in cramped or crowded quarters which should have been cleared before the operation started. In a few instances there was some question whether the injury might not have occurred because of (a) improper lifting procedure rather than because of (b) lifting excessive weight. When this question could not be specifically answered, the case was included as an unsafe lifting condition (b).

Unsafe lifting conditions constituted a much more prominent source of accidents in the malleable-iron foundries than in either the gray-iron or steel foundry groups. Comparatively, these unsafe conditions were involved in 1 out of every 3 of the malleable-iron foundry injuries for which details were available, slightly less than 1 in every 4 of the gray-iron foundry injuries, and 1 in every 8 of the steel foundry injuries.

Unsafe conditions of this type are due primarily to inadequate supervision. In all work that involves lifting, the immediate supervisor can be required to see that proper space is provided for the operation and that adequate teams or proper mechanical lifting equipment are available.

Defective Agencies

The general need for more adequate inspection and immediate repair or replacement of imperfect equipment, tools, and materials was strongly indicated by the fact that over 10 percent of the analyzed accidents in each of the three foundry groups involved defective material or equipment.

Defective hand tools, such as shovels with loose or split handles, hammers with loose heads, and chipping hammers with loose chisels were particularly common sources of injury which could have been eliminated very readily through regular tool inspection and repair.

Uneven or broken flooring resulted in many slips and falls and caused many wheelbarrows and hand trucks to tilt and spill their contents. These conditions are particularly dangerous in foundries, since the workers frequently carry heavy materials or molten metal which can

inflict severe injuries if they are dropped or spilled as a result of a slip or fall. Such hazards generally are quite obvious and are seldom difficult to repair. Their continued existence is very definitely an indication of slack supervision.

Other defective agencies, which caused fewer but nevertheless substantial numbers of accidents, included defective molds which broke in pouring, defective chains, cables, and sheaves which caused crane loads to spill on workers, defective ladders and scaffolds which caused serious falls, and defective electrical equipment and wiring which caused electric shocks and burns. Nearly all of these unsafe conditions were such that they should have been noticed in the course of a normal inspection. The fact that they were permitted to exist until they caused accidents indicates that adequate inspections were not made.

Unguarded Agencies

About 7 percent of the injuries in the gray-iron and malleable-iron foundries and over 8 percent of those in the steel foundries were directly related to the absence of needed guards. Considerable numbers of these were due to the lack of guardrails around openings or at the edge of elevated walkways or working surfaces. The majority, however, were cases of unguarded machines or mechanical equipment.

Stationary grinders, power saws, jointers, punch presses, drill presses, and sanders were frequently listed as causing injuries because there were no guards at the point of operation. Open gears, open belts, and unfenced conveyers also were responsible for a number of injuries.

UNSAFE PERSONAL ACTS

For the purpose of accident analysis an unsafe act is defined as "a violation of a commonly accepted safe procedure."⁴ Literally, this definition means that no personal action shall be designated as unsafe unless there was a reasonable and less-hazardous alternative method of procedure. There is, however, no implication that the alternative safe procedure must have been known to the person who acted in an unsafe manner, nor that his unsafe act was the result of a considered choice between the two possible procedures. In many instances, such as that of the grinder who elects to do a small grinding job without his goggles rather than take the time to go get them from his locker, it is apparent that the worker knew the safe procedure but consciously decided not to follow it. In a great many other instances, however, it is apparent from the circumstances that the person who acted unsafely did so not as a matter of choice, but simply because he did not know an alternative safe method. Strict safety-minded supervision is essential to eliminate this type of unsafe act. Thorough safety training for both workers and supervisors can do much to abolish unsafe acts which are committed unknowingly.

The great majority of the accidents analyzed in each of the three types of foundries involved one of four general groups of unsafe acts: (1) Using unsafe equipment or using equipment unsafely; (2) taking an unsafe position or posture; (3) failure to use safe attire or personal safety equipment; and (4) unsafe lifting. Together these four groups of unsafe acts contributed to 93 percent of the accidents for which

⁴ American Recommended Practice for Compiling Industrial Accident Causes, approved by the American Standards Association, August 1, 1941.

details were available in the malleable-iron foundries, 87 percent of the gray-iron foundry accidents, and 83 percent of the steel foundry accidents. The fundamental approach to the elimination of unsafe personal acts in foundries, therefore, must stress measures to—

(1) Provide training in the safe methods of handling and using tools, materials, and equipment, and enforce the use of those methods through close supervision;

(2) Train both workers and supervisors to recognize and to avoid unsafe positions;

(3) Make sure that both workers and supervisors understand and can recognize the circumstances in which different kinds of safety equipment are necessary, and that the supervisors require the use of such equipment in those circumstances; and

(4) Provide thorough instruction in the proper methods of lifting heavy objects, particularly in the proper method of lifting with the legs instead of the back, and have the supervisors continue to emphasize such instructions during actual operations.

Use of Unsafe Equipment or Unsafe Use of Equipment

The unsafe acts of this general group were factors in the occurrence of over 28 percent of the steel foundry injuries and of about 23 percent of the gray-iron and malleable-iron foundry accidents. The outstanding type of unsafe act in this group was the simple one of taking an incorrect hold or not maintaining a good grip upon objects being handled. Specifically, these included many cases in which materials or tools slipped from the worker's hands because there was oil or grease on the material or on his hands; or because the worker grasped the material at a sharp or rough spot which caused him to release his grip; or simply because the material or tool was not held firmly enough to control its movements. Particularly dangerous was the practice of using hands or feet to guide suspended crane loads into position or to adjust the chains holding the loads instead of using taglines or poles. Pinched and crushed fingers or feet were the most common injuries resulting from these practices.

Lack of skill and the lack of a full realization of the hazards involved in handling heavy materials undoubtedly had much to do with the occurrence of these accidents. Wider use of safety shoes would greatly reduce the resulting volume of foot and toe injuries. The elimination of the unsafe acts and the prevention of the actual accidents, however, can be achieved only by thorough training in safe procedures and close supervision of individual operations by safety-conscious supervisors.

Unsafe Position or Posture

In 23 percent of the steel foundry accidents, 13 percent of the gray-iron foundry accidents, and 10 percent of the malleable-iron foundry accidents, it was found that the injured person had unnecessarily placed himself in an unsafe position or posture.

Most prominent of the specific unsafe acts in this general group was that of unnecessarily working or standing under or in the path of cranes, hoists, and suspended loads. Other unsafe acts in this group included working, standing, or walking in front of moving vehicles; unnecessarily working or walking too close to other workers who were performing hazardous operations such as carrying or pouring molten

metal; walking, standing, or working on beams, girders, piled materials, or makeshift scaffolds, instead of using proper ladders or scaffolds; taking shortcuts instead of using the provided walkways; and working in cramped positions. Most of these practices can be overcome through intensified safety instruction and better supervision.

Failure to Wear Safe Attire or Personal Safety Equipment

About 30 percent of the gray-iron foundry accidents, 28 percent of the malleable-iron foundry accidents, and 20 percent of the steel foundry accidents were directly associated with the failure to wear safe clothing or proper personal safety equipment.

The cases involving failure to wear safe clothing included workers who wore loose clothing which caught on projections or was caught in machines or in sling chains; workers who wore cuffed or frayed trousers, which tripped them; and workers who wore shoes with worn soles which permitted puncture wounds and burned feet. In the aggregate, however, the failure to wear safe clothing was of much less importance than was the failure to use proper personal safety equipment.

Primarily, the cases of failure to wear proper personal safety equipment consisted of the failure to use goggles while grinding, chipping, sandblasting, or handling chemicals or molten metal; to wear gloves, leggings, and molder's shoes while pouring molten metal; and to wear gloves while handling hot molds or castings. In all of the analyzed cases included in this category the necessary safety equipment was available on the premises, but for one reason or another was not being used.

It is obvious from these data that the plant which simply provides the various necessary items of personal safety equipment and invites the employees to use them has only partially solved the problem of overcoming the hazards which this equipment can guard against, nor does the issuance of shop rules requiring its use accomplish the purpose unless those rules are strictly enforced. The two most common excuses for not using the provided safety equipment were that it was uncomfortable and that it hampered the user's activities. Particularly in respect to the use of goggles considerable objection was raised because of the tendency of goggles to "fog" when the wearers were working with hot metal. This condition, however, can generally be overcome easily through the application of "anti-fog" chemicals to the goggles. These chemicals are available commercially in a variety of forms. In other cases, the excuse was that the safety equipment was not conveniently at hand and the workers felt that it was not worth the time and effort to go get it. In still other instances it was apparent that the employee did not realize his need for the equipment. A common example of the latter group of cases was that of the laborers who move material into and out of grinding rooms or sandblast rooms without wearing goggles. Many of these workers failed to appreciate the fact that every one who approaches such operations is exposed to flying particles just as are the actual operators.

When both supervisors and workmen have been fully instructed in the need for safety equipment, and the equipment is available, there can be no question as to their joint responsibility for any injuries which occur because the equipment was not used. Management, however, can establish and maintain a definite program concerning

the use of safety equipment. Such a program should include, as a minimum, the following measures:

(1) Maintenance at convenient locations of an adequate supply of safety equipment which has been selected with due consideration not only for its effectiveness but also for the ease and comfort of the worker who must wear it;

(2) Maintenance of every piece of safety equipment in good condition and making sure that it is properly fitted to the wearer;

(3) Making sure that all supervisors and workmen are fully acquainted with the hazards which require the use of safety equipment and that they are familiar with the type of equipment needed in each instance; and

(4) Establishment of rules requiring the use of safety equipment where it is necessary and requiring supervisors to prohibit the performance of hazardous operations unless the proper safety equipment is used.

Unsafe Lifting

Injuries resulting from manual lifting of heavy objects present a serious problem in foundries. In essence, every accident of this type is a case of lifting excessive weight—that is, excessive under the existing circumstances for the individual involved. Variations in the strength and skill of different individuals, however, make the determination of what is a safe maximum weight to be lifted by one person very difficult if not impossible. There can be no question, however, that a knowledge of and the strict application of proper lifting procedure—e. g., lifting with the legs instead of with the back—will render safe the handling of much greater weights than can be safely lifted by the hit-or-miss method of grabbing and jerking. In classifying the lifting accidents, an effort was made to exclude from this unsafe-act classification those cases in which individuals attempted to lift weights which obviously should have been handled mechanically or by a team. As far as possible, the cases included represent injuries which resulted from lifting weights generally handled by individual foundrymen and normally considered to be within the lifting ability of most workers. These cases represented 31 percent of the accidents analyzed in the malleable-iron foundries, 20 percent of those in the gray-iron foundries, and 11 percent of the steel-foundry accidents.

It is frequently impossible to specify exactly what was done incorrectly in certain lifting accidents. In most cases the injured person can report only that he was lifting and suddenly felt pain, and only rarely is there a witness who was observing the operation with sufficient care to identify accurately the specific faulty procedure. It is well known, however, that strains, sprains, and hernias frequently result from lifting with the back muscles instead of the leg muscles, from lifting in cramped or awkward positions, or from lifting while standing on irregular or insecure surfaces. Most of the accidents in this group undoubtedly resulted from one or the other of these unsafe procedures.

The complete elimination of manual lifting, which would avoid all accidents of this type, is an impossible goal. Many foundries, however, could do much to reduce the volume of lifting accidents by extending the use of mechanical handling equipment and by giving all employees thorough training in the safe methods of manual lifting.

Industrial Injuries, July 1944

REPORTS from 12,493 manufacturing plants listed 26,777 disabling injuries experienced by employees during July 1944. The reporting plants employed about 6,970,000 workers, or nearly 44 percent of the total manufacturing employment for 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 July, therefore, may be estimated as about 61,500.

The actual record of the days lost from work because of these work injuries is not available because many of the injured persons had not recovered at the time the August reports were prepared. Twenty days, however, is a conservative average time loss for each disabling injury. Using this average, the July injuries represent the direct loss of 1,230,000 man-days of production without any allowance for the continuing economic loss resulting from the many deaths and permanent physical impairments included in the totals. This direct loss alone is equivalent to a month of full-time employment for over 47,000 workers.

The reports indicated that 0.3 percent of the injuries had resulted in death and 4.4 percent had caused permanent physical impairments. Later information, however, probably will show that other injuries, which appeared to be only temporary at the time the reports were submitted, have since developed into additional deaths and permanent impairments.

In comparison with the previous month, the estimated total number of disabling injuries for July shows a decrease of about 2,500. The number of workers employed in July, however, was somewhat less than in June so that in terms of frequency rates the July record was actually less favorable than the June record. The unweighted all-manufacturing injury-frequency rate for July was 20.4 as compared with the June rate of 19.8 disabling injuries for every million employee-hours worked. Forty-four of the 88 industries surveyed had July frequency rates which were 1 or more frequency-rate points higher than in June. Twelve of these increases were rises of 5 or more points. There were, however, 20 other industries which had decreases of 1 or more points in their July frequency rates, of which 5 were decreases of 5 or more points. For 20 industries the July frequency rates were the highest monthly rates thus far recorded in 1944, and for 4 others the July rates were lower than those for any previous months.

Cumulative injury-frequency rates for the first 7 months of 1944, which present a more accurate picture of safety conditions in the various industries than do the rates for particular months, ranged from an average of 5.7 disabling injuries for each million employee-hours worked in the women's clothing industry to 55.4 in the sawmill industry. Other manufacturing industries with cumulative frequency rates of less than 10 were: Explosives, 5.8; small-arms ammunition, 6.5; rayon and allied products (chemical), 6.5; radios and phonographs, 8.9; sighting and fire-control equipment, 9.0; soap and glycerin, 9.5; aircraft, 9.6; and iron and steel, 9.8.

At the other end of the scale, in addition to the sawmill group, there were eight industries which had cumulative frequency rates of

over 40: Miscellaneous lumber products, 40.1; enameling and galvanizing, 41.6; foundries, iron and steel, 43.2; boatbuilding, 43.9; sheet-metal work, 47.5; planing mills, 48.4; plate fabrication and boiler-shop products, 54.1; and wooden containers, 54.1.

Industrial Injury-Frequency Rates¹ for Selected Manufacturing Industries, July 1944
with Cumulative Rates for 1944

Industry ²	July 1944		Frequency rate	
	Number of establishments	Frequency rate ³	1944: January-July cumulative ³	1943: 12-month cumulative ⁴
Agricultural machinery and tractors.....	55	23.2	22.7	18.9
Aircraft.....	54	9.6	9.6	9.7
Aircraft parts.....	284	11.4	12.2	14.6
Ammunition, 20 mm. and over.....	341	27.6	25.5	24.8
Ammunition, small-arms.....	23	7.7	6.5	16.0
Boatbuilding.....	18	38.6	43.9	(⁵)
Bolts, nuts, washers, and rivets.....	37	30.0	30.0	(⁵)
Book and job.....	44	12.1	11.9	(⁵)
Boots and shoes, other than rubber.....	306	14.4	15.0	14.0
Canning and preserving.....	48	31.7	24.1	19.4
Chemical products, not elsewhere classified.....	76	11.5	12.5	(⁵)
Chemicals, industrial.....	351	15.9	15.7	18.3
Clothing, men's.....	517	10.5	11.1	8.5
Clothing, women's.....	383	6.8	5.7	5.4
Commercial and household machines.....	53	21.6	19.5	(⁵)
Concrete, gypsum, and plaster products.....	113	35.1	36.8	(⁵)
Confectionery.....	7	19.6	17.0	(⁵)
Construction and mining machinery.....	113	27.3	28.2	31.8
Cotton goods.....	208	16.3	15.0	16.0
Cutlery and edge tools.....	30	32.0	28.0	24.1
Drugs, toiletries, and insecticides.....	74	17.2	19.4	22.2
Dyeing and finishing.....	55	26.8	25.3	(⁵)
Electrical equipment and supplies.....	588	9.8	10.9	11.1
Enameling, galvanizing, etc.....	15	39.6	41.6	(⁵)
Engines and turbines.....	57	10.4	11.8	18.3
Explosives.....	86	7.0	5.8	11.9
Fabricated structural steel.....	110	38.7	35.5	33.0
Food products, not elsewhere classified.....	38	35.0	25.3	(⁵)
Food-products machinery.....	27	31.0	32.0	34.5
Forgings, iron and steel.....	150	35.3	34.6	39.9
Foundries, iron and steel.....	576	46.6	43.2	42.1
Furniture, except metal.....	68	18.8	28.3	28.1
General industrial machinery.....	670	22.8	23.4	24.3
Glass.....	43	25.8	19.4	17.9
Guns and related equipment.....	105	11.9	17.1	17.6
Hardware.....	38	17.8	19.4	24.3
Heating equipment, not elsewhere classified.....	54	35.1	31.2	34.2
Iron and steel.....	207	10.9	9.8	9.8
Iron and steel products, not elsewhere classified.....	294	40.5	28.5	(⁵)
Knit goods.....	83	12.8	11.1	(⁵)
Leather.....	24	40.8	30.2	(⁵)
Leather products, not elsewhere classified.....	28	16.3	22.3	(⁵)
Machine shops, general.....	198	22.6	27.1	26.2
Metalworking machinery.....	684	19.8	18.0	18.9
Miscellaneous lumber products, not elsewhere classified.....	40	39.5	40.1	(⁵)
Miscellaneous manufacturing.....	388	15.9	16.4	(⁵)
Motor vehicles.....	109	17.3	13.3	12.4
Motor-vehicle parts.....	65	31.1	27.5	25.5
Nonferrous metal products.....	579	30.5	26.8	23.7
Ordnance and accessories.....	39	24.2	24.5	(⁵)
Paints and varnishes.....	72	19.2	19.7	20.2
Paper.....	235	31.5	29.9	31.7
Paper boxes and containers.....	417	24.0	25.2	26.7
Paper products, not elsewhere classified.....	34	30.3	21.5	(⁵)
Paper and pulp (integrated).....	88	26.2	26.3	26.4
Planing mills.....	46	68.6	48.4	53.8
Plate fabrication and boiler-shop products.....	103	64.1	54.1	44.0

See footnotes at end of table.

*Industrial Injury-Frequency Rates¹ for Selected Manufacturing Industries, July 1944
with Cumulative Rates for 1944—Continued*

Industry ²	July 1944		Frequency rate	
	Number of establishments	Frequency rate ³	1944: January-July cumulative ⁴	1943: 12-month cumulative ⁴
Plumbers' supplies.....	23	17.1	16.8	18.2
Pottery.....	36	17.7	18.3	(⁵)
Pulp.....	24	38.8	35.6	(⁵)
Radios and phonographs.....	196	9.1	8.9	7.6
Railroad equipment.....	41	23.6	22.3	20.5
Rayon and allied products.....	24	7.7	6.5	7.8
Rubber boots and shoes.....	16	10.2	14.4	(⁵)
Rubber and rubber products, not elsewhere classified.....	96	17.7	18.9	(⁵)
Rubber tires.....	33	17.0	14.1	13.7
Sawmills.....	44	57.2	55.4	62.4
Screws and screw-machine products.....	71	27.9	28.3	(⁵)
Sheet-metal work.....	42	41.4	47.5	(⁵)
Shipbuilding.....	263	27.2	25.3	28.7
Sighting and fire-control equipment.....	38	9.0	9.0	6.6
Silk and rayon products, not elsewhere classified.....	52	14.1	14.3	(⁵)
Slaughtering and meat packing.....	540	39.8	34.7	35.7
Small arms.....	57	15.4	13.9	11.5
Soap and glycerin.....	10	13.7	9.5	8.5
Special industry machinery, not elsewhere classified.....	95	23.9	23.7	22.7
Stamped and pressed metal products.....	241	35.5	31.8	31.1
Steam fitting and apparatus.....	56	23.8	26.2	33.6
Stone, clay, and glass products, not elsewhere classified.....	85	19.1	14.3	(⁵)
Tanks.....	12	16.0	13.0	12.6
Tank parts.....	47	19.8	24.6	18.3
Textile machinery.....	10	13.5	26.1	(⁵)
Textile and textile-mill products, not elsewhere classified.....	184	21.2	19.7	(⁵)
Tin cans and other tinware.....	22	27.9	19.7	18.3
Tools, except edge tools.....	65	21.8	26.1	25.5
Wire and wire products.....	149	25.6	23.2	21.7
Wooden containers.....	58	54.7	54.1	(⁵)
Woolen goods.....	158	19.7	19.0	(⁵)

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 Preliminary rates for the year, subject to revision on basis of the more comprehensive annual survey. Computed from all reports received without weighting. Not based upon identical plants in successive months.

⁵ Not available.

Social Security

British Government Social-Insurance Proposals

PLANS for a general system of social insurance (covering sickness, invalidity, unemployment, and retirement, and family allowances), and for a separate system of insurance against industrial injuries, were recently issued by the British Government, and are summarized below.

*General Social-Insurance System*¹

In formulating the general program, outlined in a White Paper (Cmd. 6550), Sir William Beveridge's report² on social insurance and allied services was reviewed. In some respects the benefits sponsored by the Government are more liberal than those proposed by the Beveridge report (notably, benefits for aged persons); in others (for example, child allowances), the Government is less generous. The system is intended to supplement the previously announced employment policy and national health plan.³ Legislative and other action based on these reports will have the objectives of promoting the growth of the national power to produce and earn and preventing cases of poverty over which individuals have little control.

COVERAGE OF SOCIAL INSURANCE

Under the proposed scheme, insurance would be compulsory for the entire population, the 47,500,000 people being divided into six classes, as follows:

	<i>Number</i>
I. Employees.....	18, 100, 000
II. Self-employed.....	2, 600, 000
III. Housewives.....	9, 650, 000
IV. Adults who do not earn.....	2, 250, 000
V. Children.....	10, 100, 000
VI. People over working age.....	4, 800, 000

Large groups not previously covered would be insured, such as those living on earnings received other than from salary or wage, on earnings exceeding £420 a year, or on private income, as well as those employed in professions or industries that have been exempted from the existing social-insurance system.

CONTRIBUTIONS

Employers and their employees, the self-employed, and adults who do not earn would contribute toward the fund, the rate of contribution

¹ Data are from Social Insurance, Part I (Great Britain, Ministry of Reconstruction, London, 1944, Cmd. 6550); Economist (London), September 30, 1944; and daily press.

² See Monthly Labor Review, February 1943 (p. 272).

³ For a summary of the report on employment policy (Cmd. 6527) see Monthly Labor Review, August 1944 (p. 296), and for that on health service (Cmd. 6502) see September 1944 issue (p. 540).

varying for the different groups and also according to age and sex, as shown in table 1. Contributions for employees cover industrial-accident insurance as well as the general social insurance.

TABLE 1.—*Proposed Scale of Weekly Social-Insurance Contributions in Great Britain*
[Exchange rate of shilling (12 pence)=20.2 cents]

Sex and age	Weekly contributions for —				
	Employees ¹			Self-employed	Adults who do not earn
	Total	By insured person	By employer		
Males:	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
18 years of age and over.....	6 11	3 10	3 1	4 2	3 4
16 and under 18 years of age.....	4 6	2 5	2 1	2 9	2 2
Females:					
18 years of age and over.....	5 5	3 0	2 5	3 6	2 8
16 and under 18 years of age.....	3 7	2 0	1 7	2 5	1 10

¹ These contributions cover industrial-accident insurance also.

The contributions shown above are expected to cover 44 percent of total costs under Government proposals; interest on existing funds, another 2 percent; and expenditures to be met from Exchequer or local taxation, the remaining 54 percent. The cost of family allowances will be provided from the proceeds of taxation, the Government view being that such payments are "outside the bounds of the scheme of social insurance properly so called." With that exception, the proposals adhere to the principle that "freedom from want must be achieved in the first instance by social insurance—that benefits must be earned by contributions."

BENEFITS

Principal benefits.—The weekly rates of sickness, invalidity, and unemployment benefits, and of retirement pensions for men and women, will be as shown in table 2, varying according to marital and working status and including allowances for dependents when these are payable. These rates are to be increased by 5s. if the beneficiary has a single dependent child (if more than one, additional benefits are to be provided through family allowances). ⁴

The standard benefit rates provided for a married couple (40s. weekly) and those allotted to a single man or woman (24s.) will be identical for sickness and for unemployment; lower rates will be fixed for persons under the age of 18 years. An additional allowance of 16s. weekly (15s. when an invalidity benefit is concerned) is payable to those on a single benefit—for sickness, invalidity, or unemployment—who have an adult dependent. Duration of benefit for sickness will be 3 years; thereafter invalidity benefit at the standard retirement-pension rate is to be substituted. Persons working on their own account will not receive sickness benefit during the first 4 weeks of any illness. Unemployment benefit is to end after 30 weeks, but may be extended somewhat if the individual has a good employment

⁴ "Children" as defined for purposes of payment of family allowances (discussed hereafter) are those below the upper age limit for compulsory school attendance and those above that limit who are still attending school full-time, or are apprenticed, up to July 31 following their sixteenth birthday. Above these ages, a child is not reckoned as a member of the family.

record. (Periods covered by training allowance are not to be taken into account.) Further contributions are required before an insured person can requalify for unemployment benefit.

Standard weekly retirement-pension rates of 35s. for a married couple and 20s. for a single person, at age 65 for men and age 60 for women, will be subject to reduction if more than 20s. a week is earned during retirement. A joint pension will be payable when the husband reaches retirement age, whatever the wife's age, provided the wife is not gainfully employed. Pensions will be based on the contributions made during the working life of applicants. If persons postpone retirement beyond the pensionable age, weekly pensions will be increased, for each added year of work, by 2s. in the case of a joint pension and 1s. in the case of a single pension.

TABLE 2.—*Proposed Scale of Weekly Social-Insurance Benefits in Great Britain*

[Exchange rate of shilling (12 pence) = 20.2 cents.]

Class	Weekly rate of benefits for—			
	Sickness	Invalidity	Unemployment	Retirement pension
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Single man or woman.....	24 0	20 0	24 0	20 0
Married man with wife gainfully occupied.....	40 0	35 0	40 0	35 0
Married man with wife not gainfully occupied.....	16 0	16 0	20 0	20 0
Married woman gainfully occupied.....	16 0	15 0	16 0	-----
Dependent's allowance (when payable).....				

Family allowances.—A weekly cash allowance of 5s. will be payable for each child after the first. This sum is to come out of the proceeds of general taxation.

On the assumption that one child can be maintained from family earnings, no family allowance is provided for the first child. However, when the head of a family is on benefit, an allowance of 5s. is to be payable weekly from the social-insurance fund, as already stated. Free services in kind, for children, will include meals and milk at school. Every child both of whose parents are dead will receive 12s. weekly, of which 5s. is to be met from taxation and the remaining 7s. from social-insurance funds.

Training allowance.—For persons undergoing training in an approved course, special allowances are to be provided, at rates higher than those provided for unemployment. Such allowances will not reduce the number of days for which unemployment benefit is due. They will continue for a period up to 4 weeks after completion of the training course, in order to cover any short interval between the end of the course and the beginning of a new job. If the person who receives training is then transferred to a job away from home, he will be qualified for a settling-in grant for the first few weeks.

Special benefits for women.—In childbirth, a maternity grant of £4⁵ is provided. To this sum a maternity benefit at the rate of 36s. weekly for 13 weeks is added for gainfully occupied women who give up their occupation for that period; women not eligible for maternity benefit will receive an attendant's allowance of £1 a week for 4 weeks.

⁵ Exchange rate of pound (20 shillings) = \$4.035.

Married women may insure for a personal retirement pension of 20s. a week in lieu of their share in a joint retirement pension. If they earn over 20s. weekly they may also insure for sickness benefit (after the first 4 weeks, if self-employed) at the rate of 16s. a week, and for unemployment benefit at the rate of 20s. a week. If a woman is living apart from her husband and can get no support from him, benefit will be at the rate of 24s. weekly.

For women widowed under the age of 60 years, and for those widowed over that age whose husbands had not qualified for retirement pensions, 36s. is payable weekly for the first 13 weeks of widowhood plus 5s. for the first child (if any). Thereafter, a guardian's benefit of 24s. is paid weekly if there is a dependent child (with 5s. added for the first or only child), and a pension of 20s. a week will be granted to widows who are 50 years of age or over at the time of the husband's death or when the children cease to be dependent, provided that at least 10 years have elapsed since the marriage. These benefits will be reduced when the husband's contribution record shows a deficiency and will terminate on remarriage; guardian's benefit and widows pension are subject to reduction if earnings are substantial.

Death grants.—Death grants will be £6 if death occurs under the age of 3 years; £10 if between 3 and 6 years; £15 if between 6 and 18; and £20 at higher ages.

Special provisions.—During maintenance in a hospital⁶ and after 25 days of such maintenance, a reduction of 10s. a week will be made in sickness and invalidity, maternity, widow's, and guardian's benefits, and in widow's and retirement pensions. Only one social-insurance benefit or pension is payable at one time. Some adjustment will be made in the benefit paid when a war or industrial pensioner becomes eligible for a social-insurance benefit. The plan also provides for adjusting benefits for persons who have not complied with prescribed contribution conditions or who qualify for certain benefits before the scheme here discussed comes into operation.

ADMINISTRATION

Provision is made for establishment of a Ministry of Social Insurance⁷ which will have responsibility for the entire social-insurance system. Administration of assistance is to be kept separate from social insurance, but the Minister of Social Insurance is to be responsible to Parliament for both. Existing responsibilities of public assistance authorities for cash payments are to be transferred to the Assistance Board in their entirety, and the Assistance Board is to be responsible to the Minister of Social Insurance. The Government has concluded that it is impracticable to retain "approved societies" as independent financial units or as agents in administering the scheme.

A single weekly contribution is to cover all the benefits to which an insured person is entitled. A stamp covering the amount contributed is to be placed on a single document. Payment of benefits may be made by postal draft or in cash at the local social security offices. If neither is feasible, payment will be made at the home of the insured.

⁶Under the proposed National Health Service.

⁷Sir William Jowitt was appointed to the office early in October 1944, pending legislative enactments. The Minister is to be responsible for the legislative and other preliminary work in launching the unified social-insurance plan. Existing schemes are to be transferred to him pending adoption of the broadened program.

*Insurance Against Industrial Injuries*⁸

The Government workmen's compensation proposals, covering industrial accidents and specific industrial diseases, would broaden the present system of industrial-injury insurance and would replace employer's liability for financial support by a central fund composed of contributions from employers, employees, and the Exchequer. The plan was outlined in a White Paper (Cmd. 6551). If adopted, the principle of compensation for loss of earning capacity will be replaced by industrial-injury insurance treated as a social service. Instead of benefits based on estimated loss of earning capacity, flat-rate benefits are advocated, with supplements for injured persons having family responsibilities. The system would be administered as a separate insurance scheme having a special insurance fund, but, like the general scheme, would be under the Minister of Social Insurance.

COVERAGE

According to the plan, all persons working under a contract of service or apprenticeship will be included in the coverage. Those under the school-leaving age will be excepted, but otherwise the intention will be to include all classes of persons covered by existing workmen's compensation legislation. Nonmanual workers will be covered, without any income limit. It is not contemplated to provide for "contracting-out" schemes such as are permitted under the existing laws. Although the Government is aware of criticisms made of the phrase "arising out of and in the course of employment," official opinion is that no other form of words would be found to be more satisfactory in defining the injury coverage.

CONTRIBUTIONS

If the system is adopted, weekly contributions to the central fund at the rate of 6d. for adult men and 4d. for women will be shared equally between employers and employees. For juveniles under the age of 18 years the rate of contribution will be reduced by one-half. No contribution will be required from a workman incapacitated for work or unemployed. Calculating that the annual cost of benefits would be approximately £20,000,000 and that administration would cost another £3,000,000, the Government has estimated that the joint employer-employee contributions at the rates mentioned would cover five-sixths of the required amount, the remaining one-sixth to be made up by the Exchequer.

BENEFITS

For disablement, the proposed benefits would be fixed at uniform rates for both sexes, as shown in table 3. Benefits would not be dependent on the payment of a fixed number of contributions.

Women would receive the same basic rates of benefit as men. However, the allowances covering dependents would be paid in respect of male workers mainly, as they are generally heads of families, and because of this, the rate of contribution for women is lower than the

⁸ Data are from Social Insurance, Part II (Great Britain, Ministry of Reconstruction, London, 1944, Cmd. 6551); and Economist (London), September 30, 1944.

rate specified for men. For persons under the age of 18 years, benefits (and contributions) would be fixed at lower rates than for adults. Special financial aid would be provided only for the first child of the disabled worker; any additional children would be provided for under the proposed family-allowance system.

TABLE 3.—*Proposed Scale of Weekly Workmen's Compensation Benefits in Great Britain*

[Exchange rate of shilling (12 pence) = 20.2 cents]

Class	Weekly rate of benefits		
	Injury allowances		Pension for 100-percent disablement and if unemployable
	First 13 weeks	After 13 weeks ¹	
Single man or woman without dependent.....	s. d. 35 0	s. d. 40 0	s. d. 50 0
Single man or woman with adult dependent.....	43 9	50 0	60 0
Married man.....	43 9	50 0	60 0
Married man and first child.....	48 9	57 6	67 6

¹ Includes pension rate for 100-percent disablement.

In case of a fatal accident, the widow would receive, first, a temporary benefit provided under the general scheme (36s. weekly for 13 weeks), and then a pension. The amount of the pension payable to a widow aged 50 years or over—or of one under 50 years of age having a dependent child, or incapable of self-support—would be 30s. weekly; in other cases it would be 20s. weekly. An allowance of 7s. 6d. weekly would be paid in respect of a first child; and for a child becoming a full orphan through the death of the workman, an allowance of 12s. weekly would be paid (5s. of which would be provided by the Exchequer). Should a parent of the deceased workman be incapable of self-support, 20s. weekly would be paid, and in the case of two such dependent parents, 30s. weekly. In case no pension were payable to a widow or a parent, one other adult member of the deceased workman's family who was residing with and was mainly dependent upon him would be eligible for a maximum pension of 20s., if incapable of self-support.

If no pension was payable under the foregoing provisions, temporary benefit would be authorized for a woman who was residing with the workman at the time of the injury and had the care of the deceased person's child or children. The maximum rate, 20s. weekly, would be payable as long as at least one child came within the qualifying age for allowance. Any adult member of the deceased worker's family not eligible for any pension under the plan but who had been mainly dependent upon him, would be eligible for a temporary allowance of 36s. weekly for 6 weeks.

ADMINISTRATION

Administration of the industrial-injury insurance scheme would be integrated to the fullest possible extent with that of social insurance, both under the Minister of Social Insurance. An advisory committee or council is recommended, on which employers and workers would

have equal representation, with the purpose of advising the Minister on important questions of policy and administration referred to it. Questions as to insurability and liability to contribute would be settled by the Minister, who, in special circumstances might submit the question to the High Court (in Scotland, the Court of Session) for decision. A party aggrieved by a decision of the Minister could appeal on questions of law to the one of these courts having jurisdiction in his locality.

Contributions would be collected by stamp, with the contributions under the general social-insurance system. Payment of employer and worker contributions would be handled by the employer, who would be empowered to deduct the employee's share of the contribution from his wages. Employer, employee, and Exchequer contributions would be paid into an Industrial Injury Insurance Fund established to disburse all benefits and administrative charges.

Procedures for Settling Claims

Claims, under the proposed plan, are to be dealt with by a pensions officer, subject to appeal to local tribunals having equal employer and employee representation. The pensions officer will have the option of referring a question to the local appeal tribunal without making a decision himself. If a medical question is involved or is likely to arise, provision may be made for one or more medical practitioners to join the tribunal as members or as advisers.

Appeal may be made to an Industrial Injury Insurance Commissioner whose decision will be final. The Commissioner will be appointed by the Crown. Either the chairman of the local appeal tribunal or the Commissioner himself may grant the right to appeal on questions of law or on such other questions as may be prescribed.

When the worker's condition warrants it, the medical assessment for pension is to be made by a medical board. Appeal on final assessments, or in certain cases on interim assessments, may be taken to a tribunal consisting of a chairman of a local appeal tribunal and two medical practitioners.

Labor Organizations

Convention of Hosiery Workers, 1944¹

POST-WAR plans for the hosiery industry, including provisions for the reemployment of the union's 4,000 members in the armed services, and the expansion of the union social-welfare program were the leading subjects before the thirty-third annual convention of the American Federation of Hosiery Workers (C. I. O.)² held in Atlantic City, September 11 to 15, 1944. The convention was attended by 145 delegates from 65 branches in 36 States, and represented a paid-up membership of approximately 32,000 workers in 56 communities.

One section of the report of the executive board pointed out that, owing to the exigencies of war, the industry has been faced with two major problems: (a) An ever-tightening yarn supply, resulting from the diversion of silk and nylon almost exclusively to war needs and from the cessation of fine-spun cotton-yarn imports from England, and (b) a continually shrinking labor supply caused by the exodus of workers into the armed services and into the higher-paid war industries. The decline in employment in the industry as a whole between April 1943 and April 1944 was estimated at about 10 percent.

Post-War Program

The convention made the following decisions on the problems that will confront the union and the industry after the termination of hostilities:

1. All men and women in the military services were exempted from payment of initiation fees. At a previous convention, the union arranged to maintain all members in the armed forces in good standing without payment of dues.

2. A special clause is to be included in all future agreements, providing a 6-weeks retraining period for returning servicemen, during which time they are to be guaranteed an income not less than the average earnings in the particular branch of the trade. The national executive board was instructed (a) to negotiate with employers' associations for the payment of adequate dismissal pay to all workers laid off in the reconversion period, and (b) to explore with employers the possibilities for hosiery-industry cooperation in the work of rehabilitating veterans and the extent of possible employment for such veterans in hosiery mills.

¹ Prepared in the Bureau's Labor Information Service, by Boris Stern and John L. Afros.

² The American Federation of Hosiery Workers was organized in 1913 by hosiery workers who withdrew from the United Textile Workers of America (A. F. of L.). In 1923 the Federation returned to the U. T. W. A. It participated in the formation of the Textile Workers Organizing Committee in 1937 and affiliated with the Textile Workers Union of America, when the latter became a part of the C. I. O. in 1938.

3. All branches were urged to participate in post-war planning committees in their communities or to take the initiative in launching committees where such have not yet been established.

4. The convention instructed the national officers to seek the establishment of post-war planning committees with each of the employers' collective-bargaining associations, and to arrange similar conferences with major independent manufacturers; and, further, to urge that these various planning conferences be brought into coordination through joint meetings of the various associations and independent manufacturers.

5. The pledge in the preamble to the union's constitution to secure a 6-hour day and a 5-day week as a means of providing full employment in the industry was reaffirmed, and the national executive board was instructed "to exercise extreme vigilance in watching for the earliest possible moment" in which to incorporate the 30-hour week in future agreements.

6. The program for post-war reconstruction adopted by the International Reconstruction Conference convened by the Cooperative League of the U. S. A. in Washington, D. C., in January 1944, was endorsed.³

Welfare and Education

The convention recommended measures to broaden the Federation's welfare program which now includes employer-financed accident and health insurance. The recommended measures include (1) life insurance to be financed by employers' contributions of 1 percent of their gross pay roll, (2) 2 weeks' vacation with pay for all workers with 3 years of service and 1 week's vacation for those with less than 3 years, (3) full service credit toward vacations for those returning from the armed forces, and (4) a social-security department to be created in the national office, to administer all social-security provisions in the union's agreements with employers and to supply information on the subject to the various branches of the Federation.

Although attributing the recent decline in the union's educational work in part to the pressure of the war, the convention expressed concern over it and voted to engage a full-time educational director. It urged the branches to establish "new members' classes," to enable them to learn the rights and duties of union membership and the techniques for adjusting grievances. The delegates also renewed the union's endorsement of the Harvard University trade-union fellowships and decided to recommend the selection of one of its members for a year's study. They authorized the national executive board to provide him a weekly stipend, equal to his straight-time earnings on his job, in order to defray his expenses and reimburse him for the loss of earnings during the school year.

Wage Demands for 1945 Agreement

Full-fashioned hosiery.—The convention had before it 10 resolutions which sought to correct various alleged inequities in the rate structure affecting the workers in individual shops or in several shops within an area. To deal with these demands, the delegates adopted a general

³ See Co-ops Plan for the Post-War World, p. 1323 of this issue.

statement of policy to serve as a guide in the negotiation of the 1945 agreement between the union and employers. The statement declared (1) that the rate structure in the national hosiery agreement was designed to apply uniformly throughout the full-fashioned section of the hosiery industry, (2) that "freezing" of the uniform wage scale without any flexibility is bound to continue certain inequities between mills as well as between departments, (3) that the employers' associations have refused to deviate from the uniform wage schedule, regardless of circumstances that might warrant an adjustment, (4) that rejection by the employers' associations of attempts to correct local inequities has had a disturbing effect on the morale of the members. The national executive board was therefore directed to study the problem of uniform rate structure and report to the next convention on how to make its operation more effective.

The national executive board was also instructed to enter into negotiations with the manufacturers' association to secure a clause in the 1945 agreement providing that, if the employer is unable to obtain either male or female helpers (apprentices) on long-section, full-fashioned knitting machines, the toppers shall receive an extra payment, amounting to 50 percent of the helpers' rate, to compensate them for the loss of the helpers' aid. This rate will apply irrespective of whether the employer has followed the practice of engaging helpers on long-section machines.

Seamless hosiery.—It was pointed out to the delegates that the workers in the seamless section of the hosiery industry, a very large part of which is working exclusively on Government contracts to supply the armed forces, "are at the bottom of the list among the 10 million American workers existing on incomes below a maintenance level." Based upon calculations presented to the convention, it was concluded that, after deductions for social security and withholding tax, the average seamless-hosiery worker had in May 1944 a net take-home pay amounting to less than \$1,000 per year. The delegates therefore directed the national executive board to take necessary steps through proper Government agencies to secure (1) a correction of "the present lamentable wage situation" in the seamless section of the hosiery industry, (2) an increase in ceiling prices on Government contracts for hosiery that would absorb the increased labor costs, and (3) a corresponding rise in OPA ceiling prices for civilian goods.

The national executive board received instructions to demand the following additional provisions in the 1945 agreement for both seamless and full-fashioned hosiery: (1) Increases in hourly wage rates from the present minimum of 40 cents to 65 cents; (2) a night-shift differential (the request, if refused by the employers to be referred to an arbitrator or taken to the War Labor Board as a dispute case); (3) rate adjustments to correct existing inequalities in the looping department which has not shown an increase in earnings since 1942; and (4) wage raises for maintenance workers in hosiery mills now being paid less than workers doing comparable jobs in other plants.

Resolutions

A prolonged discussion developed on a resolution contesting the application of the seniority rule as a basis for promotion and lay-offs. The resolution charged that the impartial chairman's formula pro-

viding that, "all things being equal," the employee with the longest record of service shall be the one entitled to promotion—or preferred for employment in cases of lay-off—is being misused by employers in their interpretation of the word "equal." They construe it to mean that before an employee can qualify for a promotion his production must be equal in quantity to the production average for the shop. Since this interpretation of the production element of "equal" often results in discrimination—practically prohibiting a worker from getting a promotion, regardless of how high the quality of his work is, if he does not measure up to average production—the resolution contended that "equal" should be interpreted "as allowing a deviation up to 10 percent from the average in production." The national executive board was instructed to obtain acceptance of the union's interpretation by the manufacturers' association, or, failing in this, to seek the elimination of the industry arbitrator's formula from the next agreement.

In other resolutions the convention—

1. Endorsed pending Senate Resolution 48, introduced by Senator Pepper, which would direct the War Labor Board to permit the raising of all wages over which the Board has jurisdiction to a minimum of 65 cents per hour, and to declare substandard all rates below this.

2. Called for modification of the "Little Steel" formula and pledged all possible support to other labor unions in their fight to change the formula, so that wage increases can be granted commensurate with increases in the cost of living.

3. Endorsed the Wagner-Murray-Dingell bill for an improved and expanded social-security program.

4. Protested the enactment of restrictive ordinances in many southern communities which seek to bar union organization, and pledged the Federation to contest such legislation by every possible legal means.

5. Pledged itself to work closely with bona-fide consumers' cooperatives and credit-unions and called upon the national executive board and the locals to collaborate with church, farm, and educational groups interested in promoting consumers' cooperation.

6. Commended the Treasury Department for its pay-roll savings plan, which the Federation regards not only as a valuable contribution to the war effort and a preventive of inflation, but also as helpful to organized labor. It urged continuance of the plan after the war is over.

7. Instructed the national executive board to resume the "white list" and union-label promotion by initiating an intensive campaign for union-made hosiery.

Union Finances

Since 1938 the American Federation of Hosiery Workers has followed the practice of giving an annual public accounting of the financial operations of the national organization and of each of its branches. The 82-page report which secretary-treasurer William Smith submitted to the convention for the year ending June 30, 1944, indicated a combined net worth of the A. F. H. W. and its branches, amounting

to \$1,000,000. It gave detailed figures on quarterly receipts from per capita dues, assessments, income from interest on savings accounts and bonds, sale of supplies, profits on sale of bonds, cost of administration (including salaries and expenses of officers, organizers and clerical staffs), auditing fees, expenditures for education, research, and publications, legal fees, court and arbitration costs, conventions, relief and strike costs, printing and stationery, telephone and telegraph, postage, office equipment, rent, janitorial services, electricity, and water bills.

Also included in the report was a series of charts showing in percentage form the various types of revenue and expenditures. In addition to the annual report, the union furnishes confidential monthly statements on its finances to each of its local affiliates.

Officers

The following officers were reelected for the ensuing term of 2 years: General President, Alexander McKeown; First Vice President, Alfred Hoffmann; Second Vice President, Edward F. Callaghan. A national executive board, consisting of 14 members in addition to the general officers, and a board of trustees, composed of 3 members, both bodies serving for a term of 1 year, were also elected by the convention. According to the constitution, 70 percent of the members on the executive board must be employed as wage earners in the mills to insure rank-and-file representation on the board.

To maintain continuity and "to guard against any confusion that might result from a complete change of administration in any one election," the union's constitution provides for the election of the president and vice presidents in even-numbered years, and the secretary-treasurer in odd-numbered years. William Smith is the incumbent secretary-treasurer.

United Mine Workers' Convention, 1944¹

SOME 2,800 delegates, representing approximately 600,000 bituminous-coal and anthracite miners, convened in Cincinnati, September 12 through September 20, to review the record of the United Mine Workers of America during the past 2 years and to chart its course for the future.

Since the last convention in 1942, substantial gains have been recorded by the mine workers' organization on several fronts. According to the officers' report, the union had on hand the largest funds in its history, amounting to over \$10,000,000, as of July 1. Membership, although depleted by withdrawals into the armed forces and the war industries, included an overwhelming majority of the miners employed in the United States. Significant gains in collective bargaining, following 16 months of negotiation² included the establishment of the first national basic wage agreement in the history of the bituminous-coal industry and attainment of portal-to-portal pay for miners.

The greatest achievement reported was the miners' production record, accomplished despite several work stoppages and the loss of the younger skilled men to the armed services. That the miners in the United States and Canada have also contributed substantially to the war in terms of manpower and money was indicated in a special report, covering the period from December 1941 through July 1, 1944, as follows:

Serving in armed forces.....	137, 259
Killed, died, and missing in action.....	2, 544
Wounded in action.....	4, 391
Value of war bond purchases.....	\$170, 617, 000
Contribution to war relief agencies.....	\$3, 603, 000

Production Record

In total volume and in tons per man per day and per year, the production of bituminous and lignite coal broke all records in 1943. Comparative data for 1918 and for each year of the present war, for bituminous-coal and lignite mines producing over 1,000 tons annually, are shown below.

	Production	Men employed	Tons per man per day
1918.....	579, 000, 000	615, 300	3. 78
1941.....	514, 000, 000	457, 000	5. 20
1942.....	580, 000, 000	460, 000	5. 30
1943.....	589, 000, 000	1 415, 000	* 1 5. 50

¹ Estimates, as given in the union officers' report; a more recent estimate by K. C. Adams, editor of the United Mine Workers' Journal, gives the man-day output for 1943 as 5.75 tons.

In addition to the bituminous coal and lignite shown above, 60,327,000 tons of anthracite were mined in 1943, bringing the grand total of coal production in the United States to 649,327,000 tons. At the present rate of production, the 1944 total, according to President Lewis, will amount to nearly 700,000,000 tons, or more than the combined production of all other countries in the same year. The estimated increase of 45,000,000 tons in total coal production, as compared

¹ Prepared in the Bureau's Information Service by Boris Stern and Eleanor Finger.

² A 184-page appendix to the officers' report is devoted entirely to an analysis of the 1942-44 wage negotiations for the bituminous-coal fields.

with the war year of 1918, will be achieved with nearly 300,000 fewer men and with a working force the average age of which has increased from 32 to 45 years since December 1941.

Accidents and Safety

This production record was not attained without a tragic loss of life and productivity through fatal and nonfatal accidents, as indicated in the figures below, taken from the officers' reports.

	Total accidents	Fatal	Nonfatal
1940	61,089	1,308	59,781
1941	64,731	1,266	63,465
1942	73,482	1,482	72,000
1943	¹ 78,064	1,394	¹ 76,670

¹ Estimated.

In October 1943, Secretary of the Interior Ickes, who is also Solid Fuels Administrator, reported that casualties in the coal mines up to that month exceeded numerically the casualties in the armed forces since the attack on Pearl Harbor. The union officers' report commented on this high loss as follows:

Why is it that we kill and maim more mine workers than any other coal-mining country in the world? Not because mining here is more hazardous; not because of financial stress; not because we lack in science or research; but due in the main to placing production problems first, and the complete lack of organization among the mine owners for concerted action to attack the basic ills of the industry which bear directly upon the underlying causes. The direct and indirect money cost to life and property of approximately 20 cents per ton will amount to about \$140,000,000 in the year 1944. This cost is paid for by the consumers of coal.

Occupational diseases have likewise taken a serious toll from the miners. According to Secretary-Treasurer Thomas Kennedy, who quoted from a Government study of the Pennsylvania anthracite region, 25 percent of the men working in the anthracite industry have been affected to some extent by silicosis.

English experience.—The English experience in coal mining was described by Ebby Edwards, a fraternal delegate to the U. M. W. convention from the Miners' International Federation of Great Britain. The loss of 30,000 skilled miners yearly, food shortages, 5 years of intensive war, and the lack of mining equipment have resulted in a drop in British coal production. The average daily output per British miner (covering all employees, whether underground or surface) decreased from 1.12 tons in 1938 to 1.03 tons in 1943. Comparison of statistics on fatal accidents in 1941 reveals that the United States, employing 150,678 fewer men, had 341 more mining fatalities than Great Britain, in spite of the fact that the 1941 record in the United States was the lowest in 8 years. Nonfatal accidents were numerically greater in Great Britain, and occupational diseases there were far in excess of the rate in other British industries.

Mine safety.—Mine inspection in the United States is carried out by both State and Federal mine inspectors, but the latter have no power of enforcement. Discussing the deficiencies in State safety legislation, President Davis of District 31, told the delegates:

In all of our States, generally speaking, we have antiquated mining laws, laws that were built up over the years under hand-loading and hand-mining methods. Those laws do not cover mechanized mining. They contradict each other from

State to State, there is no uniformity, and the only possible way there can be uniformity of enforcement of known safety methods is through Federal legislation. * * * The Federal inspector reports on violations of known safety practices that have proven their worth. The State inspectors can only report on violations of State law, and the only enforcement agency in all of our mining districts is the State mining department.

President Lewis, in supplementing the previous speaker's remarks, commented:

Explosions in coal mines are unnecessary. When explosions occur, it means that safety precautions were ignored, that chances were taken, that imperfect ventilation existed, that men were permitted to work under conditions where an explosive mixture of atmosphere was a hazard that could have been removed by proper inspection and by proper management and by the expenditure of a few dollars for the protection of human life. * * * And, let me say to the officers of our local unions, and to our delegates in reporting to their local unions, make it clear that at no time, and under no circumstances and under no conditions are our men obligated to work in any mine that they know is unsafe.

Action by the convention.—The delegates voted to establish a general safety council within the union for research and investigation for the purpose of making safety recommendations to the various State mining departments, the United States Bureau of Mines, the State legislatures, and the Congress of the United States. The convention also recommended increased funds to permit employment of additional Federal inspectors, and the passage of legislation "giving the Federal mine inspectors power to force operators to remedy immediately" any dangerous conditions found. In the case of mines temporarily seized by the Government, the convention recommended that the Secretary of the Interior order a Federal mine inspection, the findings of which would then be enforced.

Demands for 1945 Wage Contract

A new wage contract for the mining industry is scheduled to be negotiated in the spring of 1945. The miners' demands to be made at that time were broadly outlined in the report of the scale committee. It noted that all resolutions and business dealing with the anthracite wage agreement were to be referred to the Anthracite Tri-District Convention, which is scheduled to meet prior to the expiration of the wage agreement. For the bituminous-coal agreement the scale committee's report recommended the following: (1) The establishment of a national policy committee, composed of the International officers, the International executive board, the executive officers of each bituminous district, and 61 district wage-scale committee members to be selected by the districts. (2) Continuation and improvement through collective bargaining of a basic national wage agreement for the bituminous-coal industry. (3) Adjustment of unsatisfactory local conditions either through the basic wage-scale conference or by referral back to the districts involved. (4) "The abolition of all discriminatory tonnage or day-wage differentials existing within and between districts and * * * uniformity of rates by classifications for work performed on mechanized units and proper differentials between the various classifications of such labor." (5) Provision of blasting material at the employer's expense; limitation on the number of supervisory and technical employees exempt under the wage agreement, and provision for their proper classification in the wage schedules; employers to be required to furnish union-made tools and ex-

plosives; and mine workers to be permitted to cease work in order to prevent shipment of coal to a consumer whose employees are engaged in a legal strike. (6) A contract provision to assist and protect returning veterans in the coal industry. (7) Reduction in hours of employment at the close of the wartime emergency, the maximum for underground workers to be not more than 7 hours per day from portal to portal, with a 5-day week of 35 hours; time and a half after 7 hours per day and 35 hours per week, and for work on Saturday; double time for Sunday; full time for travel from portal to portal. "The working time of all outside employees shall be coordinated with the underground working time." (8) Wage increases to be determined by the union policy committee with full authority. President Tetlow, of District 17, in his discussion of these wage terms, made it clear to the delegates that should the "Little Steel" formula be revised at any time, the officers of the U. M. W. A. would immediately reopen the mine contracts to press for a wage adjustment.

Matters of Internal Organization

DISTRICT AUTONOMY

The most controversial issue before the convention during the 7 days it was actually in session involved the restoration of autonomy to districts now under a provisional government appointed by the executive board of the United Mine Workers. Of a total of 31 districts, 21 have no power to elect their officers and field organizers. The fight for district autonomy is an old issue at United Mine Workers conventions. This year, however, for the first time, the delegates favoring home rule were organized, under the leadership of Ray Edmundson, formerly the appointed director of District 12 (Illinois) who resigned in order to lead the fight and later to oppose John L. Lewis for the presidency of the U. M. W. A.

In his opening speech, President Lewis attacked the opposition's attempt to defeat him "in his own organization and in his own convention." That afternoon the partial report of the credentials committee showed Ray Edmundson and three of his supporters to be among those whose credentials had been disputed. Pending a hearing, they were denied official delegate status, and were thus deprived of an opportunity to participate in the discussion on district autonomy.

The first resolution submitted to the delegates by the committee on resolutions dealt with autonomy. Of the 138 resolutions considered by the committee on this subject, 86 opposed and 52 favored home rule in the districts. These resolutions were combined by the resolutions committee into a statement reaffirming the policy adopted by the international conventions in 1938, 1940, and 1942, to the effect that—

Upon proper presentation of substantial requests for autonomy in any district or districts, the International executive board shall take into consideration such requests and with due consideration for the protection and advancement of the rights of our members in such districts and the stability and efficiency of the organization, shall be authorized at its discretion to instruct any such district that substantial autonomy is granted and that such district shall then proceed as follows:

Under the precise supervision of the International executive board, the district shall meet in district convention and adopt a constitution providing for the proper conduct of the affairs of the district; provide for the nomination and election of

district officers, except president and secretary-treasurer; and otherwise provide for district self-government. All such district laws shall be consistent with the provisions of the International constitution and not in conflict therewith, and shall be subject to approval of the International executive board.

The only exceptions to the above recommendation are the offices of presidents and secretary-treasurers in such districts, who shall continue to be selected by the International executive board and designated to hold such offices subject to International and district laws, until such time as the International executive board shall provide otherwise.

We believe that the above suggestions fully meet the needs of the situation, are protective of the rights of the membership and at the same time give to the International organization that small measure of advisory supervision that is conducive to the proper discharge of the obligations resting upon the International organization.

In the lengthy debate that followed, 20 delegates spoke in favor of the committee's report and 12 opposed it. President Lewis closed discussion with a statement outlining case histories of districts which had suffered financial insolvency and poor administration under autonomy. In the final standing vote, the committee report was overwhelmingly adopted.

The next day the convention by a large majority passed a resolution condemning the leader of the autonomy movement. Following its adoption, President Lewis appointed a committee of three International executive board members "to digest the evidence and make a report to the board at its meeting following this convention on the question of whether or not this autonomy organization * * * is or is not a dual union under the constitution of the U. M. W. A."³ For the same reasons that the convention later voted to deny Mr. Edmundson delegate status, President Lewis ruled he could not be a candidate for an International office. With one dissenting vote, this interpretation of the constitution was upheld.⁴

Like the resolutions committee, the committee on constitution, appeals, and grievances received a number of resolutions designed to increase home rule within the districts through constitutional revision. Sixty-five resolutions proposed a time limit to provisional or appointed government in districts, 75 resolutions asked for the election or the approval of appointed organizers or field workers by the district in which their membership is held; 61 resolutions sought to substitute district presidents for executive board members in the International executive board with the further provision that the International president "fill by appointment all vacancies occurring in any International office except district president, who shall be elected by the districts in which the vacancy occurs." Opposition was likewise expressed to the practice of having appointed officers and field representatives either serve as delegates to the convention or have a vote if present. The committee's recommendation of nonconcurrency in all such propositions was uncontested by the delegates.

A move for greater independence on the local level was also contained in a number of resolutions advocating a more equal distribution of dues for International, district, and local purposes. (For example, of monthly dues of \$1.50, 90 cents goes to the International union office, 30 cents to the district, and 30 cents to the local union.) All such resolutions were defeated.

³ At the meeting of the general executive board, following the close of the convention, Ray Edmundson was found guilty of organizing a dual union. The constitution provides expulsion as the penalty, but the board took no action at that time to enforce the measure.

⁴ Edmundson later appealed to the U. S. District Court in Washington, D. C., for an injunction to prevent the removal of his name from the ballot. His petition was denied.

CONSTITUTIONAL AMENDMENTS

Certain amendments to the U. M. W. A. constitution were adopted, the most important of which were the following: (1) Opportunity for amendment of the union constitution every 4, instead of every 2, years (delegates will continue to meet biennially, however, for the International scale and policy convention); (2) 4-year (instead of 2-year) terms for International and district officers; (3) 2-year (instead of 1-year) terms for local officers; and (4) to qualify for candidacy in a local election, attendance required in at least half of the local union meetings each month for 6 months immediately preceding nomination of delegates (previously only at half of all meetings during a 6-month period).

Important Resolutions

Social security.—The executive officers were authorized to prepare amendments to be submitted to Congress, reducing the age-limit requirement in the old-age provision of the present social-security law. Further, each district, in cooperation with the legal department of the International union, was urged to improve the workmen's compensation law of its State by broadening the coverage to include occupational diseases, and by increasing allowances. The delegates also voted for a liberalization of unemployment compensation, with benefits to be continued until employment is obtained.

Health.—Numerous resolutions asking for free wash houses at mines brought forth a recommendation from the resolutions committee that adequate, sanitary bathhouses be provided and maintained by coal companies at all coal mines and that such provision be required through legislation in those States where no law yet exists.

Racial discrimination.—The delegates denounced the poll tax and went on record against Negro discrimination in the armed forces and at the production front. Requests for Negro representation among district and International officers were referred to the respective bodies for further consideration.

Wartime agencies.—The War Labor Board was censured for its handling of the 1942-44 coal-wage negotiations. The War Manpower Commission and the "Little Steel" formula likewise received severe criticism in an adopted resolution, which read in part: "We condemn the freezing of wage rates at arbitrary levels and the binding of men to their jobs as destructive to the advancement that has been enjoyed by our union since its formation."

Labor unity.—The officers' report carried a full account of the negotiations between A. F. of L. officials and President Lewis concerning the move of the U. M. W. A. to reaffiliate with the Federation. In conclusion, the report stated:

We regret exceedingly that our efforts failed. We know the fundamentals involved require unification of labor's forces and when we feel that restraints are removed and organized labor is free to act by itself, we will, at the first opportunity, try again to work for consolidation and unity within the ranks of labor.

The desire to unify the large labor groups in the country received further expression in a resolution adopted unanimously by the convention, directing the officers to work toward this end.

Post-war program.—In a briefly worded resolution, the convention supported uniform, adequate unemployment insurance for returning

veterans and war workers, during the period of reconversion. On the international front, labor representation at the peace conference was demanded. The delegates further voted to excuse members in the armed forces from all union dues and assessments. Veterans' re-employment rights also received consideration in the previously mentioned report of the scale committee.

Concern for the future of the bituminous-coal industry led to the adoption of a resolution proposing a new bituminous-coal law in place of the Guffey Act which Congress allowed to expire on August 26, 1943. The proposed bill would provide for a commission of five, three to represent the public and one each for the industry and the mine workers.

Political action.—A statement by the resolutions committee condemned President Roosevelt's labor policies and his alleged bias against the mine workers' union, while favorably citing the labor plank in the Republican party platform and Governor Dewey's record in New York. The resolution adopted by the convention concluded, however, with the statement that "the U. M. W. A. should not depart from its traditional political policy and its constitutional provisions and indorse a candidate or party in the 1944 campaign." Four out of nine speakers supported President Roosevelt, but in the final standing vote, only about 200 delegates voted against the committee's report.

U. M. W. A. District 50

District 50, organized 8 years ago by 12 local unions in the city of Boston, has as its motto "Organize the unorganized." Under its U. M. W. A. charter, its jurisdiction encompasses workers in all industries, with special emphasis placed on the chemical, paper, railroad, and dairy industries. The last two are separate divisions within the district.

In a 2-day meeting, held on September 8 and 9, in Cincinnati, just prior to the U. M. W. A. convention, the problems of District 50 were reviewed by 454 delegates, representing approximately 200,000 workers under contract in 903 local unions in 415 cities and 43 States.

Aware of the big organizational problems ahead, the delegates voted to form voluntary organizing committees within their locals, to coordinate the organization of the unorganized in their communities, and to conduct a survey of unorganized industries within their territory. Discussion arose over the advisability of creating advisory councils within cities and regions. Detroit delegates, who have already organized an informal council, strongly advocated such a step; but the convention, on the recommendation of the organizing committee, voted to refer the problem of sanctioning such councils to District 50 executive officers for further study. A resolution to grant autonomy to District 50 to elect its own officers and board members was likewise voted down.

The major organizing effort of District 50 in the near future will be concentrated in the chemical industry, which thus far has remained largely unorganized. Recognizing this fertile field for unionization, the U. M. W. A. officers' report stated: "Of special importance in the post-war adjustment is the chemical industry because of its direct relation to the coal industry. It is of importance to every coal miner in the country to do his part in furthering organization in this industry

for his own interests as well as for the interests of the organization." Secretary Kennedy, in his address before the convention of District 50, pointed out the significance of this tie-up of coal with chemicals:

Oil, coal, and chemicals are going to be one great integrated industry in this Nation. * * * Oil will probably take up the slack of the coal industry, because the coal industry itself is going to be the basis for the making of synthetic oils and chemicals, which, in my judgment, will develop into the greatest industry in this Nation. That is one reason why the United Mine Workers of America approaches the problem of unity in the labor movement. It believes it is necessary to protect jurisdiction, especially in these chemical and by-products industries, because essentially they are all going to be one industry.

Two methods were proposed whereby the miners might materially assist District 50 in its organizational drive; both were to be incorporated in the 1945 wage-contract demands. One would give miners the right to cease work under their collective agreement, to prevent shipment of coal to a consumer whose employees were engaged in a legal strike. The other, requiring employers to furnish tools and explosives bearing the union label, was foreshadowed in President Lewis' opening address as follows: "I want to serve notice on the great manufacturers of chemicals and explosives in this country that the time is coming after this war when union men in the coal mines of this country will use no powder or explosive that do not bear the brand of this organization."

The final action of the District 50 convention was the passage of a set of rules and bylaws for District 50, to be submitted later, for final approval, to the International executive board of the United Mine Workers of America.

Industrial Relations

Union Agreements in Fruit and Vegetable Canning¹

Summary

ABOUT 40 percent of the estimated 200,000 workers employed at the seasonal peak in the canned fruit and vegetable industry are covered by union agreements. Approximately 75 percent of these workers, chiefly on the West Coast, are under agreements with federal labor unions directly affiliated with the American Federation of Labor. Another 20 percent are under agreement with the United Cannery, Agricultural, Packing and Allied Workers of America (C. I. O.), and the remaining 5 percent are represented by various other unions.

The outstanding agreement in the industry is that negotiated by the California State Council of Cannery Unions and the California Processors and Growers, Inc., the latter being an employer association formed in 1936 to handle labor relations for the industry. The first agreement negotiated by these two groups, which was also the first area-wide agreement in the industry, was signed in July 1937. The California Processors and Growers, Inc., now bargains for its 34 members whose 64 canneries, in northern and central California, produce nearly 80 percent of all canned goods processed in California. Some 35 independent canneries also have subscribed to the terms of this agreement, except for the provisions covering the grievance machinery.

Coverage and Duration of Agreements

This report analyzes the provisions of 32 union agreements, on file with the Bureau of Labor Statistics, covering over 85 percent of the workers in the canned fruit and vegetable industry who were under agreement during the 1943 and 1944 peak seasons. The agreement with the California Processors and Growers, Inc., covers about two-thirds of all the workers under the agreements analyzed. Other agreements which cover over 2,500 workers at the seasonal peak are those with the Campbell Soup Co. (plants at Camden, N. J., and Chicago, Ill.); H. J. Heinz Co. (Pittsburgh, Pa.); and Libby, McNeill & Libby (Portland, Oreg.). Four agreements cover between 1,000 and 1,500 workers each, 19 cover between 100 and 1,000, and 5 cover less than 100 workers.

All but 2 of the 32 agreements were initially negotiated for 1 year, but all are automatically renewable, usually from year to year, in the absence of notice. The California Processors and the Campbell Soup Co. (N. J.) agreements were signed for 2-year periods, but both permit

¹ Prepared by Judith P. Zander of the Bureau's Industrial Relations Division. More complete data are given in Bulletin No. 794.

modifications of specified sections at yearly intervals—wages, hours, and working conditions in the former, and wages only in the latter.

In all of the agreements the union bargains for all production, maintenance, and service employees and in half of the agreements for watchmen as well. Office and administrative workers, on the other hand, are always excluded, as are foremen also in all but 3 of the small-company agreements.

Regulations covering foremen.—Although workers classified as foremen are generally excluded from both the union's jurisdiction and the provisions of the agreements, about half of the agreements, particularly those which vest in foremen the right to hire and fire, regulate their productive activities. According to 9 agreements, foremen may do routine productive work only when a "special emergency" arises; and 2 permit them to do maintenance work in the nonprocessing season. Five other agreements, all with closed-shop clauses, allow foremen to do routine production work, provided they obtain a working permit and pay dues to the union while engaged in such work.

The line of demarcation between foremen and production workers is less distinct in the California Processors and Libby, McNeill & Libby agreements and in one small-company agreement. Under these three agreements, in contrast with most of those previously mentioned, foremen "customarily" supervise the work of others and may only "recommend" hiring and firing. These agreements specifically permit the assignment of foremen to routine duties, both during and after the processing season, as long as they spend most of their time supervising and are paid a specified minimum wage.

Union Status

Membership requirements.—The Libby, McNeill & Libby agreement and 11 of the agreements with smaller companies establish closed-shop conditions under which all workers must be members of the union and all new employees must be hired through the union. The California Processors and 8 other agreements establish union shops which require all employees to become members of the union, but allow the employer to obtain new employees from any source, provided such workers join the union within a specified time, ranging from 5 days to 1 month. The California Processors agreement also states that "the employer will give preference of employment to unemployed members of the local union."²

The 2 Campbell agreements, the Heinz agreement, and 2 others provide "maintenance of membership" for employees who are or who become union members.³ Of the 6 remaining agreements, 1 provides that union members shall be given preference in hiring, while the other 5 do not require union membership as a basis for hiring or continued employment.

² A supplementary emergency agreement negotiated in July 1943 provided that when it was necessary to hire workers other than present or former union members, such workers could obtain an emergency card and would not be required to complete their affiliation with the local unless they so chose. Emergency cards must be renewed weekly. If, however, these employees work more than 24 days or work all regular shifts when work is available during 4 pay-roll periods, they are deemed to be in the same category as other cannery workers and are required to join the union unless they are doing cannery work in addition to their regular employment. Emergency workers do not acquire seniority rights unless they join the union, in which case seniority is retroactive to the date of hiring.

³ The Campbell agreements provide that the "question of union security" should be submitted to the National War Labor Board. On August 9, 1943, the Board ordered the parties to incorporate a standard voluntary membership-maintenance clause in their agreement and to provide for the check-off of union dues upon individual authorization.

Check-off of union dues.—Some provision for the check-off of union dues by the company is made in 10 of the 32 agreements. In the Heinz agreement and those of 2 smaller companies, the check-off is automatic for union members; in the other 7, including the Campbell agreements, dues are checked off only on individual authorization by the employee.

Wage Provisions

With but 2 exceptions the agreements indicate the basis on which wage payments are calculated. Hourly rates are specifically provided in every case for all regular employees and in most cases for seasonal employees as well. However, 10 agreements, all but 2 of which are with plants on the West Coast, provide piece-work rates for certain seasonal workers.

Minimum wage rates.—Of the 30 agreements with wage provisions, 16 (including all the large companies but Campbell) have both plant-wide minima and occupational wage rates for men and women. Five of these, all with small companies, provide lower minimum rates for seasonal workers than for regular employees. Eight other agreements list minimum rates for regular employees and 2 more have plant minima for seasonal workers only. All of the agreements with plant-wide minima, either for regular or seasonal workers or for both, establish lower rates for women than for men. Since nearly all of the agreements specify that women shall receive men's rates when put on men's jobs, it may be inferred that most of these differences are based on differences in jobs rather than on sex alone. The 2 Campbell agreements and the 2 remaining ones list occupational rates but no plant minima. Eleven agreements have lower minima for minors.

Hiring rates.—About two-thirds of the agreements—including those of all the major companies except California Processors and Libby, McNeill & Libby—prescribe hiring rates below the minimum for new, inexperienced workers for a stipulated period, ranging from 3 weeks to 6 months. Hiring rates apply to all new workers in 11 agreements while in 8 others, all with plants in the State of Washington, hiring rates apply only to boys and girls under 18 years of age. In the Campbell agreements, which indicate that an incentive system is in force, a new employee advances from the hiring rate to the base rate which is guaranteed after he has met the production standard for 5 consecutive days, even though he may later fail to maintain production.

Interim wage adjustment.—Provisions for general wage changes during the life of the agreement are found in 5 agreements, 2 of which were signed for periods exceeding 1 year and the others for a 1-year period with provisions for automatic yearly renewal. The Heinz, California Processors, and Campbell (N. J.) agreements permit either party to request a reconsideration of the wage level upon specified notice. An agreement with a smaller company permits wage changes if the cost of living rises 5 percent but makes actual changes in wages dependent on the state of company profits; another specifies that wage changes will be made automatically in the event of a "general rise in wages" or a raise of pay in certain classifications in any 2 of 5 other designated California plants.

Incentive-wage system.—Of the 10 agreements which mention piece rates, all but 1 provide minimum guaranties.⁴ Combination group-individual incentive systems are provided in 7 agreements with West Coast companies. In the California Processors agreement, for example, a “guaranteed average rate” of 80 cents an hour is established for piece-work crews. In any week in which the average actual earnings of the group fall below the guaranteed rate, a percentage adjustment “sufficient to produce a group average of 80 cents an hour” is paid to each worker in the group, regardless of whether his individual earnings were above or below the guaranteed rate. A similar adjustment is made in the other agreements when less than 50 percent of the workers in the group earn the guaranteed minimum. The 2 remaining agreements specify that piece workers are to be paid at least the guaranteed hourly rate set for their specific jobs.

Specific provisions for rate setting and rate adjustment are outlined in 2 agreements. Under the California Processors agreement, piece rates may be changed to compensate for variations in products or processes or for other reasonable causes, provided the employer gives advance notice to the union and to the employer’s committee of the change and the reason. If the union disapproves of the change it may submit the matter to the grievance machinery within 10 days. The second agreement provides that piece rates shall be established by the end of 5 working days but that the method of determining such rates shall be discussed with the union before the rates are instituted. Job analysis and grading by a joint union-management committee are provided under the Heinz agreement and one other.

Intraplant transfer rates.—A third of the agreements mention wage rates in connection with temporary transfers. About half of these agreements (including California Processors) provide for the payment of the higher rate to all employees transferred to higher-rated jobs, and the payment of the employee’s old rate when he is transferred to a lower-rated job. The remainder provide that the rate for the job to which the worker is transferred shall apply only if he remains on the job to which transferred a given length of time—from 3 days to 2 weeks.

Minimum call pay.—All but one of the agreements provide for the payment of a minimum amount to employees who are called to work or who report for work at the regular time but for whom no work is available. The minimum guaranty varies from 1 to 4 hours’ pay, with 2 hours most common. Two-thirds of these agreements, including those of all the larger companies except H. J. Heinz, guarantee additional pay if some work is done after reporting. The minimum guaranty under these circumstances varies from 2 to 4 hours, with the latter the most common.

Stand-by pay and split shifts.—Under the Heinz agreement and 5 others, full pay is awarded to all workers for time lost when operations are halted for lack of materials or other specified causes within the control of the employer. The Heinz agreement provides, however, that piece workers will receive such stand-by pay only when the delay exceeds 15 minutes. Another agreement provides

⁴ In any industry, when the actual hourly earnings of piece workers fall below the minimum established under the Fair Labor Standards Act or State laws, whichever is higher, the employer is required to make up the difference. The “guaranties” referred to above were set considerably higher than the legal minima in every case.

that workers are to receive pay for half of such waiting time unless the employer calls a recess of 3 hours or more.

Six other agreements make no provision for stand-by pay and allow split shifts without overtime pay when work is halted for reasons beyond the employer's control. Four of the 6 agreements limit the length of these "splits." In the California Processors and Libby, McNeill & Libby agreements and one other, the work recesses may be called for not less than a half hour nor more than a total of 2 hours per week, while the other agreement specifies that 8 hours of work may be spread over 12 consecutive hours during the processing season.

Shift differentials.—To permit rapid processing of fresh produce when large quantities are brought to the plant, 11 agreements, including most of the larger companies, allow for multiple-shift operations. Of these, the California Processors and 5 others grant no differentials over day rates for night work, simply stating that shifts shall be instituted where necessary.

The other 5 agreements which mention shifts stipulate different rates for work between 6 p. m. and 6 a. m. In the 2 Campbell agreements the differential is 10 percent of the day rate; in the Heinz agreement and 1 other it is 5 cents and 10 cents an hour, respectively. The Heinz agreement, however, limits payment of a shift premium to the nonprocessing periods.

Miscellaneous pay provisions.—Several agreements with large West Coast companies permit the employer to adjust the wages and hours of an employee who cannot accomplish a satisfactory day's work because of age or physical disability. In the Heinz agreement, an employee sent to the plant hospital because of an industrial injury is paid his regular rate for the time he is required to remain there, while employees sent to the hospital because of illness are paid for the first hour only. Another agreement provides that an employee who receives, on the job, an injury not compensable under the State law is to receive a full day's pay.

Four agreements require the company to furnish, free of cost, the apparel and safety devices necessary for the job. Another states that the employee and the company shall share equally the expenses of uniforms, but the employee's share is not to exceed 75 cents a week.

Hours and Overtime

All but 1 of the 32 cannery agreements contain hours and overtime provisions. Twenty-four distinguish between the processing and nonprocessing season by allowing additional hours of work at straight-time rates during seasonal peaks known as exemption periods;⁵ 7 of these refer to 2 separate exemption periods. Although the 7 remaining agreements establish a basic 8-hour day and 40-hour week, with time and a half for work in excess of these limits throughout the year,

⁵ Canneries may take advantage of 3 types of hour exemptions permissible under the Fair Labor Standards Act, but it is not possible to tell from the agreements the number or type of exemptions taken. The exemptions which may apply to canneries are as follows: (1) A total exemption from both wage and hour provisions throughout the year is allowed "any individual employee within the area of production (as defined by the Administrator), and engaged in * * * canning of agricultural or horticultural commodities for market" (sec. 13-a-10). (2) A total exemption from the hour provisions of the act for 14 weeks of the year is provided for employees of employers engaged in "the first processing of, or the canning of * * * perishable or seasonal fresh fruits or vegetables" (sec. 7-c). (3) A limited exemption from the hour provisions of 12 hours per day and 56 per week may be granted for 14 weeks to persons engaged in any industry found by the Administrator to be of a seasonal nature (sec. 7-b-3). Canneries outside the "area of production" may take advantage of (2) or (3) or both.

several specify some exemptions: 1 limits these hours to regular employees while seasonal employees are subject to the exemptions of the Fair Labor Standards Act; and another allows an additional hour daily at straight-time rates but stipulates that if more than 9 hours are worked, time and a half shall be paid for all work in excess of 8 hours. Five of the seven 40-hour-week agreements cover companies whose plants are in or near large cities, where they compete with other industries for a labor supply; the other 2 are with firms not entitled to the statutory seasonal exemptions.⁶

In 22 of the 24 agreements with different seasonal standards, the basic hourly overtime standards during the nonprocessing season are time and a half for work in excess of 8 hours per day or 40 hours per week, although one agreement requires male employees to work 9 hours before daily overtime begins. Six of these agreements provide for double time for work in excess of 12 hours daily. Of the 2 remaining agreements, 1 requires time and a half after 40 hours weekly but contains no daily overtime provisions, and the other simply states that provisions of the Fair Labor Standards Act shall govern overtime pay.

Ten of the 24 agreements which refer to seasonal exemptions specify neither the number nor the kinds of exemptions taken, simply stating that during the processing season hours and overtime pay shall be determined by the Fair Labor Standards Act. On the other hand, 14 explicitly establish a limit on the number of hours per day and/or week which may be worked at straight-time rates, although it is not always possible to determine which or how many of the 3 allowable exemptions are referred to in these cases. Of the latter group of agreements, 9 establish longer straight-time hours for men than for women, most commonly providing time and a quarter after 8 hours daily for women; for both men and women, they provide time and a half after 10 hours daily or 60 hours weekly, and double time after 12 hours daily.

In the other 5 agreements men and women are covered by identical hours and overtime arrangements. In 2 of these, time and a half is paid after 8 hours daily or 48 hours weekly, in 2 others after 56 hours weekly, and in the remaining agreement after 12 hours daily or 72 hours weekly; the first 2 of these agreements also provide for double time after 12 hours daily.

In addition to the seasonal tolerances described above, 7 agreements also establish special hours standards for the "pea canning" or "tomato processing" seasons or refer to the "unlimited hours" exemption. The overtime-pay requirements during this second exemption period are less generous than during the seasonal exemptions described above. Of the 7 agreements having these special hours standards, only 3 provide premium pay for overtime (1 of these, for women only). No limit is placed on straight-time hours for men in 5 of the agreements and for women in 4. Of the 2 remaining agreements with provisions for men, one specifies time and a half after 66 hours and the other after 70 hours weekly. The 3 agreements with provisions for women specify, respectively, (1) time and a half after 9 hours daily or 54 hours weekly, (2) time and a half after 11 hours daily, and (3) time and a quarter after 8 hours daily, time and a half after 70 hours weekly, and double time after 12 hours daily.

⁶ These firms are engaged in dried-fruit packing, which is not considered eligible for an exemption under the Fair Labor Standards Act.

Week-end and Holiday Pay

Most of the agreements with premium rates for week-end work were negotiated in conformity with Executive Order No. 9240,⁷ but also provided Saturday and Sunday rates which were to be substituted when the order no longer applied to the industry. The California Processors agreement and 6 others specify that time and a half is to be paid for all Saturday work; another specifies time and a half for work on Saturday after 1 p. m.; and 1 other, for work on "Saturday night." The Heinz agreement and both the Campbell agreements (negotiated in conformity with Executive Order No. 9240) have retained the premium rates for sixth- and seventh-day work instead of Saturday and Sunday per se.

All of these agreements in which seasonal exemptions are taken specify that the premium rate is to apply only during the nonprocessing season. In the California Processors agreement the Saturday rate applies during this season only in case the employer does not give the employee and the union notice at the earliest possible date, or if the work is not of an emergency nature.

Payment of the premium rate for all Sunday or seventh-day work throughout the year is required by 9 agreements, half of which provide for seasonal exemptions. On the other hand, 10 agreements waive these premium rates during the exemption periods. In the California Processors agreement and 1 other, time and a half is provided for work on either Sunday or the seventh day when specified commodities are being processed. Another agreement specifies that the premium rate applies to all but 6 Sundays in the year; and the remaining agreement does not mention whether the rate applies during the processing season.

Holidays.—Pay for holidays not worked is allowed in only 2 agreements, both with the Campbell Soup Co.; the agreement with the Illinois plant allows pay for Christmas, and that with the New Jersey plant, for Thanksgiving, to employees who work on the workday immediately preceding and immediately following the holiday.

Premium pay for work on holidays (generally 6 in number) is established in 26 of the 32 agreements; 23 require payment of time and a half and 3 of double time. Only 3 small-company agreements specify that premium rates shall not apply if the holiday occurs during an exempt week. Payment of overtime after 32 hours (instead of 40) during a holiday week is specifically provided in 3 agreements.

Vacation Provisions

Paid vacations are provided for regular employees under 21 agreements, including all the major companies; 2 of these grant vacations to seasonal workers as well. Fourteen of the agreements establish a maximum paid vacation of 1 week, generally after a year of service. In 12 of the 14 agreements with a maximum of 1 week's paid vacation, this is the only vacation; the others allow 3 days' paid vacation after 6 months and 1 year, respectively.

More extensive vacation plans are provided by 7 agreements. In 5 of these the maximum is 2 weeks after periods of service ranging from

⁷ Executive Order No. 9240 prohibits premium pay for Saturday and Sunday work as such for "all work relating to the prosecution of the war," and makes the payment of double time mandatory for the seventh consecutive day of a regularly scheduled workweek. On August 23, 1943, the Secretary of Labor issued a determination stating that "in the case of an employer engaged in the first processing of, or in canning or packing, perishable or seasonal fresh fruits and vegetables the provisions of Executive Order No. 9240 shall not apply to his employees in any place of employment where he is so engaged."

1 year to 8 years. One of the 2 remaining agreements allows "60 hours' vacation with pay" after 5 years' service, and the other provides 2 weeks' vacation after 5 years of service for both men and women and 3 weeks after 15 years for women and after 20 years for men. The former also allows "20 hours' vacation with pay" to seasonal workers with 8 months' service.

The service requirement is qualified in about half the agreements by a provision that the employee must have actually worked a minimum period during the service year. Hourly minimum work requirements range from 1,600 straight-time hours to 2,295 total hours, with the former the most common. One agreement permits an employee to accumulate the 1,800 hours of required service over a 2-year period if necessary. The Heinz agreement, which allows 1 week of vacation after 1 year and 2 weeks after 8 years, requires that the employee shall have worked at least 200 days in the preceding calendar year. However, employees who have worked more than 150 but less than 200 days are entitled to half the vacation allowed to employees who have met the service requirement.

Method of computing vacation pay.—Most commonly the agreements with paid vacations (including some with single and some with graduated plans) calculate 1 week's vacation pay at 40 times the employee's basic hourly rate, although one stipulates that employees are to receive 56 hours' pay. In the Heinz agreement and one other, vacation pay is calculated on the basis of average hourly earnings. In another agreement the vacation pay amounts to 3 percent of the employee's total annual compensation.

Pay in lieu of vacation is prohibited in all the agreements except one, which permits the employer to grant vacation pay but no time off for the duration of the war, if "sufficient help is not available." All the agreements prohibit the accumulation of vacation periods. In all of the agreements with vacation provisions, the company reserves the right to designate the vacation period. Nearly all the agreements specify that vacations shall be taken during the nonprocessing period.

Leaves of Absence

With the exception of the Heinz agreement and those of 2 smaller companies, all of the agreements provide for leave of absence for personal reasons. Most of these establish no limits on the amount of leave granted, although 5 specify a 3-month limit, subject to extension and the 2 Campbell agreements limit leave of absence to 60 days. The Campbell (N. J.) agreement also prohibits workers from taking other jobs during such leave unless "such work is requested by the United States Government in an ordnance plant." About half of the agreements with leave provisions, including those of all the larger firms, require company consent and union approval before such leave is taken. The Campbell agreements and 2 others specify that leave of absence may not be taken during the peak season.

Leave for union business.—Provisions for leave of absence for union business are found in 14 agreements covering nearly 75 percent of the workers. The extent of leave varies from 15 days in any 6-month period to an indefinite period, with most of the provisions in the latter category. Most of the agreements allow such leave "without loss of seniority rights"; the California Processors and one other agreement

specifically provide that seniority shall accumulate during leave for union business.

Seniority Rules

Detailed seniority rules recognizing length of service as the basis for preferential consideration in lay-off and rehiring, and occasionally for promotions, are found in all but one of the agreements; the exception states "seniority rights shall prevail in all cases." The right to acquire seniority is limited to regular employees in 10 of the agreements, while the others extend the privilege to both regular and seasonal workers. Separate seniority rosters for regular and seasonal workers are established under 12 agreements which include all the major companies; the others provide for one seniority list arranged in order of the last date of hiring. The California Processors and Libby, McNeill & Libby agreements and one other specify that workers may have places on both lists, so that when a regular worker is laid off he may reclaim his standing on the seasonal list. The Heinz agreement establishes separate seniority lists for men and women.

About a third of the agreements, including those of all the major companies, require both regular and seasonal employees to serve a probationary period before seniority can be acquired, with seniority rights retroactive to the date of hiring. Most of these set the same probationary requirements for regular and seasonal employees, most commonly 30 days. Several agreements which have separate seniority rosters for regular and seasonal employees have separate requirements for these groups. Most of these provide that employees must work 30 out of 52 weeks in order to qualify as regular workers, while employees who have worked 60 percent of the operating days during the processing season may qualify as seasonal workers.

Seniority for special groups.—Four agreements provide that shop stewards and committeemen shall have top seniority during their term of office, with the understanding that they shall return to their original place on the seniority list at the expiration of such tenure.

All of the agreements with West Coast companies and many of those with Midwestern firms allow the employer to select a person to fill a supervisory or technical position without regard to the seniority lists if he feels a qualified person is not available. In most of these agreements the company also reserves the right to disregard seniority rules on hiring and transfer when training students for managerial positions. Such students may not accumulate seniority, however, nor may they displace any regular worker. In contrast, students who are part of the regular seasonal force are to become union members and may exercise full seniority rights.

Loss of seniority.—Clauses safeguarding seniority rights during periods of enforced lay-off are found in about two-thirds of the agreements, although the length of time during which such protection is afforded varies considerably. The maximum period of lay-off before seniority is lost is most frequently specified for regular employees only, and varies from 60 days to a year, although 2 provide for indefinite retention of seniority rights during lay-off.

In the case of seasonal employees, whose seniority is generally computed on the number of consecutive seasons worked, seniority rights are presumably lost only if the worker fails to report for the next operating season.

Most of the agreements establish time limits (generally 3 days) within which an employee must report when recalled to work; his seniority is lost unless he can furnish a justifiable excuse for not reporting when recalled. All of the agreements specifically state that seniority shall terminate upon discharge or voluntary separation.

Lay-Off and Rehiring

Twenty-four of the agreements with detailed seniority rules, including those of all the major companies, provide that lay-offs shall be in strict accordance with seniority. Three agreements, on the other hand, state that seniority shall govern only if skill and ability are equal; and 4 others provide that "length of service in the plant as well as skill and efficiency of the workers shall be taken into consideration when hiring or lay-offs occur." All the agreements which provide for separate listing of regular and seasonal employees specify that seasonal workers (and probationary employees) shall be laid off before workers on the regular force.

In 21 agreements, seniority is acquired and exercised on the basis of plant service only, although in 2 of these maintenance employees may exercise departmental seniority only. One agreement with a company operating several plants uses company-wide seniority as the basis for lay-off and rehiring, for all workers covered by plants in the same community. In 4 agreements the order of lay-off and rehiring of all employees is determined solely by departmental seniority. Another agreement allows employees to accumulate seniority on the basis of total plant service, but they may exercise this right only in the department to which they are assigned.

Under the Heinz agreement, production workers acquire seniority on the basis of total plant service but apply their seniority to both the department and the plant. For example, in a temporary reduction of forces (i. e., a lay-off of less than 2 weeks) total plant service is applied within the department only; in a general reduction, total plant service is applied throughout the plant.

Two other agreements allow employees to accumulate and exercise seniority on a plant-wide basis except during temporary lay-offs, when employees with insufficient seniority to remain in their own departments are permitted to displace workers in other departments with less total plant seniority.

The remaining agreement allows seniority rights to be accumulated and exercised on a plant basis for lay-off. In rehiring, however, preference is given to those employees who have worked on specific products in preceding years.

Work sharing.—Two small-company agreements have provisions for reducing the workweek to 32 hours before lay-offs of regular workers are made, while the Campbell agreements state that the question of work sharing will be discussed when the average workweek falls below 35 hours.

Promotions and Transfers

Consideration of seniority in making promotions is stipulated in over half the agreements, covering 90 percent of the workers. Eleven of these, all negotiated by West Coast or Midwestern companies,

provide that "seniority" alone shall govern promotions, but 7 of these also stipulate that the senior employee must serve a trial period to prove his ability to perform the higher-grade work. Seniority is a secondary factor in determining promotions in 7 agreements which give first consideration to skill and ability and, occasionally, physical fitness. In every case the seniority unit for promotion is the same as that for lay-off and rehiring.

Only the Heinz agreement and one other mention the effect of a transfer on an employee's seniority status. Under the Heinz agreement an employee who is transferred to a "new department" cannot acquire seniority in that department for a year, but retains seniority in his former department. Should a lay-off of more than a week occur in the new department within the year period, the employee may exercise his former seniority to "bump" back into his old department. After 1 year his total service is applied to the new department only. In the other agreement, in which seniority is accumulated on a departmental basis, an employee temporarily transferred by the company to another department retains seniority in his former department; but if the employee desires to make the transfer permanent, he automatically loses seniority in his former department and is placed at the bottom of the list in the new department.

Military Service and War Jobs

Clauses protecting the seniority and reemployment rights of employees who entered the military service are found in all but three of the small-company agreements. About a third of these specifically provide for the accumulation of seniority by employees on military leave, but in the others it is not clear whether seniority is accumulated or frozen.

Five of the agreements provide that a bonus shall be given to workers entering military service, and one provides for company payment of "National Service Life Insurance" premiums up to the amount of company insurance the employee carried at the time he entered military service.

References to the effect of transfers to war jobs in other plants on an employee's seniority rights are found only in a few agreements, which state that in the event of a Federal labor draft, employees affected shall accumulate seniority.

Health and Safety

Most of the agreements allow relief periods, usually of 10 minutes at 2- or 2½-hour intervals; the Heinz, Libby, McNeill & Libby, and Campbell (Ill.) agreements simply provide that adequate periods will be granted (but in the Campbell agreement, to workers on continuous operations only). Several other agreements have a variety of health and safety provisions, including physical examinations at company expense and restrictions on weight lifting by women. One agreement provides for the establishment of a joint safety committee of union and company officials, to meet regularly for the purpose of promoting safety in the plant.

Adjustment of Disputes

All but 1 of the agreements outline the specific steps in the presentation and negotiation of grievances and all but 6 of the 32 agreements provide some form of arbitration as the final step in settling disputes.

Grievance machinery.—The agreements vary widely with respect to the methods used in the initial presentation of grievances. In a majority of the agreements, including California Processors and Libby, McNeill & Libby, the shop committee or union representative discusses the grievance with the foreman or other representative of plant management. In the next largest group of agreements, the employee has the option of discussing the grievance with the foreman or of having his union representative take up the grievance for him. Several agreements specify that the individual employee is to take up the grievance with the foreman himself, while in a few others the employee involved must accompany the union representative. In the remaining agreements the employee may present the grievance himself or have the steward accompany him.

The agreements generally provide that if grievances are not satisfactorily settled at the first step, members of the shop committee or the union representative must take up the dispute with the plant manager. In the California Processors agreement and one other, disputes thereafter go to a permanent committee on which management and the union are equally represented. In the Libby, McNeill & Libby agreement and one other disputes not settled by the union executive committee and the management may likewise be submitted to a permanent bipartisan board.

Under the California Processors agreement, the permanent bipartisan committee (called the Central Adjustment Board) is composed of four regular business agents (including one woman), and two alternates, elected by the California State Council of Cannery Unions, and a like number of representatives elected by the California Processors and Growers, Inc. No member of either organization involved may participate on the Central Adjustment Board in his own case. Employers who have signed the master agreement but who are not members of the California Processors and Growers, Inc., may resort to one of three designated grievance procedures: (1) Appeal to the Central Adjustment Board established by the master agreement, (2) establishment of a board composed of four union representatives and four representatives of the independent employers to function in the same manner as the Central Adjustment Board, or (3) establishment of a bipartisan plant committee composed of three company and three union representatives to act on the grievances affecting only the plant of the individual employer.

The California Processors agreement is the only one of the cannery agreements which gives the employer an equal right to present grievances to the shop committee and/or Central Adjustment Board. Under this agreement interpretations and adjustments made in the settlement of local disputes may be reversed by the Central Adjustment Board. Employer members of the California Processors or local unions affiliated with the council who fail to comply with decisions of the Central Adjustment Board may be expelled from their respective organization.

To expedite the settlement of disputes, 22 agreements, covering 80 percent of the workers, impose time limits on most stages of the grievance procedure, and 4 of these provide for regular meetings of the plant grievance committee and the management. The California Processors agreement provides for monthly meetings of the Central Adjustment Board, although it has no provision for regular meetings within the individual plants.

Payment during adjustment meetings.—Although several agreements specify that shop stewards shall be allowed time off to settle grievances at the initial stage of the dispute, only the Heinz agreement specifically allows stewards pay for time lost, the company reserving the right to discontinue such payment “in case of abuse.” However, the two Campbell agreements provide that union representatives shall be paid for time lost if it is necessary to call a special meeting during working hours to settle a dispute of an “emergency” nature. In the California Processors agreement, union representatives on the Central Adjustment Board are full-time paid union officials.

Arbitration

All but 1 of the 26 agreements which provide for arbitration as the final step in the settlement of disputes, state that arbitration may be invoked at the request of either party. The Heinz agreement requires mutual consent for submission to arbitration. In all cases the arbitrator's decision is explicitly declared to be final and binding.

The 2 Campbell agreements and 14 others establish tripartite arbitration boards consisting of one or two representatives chosen by each side at the time of the dispute, together with a jointly selected impartial chairman. Under the California Processors, Libby, McNeill & Libby, and 6 other agreements, on the other hand, the dispute is referred to a single arbitrator (in one case, to the Massachusetts State Board of Conciliation and Arbitration) for final disposition. In the California Processors and Libby, McNeill & Libby agreements, and one other, the arbitrator is appointed only when the bipartisan board fails to agree.

In all but 4 of the agreements the arbitrator or arbitration board is chosen for particular disputes; in the others, all with small companies, the arbitrator is designated to settle all disputes arising during the term of the agreement. A third of the agreements provide that if the company and the union are unable to agree upon the selection of an impartial person, a designated public agency, usually the U. S. Conciliation Service, shall make the selection.

Only 10 of the agreements establish time limits for various stages of the arbitration proceedings, generally in connection with the selection of the arbitrator, although some have set time limits for the arbitration hearings and the rendering of the decisions. Time limits for the selection of the arbitrator vary from 2 to 7 days after arbitration has been requested.

Provisions Governing Discharge

Most of the agreements simply state that discharges may be made for “good” or “sufficient” reason. Specific causes for discharge, including incompetency, theft, intoxication, and violation of safety rules, are found in 4 agreements.

All the agreements provide for the appeal of discharge cases through the regular grievance machinery, although in the California Processors agreement an extra step is added, in that discharge disputes are referred to the union executive committee and a company official before they can be submitted to the Central Adjustment Board. This step is inserted both to hasten a decision and to obviate the need and expense of convening the members of the Central Adjustment Board. Special time limits are established for various stages of the discharge procedure in 8 of the agreements.

About half of the agreements specifically provide that back pay shall be granted to employees found discharged without justification. In 13 agreements the employee receives pay for all time lost, while in the California Processors, Libby, McNeill & Libby, and 2 other agreements the amount of back pay is left to the discretion of the arbitrator.

Strikes and Lockouts

All the agreements, except those of 6 small companies, either absolutely forbid strikes and lockouts during their term or permit such action only after every effort has been made to settle the dispute. If final and binding arbitration is provided, a restriction on work stoppages pending resort to the grievance machinery is tantamount to a prohibition, unless, of course, there is undue delay at any stage of the grievance machinery. All of the agreements which either prohibit or restrict strikes provide for arbitration of unsettled disputes; on the other hand, none of those which do not prohibit strikes and lockouts provides for arbitration.

Eight of the agreements with A. F. of L. unions which ban work stoppages within the plant, pending resort to final stages of the grievance machinery, also express disapproval of sympathy strikes. Four of these prohibit union participation in such strikes, but also specify that the employer shall not require his employees to cross a legitimate A. F. of L. picket line. A few of the remaining agreements have provisions for sympathy strikes when the approval of the local union has been obtained. These were negotiated with companies in which various unions bargain for different groups within the plant, or with companies operating more than one cannery.

Industrial Disputes

Strikes in October 1944

THERE were 440 strikes in October 1944, involving 220,000 workers, and 690,000 man-days of idleness, according to preliminary estimates by the Bureau of Labor Statistics. Idleness was 0.09 percent of the available working time.

The Bureau's strike statistics include all known strikes in continental United States which involve as many as six workers and last as long as a full day or shift. The term "strike" is used to include all stoppages of work resulting from labor disputes, regardless of whether the workers or employers initiate or are responsible for them. As in the past, the figures include all workers in any plant who were made idle because of a strike in that plant, regardless of whether or not they were all directly involved in the dispute.

Strikes in October 1944, with Comparative Figures for Earlier Periods

Month	Strikes beginning in month		Man-days idle during month (all strikes)	
	Number	Workers involved	Number	Percent of available working time
October 1944 ¹	440	220,000	690,000	0.09
September 1944 ¹	390	185,000	660,000	.09
October 1943.....	287	121,253	1,012,534	.14
October 1942.....	207	61,593	243,756	.04
October 1941.....	432	197,803	1,925,328	.27
October 1940.....	267	71,997	915,014	.15
October 1939.....	205	106,628	1,508,120	.27

¹ Preliminary estimates.

Maintenance Workers' Strike in Detroit

A demand that the National War Labor Board appoint a fact-finding panel to investigate the question of reconciling wage differences between C. I. O. maintenance workers and A. F. of L. members doing similar work precipitated a strike on October 4. As a result, approximately 50,000 workers in 20 automotive plants in the Detroit area were idle. The workers directly involved were affiliated with the Maintenance, Construction and Powerhouse Workers' Council of the U. A. W.-C. I. O., but the stoppage was not authorized by the international executive board of the union.

The question of unsatisfactory wage rates for maintenance workers, many of whom belong to skilled or semiskilled groups, has been responsible for other strikes recently (i. e., at the Packard Motor Car Co.

in August and at the Briggs Manufacturing Co. in September). The question has become particularly disturbing during the war period. Maintenance workers claim that they have been barred from production work for which the pay is higher, because they perform an indispensable function in maintaining plant machinery and equipment, and that there is increased use of A. F. of L. contract workers, most of whom are paid on the basis of building-trades scales which are higher than maintenance scales. Several individual cases involving requests for wage increases for maintenance workers were pending before the War Labor Board when the strike occurred, as was a request for an increase of 11 cents per hour for certain of these workers, which had been brought to the Board in July by the National Maintenance Conference of the U. A. W.-C. I. O.

In accordance with its usual policy, the Board refused to take any action while the workers were out on strike. Workers in a majority of the plants returned to work on October 6 and the War Labor Board then referred all disputes regarding wage rates for maintenance workers to the Automotive Section of the Eleventh Regional War Labor Board at Detroit, directing it to give the cases immediate consideration, to hear all parties interested, and to make its recommendations to the National Board.

M. E. S. A. and U. A. W.-C. I. O. Dispute in Toledo, Ohio

A dispute between the Mechanics' Educational Society of America and the United Automobile Workers (C. I. O.), somewhat similar to the one which had caused a large amount of idleness in Ohio and Michigan in February 1944, was responsible for several strikes in Toledo (Ohio) plants in October and for a sympathy strike in Detroit in early November.

The dispute started at the Electric Auto-Lite Co., where the U. A. W.-C. I. O. is the bargaining agency for production employees, although considerable numbers of workers are members of the M. E. S. A. The U. A. W. demanded the discharge of several employees, members of the M. E. S. A., stating that they were causing unrest among the workers. Because a strike was threatened, the case was certified to the National War Labor Board on October 6, but the next day about 7,000 workers struck, claiming that the Board had taken jurisdiction before negotiations under the grievance machinery had been exhausted. They returned to work on October 13, pending WLB hearings on the case.

Late in October, the management at the Electric Auto-Lite Co. discharged six M. E. S. A. employees in accordance with the maintenance-of-membership provisions of the U. A. W. contract and about 500 M. E. S. A. members struck in protest. M. E. S. A. members in about 20 Toledo plants went out in sympathy, followed by those in another 20 plants in the Detroit area early in November. After unsuccessful attempts by the War Labor Board to induce the two unions to agree on an arbitration panel, the Board referred the dispute to the President on November 3, and the next day several Toledo plants were taken over by the Army under presidential order. On November 5, officials of the M. E. S. A. ordered the men back to work, and the majority returned on November 6.

Activities of U. S. Conciliation Service, September 1944

DURING the month of September 1944, the U. S. Conciliation Service disposed of 2,290 situations as compared with 2,487 situations in August 1944 and 2,036 in September 1943.

Of the 304 strikes and lockouts handled in September 1944, 267 were settled successfully; 37 cases in which strikes occurred during negotiations were certified to the War Labor Board, but in 19 of these a Commissioner of Conciliation had effected a return-to-work agreement prior to certification of the case. The records indicate that 265 situations were threatened strikes and 1,521 were controversies in which the services of conciliators were requested by the employer, employees, and other interested parties. Altogether, 456 disputes were certified to the War Labor Board during September and in 2 cases Federal agencies other than the War Labor Board assumed jurisdiction. The remaining 200 situations included 82 arbitrations, 17 technical services, 17 investigations, and 84 requests for information, consultations, and special services.

Cases Closed by U. S. Conciliation Service, September 1944, by Type and Disposition

Method of handling	Total	Strikes and lockouts	Threatened strikes	Controversies	Other situations
All situations.....	2,290	304	265	1,521	200
Settled by conciliation.....	1,632	267	251	1,114	-----
Certified to National War Labor Board ¹	456	37	14	405	-----
Referred to other Federal agencies.....	2	-----	-----	2	-----
Decisions rendered in arbitration.....	82	-----	-----	-----	82
Technical services completed.....	17	-----	-----	-----	17
Investigations, special services.....	101	-----	-----	-----	101

¹ Of these, 19 were settled prior to referral.

Cooperation

Status of Labor Banks, June 30, 1944

LABOR banks in the United States on June 30, 1944, again numbered four, as a result of the inclusion in the group of the Brotherhood State Bank of Kansas City, Kans. The number had fallen to three in the previous year, with the dissolution of the Telegraphers National Bank of St. Louis, Mo., in September 1942. As of June 30, 1944, the capital, surplus, and undivided earnings of the four banks exceeded 3 million dollars, deposits amounted to nearly 58 million dollars, and total resources were over 61 million dollars.

Comparing figures shown for the three banks which were in the group in both years, capital, etc., rose 15.2 percent, deposits 22.6 percent, and total resources 28.1 percent.

Data on these three points for the individual banks during the past 10-year period are shown in table 1.

TABLE 1.—Development of Individual Labor Banks, 1935-44¹

Bank and year ²	Capital, surplus, and undivided earnings	Deposits	Total resources	Bank and year ²	Capital, surplus, and undivided earnings	Deposits	Total resources
Amalgamated Trust & Savings Bank, Chicago:				Union National Bank, Newark, N. J.—Con.			
1934-35	\$263, 635	\$4, 225, 094	\$4, 779, 391	1942-43	\$543, 683	\$6, 332, 788	\$6, 890, 239
1935-36	290, 000	6, 131, 090	6, 748, 675	1943-44	576, 590	7, 742, 386	8, 334, 746
1936-37	350, 000	7, 397, 983	8, 099, 097	Amalgamated Bank of New York, N. Y.:			
1937-38	650, 000	7, 056, 297	7, 804, 243	1934-35	673, 970	5, 807, 859	6, 547, 224
1938-39	694, 227	8, 456, 246	9, 297, 724	1935-36	660, 913	7, 085, 614	7, 828, 138
1939-40	786, 934	9, 448, 530	10, 393, 324	1936-37	663, 184	6, 565, 205	7, 324, 807
1940-41	852, 361	10, 600, 336	11, 615, 305	1937-38	681, 580	5, 893, 029	6, 698, 733
1941-42	1, 015, 337	11, 678, 229	12, 737, 679	1938-39	670, 747	6, 701, 582	7, 509, 533
1942-43	1, 082, 475	15, 598, 769	16, 748, 109	1939-40	704, 632	7, 150, 670	8, 032, 754
1943-44	1, 146, 852	19, 612, 646	20, 828, 305	1940-41	759, 677	7, 829, 351	8, 768, 609
Union National Bank, Newark, N. J.:				1941-42	720, 905	8, 389, 356	9, 235, 648
1934-35	457, 414	2, 730, 661	3, 198, 559	1942-43	763, 011	13, 427, 031	14, 306, 833
1935-36	466, 984	2, 677, 272	3, 154, 261	1943-44	1, 029, 236	18, 324, 120	19, 443, 369
1936-37	473, 747	2, 948, 186	3, 436, 754	Brotherhood State Bank, Kansas City, Kans.:			
1937-38	469, 743	3, 443, 320	3, 927, 852	1943-44	437, 580	12, 129, 803	12, 567, 383
1938-39	473, 867	3, 105, 280	3, 605, 066				
1939-40	474, 183	3, 035, 006	3, 533, 792				
1940-41	492, 341	4, 292, 957	4, 830, 414				
1941-42	522, 463	4, 640, 586	5, 179, 551				

¹ Data supplied by Industrial Relations Section, Princeton University.

² Year ending June 30.

As table 2 indicates, the high point of the labor-bank movement occurred in 1925 and 1926. Then began a decline that was greatly accelerated when the depression began. By the end of the "bank holiday" of 1933 only four labor banks remained. With the exception of a slight recession in 1938, this group of banks showed a continuous

growth through 1942. The decline in number in 1943 was caused by the voluntary dissolution of the Telegraphers National Bank as a result of a combination of wartime factors.

The growth of the surviving labor banks is indicated by the fact that in 1943-44 this small group of banks together had deposits amounting to over half those of the 35 that were in operation at the peak (1926) and nearly half the sum of their resources.

TABLE 2.—*Development of Labor Banks in the United States, 1920-44*¹

Date	Number	Capital, surplus, and undivided earnings	Deposits	Total resources	Date	Number	Capital, surplus, and undivided earnings	Deposits	Total resources
Dec. 31—					June 30—				
1920...	2	\$1,154,446	\$2,258,561	\$3,628,867	1932...	7	\$3,443,396	\$22,662,514	\$28,564,797
1921...	4	1,535,869	9,970,961	12,782,173	1933...	4	2,161,010	14,728,079	18,186,216
1922...	10	2,793,162	21,901,641	26,506,723	1934...	4	2,038,433	15,899,849	19,168,718
1923...	18	5,575,252	43,324,820	51,496,524	1935...	4	2,051,943	17,262,281	19,692,385
1924...	26	8,333,024	72,913,180	85,325,884	1936...	4	2,101,676	20,302,297	22,858,772
1925 ² ...	36	12,536,901	98,392,592	115,015,273	1937...	4	2,189,671	21,679,590	24,359,340
1926...	35	12,751,885	108,743,550	126,533,542	1938...	4	2,503,899	21,013,099	23,785,086
1927...	32	12,029,676	103,290,219	119,818,416	1939...	4	2,544,538	22,923,861	25,813,638
1928...	27	11,358,705	98,784,369	116,307,256	1940...	4	2,684,911	23,847,294	26,931,651
June 30—					1941...	4	2,851,116	26,914,510	30,192,066
1929...	22	10,495,079	92,077,098	108,539,894	1942...	4	3,024,185	28,967,173	32,217,469
1930...	14	7,217,836	59,817,392	68,953,855	1943...	³ 3	2,389,168	35,358,588	37,945,182
1931...	11	6,865,378	50,949,570	59,401,164	1944...	⁴ 4	3,190,257	57,808,954	61,173,804

¹ Data supplied by Industrial Relations Section, Princeton University.

² Not including Amalgamated Bank of Philadelphia.

³ Not including Telegraphers National Bank, which went out of business in September 1942.

⁴ Including Brotherhood State Bank, Kansas City, Kans., more than 50-percent control of which has been acquired by labor unions.

Labor Laws and Decisions

Legislative Sessions in 1945

IN 1945, regular legislative sessions will be held in all States except Kentucky, Louisiana, Mississippi, and Virginia. The legislatures of Alaska, Hawaii, and Puerto Rico will also meet. In the majority of the States the legislatures hold biennial sessions and assemble in odd-numbered years. At present only 4 States meet annually (New Jersey, New York, Rhode Island, and South Carolina).

The 79th Congress will convene on January 3, 1945, unless the date of meeting is previously changed by act of Congress.

Most of the State legislatures convene in January. The Florida Legislature, however, will meet on April 3. The Alabama Legislature convenes on May 1, but a preliminary session (at which no business can be transacted except general organization) is held on the second Tuesday in January, and may continue not longer than 10 consecutive calendar days. In Georgia, although the statute specifies July 16 as the date of convening the regular session, a session is held on the second Monday in January for the election of officers and the introduction of bills. At this time the date of the regular session may be changed. In practice, the regular session usually follows the preliminary January session immediately.

In about one-third of the States the length of the session is limited. The usual time limit is 60 days, but in a few States it is 90 days or more, and in Wyoming the legislature must adjourn after 40 days. In the other States there is no limit on the length of a session. However, the fact that in some of the States the pay of legislators ceases after the session has extended beyond a specified period frequently results in limiting the length of the sessions.

The accompanying table shows for each State the date of assembly and the length of session.

Date Set by Law for Convening of State Legislatures

State	Time of assembly	Date of convening, 1945 session	Length of session
Alabama.....	Second Tuesday in January ¹	Jan. 9...	60 days.
Arizona.....	Second Monday in January.....	Jan. 8...	No limit. ²
Arkansas.....	do.....	do.....	60 days. ³
California.....	Monday after first day in January.....	do.....	No limit. ⁴
Colorado.....	First Wednesday in January.....	Jan. 3...	Do.
Connecticut.....	Wednesday after first Monday in January.....	do.....	5 months.
Delaware.....	First Tuesday in January.....	Jan. 2...	No limit. ²
Florida.....	Tuesday after first Monday in April.....	Apr. 3...	60 days.
Georgia.....	Second Monday in January ⁵	Jan. 8...	Do.
Idaho.....	First Monday after January 1.....	do.....	No limit. ²
Illinois.....	Wednesday after first Monday in January.....	Jan. 3...	Do.
Indiana.....	Thursday after first Monday in January.....	Jan. 4...	61 days.

See footnotes at end of table.

Date Set by Law for Convening of State Legislatures—Continued

State	Time of assembly	Date of convening, 1945 session	Length of session
Iowa	Second Monday in January	Jan. 8	No limit.
Kansas	Second Tuesday in January	Jan. 9	Do.
Maine	First Wednesday in January	Jan. 3	Do.
Maryland	do	do	90 days.
Massachusetts	do	do	No limit.
Michigan	do	do	Do.
Minnesota	Tuesday after first Monday in January	Jan. 2	90 days.
Missouri	Wednesday after January 1	Jan. 3	No limit.
Montana	First Monday in January	Jan. 1	60 days.
Nebraska	First Tuesday in January	Jan. 2	No limit.
Nevada	Third Monday in January	Jan. 15	60 days.
New Hampshire	First Wednesday in January	Jan. 3	No limit.
New Jersey	Second Tuesday in January	Jan. 9	Do.
New Mexico	do	do	60 days. ⁴
New York	First Wednesday in January	Jan. 3	No limit.
North Carolina	Wednesday after first Monday in January	do	Do. ²
North Dakota	Tuesday after first Monday in January	Jan. 2	60 days.
Ohio	First Monday in January	Jan. 1	No limit.
Oklahoma	Tuesday after first Monday in January	Jan. 2	Do. ⁶
Oregon	Second Monday in January	Jan. 8	No limit. ⁷
Pennsylvania	First Tuesday in January	Jan. 2	Do.
Rhode Island	do	do	Do. ²
South Carolina	Second Tuesday in January	Jan. 9	No limit. ⁷
South Dakota	Tuesday after first Monday in January	Jan. 2	60 days.
Tennessee	First Monday in January	Jan. 1	No limit. ⁸
Texas	Second Tuesday in January	Jan. 9	Do. ⁹
Utah	Second Monday in January	Jan. 8	60 days.
Vermont	Wednesday after first Monday in January	Jan. 3	No limit.
Washington	Second Monday in January	Jan. 8	60 days.
West Virginia	Second Wednesday in January	Jan. 10	Do. ³
Wisconsin	do	do	No limit.
Wyoming	Second Tuesday in January	Jan. 9	40 days.
United States Congress	January 3 annually	Jan. 3	No limit.

¹ Meets for organization. Regular session will be held on May 1.

² Pay of legislators limited to 60 days.

³ The session may be extended by a two-thirds vote.

⁴ There is a recess of approximately 30 days between the period in which bills are introduced and the period in which action is customarily taken.

⁵ Meets for organization and fixes a time for regular legislative session, usually several days thereafter.

⁶ Pay of legislators reduced after 60 days.

⁷ Pay of legislators limited to 40 days.

⁸ Pay of legislators limited to 75 days.

⁹ Pay of legislators reduced after first 120 days.

Recent Decisions of Interest to Labor¹*Unemployment Compensation*

CAUSE of leaving work under unemployment-compensation act.—The Unemployment Insurance Act of California makes an employee ineligible for benefits if he leaves his work because of a "trade dispute." In *Bunny's Waffle Shop, Inc. v. California Employment Commission* (151 Pac. (2d) 224) the Supreme Court of California applied this law to a number of different situations. An association of employers had been seeking to compel several unions within the restaurant field to enter into a master contract. The unions had refused because only a

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 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.

small proportion of restaurant owners was represented. The owners then posted notices of a wage cut, increase in work schedule, and institution of split shifts, to be effective unless the unions negotiated on the master-contract basis. The wage reduction was put into effect and many employees quit work and their employers shut down; and later the other associated employers shut down.

The Supreme Court made a distinction between quitting work in the course of a labor dispute and because of a labor dispute. It held that a worker who left his job because of a reduction in wages and changed conditions of work (which had not been under discussion prior to the notices) did so because of the employer's use of an economic weapon and not because of a trade dispute. The employer's motive—to settle the dispute through the use of this weapon—does not change the situation of the employee, nor is it altered by the fact that a central union agency had approved a possible strike, since in fact the employees who quit because of a wage cut did not act under this license. The workers concerned were therefore entitled to benefits under the law.

Other employees who were out of work because their employers, who had not reduced wages, had nevertheless closed down were also entitled to unemployment compensation because they were locked out.

In regard to a further provision of the act penalizing one who voluntarily left his job without "good cause," the Commission's finding that a 25-percent wage cut was good cause was sustained.

Fair Labor Standards Act

Building-service employees and Wage and Hour Law.—A case recently before a New York court (*Schinek v. 386 Fourth Ave. Corporation*, 49 N. Y. Supp. (2d) 872) involved the use, by tenants, of building facilities such as freight elevators, to acquire goods from out-of-State suppliers and distribute them in substantial quantities to customers outside the State. The ground floor was used by other tenants as a trucking terminal in the continuous movement of goods between out-of-State mills and plants within the State. The court held that, under such circumstances, the services rendered by building-service employees are so closely related to the physical movement of the goods as to be part of the interstate commerce involved in all these activities and therefore are subject to the Fair Labor Standards Act.

Railroad wage contract modified by Fair Labor Standards Act.—In the case of *Brotherhood of Maintenance of Way Employees v. Nashville, Chattanooga, etc., Ry.*² a United States District Court in Tennessee held that a minimum-wage order for wages of 36 cents an hour under the Fair Labor Standards Act superseded an earlier agreement for 33 cents plus board. However, "wage" under that act is defined to include the reasonable cost of board customarily furnished by an employer, and the employer had been in the custom of supplying board: It was agreed that 33 cents plus the reasonable cost of board would equal or exceed 36 cents. Therefore, the court decided that the award of the National Railroad Adjustment Board that the railroad could not take credit for board and must pay 36 cents and supply board would not be enforced by the court.

² 56 Fed. Supp. (2d) 559 (Aug. 14, 1944).

Labor Relations and the Wagner Act

Discharge of "wildcat" strikers not unfair labor practice.—The Circuit Court of Appeals for the Fourth Circuit, in the case of a petition to enforce an order of the National Labor Relations Board ordering back pay for certain discharged employees, whose dismissal the Board considered an unfair labor practice, refused to agree with the Board's conclusions (*National Labor Relations Board v. Draper Corporation*³). The court decided that the employees in question were entitled to no protection under the National Labor Relations Act.

A collective agreement for 1 year had been made by the employer with the union which was the recognized bargaining agent. The negotiations as to the new contract encountered difficulties and lasted from August into October. In the latter month a conference appointment was postponed because of the illness of a company representative. Questioning the genuineness of the illness, a number of employees refused to work, in order to force action, and persisted in the refusal even though threatened with discharge. This group took a strike vote, decided to strike, and left the plant; all its members were discharged. The union which the employees had chosen as bargaining representative did not call, authorize, or sanction the strike. Through the efforts of the U. S. Conciliation Service, the discharged strikers (whom the company had meanwhile refused to rehire) were reinstated. Their right to back pay was the question before the court.

The facts also showed that the employer's action in dismissing the group was not aimed at discouraging membership in the union, the majority of whose members had continued at work. The employer continued to recognize the union and deal with it.

The court decided that the wildcat strike was not a concerted activity protected by section 7 of the National Labor Relations Act, but a strike in violation of the purposes of the act by a minority of employees in an effort to interfere with bargaining by their chosen representative. This the court characterized as "destructive of that collective bargaining which it is the purpose of the act to promote." It pointed out that the chosen union is to be the exclusive representative of all the employees for bargaining purposes. A minority has no more right to interfere with the chosen union's course of bargaining than it has to bargain separately. When the union was selected as the majority choice and was recognized, not only did the company agree to bargain only with the union but the employees agreed to bargain only through the union. The court considered this "agreement" broken by the wildcat strike.

The decision distinguished this case from those in which an unjustified strike is called by the chosen union. Without saying that a strike can be called only by a bargaining union, or that there is no protection for a strike involving less than a majority of employees if called in protection of their rights, the court decided that this particular strike violated rights established by the National Labor Relations Act. That act, therefore, gives such strikers no protection from discharge and the employer, having a right (apart from the Federal statute) to discharge for insubordination, was not guilty of an unfair labor practice as to the discharged employees. The order for back pay was held to be unfounded and would not be enforced by the court.

³ — Fed. (2d) — (C. C. A., 4, Oct. 6, 1944).

Discharge of strikers to protect property rights not unfair labor practice.—Among other questions raised by a petition to enforce an order of the National Labor Relations Board against the Clinchfield Coal Corporation, a Federal Circuit Court of Appeals recently considered the background of the discharge of certain strikers, in order to determine whether their dismissal was justified.⁴ The National Labor Relations Board had found, on substantial evidence, that the employer discriminated against union miners by refusing them rock cars which would have made their work easier. It appeared that when this question of rock cars was presented as a grievance to the mine superintendent, he refused to supply the cars, whereupon the miners concerned decided not to work. A strike leader moved an electric motor over to the key switch of the mine so that cars could not move in or out. It was kept there, preventing other miners from working, while fruitless attempts were made to settle the grievance. After a day or so, in which another mine was similarly blocked, the supposed strike leaders were discharged and were warned off the property.

The decision of the court distinguished among the employees involved, enforcing the order for reinstatement as to those who were not shown to have taken part in blocking the switch but refusing reinstatement to those who had been active in or responsible for that action. Without determining whether the strike was a sit-down strike or a wildcat strike, the court found that what the leaders began and persuaded other employees to join was more than a work stoppage. It amounted to a temporary seizure of the control of the mines, to the extent that they could not be operated by the employer or entered by other miners not interested in the strike. In such a situation, the employer may properly discharge the persons responsible without committing any unfair labor practice.

Ordinance licensing labor organizers changes appropriate bargaining unit.—The National Labor Relations Board had previously decided that the employees at one of two plants owned by a single employer in the same locality would not be an appropriate unit for employee representation. The other plant was in a city which passed an ordinance requiring union organizers to be licensed and making the grant of the license discretionary even though the applicant had the required 12 months' residence and \$5,000 fee.⁵ Taking notice of the obvious fact that organization of that plant would not be "feasible within a reasonable time," the National Labor Relations Board reversed itself and ordered an election in the single plant outside the city (*In re Newman Cotton Mills*, 58 N. L. R. B. No. 128, September 29, 1944).

Group leaders not foremen.—In a plant manufacturing machinery for underground mining, the question arose (*In re Goodman Manufacturing Co.*, 58 N. L. R. B. No. 105) whether group leaders were to be included in a unit of production and maintenance employees. The National Labor Relations Board decided in favor of their inclusion. Though they had attended courses on the handling of employees and occasionally substituted for foremen when the latter were on vacation or attending conferences, they were paid on an hourly basis like other employees in the bargaining unit. They were not permitted to attend the foremen's school or the conferences for foremen and had no effective authority as to promotions of other employees.

⁴*National Labor Relations Board v. Clinchfield Coal Corp.*, — Fed. (2d)—(Oct. 3, 1944.)

⁵ For decision on constitutionality of such an ordinance, see Monthly Labor Review for November 1944 (p. 1022).

Employer interference in election ordered by National Labor Relations Board enjoined.—The National Labor Relations Board, having directed an employer to cease discouraging unionization and having obtained the reinstatement of an employee discharged because of union activity, acted on a petition to determine representation, by ordering an election. To safeguard this election, the National Labor Relations Board asked the Seventh Circuit Court of Appeals for a temporary injunction against the employing company, to prevent its interference with the proper conduct of the election. The injunction, as issued, restrained interference with the employees' freedom by enjoining the employer from participation in the campaign and from issuing instructions as to time or manner of voting contrary to those issued by the agent of the National Labor Relations Board conducting the election (*National Labor Relations Board v. Servel, Inc.*, — Fed. (2d) — September 27, 1944).

Free speech and unfair labor practices.—The constitutional guaranty of free speech was held by the National Labor Relations Board⁶ as not saving from condemnation as improper labor practices certain statements, editorials, cartoons, and special rules, which were published by the employer as part of a course of conduct begun at the outset of an organizing campaign, which was designed and did in fact operate to coerce the employees not to organize. The publications not only reflected the employer's unwillingness to bargain collectively but misled the employees by representing (falsely) that they were already enjoying their rights under the Wagner Act. The editorial in the company news bulletin contained an implicit threat of loss of employment if the employees found fault with the employer. A rule, posted after the union's organization meeting, prohibited union solicitation within the plant even in the employees' free time. The Board held that this provision encroached upon the employees' liberty, without any evident need based on discipline or efficiency, and was applied one-sidedly to prevent pro-union but not anti-union discussion.

Union recognition obtained by strike not conclusive with National Labor Relations Board.—In a case in which a union obtained exclusive recognition and a closed-shop contract as a result of a strike and picketing (instead of using the procedure of the National Labor Relations Act), and in which the employer later refused to bargain with the union, the National Labor Relations Board considered the recognition thus coerced from the employer not conclusive of the question whether the union represented a majority of the employees. The record showed no substantial proofs on this point. The fact that a majority of the employees did not work during the strike could have occurred for many reasons other than their choice of the union as representative, and did not make the necessary showing. Moreover, any bargaining authorizations obtained by the union under the closed-shop situation could not be regarded as evidence of a free and uncoerced choice of that union, since the employees' jobs depended on union membership. Further, the employer's refusal to bargain occurred more than a year after the strike and after a 50-percent turnover in the employees. The National Labor Relations Board, on this basis, refused to call the employer's refusal to bargain an unfair labor practice (*In re McGough Bakeries Corp.*, 58 N. L. R. B. No. —, October 10, 1944).

⁶ *In re Tomlinson v. High Point, Inc.* (58 N. L. R. B. No. 188 Oct. 14, 1944).

State courts in relation to War Labor Board dispute cases.—In Illinois, the Appellate Court affirmed, in the case of *Frank Foundries Corp. v. Creager*,⁷ a decision that courts of that State cannot take jurisdiction over a dispute case on which the National War Labor Board has acted under the War Labor Disputes Act. The case involved a union contract requiring arbitration, and a dispute as to the meaning of an award of arbitrators, which was certified to the National War Labor Board. After ordering final clarification of the award, the War Labor Board required the employer to comply with it. The Appellate Court concluded, after examining the War Labor Disputes Act and Executive Order No. 9017, that the War Labor Board has exclusive jurisdiction of labor disputes which may lead to substantial interference with the war effort, since the Executive order provides "it shall finally determine the dispute." Therefore, in view of the relation of the steel industry to the war effort, it became immaterial whether the State court selected would otherwise have had jurisdiction of an award of arbitration.

Decisions Under State Labor Laws

Votes of eligible voters in union election.—The Massachusetts Labor Relations Commission, acting under the Labor Relations Act of that State, decided (*In re Rebecca Packer*, Case No. CR 776, August 14, 1944) that an employee has a right to have a challenge to his vote determined and, if he is found eligible, to have the vote counted, in a representation election. An agreement between an employer and a union that the Commission should ignore a challenged vote will therefore not be given effect by the Commission.

Court enforcement of closed-shop agreement.—The case of *Corpuz v. Hotel and Restaurant Employees' International Alliance*⁸ came before the Arizona Supreme Court on appeal from a court order enjoining an employer, who had signed a closed-shop contract, from continuing to employ nonunion employees. The appellate court affirmed the judgment, deciding incidentally that the entry of an injunction in such a situation is not prohibited by an Arizona act which provides that no injunction shall be granted in any case between an employer and an employee involving a dispute concerning terms or conditions of employment unless necessary to protect property or a property right from irreparable injury. This statute was found inapplicable to the situation. The applicable doctrine as applied by the court is that the purpose of a labor union to improve conditions under which its members work justifies an interest in the wages of nonmembers even to the extent of action to organize an entire trade; that what can lawfully be done by strikes and picketing can, of course, lawfully be done by a closed-shop contract. Hence the enforcement of such a contract is contrary to neither the public policy nor law of Arizona.

Order to conduct referendum of employees not reviewable by court.—An order to conduct a referendum to learn whether the necessary number of employees desire an "all-union agreement," issued by the Wisconsin Employment Relations Board, was held by the Supreme Court of Wisconsin not to be subject to court review under that act, because the order is an administrative step in fact finding, in which the board acts

⁷ 56 N. E. (2d) 649 (Sept. 19, 1944).

⁸ 151 Pac. (2d) 705 (Sept. 25, 1944).

in a ministerial and not an adjudicative capacity. It determines no legal rights, duties, or privileges of any party, and no "aggrieved" party with a right to review by a court can result. (*United Retail and Wholesale Department Store Employees v. Wisconsin Employment Relations Board*, —N. W. (2d)—, October 10, 1944.)

Jurisdiction of Wisconsin Employment Relations Board in dispute submitted to the National War Labor Board.—A circuit court in Wisconsin, considering its authority to enforce an order of the State Employment Relations Board to arbitrate a dispute, found that its powers were restricted to the review of questions raised before that board. Therefore it refused to consider the contention that the reference of the dispute to the National War Labor Board, after commencement of proceedings before the Wisconsin Board, ended the latter's jurisdiction. Since the fact that the National War Labor Board had taken jurisdiction of the case had not been called to the attention of the Wisconsin Board, it could not be a ground for the court's refusing to enforce the order. (*Wisconsin Employment Relations Board v. International Union*, Wisconsin Circuit Court, Milwaukee County, September 25, 1944.)

The case of *International Brotherhood v. Wisconsin Employment Relations Board*⁹ came before the Wisconsin Supreme Court on appeal from the judgment of a lower court which had confirmed the State board's order to delete a closed-shop clause from a contract. The Wisconsin act permits the establishment of a closed shop only on a vote of three-fourths of the employees, which had not been obtained. By stipulation the parties called the supreme court's attention to the fact that, after the decision by the lower court, the National War Labor Board had ordered the employer to include the closed-shop clause in the contract. The Wisconsin Supreme Court recognized the superior authority of the National War Labor Board based on the war powers of the Federal Government, and suspended the State proceeding until the order of the National War Labor Board ceases to be effective.

Jurisdiction of State and National labor relations boards.—In affirming the judgment of a lower court enforcing a reinstatement order under the Wisconsin Employment Peace Act, in the case of *International Brotherhood of Electrical Workers v. Wisconsin Employment Relations Board*,¹⁰ the Supreme Court of Wisconsin decided that the State labor act involved is applicable to a resident employer and resident employees, on a claim of improper discharge, even though the employer is a utility engaged in interstate commerce and has a system extending beyond the State borders. The National Labor Relations Board had found that a system-wide unit was the appropriate bargaining agency but had not certified the union (which was already recognized) and had dismissed the proceedings. Although the subject company is a Wisconsin public utility which sells a third of its electricity in another State, and although some of the employees covered by its all-union agreement were not residents of Wisconsin, the court held that the discharge of nonunion Wisconsin employees was correctly dealt with under the Wisconsin law as an improper labor practice because of failure to show a three-fourths vote for the all-union shop, as required by the Wisconsin law.

⁹ — N. W. (2d) — (Oct. 10, 1944).

¹⁰ — N. W. (2d) — (Oct. 10, 1944).

The policy of not prohibiting closed-shop agreements exists in the Wisconsin and Federal laws alike; the method of choosing the bargaining agent differs. The State Board retains its jurisdiction (based on the police power) until, in a proper proceeding, the National Labor Relations Board has declared a specific activity an unfair labor practice which obstructs interstate commerce. When conflict is claimed, the provisions of the two acts must still be considered in relation to the particular case to see if conflict exists; but where conflict exists in a particular case, if the National Labor Relations Board takes jurisdiction, its determination prevails over that of the State board.

State housing authority may bargain with employees.—The Attorney General of California, in an opinion rendered on August 29, 1944, expressed the opinion that the California Housing Authority is free to bargain collectively with its employees. The persuasive facts, from his viewpoint, were that the statute creating the Authority gives it the power to make contracts, without any limitation; that the public policy of California as expressed in section 923 of its Labor Code favors collective bargaining;¹¹ that no sound distinction in this regard exists between the government as an employer and private employers, or indeed between the State as operator of housing or of a bus line and the State in its purely governmental capacity. The right or lack of right of public employees to strike is not involved; collective bargaining is the antidote for strikes. The answer does not depend on the validity of closed-shop or preferential-hiring clauses; collective bargaining relates to the much wider field of hours, wages, and conditions of employment.

War Labor Board Decisions

Seniority rule defined by National War Labor Board.—In deciding an appeal from the Regional Board at Kansas City (*In re U. S. Gypsum Co.*, Case No. 111-4670-D, August 22, 1944), the National War Labor Board amended the clause establishing the seniority rule in promotions, increases, and decreases of working forces by the following explanation: "Seniority, as herein used, shall consist of the following factors: (a) Length of service, (b) qualifications and ability, (c) physical fitness. When (b) and (c) are relatively equal, length of continuous service shall govern."

Post-emergency workweek established in contract.—Regional War Labor Board XII at Seattle, at the request of a union, granted a change in a contract to provide that after the War Manpower Commission's order for an emergency 48-hour week ceases to be effective, the schedule for the union shall be 40 hours per week, spread over 5 consecutive days, which was shown to have been the former standard practice in optical manufacture in the area (*Western Association of Wholesale Opticians*, Case No. 111-6648-D, September 7, 1944). A minority of the Board argued that the Board should not decide matters affecting only the post-war situation. This contention was not persuasive because every present decision affects post-war bargaining relationships to some degree; because labor contracts are generally entered into for a year or other fixed term and should provide for the entire

¹¹ The proposed constitutional amendment, declaring the right to seek, obtain, or hold employment without abridgement because the worker "does or does not belong to or pay any money to a labor organization," was defeated at the polls on November 7, 1944.

period; and because settlement of basic issues in advance will reduce the burden of unresolved questions in a period of transition and will facilitate necessary planning for industry as well as labor.

War Labor Board review as to industry and area practice.—The National War Labor Board, in dealing with an appeal from the decision of the Non-Ferrous Metals Commission granting a wage differential for night work, refused to reverse on the general question, even though it was demonstrated that a night differential was neither area nor industry practice. From a series of concurring opinions, it appears to be generally conceded that night work is deserving of extra remuneration; that in continuous industries there is a presumption, particularly if shifts are rotated, that this burden is compensated for in the base pay; but that no such inference is applicable to the non-ferrous-metals industry from the area considered by the Commission in this case, in which continuous operation is a matter not of necessity, but of choice.

The primary consideration, therefore, as to allowance of a shift differential is whether it violates stabilization policy by an appreciable increase in production costs which might furnish a basis for an increase in prices. Granted that stabilization policy will not be violated, the matters of industry and area practice are secondary considerations but important if a change would put a particular employer to an economic disadvantage or if it would threaten to create a movement of unrest in the area, or, from the opposite viewpoint, if the existing exception displays a greater inequity because it differs from established practice. It was further suggested that in cases in which a large segment of an industry is to be dealt with, the relevance of industry and area practice is lessened. The Board recognized that the regional agency, being in direct contact with the problems, has a feeling for all of the facts, which a reviewing body cannot obtain in the review process. (*In re Non-Ferrous Metals Industries*, Case No. 111-4116-D, July 27, 1944.)

Woman's change of mind not ground for discharge.—The Regional War Labor Board at Detroit in the case of *Paragon Products Co.* (Case No. 111-7919-D, August 29, 1944) found that the employer had not been harmed by a change of mind of two women before the expiration of their notices of resignation. The employer had discharged them and was ordered to reinstate only one, since the other, who had incited a strike while her case was being properly handled as a grievance under the contract procedure, had thereby lost the right she would have had.

Seniority rules and reductions in force.—Although the union involved in the case of *Procter & Gamble Mfg. Co.* (Case No. 111-6042-D) asked for strict seniority rules in lay-offs, the War Labor Board for Region X permitted the employer to maintain separate seniority ratings for men and women, provided that no man employed on July 1, 1941, is to be laid off while any woman hired later than that stays on the job. Further, the Board directed that jobs which are now considered as men's jobs, although at present subdivided to enable them to be handled by women, shall at the end of the war emergency still be regarded as men's jobs, subject to a later agreed change of view on the point.

Employment terms for intrastate employer refusing to bargain with union.—The National War Labor Board's decision in re *The Polk Sanitary Milk Co.* (Case No. 111-1826-D, September 6, 1944), on

appeal from the action of Regional Board VI at Chicago, was that in the case of an intrastate company which is not within the jurisdiction of the National Labor Relations Board and which refuses to bargain with a union, claiming the support of the Indiana law, the Regional Board must fix the terms of employment with respect to any disputed issues. Although the issue of representation cannot be dealt with by a War Labor Board in such case, the Regional Board erred in confining its action to a mere recommendation in favor of collective bargaining.

Veterans' reemployment rights.—The Regional War Labor Board at Cleveland, dealing with a case involving disabled veterans, honorably discharged and seeking reemployment, found them entitled to employment at light work if such jobs exist, when they are unable to work at their regular classification. The problem of whether such positions at light work exist, if causing disagreement, is to be handled as a grievance. (*Columbia Machinery & Engineering Corp.*, Case No. 111-7191-D, Regional Board V, August 22, 1944.)

Court review of War Labor Board directive order.—In a proceeding asking an injunction or declaratory judgment against a "directive order" of the National War Labor Board, the Court of Appeals of the District of Columbia in *National War Labor Board v. United States Gypsum Co.*¹² reversed the District Court and dismissed the proceeding, on the basis of its prior decision¹³ that such orders are merely advisory and not decisions subject to review by a court. The situation was not considered to be altered by the fact that the employer's non-compliance had, in this case, actually been reported to the Director of Economic Stabilization and the President.

The Supreme Court has also refused review of the decision against Montgomery Ward & Co. made by the Court of Appeals of the District of Columbia in a similar attempt by that company to have the court reverse the order of the War Labor Board.

Miscellaneous Decisions

Libel in organization campaign of rival unions.—Under section 876-A(6) of the New York Civil Practice Act, several points were decided by a lower court of New York State, in the case of *Subliner v. Reintlib*.¹⁴ A union president may sue on behalf of the union if it is libeled. Neither a union nor its members may be sued, criminally or civilly, for libel in connection with a labor dispute (and attempts by locals of different internationals to organize the employees of a single employer form such a dispute) except in case of actual participation in, authorization of, or ratification of the wrongful acts. The president of a union may be subject to legal action if he personally wrote or published libelous documents. As to any protection or excuse existing for libel under the special circumstances, the court pointed out that the constitutional privilege of free speech stops short of protecting libel. Moreover, although unions have been allowed some leeway on the basis of the heat of a dispute, when seeking to persuade the public to shun a company against which peaceful and lawful union activity is directed, the same considerations do not apply in attempts by rival

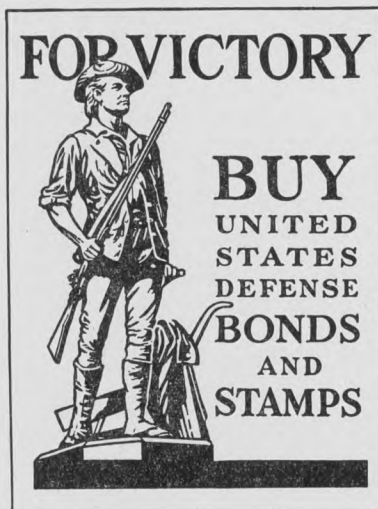
¹² — Fed. (2d) —, (D. C., Oct. 23, 1944).

¹³ *Employers Group of Motor Freight Carriers v. National War Labor Board*, 143 Fed. (2d) 145, certiorari denied, October 9, 1944.

¹⁴ — N. Y. Supp. (2d) — (N. Y. Sup. Ct., Sept. 28, 1944).

unions to organize employees. In such a situation there is a greater premium to be placed upon truthful, responsible, and accurately informative statements than in most strike and picketing situations.

Injunction in internal dispute of union.—The sovereign authority of an international union over the local it had chartered, which included legislative, executive, and judicial powers, is such that no court has a right to interfere if there is a fairly debatable issue as to the legitimate exercise of any power reserved by the international. In the case of *Canfield v. Moreschi*, 49 N. Y. Supp. (2d) 903, however, a county court in New York State applied the exception to the rule, based on the fundamental requirement that the power must be exercised in good faith and for valid purposes. On proof of a conspiracy among certain officers of the international and local to take over illegally the management of the union local and to deprive the members of the local of the privilege of self-government, the court, on application by the president and other members of the local, issued an injunction preventing interference by those shown to have taken part in the conspiracy.



Women in Industry

Women in Wartime Labor Force in Illinois, July 1944

WHEN the March 1940 census was taken in Illinois, 746,933 women were reported as employed and 107,343 as seeking work. At that period women constituted a fourth of the labor force of the State. Tentative estimates by the Illinois Department of Labor indicate that in July 1944 approximately 1,246,000 women were employed, over 10,000 were in military service, and only 20,000 to 30,000 were looking for work.¹

In July 1944 women constituted about 36 percent of the employed workers in Illinois, while in nonagricultural occupations the proportion was nearly 40 percent.

The increase of women in the labor force in that State as compared with the United States is shown in the accompanying table. The number of women engaged in nonagricultural employment in July 1944 was 64 percent above the number in March 1940; the corresponding expansion for the United States in the same period was 53 percent.

Women in the Labor Force in Illinois and the United States, 1940 and 1944

Item	Illinois ¹			United States ²		
	Number of women		Per- cent of in- crease	Number of women		Per- cent of in- crease
	March 1940	July 1944		March 1940	July 1944	
Women in total civilian labor force.....	854,000	1,271,000	49	13,010,000	19,110,000	47
Women employed.....	747,000	1,246,000	67	11,240,000	18,590,000	65
Women in nonagricultural employ- ment.....	741,000	1,214,000	64	10,730,000	16,440,000	53

¹ Estimates by Division of Statistics and Research, Illinois Department of Labor.

² Monthly Report on the Labor Force, No. 26 (U. S. Department of Commerce).

Women's Expanding Employment in Iowa, 1940-44

IN May 1944, the number of females employed by 395 firms in Iowa in various industries reached 28,394, as compared to 15,288 in that month of 1940—a rise of 85.7 percent. Among the most striking increases within the period under review was that in the iron-and-steel-products group in which the number of women in May 1944 was 5,268—over 7½ times the May 1940 figure, as indicated in the accompanying table from the Iowa Employment Survey of May 1944, published by the Bureau of Labor of that State.

¹Data are from the Illinois Labor Bulletin, Illinois Department of Labor, Chicago, August 31, 1944.

In the "various industries" group, the record was 1,820 females employed in 1940 and 3,823 in May 1944—an upward swing of 110.1 percent. While the number of women in railway-car shops has been small in the war period, the 153 employed in May 1944 was 9½ times the number in such shops in May 1940.

Increase in Female Employment in Various Industry Groups in Iowa, in May of Years 1940 to 1944

Industry	Number of firms reporting	Number employed in May—									
		1944		1943		1942		1941		1940	
		Total	Females	Total	Females	Total	Females	Total	Females	Total	Females
All industries.....	395	84, 037	28, 394	81, 289	24, 703	76, 645	18, 828	73, 013	16, 695	66, 219	15, 288
Food and kindred products.....	78	24, 586	6, 876	23, 568	5, 763	23, 488	4, 693	20, 259	3, 942	19, 868	3, 829
Textiles.....	24	3, 137	2, 509	3, 469	2, 765	3, 526	2, 685	3, 292	2, 389	3, 024	2, 234
Iron and steel products.....	82	24, 221	5, 268	22, 662	4, 013	18, 536	1, 381	17, 989	780	14, 482	688
Lumber products.....	25	3, 682	668	4, 239	729	4, 420	255	4, 813	260	4, 348	244
Leather products.....	10	865	631	941	676	979	657	975	631	818	528
Paper products, printing and publishing.....	30	3, 265	1, 059	3, 211	979	3, 279	830	3, 423	848	3, 301	832
Patent medicines, chemicals, and compounds.....	7	668	437	680	428	558	330	510	300	453	253
Stone and clay products.....	22	1, 920	70	2, 303	59	2, 566	15	2, 575	13	2, 463	12
Railway-car shops.....	11	3, 402	153	3, 358	61	2, 984	12	2, 698	14	2, 504	16
Various industries.....	51	6, 787	3, 823	5, 801	2, 964	5, 436	2, 562	5, 318	2, 243	4, 362	1, 820
Public utilities.....	15	7, 027	4, 143	6, 730	3, 673	6, 702	3, 150	6, 891	3, 095	6, 606	2, 844
Wholesale and retail trade.....	40	4, 477	2, 757	4, 327	2, 593	4, 181	2, 258	4, 270	2, 180	3, 990	1, 988



Occupations of Women Workers Injured in Michigan Industries

THE occupational distribution of 2,538 cases involving compensable injuries to Michigan women workers which were closed in the first half of 1944 is given below:¹

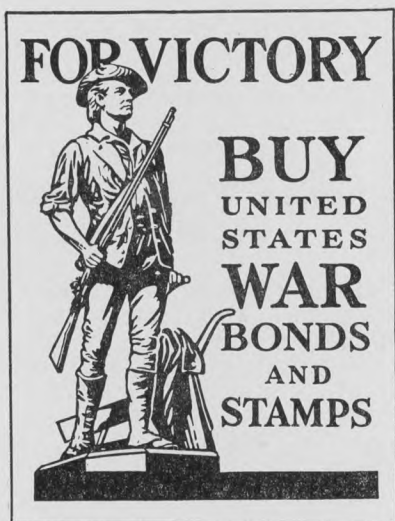
	Number of closed cases
All occupations.....	2, 538
Manufacturing industries.....	1, 731
Metalworking trades.....	924
Transportation equipment.....	195
Other.....	612
Nonmanufacturing industries.....	807
Waitresses, cooks, and kitchen workers.....	215
Other service workers.....	181
Clerical workers.....	131
Saleswomen.....	94
Professional, semiprofessional, and managerial workers, and officials.....	61
Other.....	125

Of the closed cases, 68 percent are reported in manufacturing occupations, over half of the latter group being in the metalworking trades. Of the 924 compensable injuries to women in such trades, 100 are reported for filers, grinders, buffers, and polishers of metals and 223 for those engaged in the mechanical treatment of metals. Of the

¹ Michigan Labor and Industry (Michigan department of Labor and Industry, Lansing), October 1944. The cases analyzed were reported to the department since 1942.

612 injuries reported in "other manufacturing occupations," 461 were distributed as follows: In the manufacture of food products, 92; in the manufacture of lumber and lumber products, 80; among inspectors, 136; in automobile manufacture, 68; and in the manufacture of aircraft, 85.

These statistics, the report points out, should not be interpreted as showing that a disproportionate number of industrial accidents have occurred among women workers. In the 6 months under review 14,795 cases of compensable injuries to men were closed. The 2,538 cases of injury to women constituted less than 15 percent of all cases closed. In manufacturing, however, women comprised 23 to 24 percent of the total wage earners.



Education and Training

Training of War Workers under Various Programs¹

BY September 1, 1944, over 13,760,000 workers in the United States had been specially trained for war production under six wartime training programs conducted by or coordinated with the War Manpower Commission's Bureau of Training, in cooperation with the U. S. Office of Education. According to the Chairman of the War Manpower Commission, "special industrial training for war production has enabled millions of war workers to reach peak production in the shortest possible time. It is reasonable to believe that these war-trained workers will play an important part in an expanding peacetime production."

Information on the six training programs is summarized below.

(1) *Vocational training for war production.*—This program has included 6,756,339 men and women who have received either pre-employment training or supplementary training. The U. S. Office of Education, in cooperation with State and local vocational schools, has been definitely designated to give training of less-than-college level to war production workers. This agency's program of vocational training for war production workers, operating through public vocational schools, makes available (1) preemployment training for definite pay-roll jobs in war industries; (2) preproduction training in the performance of specific operations; (3) supplementary courses in skills, techniques, and special knowledge; (4) conversion training in specific operations and related knowledge; and (5) refresher courses in manipulation skills and related knowledge. Operating through State boards for vocational education, this agency also makes available short-unit courses in supervision for the training of industrial supervisors.

Of those who received training in local or State vocational schools, 2,604,187 persons were given preemployment courses, and 4,152,152 were given supplementary courses. Of these, 1,313,220 were women. Negro workers numbered 323,496.

(2) *Food production war training program.*—This is a training plan which functions through vocational agricultural schools. By September 1, 1944, the enrollments under this scheme had reached 3,207,205. This training is of less-than-college grade and makes available production training for employed farmers and preemployment training for farm workers and war industry workers.

(3) *Engineering science and management war training.*—This program has a record of over 1,583,000 enrollments. (A brief report on it was published in the October 1944 issue of the Monthly Labor Review, p. 818.)

¹ Office of War Information. Press release, Washington, October 27, 1944.

(4) *Training within industry.*—With enrollees aggregating 1,440,494 men and women supervisors, this program has been carried on in about 1,500 plants throughout the United States.

Once the three components of training within industry have been mastered by the supervisor, * * * he can train any worker in any plant for any operational part in any production skill of which he himself is master.

The three components are (1) job instructor training (training supervisors to train new workers); (2) job methods training (training supervisors to train persons already at work to do their job better); (3) job relations training (training supervisors to train employees to work more smoothly with each other and with management).

(5) *Apprentice-training service.*—This service, which cooperates with industry in establishing organized programs of apprentice or advancing-worker training, aided 43,050 plants from July 1, 1940, to June 30, 1944. Statistics as to the total number of persons trained under this service are not available but a conservative estimate places the number at considerably more than a million.

(6) *National Youth Administration.*—In the fiscal years 1942 and 1943, this agency (no longer in existence) cooperated with the U. S. Office of Education and local vocational schools in providing industrial training for 772,756 persons.

Visual aid for war training.—In addition to the six training programs listed above, this unit of the U. S. Office of Education has produced approximately 150 motion pictures and film strips.



Schools for Skilled Workers in Dominican Republic¹

THE Dominican Republic has taken measures to overcome its almost complete lack of skilled technicians, one of the principal obstacles to the industrialization of that nation. To remedy that shortcoming, the Government has undertaken the operation of "school workshops" for the training of skilled workers in the textile industry. At the same time, widespread instruction in the operation of hand looms has been given in order to provide a source of livelihood and a source from which unskilled workers may be drawn. In addition, during 1943, courses were begun in the University of Santo Domingo to prepare skilled technicians for work in the chemical industries.



British Education Act, 1944²

UNDER the terms of the British Education Act, assented to on August 3, 1944, provision is made for raising the school-leaving age and for reconstruction of the educational system. The law supersedes existing legislation and is officially stated to be "the greatest advance in education in Britain since the Education Act of 1902." It is based on "the principle of retaining diversity of choice for the individual child within a coordinated system of education in progressive stages from the nursery school to adult education."

¹ Data are from report by James G. McCargar, third secretary, United States Embassy at Ciudad Trujillo, April 20, 1944.

² Data are from Great Britain, Ministry of Labor, Gazette, August 1944, and British Information Services, The Future of Education in England and Wales, ID 540, August 1944; and Local Government Chronicle (London), August 26 and September 9, 1944.

School-Leaving Age

Prior to adoption of the 1944 act, school attendance was compulsory between the ages of 5 and 14 years. The school-leaving age was to have been raised to 15 years in 1939, but owing to war conditions, the change was not made. Under the original provisions of the 1944 legislation, the 15-year limit was to become effective on April 1, 1945. However, because of the shortage of both teaching staff and school accommodations, the Government has again, by order (S. R. & O., 1944, No. 979) postponed introduction of the higher school-leaving age. The 14-year maximum for compulsory attendance is being retained for an undetermined period, but by 1947, at the latest, the age limit must be raised to 15 years in compliance with the provisions of the law, which also requires that as soon as possible thereafter it is to be further raised to 16 years.

For children who leave school before reaching 18 years of age, part-time attendance at county colleges will be compulsory. They must attend either 1 whole day or 2 half days weekly for 44 weeks each year or, if continuous attendance is more suitable, for 8 weeks or for two 4-week periods a year.

Administration of Act

Part I of the Education Act provided for establishment of the Ministry of Education in place of the Board of Education. The Minister of Education, who was appointed by order in council dated August 10, 1944, stated, on taking office, that the terms of the legislation necessitated local and central administrative changes and that in order to achieve the extensive reforms envisaged by the law the partnership between local governments and the central organization would have to be maintained and strengthened.

Immigration and Emigration

Immigration and Emigration, 1943-44

ALIENS admitted into the United States in the fiscal year closing June 30, 1944, numbered 142,192. Of these, 113,641 were nonimmigrants. The number of immigrants—28,551—exceeded by 4,826 the number admitted in the last preceding fiscal year, but was 54,447 less than the number reported admitted for the year ended June 30, 1939.

Emigration in 1943-44 totaled 84,409. Of this number, 78,740 were nonemigrant aliens and 5,669 were emigrant aliens who left the country without intending to return.

In table 1, are given immigration statistics for 3 fiscal years, 1939, 1943, and 1944:¹

TABLE 1.—*Immigration and Emigration, Fiscal Years Ended June 30, 1939, 1943 and 1944*

Class	1939	1943	1944
Aliens admitted	268, 331	104, 842	142, 192
Immigrant	82, 998	23, 725	28, 551
Nonimmigrant	185, 333	81, 117	113, 641
Aliens departed	201, 409	58, 722	84, 409
Emigrant	26, 651	5, 107	5, 669
Nonemigrant	174, 758	53, 615	78, 740

Six out of 10 of the immigrant aliens admitted in the fiscal year 1943-44 were women. The median age of the newcomers was 31.2 years, as compared with an estimated median age of 51.7 years for the country's total alien population and of 29.5 years for the whole population. Among these immigrants were 4,192 children under 16 years of age, and 2,041 aliens were over 60. The sex and age distribution largely explains why over 50 percent of those admitted were reported to have no occupation.

TABLE 2.—*Immigrant Aliens Admitted to United States, by Occupational Group, Fiscal Years Ended June 30, 1942-44*

Occupational group	1942		1943		1944	
	Number	Percent	Number	Percent	Number	Percent
All groups	28, 781	100. 0	23, 725	100. 0	28, 551	100. 0
Professions	3, 496	12. 1	2, 673	11. 3	2, 593	9. 0
Commercial occupations	2, 753	9. 9	1, 311	5. 5	1, 137	4. 1
Skilled workers	3, 179	11. 0	3, 982	16. 8	5, 528	19. 4
Farmers	254	. 8	235	1. 0	349	1. 2
Servants	782	2. 7	654	2. 8	987	3. 4
Laborers	547	1. 9	820	3. 4	1, 168	4. 1
Miscellaneous	962	3. 2	992	4. 2	1, 167	4. 1
No occupation reported	16, 808	58. 4	13, 058	55. 0	15, 622	54. 7

¹ Data are from Monthly Review (U. S. Immigration and Naturalization Service, Washington), October 1944.

Before the outbreak of World War II the great majority of the immigrant aliens admitted into the United States came directly from the countries in which they were born. However, the proportion of those born in Europe who have come in from countries outside of Europe has greatly increased as a result of the displacement of peoples under the impact of war, as will be noted from table 3, which compares the number of alien immigrants admitted during 3 fiscal years, by country of birth and by country of last permanent residence.

TABLE 3.—Immigrant Aliens Admitted to United States by Country of Birth and of Last Permanent Residence, Fiscal Years Ended June 30, 1939, 1943, and 1944

Country of birth or last residence	1939: Country of—		1943: Country of—		1944: Country of—	
	Birth	Residence	Birth	Residence	Birth	Residence
All countries.....	82,998	82,998	23,725	23,725	28,551	28,551
Europe.....	68,198	63,138	8,953	4,920	8,694	4,509
Albania.....	217	229	3	10	1	1
Belgium.....	329	683	210	120	135	126
Bulgaria.....	117	129	11	3	23	6
Czechoslovakia.....	3,127	2,896	375	102	341	136
Denmark.....	303	306	142	100	119	61
Estonia.....	112	93	21	14	28	26
Finland.....	514	411	113	49	72	29
France.....	923	1,907	524	1,201	232	387
Germany.....	33,621	33,515	1,295	248	1,360	238
Great Britain:						
England.....	2,423	2,739	1,114	901	1,135	1,210
Scotland.....	619	277	287	71	357	96
Wales.....	92	42	43	2	47	15
Greece.....	841	907	309	229	292	226
Hungary.....	1,321	1,348	167	75	227	87
Ireland (Eire).....	1,494	1,101	227	132	146	68
Italy.....	6,780	6,570	81	49	177	120
Latvia.....	241	168	65	21	66	24
Lithuania.....	418	290	139	43	105	37
Netherlands.....	674	1,259	199	77	217	71
Northern Ireland.....	187	88	112	33	92	44
Norway.....	575	527	123	71	195	127
Poland.....	7,315	3,072	1,647	394	1,420	292
Portugal.....	484	422	301	395	429	431
Rumania.....	679	421	230	45	249	70
Soviet Russia.....	1,901	59	444	32	433	41
Spain.....	379	257	318	254	291	271
Sweden.....	378	342	113	58	90	58
Switzerland.....	639	1,237	127	123	50	33
Yugoslavia.....	1,050	1,090	99	29	178	93
Other Europe.....	445	753	114	49	178	85
Asia.....	1,304	2,162	353	334	349	227
China.....	317	642	56	65	72	50
Japan.....	78	102	16	20	9	4
Palestine.....	255	1,066	47	107	35	45
Syria.....	190	207	36	9	42	8
Other Asia.....	464	145	198	133	191	120
Canada.....	8,151	10,501	7,235	9,571	7,023	9,821
Newfoundland.....	342	312	194	190	363	322
Mexico.....	2,265	2,640	3,985	4,172	6,399	6,598
West Indies.....	1,192	2,231	1,116	2,312	2,299	3,198
Central America.....	450	530	1,181	1,218	1,876	1,985
South America.....	625	915	474	693	899	1,160
Africa.....	167	218	83	141	75	112
Australia.....	151	159	82	97	425	461
New Zealand.....	59	54	28	23	108	116
Other countries.....	94	138	41	54	41	42

Wage and Hour Statistics

Earnings in Detroit Tool and Product Engineering Plants, April 1944¹

Summary

TOOL engineering and designing constitutes an important phase in the manufacture of metal products and many other articles. This segment of industry, which is responsible for the designing of machine tools and other essential implements, merits a share of the credit for the efficiency of American production. Its importance in the organization of war production and in the post-war reconversion of industry can scarcely be exaggerated. Because of its requirements of special skill and long training and experience, tool engineering and designing is one of the highest-wage divisions of manufacturing industry.

In April 1944 average straight-time hourly earnings for men in the key occupations studied by the Bureau of Labor Statistics in 44 Detroit plants ranged from \$1.35 an hour for tool detailers to \$2.43 for product checkers. Earnings of male apprentice tool detailers, however, fell far below this range and averaged 77 cents. Women were employed in only one of the key jobs studied, that of tool detailer, with average earnings of \$1.12. A single shift was common to most of the companies; the normal workweek ranged from 43¾ to 71 hours, with a concentration of plants in the 58-hour group.

Scope of Survey

The chief function of the industry is to design tools, dies, jigs, and fixtures for use by various manufacturers in fabricating their products. In many large establishments, of course, this is done in their own engineering and designing departments. The Bureau's study, the findings of which are here given, excluded such "captive" departments and covered only specialized establishments that design tools and other implements on a jobbing basis. These establishments study the needs of their customer, design appropriate tools and equipment to meet these needs, and prepare the blueprints essential for the manufacture of the equipment. The actual manufacture of tools and equipment is typically performed not by the engineering and designing establishment but by a tool and die job shop or the customer manufacturer himself. "Product designing" is also undertaken by some engineering and designing establishments but is currently much less important than tool designing.

¹ Prepared in the Bureau's Division of Wage Analysis by Randle E. Dahl, regional wage analyst, Detroit regional office.

As a concomitant of its leading position in the metalworking industries, Detroit has become an important center of tool engineering and designing. The Bureau's survey of the industry in that city was made at the request of the Regional War Labor Board in connection with the wage-stabilization program. This survey, based on pay-roll periods in April 1944, covered 44 establishments in the Detroit metropolitan wage area. These establishments, varying in size from 19 to 443 employees, are believed to include virtually all of the tool and product engineering and designing firms in the Detroit area.

Practically all of the 44 firms covered were engaged in the designing and engineering of tools, dies, jigs, and fixtures on a jobbing basis. A few of them also manufactured tools, jigs, and special machinery, but occupations pertaining to actual fabrication were not covered. About a dozen of the establishments studied were also engaged in the designing and engineering of other products.

The Bureau's study was made by trained field representatives, who used standard job descriptions in all establishments and obtained the data directly from pay rolls and other official records of the plants surveyed. As is customary in Bureau studies, the wage data shown exclude premium payments for overtime and night-shift work. None of the plants studied operated on incentive systems of wage payment, and only one was unionized. Wages were paid on an hourly basis in all but one of the firms, which paid its employees on a monthly basis.

Average Hourly Earnings

Except for the apprentice tool detailers, the workers in the 12 key occupational groups covered in this survey were highly skilled, and hence in the upper wage brackets. Aside from custodial jobs, in fact, there appear to be no jobs of truly low skill in the industry. As might be expected, men were employed almost exclusively in the jobs studied. In only one job, that of tool detailer, were women employed. The highest-paid male workers studied were product checkers, whose straight-time average hourly earnings were \$2.43; the lowest-paid occupation was that of tool detailer, with average earnings for men of \$1.35 an hour, and for women of \$1.12 an hour. Male apprentice tool detailers averaged 77 cents an hour.

Wide ranges occurred in establishment averages for several occupations, the most notable being those of product designers and tool designers, where the difference between high and low plant averages amounted to 98 and 91 cents, respectively. It seems probable that these wide ranges were due to historical or fortuitous factors or, in some cases, to the special talents of individual workers, since a comparison of the earnings in small and large establishments failed to show corresponding differences. It should be noted that the highest and lowest plant averages do not necessarily coincide with the limits of the range in earnings of individual workers. For example the low and high establishment averages for the occupation of tool designer were \$1.55 and \$2.46, although individual tool designers earned as little as \$1.30 and as much as \$3.00 an hour.

Average Hourly Earnings¹ for Selected Occupations in 44 Tool and Product Engineering Establishments, Detroit, April 1944

Occupation and sex	Number of establishments	Number of workers	Straight-time hourly earnings		
			General average	Lowest establishment average	Highest establishment average
Male workers:					
Checkers, product.....	3	7	\$2.43	\$2.35	\$2.50
Checkers, tool.....	38	407	2.32	2.00	2.63
Designers, product.....	10	81	2.15	1.60	2.58
Designers, tool.....	43	943	2.07	1.55	2.46
Detailers, product.....	4	17	1.45	1.24	1.67
Detailers, tool.....	41	546	1.35	.88	1.63
Detailers, tool, apprentice.....	24	142	.77	.50	.93
Layout men, tool.....	4	89	1.85	1.40	1.92
Loftsmen.....	6	189	2.18	1.97	2.40
Plant-layout men.....	6	31	2.26	2.00	2.45
Process engineers.....	18	220	2.26	2.00	2.60
Female workers:					
Detailers, tool.....	11	39	1.12	.85	1.33

¹ Exclusive of premium payments for overtime and night-shift work.

Hours and Working Conditions

Most of these engineering companies operated only one shift. The normal working hours per week ranged in the several establishments from 43¾ to 71 hours. Within this range the greatest concentration of establishments was at 58 hours per week. Most of the plants followed the practice of paying time and a half for overtime after 8 hours a day and after 40 hours a week. Practically all paid time and a half for the sixth consecutive day and for major holidays, and double time for the seventh consecutive day.

Few of the firms studied granted their employees paid vacations. Of the 44 establishments, 36 made no provisions for paid vacations; 1 gave 1 day for each month of service; 4 gave 1 week after 1 year; 1 gave 2 weeks after 1 year; 1 gave a half day for each month, up to a maximum of 40 hours; and 1 gave 1 week after 1 year, 60 hours after 1½ years, and 80 hours after 2 years of service.

Union Wages and Hours of Motortruck Drivers and Helpers, July 1, 1944

Summary

ON JULY 1, 1944, the average hourly wage rate for union motortruck drivers was 98.3 cents per hour in 75 cities surveyed by the Bureau of Labor Statistics; the average for helpers was 81.4 cents and for the combined groups, 96.0 cents. Wage rates for drivers advanced 1.7 percent, and for helpers 2.5 percent, during the period July 1, 1943, to July 1, 1944, as indicated by comparable quotations obtained for both years. San Antonio, Tex., with the lowest composite average for all of the 75 cities surveyed, showed the greatest percentage increase over 1943—16.9 percent.

Union agreements provided normal workweeks averaging 46.0 hours for drivers and 45.3 for helpers. Over two-fifths of both drivers and helpers were covered by provisions calling for a 48-hour week. No change in weekly hours was recorded during the year for most (97 percent) of the drivers and helpers.

More than three-fourths of the union members were covered by agreements providing paid vacations, and about two-fifths received pay for a limited number of holidays not worked.

Scope and Method of Study

This study is one of a series of annual surveys made by the Bureau of Labor Statistics, covering union scales in various trades in 75 principal cities of the United States. The data were collected by field representatives of the Bureau, who called upon the officials of the local unions in each city to obtain the rates provided in their agreements with employers and the number of persons working under each wage scale. Scales in negotiation or before the National or Regional War Labor Boards or their designated agencies at the time the Bureau's representatives called were further checked before the data were tabulated, in order that changes retroactive to July 1, 1944, would be reflected in this report.

The figures are for city trucking primarily, although over-the-road drivers were included when they were paid on an hourly rather than a mileage basis. Included in the report are 3,237 wage quotations covering 215,662 union members, of whom 86 percent were drivers and 14 percent were helpers. The averages presented are weighted according to the number of union members receiving each rate and thus reflect not only the actual rates provided in union agreements but also the number of members benefiting from those scales.

The term "truck drivers" covers a heterogeneous group of workers, such as drivers of building and excavating trucks, coal trucks, ice trucks, general hauling and transfer trucks, delivery trucks hauling various and miscellaneous commodities, and express and freight trucks. In each of the many classifications of hauling, different types and sizes of trucks are commonly used. Each branch of the trucking industry, as well as each size and type of truck, usually has a different wage rate. Furthermore, there is great variation among the different cities, not only in commodities handled and types of trucks but also

in the terminology used to describe the different kinds of trucking. For these reasons it would be difficult to make an intercity classification by types. All truck driving in each city studied is treated as one trade, division being made only between drivers and helpers.

Usually the union agreements specify hourly rates as the basis of wage payment for drivers doing local hauling or making local deliveries which do not involve sales functions, although daily or weekly wage scales are not uncommon. For purposes of this study the daily and weekly wage scales have been converted to an hourly basis whenever the agreements specified the number of hours for which the scales applied; otherwise they have been omitted. Some trucking agreements, although specifying wages on an hourly basis, do not state the number of hours which constitute full time; these quotations necessarily have been omitted in the computation of average full-time hours and in the table showing the distribution according to hours per week.

Agreements covering route drivers, particularly those handling bakery products, beer, laundry, and milk, commonly classify the drivers as salesmen. Ordinarily, the compensation of these drivers is specified as a weekly guaranty, plus various commissions based upon the volume of deliveries or collections. Similarly, the agreements covering over-the-road drivers commonly specify either trip or mileage rather than hourly wage scales. All quotations specifying such commission, trip, or mileage wage scales which could not be converted to an hourly basis have been excluded from the computations in this report.

Trend of Union Wage Rates and Weekly Hours

On the basis of comparable quotations for July 1, 1943, and July 1, 1944, hourly wage rates showed an advance of 1.8 percent for all union motortruck drivers and helpers during the year (table 1). This is the smallest increase recorded since 1936, the first year for which comparable quotations for the trucking industry are available. This small increase indicates the effectiveness of wartime Government controls over wage rates. The very slight decrease in weekly hours is due to the approval by the National War Labor Board of a few cases in which the normal straight-time weekly hours were reduced.

TABLE 1.—*Indexes of Hourly Wage Rates and Weekly Hours for Union Motortruck Drivers and Helpers, 1936-44*

[1939=100]

Year	Drivers and helpers		Drivers		Helpers	
	Wage rates	Hours	Wage rates	Hours	Wage rates	Hours
1936.....	88.5	101.8	(1)	(1)	(1)	(1)
1937.....	94.4	100.9	94.5	100.8	94.2	101.2
1938.....	97.8	100.9	97.9	100.8	97.5	101.2
1939.....	100.0	100.0	100.0	100.0	100.0	100.0
1940.....	102.0	99.1	102.1	99.2	102.0	98.7
1941.....	106.1	98.5	105.9	98.5	107.0	98.1
1942.....	113.6	98.8	113.1	98.6	116.4	100.0
1943.....	119.8	98.6	119.2	98.4	123.0	99.8
1944.....	121.9	98.5	121.2	98.3	126.1	99.8

¹ Information not computed separately in 1936.

This does not mean that the union members worked shorter time, but merely that some hours previously worked at straight time are now worked at overtime rates.

Drivers received wage-rate increases averaging 1.7 percent during the year, raising the index to 121.2, a total increase of slightly more than 21 percent since 1939. Normal hours have decreased 1.7 percent during the same period.

Increases for helpers during the 12-month period averaged 2.5 percent, bringing the index to 126.1, an increase of more than 26 percent in base rates after 1939. Average weekly hours for helpers remained unchanged during the year and have dropped only slightly since 1939, the base year of the index.

Distribution of Members by Hourly Wage Rates

Motortruck drivers' wage rates average 98.3 cents per hour on July 1, 1944, in the 75 cities surveyed; helpers averaged 81.4 cents and, the combined groups, 96.0 cents (table 2). Almost half of the drivers had hourly rates ranging from 85 cents to \$1.05 per hour. Only 17 percent earned less than 85 cents, while over a third had rates exceeding \$1.05. The lowest scale, 39.5 cents, was reported in Des Moines for meat-truck drivers employed less than 6 months. Operators of dump trucks with a capacity of 8 cubic yards or over in St. Louis had the highest scale, \$2.00 per hour.

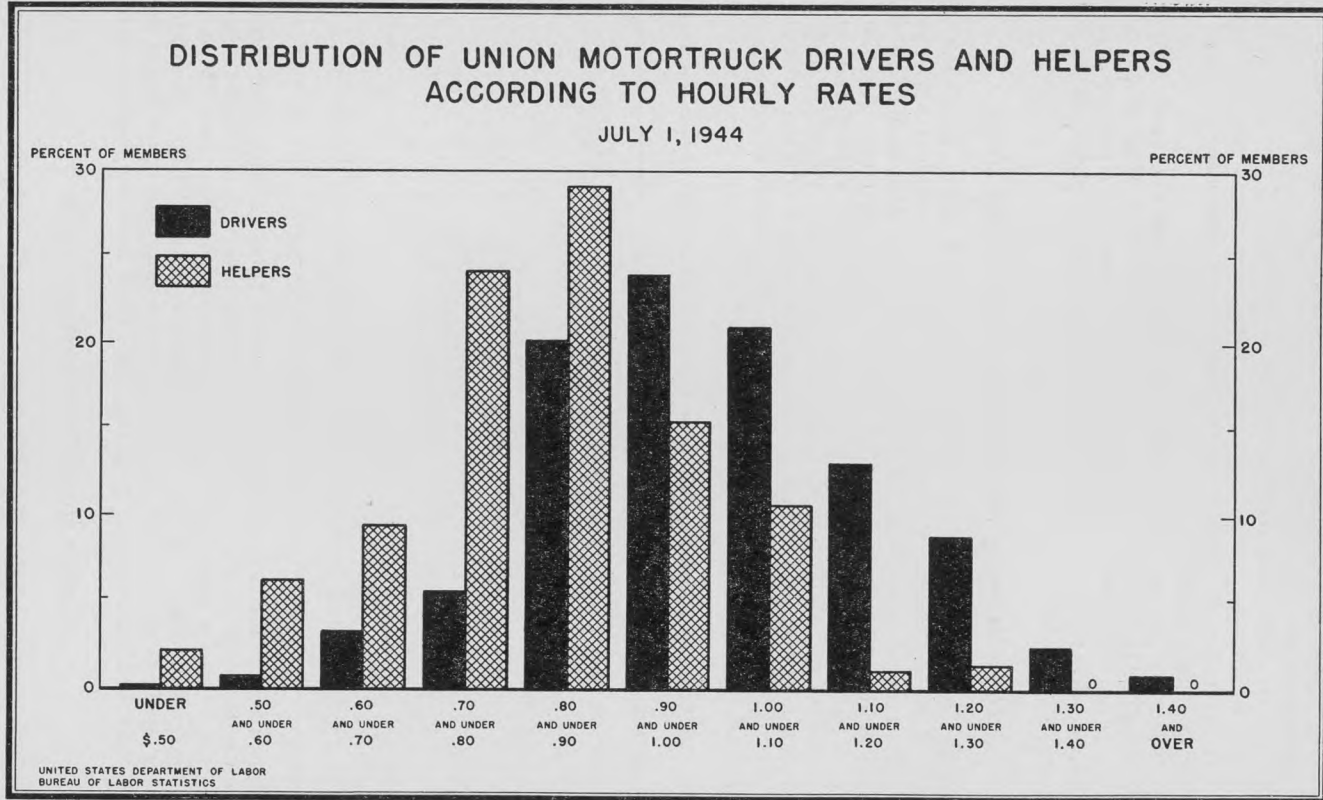
TABLE 2.—Percentage Distribution of Union Motortruck Drivers and Helpers, by Hourly Wage Rates, July 1, 1944

Classified hourly rate	Drivers and helpers			Classified hourly rate	Drivers and helpers		
	Drivers	Helpers	Percent		Drivers	Helpers	Percent
	Percent	Percent	Percent		Percent	Percent	Percent
Under 50 cents.....	0.4	0.1	2.2	\$1.10 and under \$1.15.....	6.5	7.5	0.5
50 and under 55 cents.....	.5	.1	2.8	\$1.15 and under \$1.20.....	4.9	5.6	.6
55 and under 60 cents.....	1.0	.6	3.5	\$1.20 and under \$1.25.....	4.5	5.1	.6
60 and under 65 cents.....	1.6	1.4	2.8	\$1.25 and under \$1.30.....	3.4	3.8	.8
65 and under 70 cents.....	2.6	1.9	6.7	\$1.30 and under \$1.35.....	1.0	1.2	-----
70 and under 75 cents.....	3.0	2.0	9.0	\$1.35 and under \$1.40.....	1.1	1.2	-----
75 and under 80 cents.....	5.2	3.6	15.3	\$1.40 and under \$1.45.....	.1	.1	-----
80 and under 85 cents.....	9.4	7.6	20.2	\$1.45 and over.....	.6	.7	-----
85 and under 90 cents.....	12.0	12.5	8.9	Total.....	100.0	100.0	100.0
90 and under 95 cents.....	12.8	13.3	10.5	Average hourly rate.....	\$0.960	\$0.983	\$0.814
95 cents and under \$1.00.....	9.9	10.7	5.0				
\$1.00 and under \$1.05.....	11.2	11.9	7.0				
\$1.05 and under \$1.10.....	8.3	9.1	3.6				

More than a third of the helpers reported rates ranging from 75 to 85 cents per hour, and 1 of every 10 helpers received between 90 and 95 cents. Over a quarter of the helpers received less than 75 cents per hour, while about 13 percent earned in excess of \$1.00. Laundry drivers' helpers in Atlanta received the lowest scale, 29.2 cents per hour, and beer drivers' helpers in New York had the highest rate, \$1.27.

Weekly Hours and Overtime, 1944

Normal weekly hours established by union agreements in 75 cities averaged 46.0 for all union truck drivers on July 1, 1944 (table 3); helpers averaged 45.3 hours, and drivers and helpers combined, 45.9. Slightly more than two-fifths of the drivers and over 45 percent of the



helpers had a basic workweek of 48 hours. More than a fourth of both the drivers and helpers reported a basic workweek of 40 hours, while 11 percent of the drivers and 12 percent of the helpers worked on a 44-hour basis. Hours in excess of 48 per week were worked by 16 percent of the drivers and 10 percent of the helpers. The shortest workweek, 30.8 hours, was reported for night city newspaper drivers in Duluth, while bread drivers in St. Louis had the longest, 65.0 hours.

The Fair Labor Standards Act, which limits straight-time working hours to 40 per week in interstate commerce, is not a governing factor in the trucking industry, as is indicated by the extent of weekly hour scales that exceed 40 per week. The vast majority of these workers are in strictly intrastate commerce to which the act does not apply, or they are drivers of common, contract, or private motor carriers engaged in transportation in interstate commerce which are exempt from the overtime provisions of the Fair Labor Standards Act. The latter are subject to the regulations of the Interstate Commerce Commission which has jurisdiction over all trucking occupations in interstate commerce affecting the safety of operations.¹ The Interstate Commerce Commission has ruled that employers of drivers operating vehicles in interstate commerce may not require drivers in their employ to remain on duty for more than 60 hours in a period of 168 consecutive hours. There are various exceptions allowed regarding daily and weekly hours.²

TABLE 3.—Percentage Distribution of Union Motortruck Drivers and Helpers, by Normal Hours Per Week, July 1, 1944

Normal hours per week	Drivers and helpers	Drivers	Helpers	Normal hours per week	Drivers and helpers	Drivers	Helpers
Under 40.....	0.8	0.7	1.4	54.....	5.0	5.1	4.7
40.....	26.7	26.9	25.4	Over 54 and under 60.....	.3	.2	.4
Over 40 and under 44.....	.5	.5	.3	60.....	3.8	4.0	2.4
44.....	11.1	11.0	12.0	Over 60.....	(1)	(1)	-----
Over 44 and under 48.....	4.1	4.0	5.2	Total.....	100.0	100.0	100.0
48.....	41.5	40.9	45.4	Average weekly hours....	45.9	46.0	45.3
Over 48 and under 51.....	.5	.4	1.2				
51.....	5.5	6.1	1.6				
Over 51 and under 54.....	.2	.2	(1)				

¹ Less than a tenth of 1 percent.

Changes in Wage Rates and Hours, From 1943 to 1944

Wage rates.—About 28 percent of the total union members for whom comparable quotations were obtained for both 1943 and 1944 received increases in wages during the year (table 4). Over three-fourths of those benefiting from increases obtained raises of less than 10 percent. The only decrease in hourly wages reported was caused by an increase in the normal straight-time weekly hours for fur drivers in New York

¹ The courts have generally ruled in cases where employees have brought suits for payment of overtime due under the Wage and Hour Law that drivers, drivers' helpers, mechanics, and even body builders working for trucking firms which operate in interstate commerce are covered by regulations of the Interstate Commerce Commission and not by provisions of the Fair Labor Standards Act.

² An essential difference between the hour regulations of the Interstate Commerce Commission and of the Fair Labor Standards Act should be noted. Whereas the Interstate Commerce Commission regulations specify maximum hours which may not be exceeded, the regulations under the Fair Labor Standards Act merely specify the maximum hours that may be worked at straight-time rates, and do not limit the number of total hours that may be worked provided time and a half is paid for all hours in excess of the specified normal week. See Interstate Commerce Commission: "Motor Carrier Safety Regulations Revised."

City, without sufficient addition to the weekly wages to compensate for the change in hours.

A majority (54 percent) of the drivers whose scales were increased, received advances of 5 but less than 10 percent. Increases of less than 5 percent were obtained by over 25 percent of these drivers, and 5 percent received raises of 15 percent or more.

The wage scales of almost four-fifths of the helpers who received increases are at least 5 but less than 15 percent higher than in 1943. Over a third of these are earning between 10 and 15 percent more than in the previous year. Almost 4 percent of all union helpers (13 percent of those receiving increases) had raises of 15 percent or more.

TABLE 4.—Extent of Increases in Wage Rates of Motortruck Drivers and Helpers and Percent of Members Affected, July 1, 1944, Compared with July 1, 1943

Extent of increase	Drivers and helpers		Drivers		Helpers	
	Number of quotations	Percent of members affected	Number of quotations	Percent of members affected	Number of quotations	Percent of members affected
All increases.....	867	27.8	694	27.7	173	28.8
Less than 5 percent.....	211	6.5	180	7.1	31	2.8
5 and under 10 percent.....	416	15.0	333	15.1	83	15.2
10 and under 15 percent.....	138	4.0	105	3.5	33	6.9
15 and under 20 percent.....	60	1.5	43	1.5	17	1.9
20 and under 25 percent.....	21	.4	19	.4	2	(1) .4
25 and under 30 percent.....	14	.1	10	(1)	4	.4
30 percent and over.....	7	.3	4	.1	3	1.6

¹ Less than a tenth of 1 percent.

Maximum weekly hours.—Ninety-seven percent of the quotations, covering about the same proportion of the union members, indicated no change in maximum full-time weekly hours during the period July 1, 1943, to July 1, 1944. Less than 1 percent had their hours increased, while less than 3 percent of the drivers and almost 5 percent of the helpers reported slight decreases in hour scales.

Overtime Pay

Time and a half was reported as the initial overtime rate for practically all of the union members (90.4 percent of the drivers and 93 percent of the helpers). Over 6 percent of the drivers and 4 percent of the helpers worked without extra pay for overtime work. In some of these cases, overtime was prohibited by agreement or by Interstate Commerce Commission regulations. Double time as an initial overtime rate was very seldom reported. It covered less than 0.4 percent of the drivers and helpers combined. A few of the drivers (3 percent) and helpers (2.8 percent) were covered by other penalty scales such as a fixed monetary rate, time and one-third, or time and one-fourth.

A small number of union agreements provided a daily or weekly tolerance under which a limited amount of overtime could be worked before the penalty rate became effective. This tolerance usually ranged from 3 to 6 hours per week.

A substantial number of agreements guaranteed a few overtime hours each week at the rate of time and a half. Such a guaranty in effect substantially increases the "take home" pay without changing

the basic rates. These guaranties are usually on a weekly basis and are not effective if the member takes time off for his own convenience.

Pay for Sundays and Holidays

Work on Sunday or the seventh consecutive day called for rates of either time and a half or double time for almost 90 percent of the union members. About half of both drivers and helpers received time and a half for work on this day, while two-fifths received double time. Only 1 of every 10 drivers or helpers did not receive any special rate for work on Sunday or the seventh consecutive day.

About two-fifths of the union motortruck drivers and helpers worked under agreements calling for regular pay for holidays not worked. More than 18 percent of the members received 6 holidays with pay while an additional 18 percent received pay for seven or more holidays not worked. About 3 percent are included under agreements providing pay for one to five holidays.

Vacations

Vacations with pay are provided in the union agreements covering over 78 percent of the union members included in this survey. A similar check in 1942 indicated that only about 65 percent of the union drivers and helpers benefited by paid vacations. About 44 percent of the union members (56 percent of those receiving vacations) were required to work 1 year to earn 1 week's vacation, while about 12 percent received 2 weeks after 1 year of service. Agreements providing 1 week of vacation after 1 year and 2 weeks after 2 years covered 4 percent of the total union membership. Vacations of 1 week after 1 year and 2 weeks after 5 years were specified for more than 6 percent of the union members. About an eighth of the union members were covered by other miscellaneous vacation provisions.

*Average Wage Rates and Changes by City*³

New York City led all other cities included in the survey with a composite average rate for union truck drivers of \$1.181 per hour (table 5). Seattle was second with an average of \$1.163, followed by Newark with \$1.154. In addition to Seattle, averages exceeding \$1.00 were found in all the other West Coast cities covered: San Francisco (\$1.122), Spokane (\$1.115), Portland, Oreg. (\$1.057), and Los Angeles (\$1.051). Three other cities—Detroit (\$1.060), Butte (\$1.028), and Cleveland (\$1.008)—also fell in this group. No other city had rates as high as the average for all cities, 98.3 cents. Forty-one cities had averages exceeding 80 cents, and only 22 had averages below this rate. San Antonio's average was lowest (64 cents per hour).

*Percentage changes.*⁴—The greatest increase in wage rates (16.9 percent) during the period of the survey, July 1, 1943, to July 1, 1944,

³ The average rate shown for each city is a composite of all rates quoted for each different type of truck driver, weighted by the number of union members earning each rate.

⁴ The percentage changes are based on specific rates weighted by the number of members working at each rate. Only those quotations showing comparable data for both 1943 and 1944 are included. Specific increases during the 12-month period of this study will reflect larger percentage changes among those classifications with comparatively lower scales; e. g. if freight drivers in city A increase their scale 10 cents per hour from 70 to 80 cents, an average increase of 14.3 percent is registered, while in city B if the same increase raises the rate from \$1.10 to \$1.20 per hour the change is only 9.1 percent. For this reason those cities which have lower scales tend to show greater percentage increases than those which have higher scales.

was recorded for San Antonio; but in spite of this large increase, San Antonio, for the second successive year, had the lowest composite average of all the cities surveyed. El Paso, Tex., had the next highest increase (10 percent). Only nine other cities had average increases of 5 percent or more. Thirty additional cities had increases in wage scales that exceeded the average increase for all cities (1.7 percent). In 21 cities increases of less than 1 percent were recorded, and in 2 cities there was no change in scales.

TABLE 5.—Average Hourly Rates of Union Motortruck Drivers, by City, July 1, 1944, and Percent of Increase over Previous Year¹

City	Average hourly rate	Percent of increase	City	Average hourly rate	Percent of increase
New York, N. Y.	\$1.181	0.7	Scranton, Pa.	\$0.856	4.6
Seattle, Wash.	1.163	.1	Baltimore, Md. ²	.855	5.0
Newark, N. J.	1.154	2.5	Grand Rapids, Mich.	.849	6.5
San Francisco, Calif.	1.122	.4	Indianapolis, Ind.	.848	2.3
Spokane, Wash.	1.115	1.9	Charleston, W. Va.	.846	(3)
Detroit, Mich.	1.060	4.0	Little Rock, Ark.	.840	1.5
Portland, Oreg.	1.057	1.4	Madison, Wis.	.829	1.9
Los Angeles, Calif.	1.051	.1	Worcester, Mass.	.824	.7
Butte, Mont.	1.028	5.7	Salt Lake City, Utah	.822	3.1
Cleveland, Ohio	1.008	4.1	Erie, Pa.	.820	.4
Average, all cities	.983	1.7	Kansas City, Mo.	.819	3.7
Chicago, Ill.	.979	1.6	Jacksonville, Fla.	.809	1.9
Pittsburgh, Pa.	.968	1.5	Portland, Maine	.808	.1
Boston, Mass.	.949	.3	Reading, Pa.	.806	2.0
Phoenix, Ariz.	.949	1.2	Binghamton, N. Y.	.804	.8
Toledo, Ohio	.946	3.5	Charlotte, N. C.	.784	6.1
Columbus, Ohio	.930	5.7	Des Moines, Iowa.	.784	2.5
Milwaukee, Wis.	.929	2.9	Duluth, Minn.	.782	.5
Cincinnati, Ohio	.913	5.1	Rock Island (Ill.) district ⁴	.775	3.6
Youngstown, Ohio	.913	2.5	Wichita, Kans.	.766	.3
Philadelphia, Pa.	.909	.7	Louisville, Ky.	.762	3.1
New Haven, Conn.	.908	4.5	Omaha, Nebr.	.754	.5
Minneapolis, Minn.	.903	1.8	Memphis, Tenn.	.744	4.1
Mobile, Ala.	.899	.7	Manchester, N. H.	.738	.2
St. Paul, Minn.	.899	2.7	York, Pa.	.736	.1
Buffalo, N. Y.	.889	.5	Atlanta, Ga.	.725	5.6
Washington, D. C.	.889	1.9	Oklahoma City, Okla.	.720	4.1
South Bend, Ind.	.888	3.8	Jackson, Miss.	.716	1.2
St. Louis, Mo.	.878	2.6	Dallas, Tex.	.713	7.0
Dayton, Ohio	.876	3.9	Norfolk, Va.	.706	0
Tampa, Fla.	.875	1.2	Birmingham, Ala.	.683	1.1
Charleston, S. C.	.873	2.3	Richmond, Va.	.672	0
Providence, R. I.	.870	.2	New Orleans, La.	.669	5.0
Peoria, Ill.	.867	3.1	Houston, Tex.	.666	4.7
Springfield, Mass.	.865	.5	El Paso, Tex.	.660	10.0
Rochester, N. Y.	.864	1.3	Nashville, Tenn.	.646	3.9
Denver, Colo.	.858	.5	San Antonio, Tex.	.640	16.9

¹ Does not include drivers paid on a commission or mileage basis. Averages are weighted according to number receiving each different rate. Helpers are not included in this table.

² Data obtained for only about two-thirds of the union drivers and helpers in Baltimore.

³ Less than a tenth of 1 percent.

⁴ Includes Rock Island, Ill., Davenport, Iowa, and Moline, Ill.

Trend of Factory Earnings, 1939 to September 1944

THE published average earnings of factory workers are summarized in the accompanying table for selected months from January 1939 to September 1944.¹ The earnings shown in this table are on a gross basis (i. e., before deductions for social security, income and victory taxes, bond purchases, etc.).

¹ Compare Trends in Factory Wages, 1939-43, in Monthly Labor Review, November 1943 (pp. 869-884), especially table 4 (p. 879). For detailed data regarding weekly earnings, see Detailed Reports for Industrial and Business Employment, September 1944, table 6 (p. 131), of this issue.

Weekly earnings in all manufacturing averaged \$46.25 in September 1944—99.4 percent above the average in January 1939, 73.6 percent above January 1941, and 18.9 percent above October 1942. Such factors as longer hours of work, merit increases for individual workers, premium pay for overtime worked, changing composition of the labor force within plants, shifts in the distribution of workers among plants and among industries, as well as wage-rate increases, account for the rise in earnings.

Gross hourly earnings in all manufacturing averaged 103.1 cents in September 1944—63.1 percent above the average in January 1939, 51.0 percent above January 1941, and 15.5 percent above October 1942.

Straight-time average hourly earnings, as shown in columns 7 to 9, are estimated to exclude premium pay at time and a half for work in excess of 40 hours. The effect of extra pay for work on supplementary shifts and on holidays is included. For all manufacturing, the straight-time average in September 1944 was 96.1 cents per hour; this was 54.3 percent higher than in January 1939, 44.7 percent above January 1941, and 14.5 percent above October 1942.

Earnings of Factory Workers in Selected Months, 1939 to September 1944

Month and year	Average weekly earnings			Average hourly earnings ¹			Estimated straight-time average hourly earnings ¹			Estimated straight-time average hourly earnings weighted by January 1939 employment ²		
	All manufacturing	Durable goods	Non-durable goods	All manufacturing	Durable goods	Non-durable goods	All manufacturing	Durable goods	Non-durable goods	All manufacturing	Durable goods	Non-durable goods
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1939: Jan.	\$23.19	\$25.33	\$21.57	\$0.632	\$0.696	\$0.583	\$0.623	\$0.688	\$0.574	\$0.623	\$0.688	\$0.574
1940: Jan.	24.56	27.39	22.01	.655	.717	.598	.644	.703	.589	.635	.697	.589
1941: Jan.	26.64	30.48	22.75	.683	.749	.610	.664	.722	.601	.648	.711	.600
1942: Jan.	33.40	38.98	26.97	.801	.890	.688	.762	.835	.670	.729	.810	.667
July.	36.43	42.51	28.94	.856	.949	.725	.809	.885	.701	.759	.846	.694
Oct.	38.89	45.31	30.66	.893	.990	.751	.839	.919	.723	.782	.869	.716
1943: Jan.	40.62	46.68	32.10	.919	1.017	.768	.859	.941	.733	.794	.886	.724
Apr.	42.48	48.67	33.58	.944	1.040	.790	.878	.957	.751	.808	.897	.741
July.	42.76	48.76	34.01	.963	1.060	.806	.899	.981	.766	.823	.919	.750
Oct.	44.86	51.26	35.18	.988	1.086	.824	.916	.997	.781	.836	.929	.765
Dec.	44.58	50.50	35.61	.995	1.093	.832	.927	1.011	.788	.846	.942	.773
1944: Jan.	45.29	51.21	36.03	1.002	1.099	.838	.931	1.013	.793	.850	.945	.778
Apr.	45.55	51.67	36.16	1.013	1.110	.850	.942	1.023	.806	.862	.955	.792
July.	45.43	51.07	37.05	1.018	1.116	.862	.950	1.035	.815	.874	.973	.799
Aug. ³	45.86	51.82	37.15	1.016	1.111	.865	.944	1.024	.817	.871	.960	.803
Sept. ³	46.25	52.18	37.67	1.031	1.131	.876	.961	1.046	.829	.886	.979	.815

¹ Average hourly earnings, excluding the effect of premium pay for overtime.

² Average hourly earnings, excluding premium pay for overtime, weighted by man-hours of employment in the major divisions of the manufacturing industry for January 1939.

³ Preliminary.

The shift of workers from relatively low-wage to relatively high-wage industries since 1939 would have raised the average earnings of factory workers, even if no other influences had been present. The effects of such interindustry shifts have been eliminated from the averages shown in columns 10 to 12 of the table. If employment had been distributed between industries as it was in January 1939, the straight-time hourly earnings of factory workers would have averaged

88.6 cents in September 1944, or 42.2 percent above the corresponding average in January 1939, 36.7 percent above January 1941, and 13.3 percent above October 1942. Between August 1944 and September 1944 the rise in straight-time hourly earnings, after eliminating the influence of shifting employment, amounted to 1.7 percent. Even this latter series of averages exaggerates the rise in wage rates, because it includes the influence of interplant shifts of employment, merit increases for individual workers, and premium rates for work on extra shifts and on holidays.



Per Capita^r Income of Wage-Earner Families, 1939

THE economic load which a large family constitutes is indicated in an analysis of family income by the Bureau of the Census.¹ In a typical American wage-earner family of 6 persons, the father of which was under 35 years of age, the median wage or salary income in 1939 was only \$147 per capita. In contrast, for a family of 2 (a married couple), the husband being under 35 years of age, the median income per member was \$660.

Per Capita Wage or Salary Income in 1939, by Sex, Marital Status, Age of Head, and Size of Family

Marital status and age of family head	Per capita wage or salary income of families without other income, by size of family							
	Total	1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons
All families.....	\$310	\$487	\$591	\$439	\$349	\$269	\$208	\$137
Families with male head:								
Wife present, husband aged—								
Under 35 years.....	304		660	397	288	202	147	98
35-44 years.....	302		759	535	399	287	207	123
45-54 years.....	332		681	539	433	334	256	167
55 years and over.....	332		428	427	388	331	275	194
Other marital status.....	376	591	483	421	337	280	227	157
Families with female head.....	238	377	350	278	222	190	162	112

"As a measure of economic well-being, per capita family income is only an approximation, because it does not take into account the difference in living costs per family member in large families as compared with smaller ones. However, the differences in economic status of the various family types are so great that an approximate measure is adequate to indicate the relationships involved."

For all families without other income, the median wage or salary income per member in 1939 was about \$310, while for the 2-person family, usually composed of a man and wife without children, it was \$591. For families of 7 or more, the median per capita income was only \$137. The low median income per member in large families with heads under 35 years of age is explained, in most cases, by the fact that the head of the family is the only breadwinner.

¹ U. S. Bureau of the Census. Population—Special reports, Series P. 44, No. 19. Washington, September 8, 1944.

Wages of Textile Workers in Province of Concepción, Chile¹

DAILY wages in the woolen and cotton mills of the Province of Concepción, Chile, early in 1944, ranged from a maximum of 74 pesos² in the machine shop and 48 pesos in the weaving section, to a minimum of 27 pesos in the carding and spinning sections. More than 6,000 persons were employed in the textile industry of the Province, which provides from 65 to 70 percent of the Chilean output of cotton and woolen textiles.

Wages and Hours

The figures in the accompanying table are said to represent accurately the wage scale for workers in the woolen mills, and that scale is practically identical with the scale in the cotton mills.

Daily Wage Scale in Woolen-Textile Plants in Province of Concepción, Chile

Occupation	Daily wage	Occupation	Daily wage
Weaving section:	<i>Pesos</i>	Spinning section—Continued.	<i>Pesos</i>
Weavers.....	40.75	Workmen:	
Apprentices.....	38.00-48.00	Range.....	27.00-35.00
Subapprentices.....	35.00-38.00	Average.....	¹ 31.00
Master warpers.....	33.00-39.00	Machine shop:	
Warpers' helpers.....	36.40	Turners.....	41.00-74.00
Workmen:		Plumbers.....	46.30
Range.....	27.50-44.00	Plumbers' helpers.....	27.50
Average.....	¹ 29.00	Welders.....	49.20
Dyeing section:		Welders' helpers.....	38.00
Workmen:		Mechanics.....	41.00-44.30
Range.....	29.00-42.00	Mechanics' helpers.....	33.50-38.00
Average.....	¹ 33.00	Firemen:	
Stockroom: Workmen.....	28.00-37.00	Range.....	40.00-49.30
Gatemen:		Average.....	¹ 44.00
Head gatemen.....	54.00	Alternate firemen.....	41.00
Porters.....	43.20	Electricians.....	40.00
Workmen:		Carpenters.....	43.00
Range.....	28.00-41.00	Carpenters' helpers.....	32.30
Average.....	¹ 31.00	Stokers.....	34.30
Blending section:		Maintenance: Workmen.....	27.50-49.30
Workmen:		Finishing section:	
Range.....	29.00-35.00	Apprentices.....	40.50
Average.....	¹ 31.00	Fullers:	
Wool warehouse:		Range.....	36.00-40.00
Workmen:		Average.....	¹ 38.00
Range.....	28.00-34.50	Cleaners:	
Average.....	¹ 30.00	Cleaners:	
Carding section:		Range.....	31.00-34.50
Apprentices.....	41.00-42.00	Average.....	¹ 32.00
Subapprentices.....	33.50-35.60	Workmen:	
Workmen.....	27.00-38.40	Range.....	27.00-40.00
Spinning section:		Average.....	¹ 30.00
Apprentices.....	33.00-42.00		
Subapprentices.....	31.80-35.00		

¹ Approximate.

Textile workers in the Province of Concepción receive, in addition to wages, a monthly rental allowance (*asignación de arriendo*) of 60 pesos in lieu of a house furnished by the employer, a monthly family allowance (*asignación familiar*) of 60 pesos for a wife and 50 pesos for each child under 16 years of age; an annual gift of 2 pieces of

¹ Data are from report of Caspar D. Green, United States vice consul, Concepción, Chile, March 1, 1944, enclosing wage scale.

² Average exchange rate of peso in February 1944 = 5 cents.

woolen cloth (of 3 meters³ each); and 2 pieces of denim for overalls. The textile firms furnish medical attention, pay 1,500 pesos or its equivalent for funeral expenses of an employee dying in their service, and maintain social workers.

Operatives in establishments employing 25 or more persons are required to form a union, in which membership is compulsory. These unions are members of the Provincial Confederation of Textile Workers (*Confederación Textil Provincial*). At the beginning of the calendar year, each union presents any petition it may have, requesting modifications of wages or working conditions. The petitions are considered under a standard procedure, and a union-company agreement is signed for the ensuing year. It is reported that the wage demands of the unions are generally identical and that the entire woolen-industry settlement is reached in a single negotiation. In practice, the settlements differ only in minor details.

The usual workweek is 48 hours, and, although the length of shift varies from plant to plant, a day of 8½ hours is common. Most of the plants carry out the entire process from raw wool or cotton to the finished product, and some plants work 2 or 3 shifts in certain departments in order to maintain a balance in the process.

Whereas textile plants in the United States figure on an average of one employee per loom, the mills here described have twice that number. This has been attributed to lack of certain trained personnel. Local technical schools are reported to be training mechanics.

Employment and Production

The largest textile mill in the Province employs about 2,000 workers, two plants employ more than 1,000 each, and the others employ from less than 100 to 800 each. The proportion of women to men is high. The number of looms in the woolen mills varies from 22 to 150; the principal cotton mill has 1,008 looms.

Though the woolen goods produced range all the way from heavy blanket and overcoat materials to men's suitings, the bulk of the woolen production consists of coarse fabrics. The main cotton products are low-priced sheeting (*tocuyo*) and shirt materials. The cotton yarn is used to supply not only the textile mills but also a small twine and rope factory and a knitting factory which employs about 150 operatives and produces "low quality" socks, stockings, and underwear. Raw cotton for manufacture in Concepción is imported almost exclusively from Peru; wool is bought by the manufacturing firms directly from producers in the central and south central areas of Chile.

Although the textile industry of the Province dates from about 1875, most of the buildings are modern one-story, reinforced concrete structures (designed to be earthquake-proof). The industry has increased only slightly during the war years, but is growing. According to one estimate, 10 years ago production was at the rate of only 40 percent of the present output; 5 years ago it had risen to 80 percent. The market for the finished goods is largely domestic.

³ A meter is equivalent to 39.37 inches.

Wartime Agricultural Wages in Hungary¹

UP TO the present war, the general wage level in Hungary had remained relatively low, primarily as a result of a continual oversupply of labor in both industry and agriculture. Under the impetus of the war, which brought a more rapid growth in industrialization, the surplus of workers was gradually absorbed. As a result, money wages generally tended to rise, although "real" wages lagged, because of a steady rise in the cost of living.

The shortage of agricultural labor which resulted from the migration of workers into war industries caused agricultural wages to rise substantially above the maximum wage rates fixed by the Government in 1941. According to a survey undertaken by the Hungarian Ministry of Public Supply in 191 communities, daily wages for agricultural workers increased from 3.80 pengös² in January 1942 to 4.98 pengös in January 1943, and from 5.06 pengös in December 1942 to 7.41 pengös in December 1943. Average wages for July rose from 5.44 pengös in 1942 to 8.14 pengös in 1943, an increase of 50 percent. Thus, actual wages exceed the ceiling wage rates by percentages ranging from 18.0 for September to 65.0 for December. In July and August 1943, the actual wages were the same as those fixed by the Government, as the official wage rates were calculated in July and were based on wages actually paid.

The official daily rates declined from 8.10 pengös in July to 4.40 pengös in December, largely as a result of their being calculated on the customary decline in daily working hours from 13½ in July to 7½ in December. However, this decline did not occur in 1943, for conditions in agriculture had changed. Many employers sought to make up, during fall and early winter, work which had been postponed in the summer. Furthermore, at the end of the harvesting season many agricultural workers went into factories, thus reducing the labor supply. As a result of the continued long hours thus necessitated, actual agricultural wages per day declined only 9 percent between July and December, whereas the official rates had provided for a decrease of 44 percent. Wages actually paid in December exceeded those fixed by the Government by 65 percent.

Agricultural wages in Hungary vary with the different districts. They are lowest in the territory beyond the Tisza River and highest in the territory between the Danube and the Tisza, in the southern parts of former Slovak territory annexed by Hungary in 1940, in the southwestern parts of Transdanubia, and in southern Hungary. In the higher-wage districts cattle raising and viticulture predominate.

¹ Data are from an article in *Südost Economist* (Budapest), of January 21, 1944.

² In 1929 the exchange value of the pengő was 17 cents in United States currency. Since then it has fluctuated considerably. During the first 6 months of 1941 (the latest period for which data are available) the pengő was quoted at 19.8 cents.

Cost of Living and Retail Prices

Prices in the Third Quarter of 1944

Summary

THE third quarter of 1944 brought little change in the general level of prices, either in retail markets or at the producers' level. Problems of reconversion pricing policies and of supplies of certain kinds of consumers' goods claimed the center of attention.

At retail, costs of clothing, household textiles, and some furniture continued to rise, while food prices moved almost wholly in response to seasonal influences. The net rise for the quarter in prices of living essentials was 0.9 percent.

Most industrial prices were stable, and there was little evidence of continuation of the rising trend in markets for industrial goods noted earlier in the year, except for an advance of about 4 percent in producers' prices of cotton products required by the Stabilization Extension Act of 1944. Scattered advances were reported for some farm machinery, waste paper, asphalt roofing, and a few other products. Some weakness developed for steel scrap and certain chemicals as war demands tapered off.

Trend of Prices

September 1944 marked the end of nearly 18 months without any significant change in the general level of prices. This stability is attributable to the magnificent production record of American farmers, industrial workers, processors, and manufacturers, and the general effectiveness of price and rationing controls. The principal problems of supply and of price that affect the American public continue to be in the field of low- and medium-priced cotton clothing and housefurnishings, discussed at length elsewhere in this report. Supplies of foodstuffs were adequate, and acute scarcities were reported for only a few foods, notably American cheese, butter, good grades of beef, veal, and lamb, canned salmon, and certain kinds of canned fruit, all of which are in demand by the military services. As a whole, the record of price and supply is proof of America's ability in this war to produce "guns and butter too."

Recent trends in prices can be illustrated best by comparison with September 1943, when prices were affected by the same seasonal influences as in September of the present year. The price rise during the year in primary markets amounted to about 1 percent, and the rise in prices paid by consumers at retail for living essentials, to slightly over 2 percent. During the same period, the general level of industrial production (including military production) dropped 5 percent,

while total employment in nonagricultural establishments showed a decline of 3 percent.

The statement below summarizes price changes during the third quarter of 1943, and since September 1943 and August 1939, both at retail and in primary markets, for selected groups of commodities.

	Percent of change from—		
	June 1944 to September 1944	September 1943 to September 1944	August 1939 to September 1944
Wholesale prices: All commodities-----	-0.3	+0.9	+38.7
Farm products-----	-1.8	-.3	+101.1
Foods-----	-2.2	-.8	+55.1
All other commodities-----	+1	+1.4	+23.1
Cost of living-----	+9	+2.1	+28.3

Reconversion prices.—For a time during the summer and early autumn of 1944, as France was liberated and there was hope for an early end to the European war, discussion was active on problems of reconversion pricing. The Office of Price Administration is establishing general standards for fixing maximum prices for consumer durable goods and other civilian products which have been out of the market, in order that uncertainty over prices shall not be a bar to production after victory in Europe. The OPA has announced that, in general, its objective will be to maintain 1942 price levels where possible, but in all cases ceilings will be fixed high enough to “yield good profits for business, large or small, on the basis of high-volume production,” along with “continued payment of high wage rates,” and to “encourage maximum production,” at the same time “discouraging general increases in the cost of living.”¹

The principal problems will, of course, center in consumer durable goods and their parts and certain heavy goods manufactured for producers. In October 1944 the OPA began to hold conferences and conduct inquiries to determine the nature of cost and price problems which will be faced after V-E (Victory in Europe) day. Preliminary studies conducted by the OPA and by the Bureau of Labor Statistics for the OPA indicate that in a number of lines no price increases, or only moderate price increases above 1942 levels, will be required. It is recognized, of course, that the situation may change before the beginning of the reconversion period. However, some producers of automobiles and certain other major consumer durable goods, such as washing machines and radios, have publicly announced their need for higher prices. Others have announced an intention to produce at 1941 or 1942 prices.

Meantime, some civilian goods of pre-war types have begun to appear in retail markets. This trend was accelerated in the autumn quarter, particularly for all-wool apparel and furniture containing steel springs. These products recently returned to civilian markets in large quantities after an absence of a year and a half or more. In the case of both types of goods, prevailing prices are above 1942 levels, partly because of higher production costs and partly because of changes in construction and styling, for furniture. Limited production of consumer durable goods, such as electric irons, has been

¹ Memorandum (Our Pricing Objectives in the Reconversion Period) from Chester Bowles, Administrator, to all members of OPA Advisory Committees, October 1944.

authorized under the "WPB spot authorization program" or under orders issued prior to the establishment of that program. Most of these products approved in the autumn of 1944 were scheduled to sell at 1942 ceilings, although in some cases requests for upward adjustments were made to the OPA by individual firms and were granted. In general, the largest production of electric irons has been in the moderate- to high-priced fields rather than in the lowest price lines previously on the market.

Cost of Living

The advance of slightly less than 1 percent during the third quarter of 1944 brought the level of retail prices for living essentials in large cities up 28 percent above that prevailing in August 1939, just before the outbreak of war in Europe. Since the President's "hold-the-line" order in the spring of 1943, however, there has been little over-all movement, amounting to a rise of only 1.1 percent since the peak in May 1943. The largest advances were in costs of clothing and housefurnishings, which rose 2.5 percent and 1.7 percent, and a seasonal rise of 1 percent in food prices. The rise in clothing again has been due almost wholly to the scarcity in retail stores of low-priced and moderate-priced clothing, particularly cotton work clothing, children's clothing, knit underwear of all kinds, inexpensive dresses, and cotton household textiles such as sheets and pillowcases. These shortages remain acute (see *Textiles*, p. 1264). In housefurnishings, the return to the market of living-room furniture of steel-spring construction at higher prices than prevailed in 1942, as already noted, contributed to the advance. There have also been steady advances, almost uninterrupted since 1940, in the cost of services, many of which are exempt from OPA control. Illustrations are the services provided by beauty and barber shops, hospitals, physicians, and movie theaters. This trend continued in the quarter ended with September 1944.

Although the housing situation remained serious in most of the large cities surveyed during the quarter by the Bureau of Labor Statistics, there were no significant changes in rents. In 8 cities there were slight increases in the average rental bill—none greater than 0.5 percent—as the result of the curtailment of services ordinarily provided, additional charges for services, changes in the number of occupants, and other reasons. In four cities there were slight decreases. The average rental bill in all large cities rose 0.1 percent, and was still 1.5 percent below its level in May 1942, when OPA controls were initially established. Utility rates remained substantially unchanged during the quarter, as did prices of fuel also. There were minor adjustments in OPA ceilings on coal, and scattered changes in electricity and gas rates.

Changes in retail prices of goods and services in large cities are summarized in table 1 and the chart on page 1262. Changes in prices of consumer goods in primary markets are shown in table 2.

TABLE 1.—Percent of Change in Cost of Living in Specified Periods, by Commodity Group

Commodity group	Percent of change—				
	In last quarter	In last year	From 1943 peak	From beginning of OPA control	From start of war
	June 1944 to September 1944	September 1943 to September 1944	May 1943 to September 1944	May 1942 to September 1944	August 1939 to September 1944
All items.....	+0.9	+2.1	+1.1	+9.1	+28.3
Food.....	+1.0	-.3	-4.2	+12.7	+46.5
Clothing.....	+2.5	+6.7	+10.6	+12.0	+41.0
Rent.....	+1	+2	+2	-1.5	+3.7
Fuel, electricity, and ice.....	+2	+2.0	+2.0	+4.7	+12.6
Housefurnishings.....	+1.7	+11.4	+12.5	+15.1	+39.9
Miscellaneous.....	+6	+4.6	+6.2	+10.4	+21.9

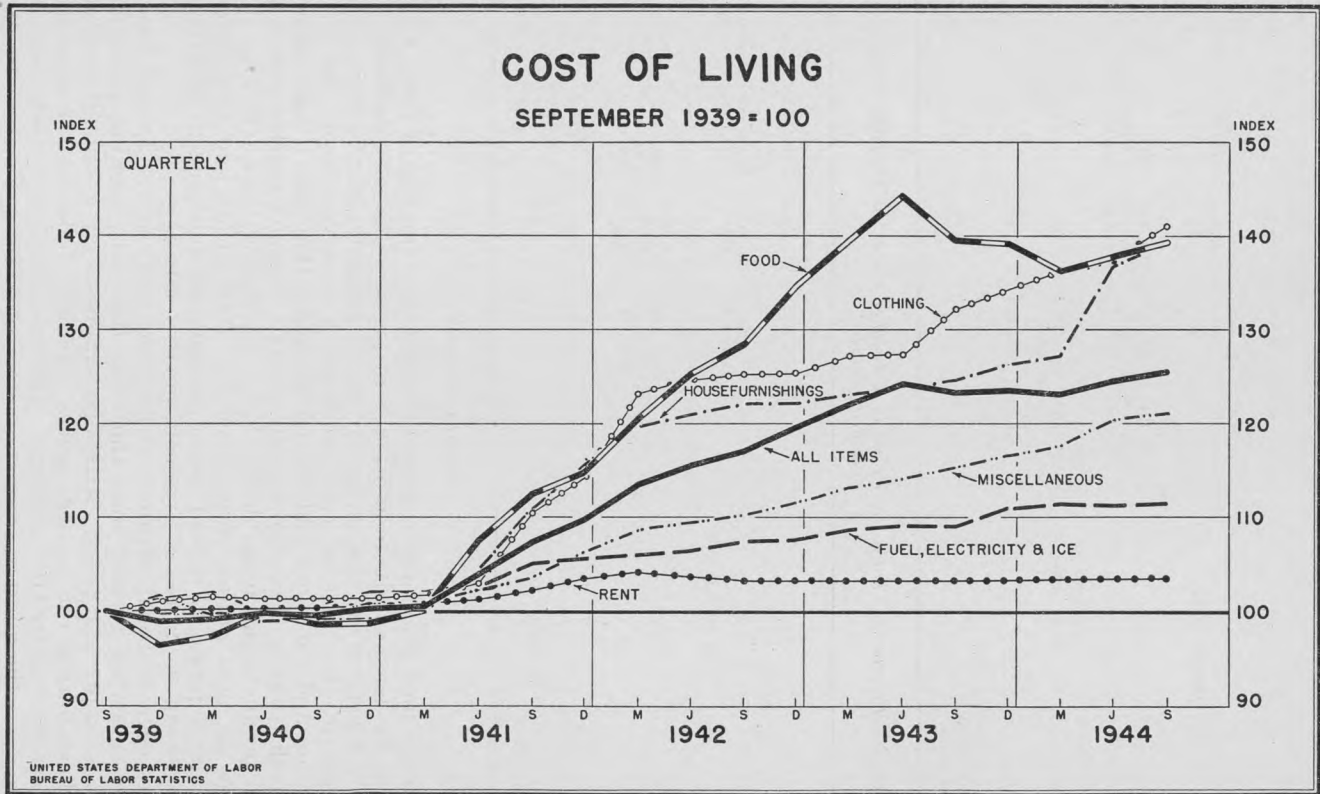
TABLE 2.—Percent of Change in Prices of Consumer Goods in Primary Markets in Specified Periods

Commodity group	Percent of change—			
	In last quarter	In last year	From beginning of OPA control	From start of war
	June 1944 to September 1944	September 1943 to September 1944	May 1942 to September 1944	August 1939 to September 1944
Farm products.....	-1.8	-0.3	+17.5	+101.1
Foods.....	-2.2	-.8	+5.4	+55.1
Hides and leather products.....	-.3	-1.5	-2.4	+25.1
Textile products.....	+1.4	+1.7	+1.2	+46.3

FOOD PRICES

Retail food prices rose 1 percent in the third quarter of 1944, while prices for farm products and foods in primary markets declined 1.8 and 2.2 percent, respectively. In retail markets, large seasonal increases in the price of eggs, amounting to a 30-percent advance between mid-June and mid-September, more than offset lower prices of fresh fruits and vegetables and meats. Primary-market prices of farm products and foods declined steadily during the quarter,* as the prices of most grains, cereal products, fresh fruits and vegetables, and dairy products moved lower or remained unchanged, offsetting increases in the prices of livestock, poultry, and eggs.

For eggs, seasonal advances at both the wholesale and retail levels were somewhat greater than those for the corresponding period in 1943 or in pre-war years. Although supplies were abundant in most markets during this period, prices generally followed the seasonal pattern allowed by OPA ceilings. The retail prices increased steadily throughout the quarter, from an average of 45.7 cents in June to 59.6 cents per dozen in September. However, the September 1944 price was more than 5 percent below, and prices at wholesale from 10 to 18 percent below, those of September 1943.



Prices for fresh fruits and vegetables declined about 3 percent at retail and 16 percent in primary markets from June to September. Substantially larger crops of apples, onions, potatoes, and sweetpotatoes in 1944 than in 1943 resulted in large seasonal decreases for these commodities during August and September. In the latter part of the quarter the retail prices of green beans, carrots, lettuce, and spinach increased as the drought materially reduced the yield of these crops. The reduction in fresh fruit and vegetable crops in Florida by the hurricane and freeze was not reflected in prices in the third quarter, but is expected to result in some price advances in the last quarter of the year.

For apples, part of the decrease in the average retail price, from 12.1 to 9.7 cents per pound, resulted from the establishment of lower ceilings for the 1944 crop than for the 1943 crop. Considerably larger crops than in 1943 contributed to a 15-percent decline in the retail prices of onions and a 38-percent drop in wholesale markets. The retail price of white potatoes was 8 percent lower in September than in June, although an increase was permitted by OPA in July and August to compensate for the reduction in the crop yield caused by drought. Sharp seasonal declines in the prices of sweetpotatoes, from a high in July, resulted in a 32-percent reduction during the quarter in average retail prices and a 29-percent decrease at wholesale.

Changes in prices of foods in retail and in primary markets are shown in table 3.

TABLE 3.—Percent of Change in Retail and Wholesale Prices of Food, in Specified Periods

Commodity Group	Percent of change—			
	In last quarter	In last year	From beginning of OPA control	From start of war
	June 1944 to September 1944	September 1943 to September 1944	May 1942 to September 1944	August 1939 to September 1944
<i>Retail markets</i>				
All foods.....	+1.0	-0.3	+12.7	+46.5
Cereals and bakery products.....	+3	+5	+3.3	+16.4
Meats.....	-6	-7	+3.8	+34.8
Beef and veal.....	-4	-5	-4.7	+18.8
Pork.....	+2	-1.6	-8.9	+27.5
Lamb.....	-1	-2	+13.9	+36.2
Chickens.....	-3.1	+1.2	+31.7	+57.8
Fish, fresh and canned.....	+1.9	-3.9	+32.8	+101.2
Dairy products.....	+1	+1	+8.4	+43.5
Eggs.....	+30.1	-5.4	+45.6	+85.2
Fruits and vegetables.....	-2.4	+1.7	+32.0	+83.9
Fresh.....	-2.8	+2.0	+38.0	+93.3
Canned.....	+2	-5	+5.5	+41.3
Dried.....	+7	+3.5	+25.9	+82.9
Beverages.....	0	-7	-2	+31.0
Fats and oils.....	-1	-2.8	+5	+45.6
Sugar and sweets.....	-2	-4	-6	+32.1
<i>Primary markets</i>				
All foods.....	-2.2	-8	+5.4	+55.1
Dairy products.....	+4	+1.7	+18.4	+63.0
Cereal products.....	-3	0	+6.1	+31.3
Fruits and vegetables.....	-15.8	-7	+19.9	+98.1
Meats.....	-1	0	-7.7	+43.8
Other foods.....	+2.7	-3.5	+5.4	+58.4

Weakening grain markets, caused by bumper crops of wheat and downward adjustments in the price ceilings in primary markets for oats and barley, brought the general level of grain prices down 4.3 percent. Livestock and poultry prices at primary markets increased seasonally almost 4 percent during the quarter, while prices of dressed poultry and meats at wholesale and retail remained stable. Slaughter of veal calves and lower grades of cattle (grass fed) was at record levels, but lamb and hog marketings were inadequate to meet demand as supplies continued to be below those of 1943.

Although food supplies in general were ample, civilian supplies of a number of important foodstuffs became more limited during the quarter, notably canned fruits, canned salmon, pork, and butter. Butter was informally rationed by almost all retailers in September and October. Even with sales limited to one-fourth or one-half pound per customer, butter supplies lasted only a few hours in many stores. However, fresh fruits and vegetables and lower grades of veal and beef were plentiful, according to the Department of Agriculture. Much of the better-grade beef was shipped to the armed forces. The supply situation from June to October for some of the items that were particularly short is shown in table 4. This information was obtained by Bureau of Labor Statistics' representatives from independent retail groceries and markets in 56 cities.

TABLE 4.—Percent of Independent Stores with No Stocks of Selected Foods on Specified Dates

Item	June 13, 1944	July 18, 1944	Aug. 15, 1944	Sept. 12, 1944	Oct. 17, 1944
Beef, steaks and roasts ¹	24	29	22	28	42
Veal.....	42	37	31	37	31
Lamb, steaks, chops, roasts ²	37	29	25	30	22
Pork.....	11	18	31	32	49
Salmon, canned.....	46	73	80	85	84
American cheese.....	47	45	47	46	49
Butter.....	1	2	5	27	32
Peaches, canned.....	26	38	48	52	43
Pineapple, canned.....	31	46	55	54	55

¹ Data for June through September based on all grades; October based on grades AA, A, and B.

² June data include all grades and cuts; July through October based on rationed steaks, chops, and roasts.

TEXTILES AND APPAREL

Advances in costs of textiles and apparel during the quarter were coupled with increasing shortages, as military needs expanded substantially and production remained appreciably below the levels of 1943 for a number of critical items. Thus, in order to meet essential military needs, the WPB, in September, ordered the partial conversion of certain cotton mills to production of duck and related fabrics by looms ordinarily operating on bedspread fabrics, drapery, upholstery, and pile fabrics, table damask, colored yarn suitings, corduroy and denims, drills, and twills used for work clothing. In retail markets the shortage of lower-priced merchandise has become increasingly pronounced. As previously noted, the fact that consumers could buy only higher-priced merchandise than they ordinarily purchase was largely responsible for raising retail clothing costs for consumers in large cities by 2½ percent during the quarter, to a level 41 percent above that prevailing in the summer of 1939. Additional

factors raising the cost of clothing during the quarter were the return to civilian markets of all-wool apparel at prices higher than when last available, and the increased excise tax on fur garments.

The most important price increases between June and September were for men's shorts (6 percent), women's house dresses (5 percent), and men's pajamas (4 percent). The dropping of lower price lines was chiefly responsible for the increases between September 1943 and September 1944 of 19 percent for men's wool jackets, 13 percent for women's sport coats, 12 percent for men's sweaters and girls' coats, and 6 percent for men's heavy-weight cotton union suits.

Some types of merchandise have been difficult to find in recent months in any popular-priced grade. A Bureau of Labor Statistics survey conducted in July in 21 large cities disclosed the most acute shortages to be for work clothing, men's and boys' underwear (especially shorts), infants' clothing, percale yard goods and sheets and pillowcases, as shown in the accompanying tabulation.

	<i>Percent of stores out of stock</i>
Percale yard goods.....	77
Boys' knit shorts.....	41
Men's overalls.....	38
Men's chambray work shirts.....	34
Men's woven shorts.....	33
Men's covert work shirts.....	30
Men's undershirts.....	28
Diapers, birdseye.....	29
Bed sheets.....	28
Fine yard goods.....	26
Men's knit shorts.....	25
Men's khaki drill work pants.....	25
Women's anklets.....	22
Pillowcases.....	21
Infants' training pants.....	21

A survey conducted in September and October to determine the amount of stocks retailers had on their shelves at the end of August showed that the supply situation was not improving. Sales of most cotton products were substantially below those of the corresponding period in the preceding year, reflecting the unavailability of many items such as men's and boys' underwear, work clothing, and yard goods in many stores. In order to alleviate these shortages, WPB had instituted a program for the allocations of specified quantities of cotton yard goods for the production of low-priced shorts and business shirts for men and house dresses and slips for women. However, only a few retailers had received any merchandise manufactured under this program for sale in the late summer and early autumn, and the shortages persisted. The majority of retailers do not expect the situation to improve substantially, since the yardage available for allocation is relatively small. The work-clothing supply situation, also, had not improved, although WPB had ordered manufacturers to produce not less than 90 percent of the volume of work clothing that they produced in the third quarter of 1942, and to put back into production any of the specified essential items of which production had been discontinued since 1942.

Prices of basic textile materials in primary markets had remained relatively stable since early 1942, when most of these products were brought under OPA control, although trade reports have indicated some up-grading and black-market dealings. In July, August, and

September 1944, however, substantial advances were ordered by the OPA, in compliance with the Stabilization Extension Act of 1944, which directs that ceilings on "major cotton items" be high enough to reflect parity prices of cotton to growers. The OPA ordered upward revisions, retroactive to June 30, for combed and carded cotton yarns, major types of sheets and pillowcases, denims, 3.60 yard sanforized chambray, most combed yarn fabrics, and knit cotton heavy underwear. These items account for about a third of the total cotton consumption. Revised ceilings were extended to sheetings early in September, but were not retroactive. Trade representatives, however, have requested that the list of items so handled be extended, especially to include additional finished products. Although the price increases allowed during the third quarter were not as yet fully reflected in the Bureau of Labor Statistics indexes, reports up to September showed increases ranging from slightly less than 3 to more than 11 percent at manufacturers' levels. They raised the BLS price index for cotton goods at wholesale by 4.2 percent and the more comprehensive index for textile products by slightly more than 1 percent. In October, there was an additional advance of about $\frac{1}{2}$ percent for textile products, as further increases ranging from 8 to 14 percent were reported for cotton yarns. Continued advances in succeeding months are virtually certain. The OPA has already announced that higher ceilings will shortly be established for duck, flannel, and toweling and that the need for similar upward revisions for certain other textile products was being considered.

Prices of Producer Goods

Prices of most producer goods were unchanged in the third quarter of 1944. For a few products improved supplies or reduced demand brought some lowering of prices. Thus, weakness appeared in the scrap-steel markets for the first time in 4 years, with the No. 1 heavy melting grade selling at \$4 per ton below the OPA ceiling, and there was some further reduction for quicksilver. In chemical markets, lower prices were reported for methanol, glycerin, formaldehyde and certain of its derivatives, nitrocellulose, oleic acid, and several vitamins—ascorbic acid (vitamin C), riboflavin (B_2), and thiamine hydrochloride (B_1). Prices of formaldehyde and the vitamins, for which demand has expanded tremendously during the war period, were at all-time lows. Ceiling prices for several petroleum products were lowered by the OPA. A reduction in the octane rating of regular gasoline was coupled with a cut of one-eighth cent per gallon in the refiners' price. Reductions in transportation costs made possible decreases in the ceiling prices of gasoline, kerosene, and fuel oils in several eastern areas.

On the other hand, OPA maximum prices were raised slightly for one grade of alloy steel, several types of farm machinery, and certain other commodities. Higher costs, in a few cases resulting from higher unit overhead on a smaller volume of business or the need for stimulating greater supply, were the cause of these price increases. As war orders assigned to the farm-machinery industry have been falling off in recent months, a moderately higher profit margin has been requested on regular business. The OPA ceiling for asphalt roofing east of the Rocky Mountains was raised by 3 percent, and

minor increases were permitted for brick in several areas. Upward adjustments were also allowed for scarce waste paper and second-hand paperboard containers, in order to encourage collection. Supplies of both paper and lumber remained critically short in the third quarter. However, a WPB order controlling the distribution of nearly all lumber became effective in August and brought prompt relief to essential users. Changes in prices of producer goods are summarized in table 5.

TABLE 5.—Percent of Change in Prices of Producer Goods in Primary Markets, in Specified Periods

Commodity group	Percent of change—			
	In last quarter	In last year	From beginning of OPA control	From start of war
	June 1944 to September 1944	September 1943 to September 1944	May 1942 to September 1944	August 1939 to September 1944
Fuel and lighting.....	-0.4	+2.5	+6.4	+14.3
Metals and metal products.....	+1	+1	-1	+11.4
Building materials.....	+1	+3.1	+5.4	+29.5
Chemicals and allied products.....	-3	+4.6	+7.8	+41.4
Miscellaneous commodities.....	+1	+6	+3.4	+27.7

Prices During Year 1944

Barring radical changes in the military situation in November and December, it is likely that, as regards the behavior of prices throughout the year, 1944 will rank with the more stable years of the war period. From December 1943 to September 1944, the general level of wholesale prices rose 0.8 percent. During the same period, living costs in large cities rose 1.7 percent. Throughout the course of the war, the rise in wholesale prices was 39 percent and in the cost of living, 28 percent. The statement below compares price changes during the first 9 months of 1944 with those in preceding years.

	Percent of increase in—	
	Wholesale prices	Cost of living
December 1939 to December 1940.....	1	1
December 1940 to December 1941.....	17	10
December 1941 to December 1942.....	8	9
December 1942 to December 1943.....	2	3
December 1943 to September 1944.....	0.8	1.7

Some further advances in the closing months of 1944 are to be expected, as for example, upward adjustments in OPA ceilings for textiles, perhaps somewhat higher average costs for services, and some increase in prices of fruits as the result of the Florida hurricane. However, these should not greatly affect the general price level.

Cost of Living in Large Cities, October 1944

LOWER prices of fresh fruits and vegetables brought the average cost-of-living essentials down slightly (by 0.1 percent) in the month ending October 15, 1944. Prices of clothing, housefurnishings, and miscellaneous items continued to rise moderately, but utilities and fuel costs remained stable. The Bureau of Labor Statistics index of the cost of living in October 1944 was 126.4 percent of the 1935-39 average, and 28.2 percent above the level of August 1939.

The cost of the food budget of moderate-income families dropped 0.4 percent between mid-September and mid-October, as marked decreases in the prices of fresh fruits and vegetables more than offset seasonally higher prices of eggs. Contrary to the usual large seasonal declines, prices for most meats remained unchanged or increased slightly, reflecting limited civilian supplies. Fresh fish prices increased for the fourth consecutive month.

Record harvests of fall vegetables, 14 percent above the 1933-42 average, were reflected in large decreases in the prices of sweetpotatoes (18 percent), green beans (14 percent), onions (13 percent), spinach (12 percent), and potatoes and cabbage (over 5 percent).

Clothing prices rose 0.2 percent during the month. There were scattered increases in prices of men's overcoats and sweaters and women's wool-felt hats, resulting in some cases from the restocking of all-wool garments in stores which sold blended fabrics last year. There was a slight net increase resulting from widespread small price changes in work clothing, as dollar-and-cent ceilings at the retail level were established by the OPA, causing price decreases in some stores and permitting increases in others. Christmas shoppers found the supply of men's white business shirts extremely limited. Women's cotton house dresses cost more than in September because of the continued disappearance of lower-priced lines.

Average prices of furniture and cook stoves available in mid-October were slightly higher than a month ago, and the supply of cotton blankets was extremely limited in most large cities of the country. Higher charges for beauty-shop services in some cities reflected increased costs of labor and materials. Popular brands of cigarettes were scarce and many dealers limited sales to one pack per customer, with a consequent small rise in average cigarette prices resulting from loss of the saving entailed in the purchase of two packs at a time.

In connection with the figures herein given, it should be borne in mind that the Bureau of Labor Statistics index indicates average changes in retail prices of selected goods, rents, and services bought by families of wage earners and lower-salaried workers in large cities. The items covered represented 70 percent of the expenditures of families who had incomes ranging from \$1,250 to \$2,000 in 1934-36.

The index does not show the full wartime effect on the cost of living of such factors as lowered quality, disappearance of low-priced goods, and forced changes in housing and eating away from home.

It does not measure changes in total "living costs"—that is, *in the total amount families spend for living*. Income taxes and bond subscriptions are not included.

TABLE 1.—Cost of Living in Large Cities, October 15, 1944, and Previous Dates

Date	Indexes ¹ (1935-39=100.0) 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
September 15.....	117.8	126.6	125.8	108.0	106.2	123.6	111.4
1943: October 15.....	124.4	138.2	133.3	108.0	107.8	126.7	117.6
1944: September 15.....	126.5	137.0	141.4	108.2	109.8	140.7	122.4
October 15.....	126.4	136.4	141.7	(?)	109.8	141.3	122.7

¹ Based on changes in cost of goods purchased by wage earners and lower-salaried workers.

² Rents surveyed at quarterly dates: Mar. 15, June 15, Sept. 15, and Dec. 15.

TABLE 2.—Percent of Change¹ in Cost of Living in Large Cities in Specified Periods, by Groups of Items

Period	All items	Food	Clothing	Rent ²	Fuel, electricity, and ice	House-furnishings	Miscellaneous
Sept. 15, 1944, to Oct. 15, 1944.....	-0.1	-0.4	+0.2	(³)	0	+0.4	+0.2
Oct. 15, 1943, to Oct. 15, 1944.....	+1.6	-1.3	+6.3	+0.2	+1.9	+11.5	+4.3
Sept. 15, 1942, to Oct. 15, 1944.....	+7.3	+7.7	+12.6	+2	+3.4	+14.3	+10.1
May 15, 1942, to Oct. 15, 1944.....	+9.0	+12.2	+12.3	-1.5	+4.7	+15.6	+10.6
Jan. 15, 1941, to Oct. 15, 1944.....	+25.4	+39.5	+40.7	+3.0	+8.9	+41.2	+20.4
Aug. 15, 1939, to Oct. 15, 1944.....	+28.2	+45.9	+41.3	+3.7	+12.6	+40.5	+22.2

¹ Based on changes in cost of goods purchased by wage earners and lower-salaried workers.

² Changes through September 15, 1944.

³ Rents not surveyed in October.

TABLE 3.—Percent of Change in Cost of Living,¹ September 15 to October 15, 1944, by Cities

City	All items	Food	Clothing	Fuel, electricity, and ice	House-furnishings	Miscellaneous
Average: Large cities.....	² -0.1	³ -0.4	⁴ +0.2	⁵ 0	⁴ +0.4	⁴ +0.2
New England: Boston.....	- .5	-1.4	+ .1	0	+3.0	⁶ 0
Middle Atlantic:						
Buffalo.....	- .1	- .1	+ .1	0	0	- .1
New York.....	0	- .1	+ .1	0	+ .1	0
Philadelphia.....	⁷ - .4	⁸ - .9	0	0	- .1	+ .1
Pittsburgh.....	- .3	-1.0	+ .2	0	0	+ .5
East North Central:						
Chicago.....	- .2	-1.1	+ .4	0	0	+ .9
Cincinnati.....	- .6	-1.8	+ .5	+ .1	+ .5	+ .1
Cleveland.....	- .2	- .6	- .1	0	0	+ .2
Detroit.....	- .2	- .9	+ .9	0	+ .5	+ .1
West North Central:						
Kansas City.....	- .2	- .9	+ .2	0	+ .2	0
Minneapolis.....	+ .2	+ .5	+ .6	0	0	0
St. Louis.....	- .5	-1.3	0	0	0	0
South Atlantic:						
Baltimore.....	+ .4	+ .9	+ .2	- .1	+ .3	0
Savannah.....	- .4	-1.2	+ .6	0	+ .3	0
Washington, D. C.....	0	- .4	+ .1	- .1	0	+ .4
East South Central: Birmingham.....	- .2	- .6	0	+ .3	0	0
West South Central: Houston.....	- .2	- .7	+ .1	0	+ .3	0
Mountain: Denver.....	+ .2	- .1	+ .2	0	+ .9	+1.2
Pacific:						
Los Angeles.....	+ .5	+1.1	+ .1	0	+1.4	0
San Francisco.....	+ .8	+1.3	+ .7	0	0	+ .5
Seattle.....	+ .5	+1.1	0	0	0	0

¹ Based on indexes of cost of goods purchased by wage earners and lower-salaried workers.

² Rents not surveyed in October.

³ Based on prices for 56 cities collected on Tuesday nearest 15th of month.

⁴ Based on data for 21 cities

⁵ Based on data for 34 cities.

⁶ Index for September 1944, revised to 117.2.

⁷ Index for September 1944 revised to 125.5.

⁸ Index for September 1944 revised to 134.7.

TABLE 4.—Percent of Change¹ in Cost of Living in Specified Periods, by Cities

City	Oct. 15, 1943, to Oct. 15, 1944	Aug. 15, 1939, to Oct. 15, 1944	Jan. 1, 1941, to Oct. 15, 1944	May 15, 1942, to Oct. 15, 1944	Sept. 15, 1942, to Oct. 15, 1944
Average: Large cities.....	+1.6	+28.2	+25.4	+9.0	+7.3
New England: Boston.....	+9	+26.4	+23.8	+8.2	+5.6
Middle Atlantic:					
Buffalo.....	+7	+28.9	+24.6	+5.4	+5.4
New York.....	+2.1	+28.4	+25.8	+12.2	+9.3
Philadelphia.....	+1.1	+27.8	+26.0	+9.0	+6.9
Pittsburgh.....	+2.0	+29.6	+26.0	+10.1	+8.5
East North Central:					
Chicago.....	+1.6	+27.5	+24.3	+8.0	+7.2
Cincinnati.....	+1.3	+29.1	+26.1	+8.4	+6.4
Cleveland.....	+1.2	+30.1	+27.5	+9.5	+8.8
Detroit.....	+1.8	+29.1	+25.9	+7.1	+7.4
West North Central:					
Kansas City.....	+1.8	+25.8	+26.0	+8.7	+8.1
Minneapolis.....	+1.0	+23.3	+20.7	+6.0	+5.2
St. Louis.....	+1.5	+27.0	+23.4	+7.8	+6.9
South Atlantic:					
Baltimore.....	+1.0	+29.9	+27.3	+8.5	+7.0
Savannah.....	+1.5	+35.4	+32.6	+11.2	+10.2
Washington, D. C.....	+5	+26.6	+24.9	+8.8	+6.6
East South Central: Birmingham.....	+1.9	+31.7	+27.7	+9.3	+9.2
West South Central: Houston.....	+9	+23.6	+22.1	+7.1	+5.5
Mountain: Denver.....	+2.7	+27.0	+25.2	+8.3	+6.8
Pacific:					
Los Angeles.....	+1.9	+28.1	+25.6	+9.0	+5.8
San Francisco.....	+3.2	+31.8	+28.6	+11.3	+8.3
Seattle.....	+1.8	+30.1	+27.8	+7.7	+6.4

¹ Based on indexes of cost of goods purchased by wage earners and lower-salaried workers.

TABLE 5.—Indexes of Cost of Living in Large Cities, 1935 to October 1944

Year and month	Indexes ¹ (1935-39=100) of cost of—						
	All items	Food	Clothing	Rent	Fuel, elec- tricity, and ice	House- furnish- ings	Miscel- laneous
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.....	123.6	138.0	129.7	108.0	107.7	125.6	115.8
1944:							
Jan. 15.....	124.2	136.1	134.7	108.1	109.5	128.3	118.4
Feb. 15.....	123.8	134.5	135.2	108.1	110.3	128.7	118.7
Mar. 15.....	123.8	134.1	136.7	108.1	109.9	129.0	119.1
Apr. 15.....	124.6	134.6	137.1	108.1	109.9	132.9	120.9
May 15.....	125.1	135.5	137.4	108.1	109.8	135.0	121.3
June 15.....	125.4	135.7	138.0	108.1	109.6	138.4	121.7
July 15.....	126.1	137.4	² 138.3	³ 108.2	² 109.7	² 138.7	² 122.0
Aug. 15.....	² 126.4	137.7	² 139.4	³ 108.2	109.8	² 139.3	² 122.3
Sept. 15.....	126.5	137.0	141.4	³ 108.2	109.8	140.7	122.4
Oct. 15.....	126.4	136.4	141.7	(⁴)	109.8	141.3	122.7

¹ Based on changes in cost of goods purchased by wage earners and lower-salaried workers.

² Revised

³ Based on rents in 20 large cities in September 1944 and assuming no change in rents in cities not surveyed in September.

⁴ Rents not surveyed in October.

Retail Prices of Food in September 1944

PERCENTAGE changes in retail food costs on September 12, 1944, as compared with costs in the previous month and in September 1943, are shown in table 1.

TABLE 1.—Percent of Change in Retail Costs of Food in 56 Large Cities Combined,¹ by Commodity Groups, in Specified Periods

Commodity group	Aug. 15, 1944, to Sept. 12, 1944	Sept. 14, 1944, to Sept. 12, 1944	Sept. 15, 1942, to Sept. 12, 1944	Jan. 14, 1941, to Sept. 12, 1944	Aug. 15, 1939, to Sept. 12, 1944
All foods.....	-0.5	-0.3	+8.2	+40.1	+46.5
Cereals and bakery products.....	+1.1	+4.4	+3.0	+14.4	+16.3
Meats.....	0	-7	-1.2	+27.6	+34.8
Beef and veal.....	-3	-5	-6.1	+8.1	+18.8
Pork.....	+2	-1.6	-9.5	+30.3	+27.5
Lamb.....	-1	-2	+7	+36.4	+36.2
Chickens.....	-3	+1.2	+11.7	+53.6	+57.8
Fish, fresh and canned.....	+1.2	-3.9	+19.1	+68.8	+101.2
Dairy products.....	0	+1	+4.6	+27.1	+43.5
Eggs.....	+5.4	-5.4	+8.2	+72.5	+85.2
Fruits and vegetables.....	-3.3	+1.7	+31.0	+71.1	+83.9
Fresh.....	-3.9	+2.0	+37.7	+92.1	+93.3
Canned.....	+1	-5	+4.5	+41.6	+41.3
Dried.....	+2	+3.6	+15.3	+65.0	+83.1
Beverages.....	0	-7	+4	+36.7	+31.0
Fats and oils.....	+2	-2.8	+1.9	+53.2	+45.6
Sugar and sweets.....	-2	-4	-6	+32.5	+32.1

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, on Specified Dates

[1935-39=100]

Commodity group	1944		1943	1942	1941	1939
	Sept. 12	Aug. 15	Sept. 14	Sept. 15	Jan. 14	Aug. 15
All foods.....	137.0	137.7	137.4	126.6	97.8	93.5
Cereals and bakery products.....	108.6	108.5	108.2	105.4	94.9	93.4
Meats.....	129.0	129.0	129.9	130.6	101.1	95.7
Beef and veal.....	118.3	118.6	118.9	126.0	109.4	99.6
Pork.....	112.2	112.0	114.0	124.0	86.1	88.0
Lamb.....	134.6	134.7	134.9	133.7	98.7	98.8
Chickens.....	149.3	149.8	147.5	133.7	97.2	94.6
Fish, fresh and canned.....	200.4	198.0	208.5	168.2	118.7	99.6
Dairy products.....	133.6	133.6	133.5	127.7	105.1	93.1
Eggs.....	168.0	159.4	177.5	155.2	97.4	90.7
Fruits and vegetables.....	169.9	³ 175.7	167.0	129.7	93.3	92.4
Fresh.....	179.4	³ 186.7	175.8	130.3	93.4	92.8
Canned.....	129.4	129.3	130.0	123.8	91.4	91.6
Dried.....	165.3	165.0	159.6	143.4	99.6	90.3
Beverages.....	124.3	124.3	125.2	123.8	90.9	94.9
Fats and oils.....	123.0	122.7	126.5	120.7	80.3	84.5
Sugar and sweets.....	126.3	126.5	126.8	127.0	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 Revised.

TABLE 3.—Average Retail Prices of 78 Foods in 56 Large Cities Combined,¹ September 1944 Compared with Earlier Months

Article	1944		1943	1941	1939
	Sept. 12	Aug. 15	Sept. 14	Jan. 14	Aug. 15
Cereals and bakery products:					
Cereals:					
Flour, wheat.....10 pounds..	64.4	64.6	62.1	41.4	35.8
Macaroni.....pound.....	15.7	15.8	15.7	13.8	14.0
Wheat cereal ²28 ounces..	23.2	23.2	23.4	23.5	24.2
Corn flakes.....8 ounces..	6.5	6.5	6.6	7.1	7.0
Corn meal.....pound.....	6.3	6.3	5.9	4.2	4.0
Rice ²do.....	12.8	12.9	12.7	7.9	7.5
Rolled oats.....do.....	10.0	9.9	8.7	7.1	7.1
Flour, pancake ²20 ounces..	12.2	12.2	10.6	(³)	(³)
Bakery products:					
Bread, white.....pound.....	8.8	8.8	8.9	7.8	7.8
Bread, whole-wheat.....do.....	9.6	9.6	9.7	8.7	8.8
Bread, rye.....do.....	9.9	9.9	10.1	9.0	9.2
Vanilla cookies.....do.....	27.8	28.1	28.8	25.1	(⁴)
Soda crackers.....do.....	18.9	19.0	18.5	15.0	14.8
Meats:					
Beef:					
Round steak.....do.....	40.9	41.2	41.5	38.6	36.4
Rib roast.....do.....	32.9	33.1	33.8	31.5	28.9
Chuck roast.....do.....	28.5	28.7	29.0	25.2	22.5
Stew meat ²do.....	30.6	31.0	30.9	(³)	(³)
Liver.....do.....	37.2	37.2	36.3	(⁴)	(⁴)
Hamburger.....do.....	27.5	27.7	28.5	(³)	(³)
Veal:					
Cutlets.....do.....	44.7	45.2	45.8	45.2	42.5
Roast, boned and rolled ²do.....	35.4	35.0	35.2	(²)	(²)
Pork:					
Chops.....do.....	37.3	37.3	37.9	29.1	30.9
Bacon, sliced.....do.....	40.9	40.9	42.0	30.1	30.4
Ham, sliced.....do.....	50.3	50.4	52.2	45.1	46.4
Ham, whole.....do.....	35.3	35.3	36.0	26.2	27.4
Salt pork.....do.....	22.1	22.1	22.7	16.7	15.4
Liver ²do.....	21.9	21.9	22.2	(³)	(³)
Sausage ²do.....	38.2	38.1	38.2	(³)	(³)
Bologna, big ²do.....	34.1	34.1	34.5	(³)	(³)
Lamb:					
Leg.....do.....	39.9	40.0	40.2	27.8	27.6
Rib chops.....do.....	45.1	45.3	46.0	35.0	36.7
Poultry: Roasting chickens.....do.....					
	44.6	44.6	44.8	31.1	30.9
Fish:					
Fish (fresh, frozen).....do.....	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
Salmon, pink.....16-oz. can..	22.9	23.6	23.6	15.7	12.8
Salmon, red ²do.....	40.4	40.4	41.7	26.4	23.1
Dairy products:					
Butter.....pound.....	50.0	50.0	50.5	38.0	30.7
Cheese.....do.....	36.1	36.1	37.0	27.0	24.7
Milk, fresh (delivered).....quart..	15.6	15.6	15.5	13.0	12.0
Milk, fresh (store).....do.....	14.5	14.5	14.4	11.9	11.0
Milk, evaporated.....14½-oz. can..	10.0	10.0	10.1	7.1	6.7
Eggs: Eggs, fresh.....dozen.....	59.6	56.5	62.7	34.9	32.0

See footnotes at end of table.

TABLE 3.—Average Retail Prices of 78 Foods in 56 Large Cities Combined,¹ September 1944 Compared with Earlier Months—Continued

Article	1944		1943	1941	1939
	Sept. 12	Aug. 15	Sept. 14	Jan. 14	Aug. 15
Fruits and vegetables:					
Fresh fruits:					
Apples.....	9.7	11.0	10.7	5.2	4.4
Bananas.....	11.1	11.2	12.3	6.6	6.1
Oranges.....	50.6	50.9	51.8	27.3	31.5
Grapefruit ²	11.0	10.4	10.1	(³)	(³)
Fresh vegetables:					
Beans, green.....	17.2	14.1	15.3	14.0	7.2
Cabbage.....	5.0	4.9	4.9	3.4	3.9
Carrots.....	8.9	8.7	9.0	6.0	4.6
Lettuce.....	12.2	10.8	13.1	8.4	8.4
Onions.....	5.5	6.5	7.3	3.6	3.6
Potatoes.....	72.4	80.1	60.6	29.2	34.4
Spinach.....	12.9	11.6	12.5	7.3	7.8
Sweetpotatoes.....	8.7	12.3	10.2	5.0	5.5
Beets ²	7.7	7.3	8.3	(³)	(³)
Canned fruits:					
Peaches.....	28.0	27.7	26.7	16.5	17.1
Pineapple.....	27.3	27.3	28.0	20.9	21.0
Grapefruit juice.....	14.3	14.4	14.4	(³)	(³)
Canned vegetables:					
Beans, green.....	13.1	13.2	14.6	10.0	10.0
Corn.....	14.5	14.5	14.0	10.7	10.4
Peas.....	13.2	13.1	14.4	13.2	13.6
Tomatoes.....	12.0	12.0	12.5	8.4	8.6
Soup, vegetable ²	13.4	13.4	12.8	(³)	(³)
Dried fruits: Prunes.....					
.....	17.3	17.3	16.5	9.6	8.8
Dried vegetables:					
Navy beans.....	10.9	10.8	10.2	6.5	5.8
Soup, dehydrated, chicken noodle ²	3.6	3.6	3.7	(³)	(³)
Beverages:					
Coffee.....	30.2	30.1	30.0	20.7	22.3
Tea.....	23.9	23.9	23.5	17.6	17.2
Cocoa ²	10.4	10.3	9.1	9.1	8.6
Fats and oils:					
Lard.....	18.7	18.6	18.9	9.3	9.9
Shortening other than lard—					
In cartons.....	20.2	20.2	20.0	11.3	11.7
In other containers.....	24.8	24.8	24.8	18.3	20.2
Salad dressing.....	25.8	25.6	25.3	20.1	(⁴)
Oleomargarine.....	24.0	24.0	24.0	15.6	16.5
Peanut butter.....	28.4	28.4	33.4	17.9	17.9
Oil, cooking or salad ²	30.6	30.7	30.5	(⁴)	(⁴)
Sugar and sweets:					
Sugar.....	6.7	6.7	6.8	5.1	5.2
Corn sirup.....	15.8	15.8	15.9	13.6	13.7
Molasses ²	15.8	15.8	15.9	13.4	13.6
Apple butter ²	13.4	13.3	13.2	(³)	(³)

¹ Data are based on 51 cities combined prior to January 1943.

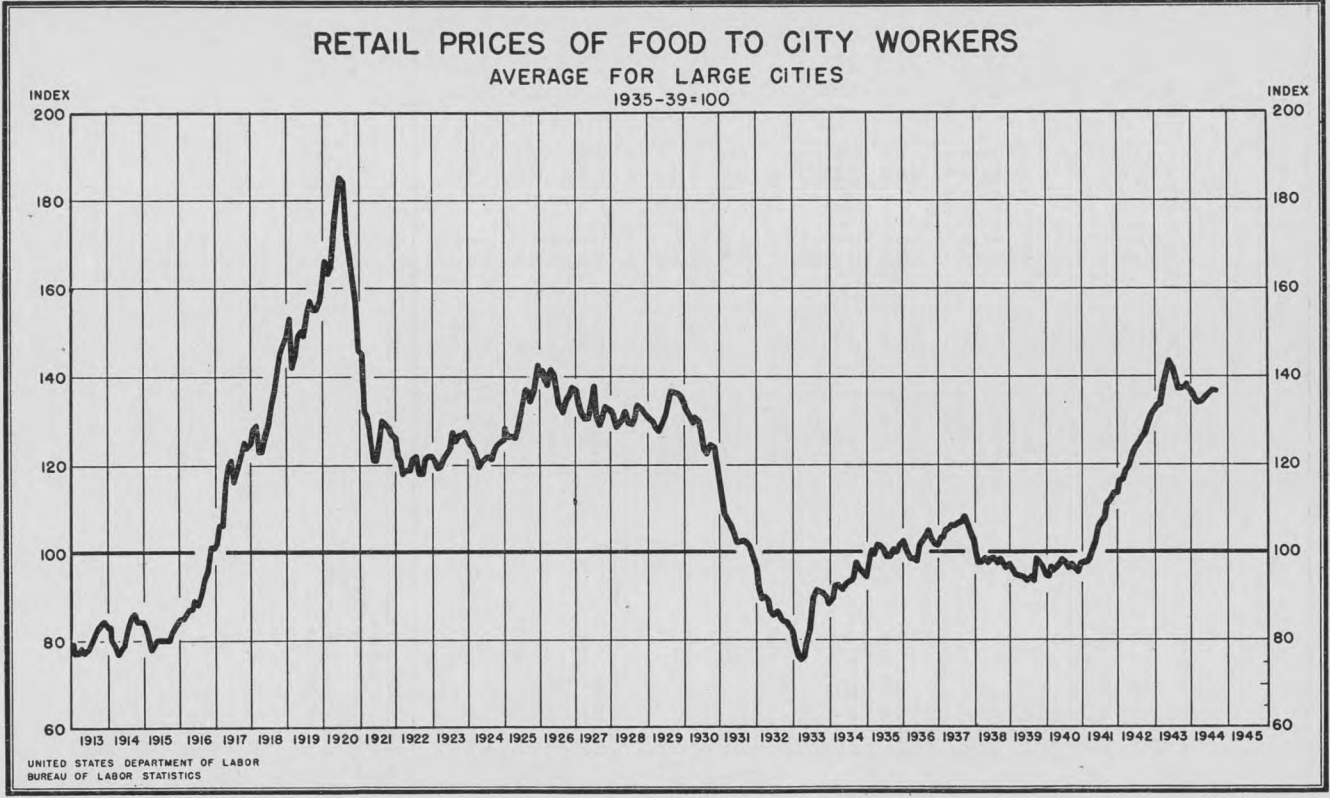
² Not included in index.

³ First priced, February 1943.

⁴ Not priced.

⁵ Composite price not computed.

⁶ First priced, October 1941.



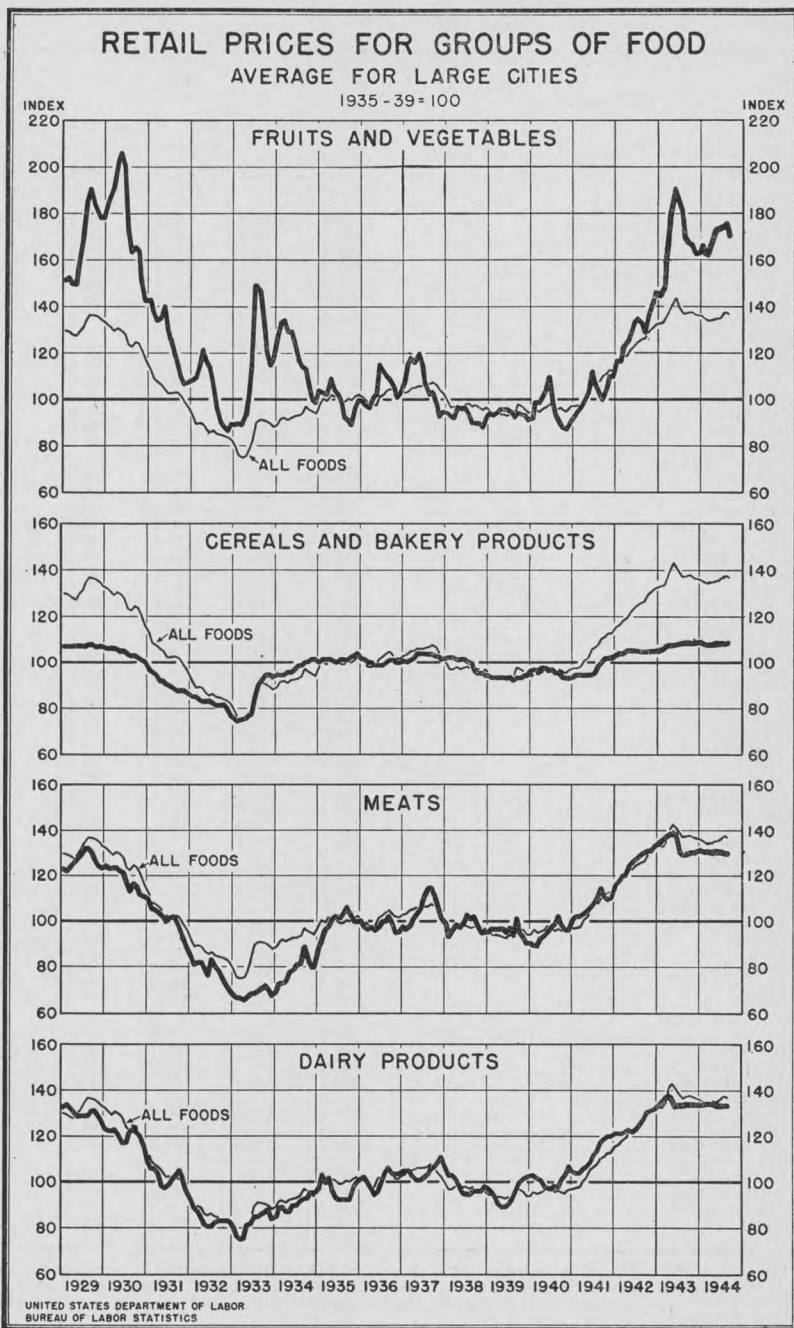


TABLE 4.—Indexes of Average Retail Costs of All Foods, by Cities,¹ on Specified Dates

[1935-39=100]

City and regional area	1944		1943	1941	1939
	Sept. 12	Aug. 15	Sept. 14	Jan. 14	Aug. 15
United States.....	137.0	137.7	137.4	97.8	93.5
New England:					
Boston.....	132.9	132.2	131.0	95.2	93.5
Bridgeport.....	135.1	135.1	136.0	96.5	93.2
Fall River.....	132.4	132.3	133.4	97.5	95.4
Manchester.....	134.2	135.0	133.9	96.6	94.9
New Haven.....	136.3	136.0	136.6	95.7	93.7
Portland, Maine.....	133.6	136.5	132.7	95.3	95.9
Providence.....	135.9	136.8	135.5	96.3	93.7
Middle Atlantic:					
Buffalo.....	134.8	134.0	137.3	100.2	94.5
Newark.....	138.5	138.4	139.6	98.8	95.6
New York.....	137.3	138.9	138.4	99.5	95.8
Philadelphia.....	134.7	136.1	135.2	95.0	93.0
Pittsburgh.....	138.0	138.7	137.4	98.0	92.5
Rochester.....	133.8	133.0	132.1	99.9	92.3
Scranton.....	138.1	138.8	137.2	97.5	92.1
East North Central:					
Chicago.....	137.3	137.1	137.0	98.2	92.3
Cincinnati.....	135.8	136.8	136.2	96.5	90.4
Cleveland.....	142.8	144.3	143.9	99.2	93.6
Columbus, Ohio.....	129.4	130.2	130.9	93.4	88.1
Detroit.....	134.0	134.4	133.6	97.0	90.6
Indianapolis.....	134.3	134.4	134.6	98.2	90.7
Milwaukee.....	135.5	136.4	133.6	95.9	91.1
Peoria.....	140.6	141.1	140.6	99.0	93.4
Springfield, Ill.....	142.5	142.5	141.6	96.2	94.1
West North Central:					
Cedar Rapids.....	139.0	139.1	136.1	95.9	-----
Kansas City.....	130.9	131.2	132.6	92.4	91.5
Minneapolis.....	129.7	130.5	130.4	99.0	95.0
Omaha.....	129.9	129.7	131.6	97.9	92.3
St. Louis.....	139.8	140.1	139.1	99.2	93.8
St. Paul.....	127.9	128.5	128.7	98.6	94.3
Wichita.....	147.0	147.8	146.8	97.2	-----
South Atlantic:					
Atlanta.....	137.8	139.2	139.9	94.3	92.5
Baltimore.....	140.7	143.5	145.3	97.9	94.7
Charleston, S. C.....	134.7	135.4	136.4	95.9	95.1
Jacksonville.....	148.1	148.9	150.0	98.8	95.8
Norfolk.....	141.1	144.8	149.7	95.8	93.6
Richmond.....	134.1	136.5	136.7	93.7	92.2
Savannah.....	152.8	154.7	152.5	100.5	96.7
Washington, D. C.....	135.2	136.7	138.5	97.7	94.1
Winston-Salem.....	137.4	138.8	138.6	93.7	-----
East South Central:					
Birmingham.....	140.3	145.4	142.9	96.0	90.7
Jackson.....	(4)	142.9	148.7	105.3	-----
Knoxville.....	157.9	158.6	157.9	97.1	-----
Louisville.....	131.7	133.4	134.9	95.5	92.1
Memphis.....	146.5	148.3	148.2	94.2	89.7
Mobile.....	146.6	147.1	147.9	97.9	95.5
West South Central:					
Dallas.....	132.9	133.5	134.8	92.6	91.7
Houston.....	137.5	137.8	138.7	102.6	97.8
Little Rock.....	137.4	137.7	135.0	95.6	94.0
New Orleans.....	153.1	152.7	151.7	101.9	97.6
Mountain:					
Butte.....	133.1	133.7	136.0	98.7	94.1
Denver.....	136.4	137.1	134.8	94.8	92.7
Salt Lake City.....	140.3	139.9	138.6	97.5	94.6
Pacific:					
Los Angeles.....	141.4	141.1	141.8	101.8	94.6
Portland, Oreg.....	144.8	145.3	144.8	101.7	96.1
San Francisco.....	143.3	142.4	139.9	99.6	93.8
Seattle.....	141.7	141.6	142.4	101.0	94.5

¹ Aggregate costs of 61 foods in each city (54 foods prior to March 1943), weighted to represent total purchases 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 June 1940=100.

³ Includes Portsmouth and Newport News.

⁴ Data not yet available for September 1944.

TABLE 5.—Indexes of Retail Food Costs in 56 Large Cities Combined,¹ 1913 to September 1944

[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	1929	132.5	1943		1944	
1914	81.8	1930	126.0	January	133.0	January	136.1
1915	80.9	1931	103.9	February	133.6	February	134.5
1916	90.8	1932	86.5	March	137.4	March	134.1
1917	116.9	1933	84.1	April	140.6	April	134.6
1918	134.4	1934	93.7	May	143.0	May	135.5
1919	149.8	1935	100.4	June	141.9	June	135.7
1920	168.8	1936	101.3	July	139.0	July	137.4
1921	128.3	1937	105.3	August	137.2	August	137.7
1922	119.9	1938	97.8	September	137.4	September	137.0
1923	124.0	1939	95.2	October	138.2		
1924	122.8	1940	96.6	November	137.3		
1925	132.9	1941	105.5	December	137.1		
1926	137.4	1942	123.9				
1927	132.3	1943	138.0				
1928	130.8						

¹ Indexes based on 51 cities combined prior to March 1943.



Prices of Electricity and Gas, September 1944

Electricity—Price Changes Between March and September 1944

THE net monthly bills of domestic consumers for electricity in 51 cities averaged about seven-tenths of 1 percent higher in September 1944 than in June. The September prices were at the same level as in March. There has been very little change in these composite prices since September 1942 because increases in some cities have been offset by decreases in others.

Between March and June 1944, costs of electricity to domestic consumers decreased in 3 cities and increased in 2. One of these cities (New York) reported a reduction retroactive to August 1, 1943. Between June and September, costs decreased in 2 cities and increased in 4. The changes which were reported between March and September are shown in detail in table 1.

Changes in fuel costs continue to result in fluctuations in charges for electricity in cities having steam generation of power, such as New York, where increased bills in all five boroughs in this 6-month period were due to operation of fuel clauses. In May 1944, an 8-percent reduction in domestic electric bills in Richmond Borough, ordered by the New York State Public Service Commission on May 27, 1943, was upheld and made retroactive to August 1, 1943.

The rate reduction in Newark accompanied the initiation of a new method of rate fixing for the utility company concerned, which related the utility's net income to the market value of its securities. The "reduction" of 86 percent of June bills in Portland, Oreg., was in fact a rebate intended to distribute equitably the excess earnings during the previous year of one of the two utilities involved; the other took similar action, voluntarily. Both returned to previous billing levels in July.

TABLE 1.—Changes in Net Monthly Bills for 25,100, and 250 Kilowatt-hours of Electricity, March 15—June 15 and June 15—September 15, 1944

Region, city, and date	Net monthly bill for—			Cause of change
	25 kwh	100 kwh	250 kwh	
<i>New England</i>				
Fall River:				
June 15.....	\$1.50	\$4.90	\$9.05	} Rate reduction.
September 15.....	1.42	4.88	9.03	
<i>Middle Atlantic</i>				
Newark:				
June 15.....	1.70	4.35	8.60	} Do.
September 15.....	1.65	4.15	8.15	
New York:				
Company 3: ^{1 2}				
March 15.....	1.38	3.74	6.68	} Adjustment for cost of fuel. ³
June 15.....	1.38	3.76	6.73	
Company 1: ^{4 2}				
June 15.....	1.69	4.85	8.29	} Adjustment for cost of fuel.
September 15.....	1.70	4.87	8.33	
<i>East North Central</i>				
Columbus:				
Company 1:				
March 15.....	1.12	4.20	7.50	} Utilities commodity tax of 5 percent effective April 1, 1944.
June 15.....	1.18	4.41	7.88	
Company 2:				
March 15.....	.98	3.40	6.25	
June 15.....	1.02	3.57	6.56	
<i>South Atlantic</i>				
Norfolk:				
June 15.....	1.25	4.25	7.50	} Rate increase.
September 15.....	1.35	4.35	8.60	
Richmond:				
June 15.....	1.25	4.25	7.50	} Do.
September 15.....	1.35	4.35	8.60	
Savannah:				
March 15.....	1.45	4.20	6.95	} Rate reduction.
June 15.....	1.22	3.90	6.65	
<i>Pacific</i>				
Portland, Oreg., Companies 1 and 2:				
March 15.....	.88	3.00	5.30	} (Bills for June 1944 were reduced 86 percent in order to distribute excess earnings for 1943. Regular billing levels resumed in July. (See text.)
June 15.....	.12	.42	.74	
September 15.....	.88	3.00	5.30	
Seattle:				
March 15.....	.88	2.95	5.20	} Rate reduction.
June 15.....	.80	2.72	5.10	

¹ Serving Richmond Borough.

² Bills include 1 percent city sales tax.

³ These bills were also affected by a reduction of 8 percent on both net and gross charges announced in May 1944, which was retroactive to August 1, 1943. Bills for September and December 1943, adjusted to reflect this reduction, were the same as in March 1944.

⁴ Serving Boroughs of the Bronx, Brooklyn, Manhattan, and Queens.

Gas—Price Changes Between March and September 1944

Composite prices of gas for domestic consumers in 50 cities were about the same in September 1944 as in March, because increases in some cities were offset by decreases in others. Between March and June, increases were reported in 2 cities and decreases in 4, and between June and September, increases were reported in 2 cities and decreases in 6. The changes are shown in table 2.

In Boston, Manchester, Fall River, and Portland (Maine), where manufactured gas is used, adjustments in charges during the 6-month

period were due to the operation of fuel adjustment clauses in the rate schedules.

In New Orleans and in a small section of Houston served by one company, an increase in the heating value of the natural gas with a corresponding decrease in the number of cubic feet per therm lowered the cost. Rate reductions occurred in Pittsburgh and Mobile, where natural gas is used, and in Minneapolis, where the gas is a mixture of manufactured and natural gas. These decreases in charges to domestic consumers, through actual rate reductions or through increases in the heat value of gas, continued a trend already well established in the natural-gas industry.

TABLE 2.—Changes in Net Monthly Bills for 10.6, 19.6, 30.6, and 40.6 Therms of Gas, March 15–June 15 and June 15–September 15, 1944

Region, city, and date	Heating value per cubic foot in British thermal units	Net monthly bill for—				Cause of change
		10.6 therms	19.6 therms	30.6 therms	40.6 therms	
MANUFACTURED GAS						
<i>New England</i>						
Boston, Company 2:						} Adjustments for costs of fuel.
March 15.....	535	\$2.40	\$4.43	\$5.97	\$7.58	
June 15.....	535	2.38	4.39	5.91	7.50	
September 15...	535	2.42	4.47	6.03	7.65	
Fall River:						} Do.
June 15.....	528	3.04	4.69	6.72	8.55	
September 15...	528	3.00	4.62	6.60	8.40	
Manchester:						} Do.
March 15.....	525	3.23	4.88	6.53	7.99	
June 15.....	525	3.24	4.91	6.56	8.04	
September 15...	525	3.24	4.91	6.57	8.04	
Portland, Maine:						} Do.
March 15.....	525	3.36	5.56	6.77	8.37	
June 15.....	525	3.40	5.64	6.89	8.58	
September 15...	525	3.36	5.56	6.77	8.37	
<i>Middle Atlantic</i>						
New York, Company 1: 1 ²						} Seasonal reduction under rates effective May through October.
March 15.....	540	2.28	4.22	6.59	8.73	
June 15.....	540	2.28	3.96	5.51	6.91	
<i>East South Central</i>						
Birmingham:						} Rate reduction and discontinuation of "Objective Rate Plan."
June 15—						
Immediate rate.....	520	1.63	2.93	4.47	5.82	
Objective rate.....	520	(³)	2.69	3.78	4.55	
September 15...	520	1.62	2.66	3.75	4.52	

NATURAL GAS

<i>Middle Atlantic</i>						
Pittsburgh, Company 2:						} Rate reduction.
June 15.....	1,100	\$1.39	\$1.93	\$2.58	\$3.17	
September 15...	1,100	1.18	1.72	2.37	2.96	
<i>East North Central</i>						
Mobile:						} Do.
June 15.....	1,064	1.70	2.54	3.58	4.15	
September 15...	1,064	1.60	2.31	3.19	3.70	

See footnotes at end of table.

TABLE 2.—Changes in Net Monthly Bills for 10.6, 19.6, 30.6, and 40.6 Therms of Gas, March 15—June 15 and June 15—September 15, 1944—Continued

NATURAL GAS—Continued						
Region, city, and date	Heating value per cubic foot in British thermal units	Net monthly bill for—				Cause of change
		10.6 therms	19.6 therms	30.6 therms	40.6 therms	
<i>West South Central</i>						
Houston, Company 3:						} Increase in heating value of gas.
March 15.....	1,030	\$0.90	\$1.38	\$1.96	\$2.50	
June 15.....	1,071	.87	1.34	1.90	2.41	
New Orleans:						} Do.
March 15.....	1,055	1.11	1.71	2.44	3.10	
June 15.....	1,066	1.10	1.70	2.42	3.08	
MIXED MANUFACTURED AND NATURAL GAS						
<i>West North Central</i>						
Minneapolis:						} Rate reduction.
June 15.....	800	\$1.70	\$2.44	\$3.32	\$4.07	
September 15..	800	1.65	2.31	3.15	3.84	

¹ Serving boroughs of the Bronx, Brooklyn, Manhattan, and Queens.

² Bills include 1 percent city sales tax.

³ The Objective rate was not applicable to customers using 10.6 therms since the bill would have been higher than that computed under the Immediate rate.



Prices and Cost of Living in Brazil

Food Costs in São Paulo, 1943-44 ¹

PRICES of various staple foods consumed by families having a monthly income of 417 to 834 cruzeiros (\$25 to \$50, U. S. currency) in the city of São Paulo, Brazil, showed increases ranging up to 150 percent between August 1943 and August 1944. Thirteen of the 25 items listed by the municipality as staples were under price control. Of the 13, only salt and beef were quoted at the same price in 1944 as in 1943. Increases in prices of the other controlled foods ranged from 10 percent for salad oil to 115.4 percent for potatoes. Of the 7 staple foods which increased 100 percent or more during the year, only potatoes appeared on the controlled list.

Broad price-fixing powers had been conferred upon a Coordinator of Economic Mobilization under a Brazilian decree law of September 28, 1942. Regulations issued when the Coordinator first set prices in January 1943 set forth the organization and duties of price commissions in each municipality, including State capitals.

Prices per unit of the 25 staple food items in August 1943 and in July and August 1944, as reported by the statistical office of the city

¹ Data are from reports of Walter J. Donnelly, counselor for economic affairs, United States Embassy at Rio de Janeiro, January 11, 1943 (No. 9748), and January 13, 1943 (No. 9781), and of DuWayne G. Clark, United States consul at São Paulo, September 13, 1944 (No. 387); and from Boletim do Ministério do Trabalho, Indústria e Comércio (Rio de Janeiro), October 1942 (p. 43).

São Paulo, are shown in table 1. São Paulo, with a rapidly growing population (it had reached 1,330,000 in 1940), is the chief industrial city of Brazil.

TABLE 1.—Food Prices in São Paulo, August 1943 and July and August 1944

Article and unit	August 1943	July 1944	August 1944
	Cruzeiros ¹	Cruzeiros ¹	Cruzeiros ¹
Sugar, refined ² kilogram ³	2.00	2.40	2.40
Lard, bulk..... do.....	7.50	9.00	10.00
Beef ² do.....	3.50	3.50	3.50
Salt bacon..... do.....	6.00	8.00	8.50
Fresh pork..... do.....	5.50	8.00	8.00
Sausages..... do.....	5.00	10.00	10.00
Macaroni ² do.....	2.10	2.60	3.00
Fresh butter, ² bulk $\frac{1}{4}$ do.....	-----	4.70	4.70
Beans ² do.....	1.20	1.80	1.60
Rice ² do.....	2.30	3.40	3.20
Onions..... do.....	-----	4.00	-----
Potatoes ² do.....	1.30	3.00	2.80
Eggs, country..... dozen.....	3.00	6.50	6.60
Coffee, powdered ² kilogram.....	5.60	7.20	7.20
Bread, Italian type ² do.....	1.60	2.20	2.50
Milk, pasteurized ² liter ⁴	1.30	1.60	1.60
Flour, wheat ² kilogram.....	1.60	2.00	2.40
Salad oil ² do.....	6.00	6.60	6.60
Lettuce..... pair.....	.80	2.00	2.00
Tomatoes..... kilogram.....	1.40	4.00	3.00
Collard..... bunch.....	.40	.50	.80
Cabbage..... each.....	2.00	2.50	2.50
Bananas..... dozen.....	.60	1.20	1.20
Oranges..... do.....	1.20	1.50	1.20
Salt, common ² kilogram.....	.70	.70	.70

¹ Average exchange rate of cruzeiro in 1943 and in July and August 1944=6 cents.

² Commodities which are under price control.

³ A kilogram=2.2046 pounds.

⁴ A liter=1.0567 quarts.

Middle-Class Cost of Living in Federal District

A Brazilian Government report shows that the cost of living of a middle-class family of 7 persons in the Federal District, comprising mainly the city of Rio de Janeiro, rose 112 percent from the year 1933 to June of 1943.² During this period, the total cost per month of food, house rent, clothing, fuel and light, servants, and housefurnishings for such a family increased more than twofold.

Table 2 gives the average monthly cost of living by classes of expenditures. There was a gradual, almost uniform, rise from 1933 to 1940, then a sudden increase between 1940 and the end of 1942. Although another rise was apparent from 1942 to 1943, cost of living tended to remain almost stationary for the first 6 months of 1943, possibly as a result of the application of Government controls.

When the separate classes of expenditures are considered for the 10½-year period, the greatest increase (363 percent) is seen to have occurred in housefurnishings, and the smallest (41 percent) in fuel and light. The rise in cost of food was exactly the same as the general increase—112 percent.

² Boletim do Ministério do Trabalho, Indústria, e Comércio, Rio de Janeiro, February 1944 (p. 346).

TABLE 2.—Cost of Living in Federal District, Brazil, 1933 to June 1943

[Average exchange rate of milreis from 1933 to 1935=8 cents, from 1936 to 1937=9 cents, from 1938 to 1942=6 cents; average exchange rate of cruzeiro in 1943=6 cents. The official designation of the Brazilian currency unit was changed, effective November 1, 1942, from "milreis" to "cruzeiro."]

Year	Total	Food	House rent	Clothing	Fuel and light	Servants	Furniture, utensils, bed and table linen, etc
	<i>Milreis</i>	<i>Milreis</i>	<i>Milreis</i>	<i>Milreis</i>	<i>Milreis</i>	<i>Milreis</i>	<i>Milreis</i>
1933	1,609	647	460	140	162	120	80
1934	1,735	716	500	190	127	120	82
1935	1,828	747	500	235	126	120	100
1936	2,099	846	600	250	127	139	137
1937	2,260	935	620	250	127	171	157
1938	2,354	935	635	259	127	187	211
1939	2,416	953	650	261	127	200	225
1940	2,511	1,007	665	268	134	210	227
1941	2,803	1,088	760	299	167	220	269
1942	3,134	1,224	810	321	191	240	348
1943:	<i>Cruzeiros</i>	<i>Cruzeiros</i>	<i>Cruzeiros</i>	<i>Cruzeiros</i>	<i>Cruzeiros</i>	<i>Cruzeiros</i>	<i>Cruzeiros</i>
January	3,403	1,358	810	386	239	240	370
February	3,409	1,364	810	386	239	240	370
March	3,414	1,369	810	386	239	240	370
April	3,401	1,366	810	386	229	240	370
May	3,404	1,369	810	386	229	240	370
June	3,407	1,372	810	386	229	240	370



Wartime Prices and Wages in Switzerland¹

WAGES in Switzerland have not risen during the present war to the same extent as the cost of living, although Government controls have kept the price advance proportionately smaller than in the last war. The Government has advised and encouraged industry to increase wages as much as possible within the limits of the increased cost of living. In many cases an increase in wholesale prices is permitted only if the factory management has advanced the wages of its workers by a certain percentage. Export licenses are not granted to firms which fall behind in wage increases. Control of prices is exercised in various ways. The Swiss Price Control Office has the right to enforce price ceilings, although it usually exercises its power flexibly, permitting price rises when increased costs threaten to eliminate the margin of profit. Rationing of all staple foods except fruits and vegetables also has been introduced and is a basic factor in keeping the average food-price increase low relative to that in the last war. In addition, "compensation" funds have been established for the purpose of averaging the cost of production of similar articles in various parts of Switzerland; part of the profits of manufacturers with low production costs—owing, for example, to modern equipment—are given to factory owners whose costs are high.

¹ Data are from a report by Robert T. Cowan, vice consul, American Consulate General, Zurich, August 22, 1944 (No. 79).

Wholesale Prices

Wholesale Prices in October 1944

A FURTHER increase of 0.1 percent was recorded in commodity prices at the primary market¹ level during October. Higher prices for agricultural products, such as grains, cotton, citrus fruits, and eggs, together with an extension of increased ceiling prices on brick and tile to additional areas, brought the Bureau of Labor Statistics index of all commodities up to 104.1 percent of the 1926 average. The index was 1.1 percent higher than in October 1943 and nearly 39 percent higher than in August 1939.

Except for an increase of 0.6 percent in average prices for farm products in October, changes in the group indexes amounted to less than one-half of 1 percent. Building materials rose 0.3 percent; hides and leather products and textile products, 0.2 percent; and chemicals and allied products, 0.1 percent. The indexes for fuel and lighting materials and for metals and metal products declined 0.1 percent, while foods, housefurnishing goods, and miscellaneous commodities remained unchanged at the September level.

Largely as a result of the increase in prices for agricultural commodities, the Bureau's index of raw material prices rose 0.4 percent in October. Semimanufactured and finished products advanced 0.1 percent during the month.

Average prices for farm products in primary markets advanced 0.6 percent in October, led by an increase of 2.8 percent in grain prices. Oats and wheat rose over 4 percent and rye more than 7 percent. Cotton prices advanced 0.7 percent and domestic wool prices about 0.5 percent. Eggs advanced seasonally by more than 6 percent. Substantial increases were also reported in prices for hay. Quotations for livestock averaged about 0.4 percent lower than in September because of declining prices for cows, hogs, lambs, and live poultry. Prices for calves and ewes, on the contrary, advanced. Lower prices were reported for apples and for onions and potatoes.

In the foods group a decline of 2.8 percent for fruits and vegetables was counterbalanced by higher prices for flour, eggs, and pepper, with the result that the group index remained unchanged at the September level. In addition to lower prices for most fresh fruits and vegetables and for dried apricots and peaches, canned tomatoes declined. Oranges, which had been selling below ceilings, and lemons advanced sharply on news that the hurricane had destroyed a substantial portion of the new crop. Pepper prices were raised by OPA from 6½ to 10 cents a pound in order to bring stocks into normal trade channels.

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.

Quotations for sheepskins continued to advance and in October were more than 8 percent above the September price. A further decline of 0.7 percent was recorded in prices for goatskins.

The effect of the Stabilization Extension Act of 1944 continued to be reflected in prices for men's and boys' underwear and for work clothing. The index for hosiery and underwear rose 1 percent and for overalls nearly 4 percent.

Minor declines in prices for anthracite and for bituminous coal occurred in some areas.

The index for metals and metal products dropped 0.1 percent in October because of further weakness in scrap steel markets. Prices for mercury again advanced and at the end of October it was quoted at \$115.00 per flask, an increase of more than 17 percent over the low level of \$98.00 to which it fell in June and July of this year. Fractional declines were reported in prices for some types of farm machinery because of the elimination of certain equipment such as tools and grease guns.

Higher prices for building brick and for rosin and linseed oil brought the index for the building materials group up 0.3 percent during October to the highest level since 1920. In an effort to maintain current production by allowing for increases in costs, OPA extended higher ceilings to producers of building brick in additional areas east of the Rocky Mountains. Cement prices advanced 0.6 percent. Average prices for lumber dropped 0.1 percent as a result of lower quotations for Douglas fir and western pine. Slightly higher prices were reported for most types of southern pine lumber.

The elimination of seasonal discounts on potash fertilizer materials brought the index for chemicals and allied products up 0.1 percent. A minor increase occurred in quotations for stearic acid while those for glycerine declined fractionally.

Average prices for furniture and furnishings were steady in October and the housefurnishing goods group index remained unchanged at 104.4 percent of the 1926 average.

Prices for most commodities have moved within a very narrow margin, if at all, during the 12-month period October 1943 to October 1944. As may be expected, most of the increases were the result of Government action in increasing taxes or in allowing higher ceilings to stimulate production. Chemicals and allied products rose 4.6 percent, principally because of the effect of higher taxes on alcohol. OPA action in making upward adjustments in ceiling prices for brick and tile, cement, and lumber accounted for an increase of 3.2 percent in average prices for building materials. Higher ceiling prices for coal and coke caused the fuel and lighting materials index to rise 2.3 percent above the October 1943 index.

Textile products and housefurnishing goods advanced 1.8 percent during the year largely as a result of the effect of the Stabilization Extension Act in raising prices on cotton goods, and the increase in prices of furniture allowed by OPA early in 1944.

Average prices for farm products rose 1.0 percent during the 12-month period, principally because of higher grain markets. Sharp declines in prices for sheepskins and goatskins brought the index for

the hides and leather products group down 1.4 percent. Food prices averaged nearly 1 percent lower than in 1943, owing to a decrease of 2.1 percent in prices for fruits and vegetables.

Small increases in prices for farm machinery and for certain heating equipment were offset by a break in the mercury market during the year and the metals and metal products group index remained unchanged at 103.7 percent of the 1926 level.

Marked increases have taken place in prices for most commodities since the war began. Between August 1939 and October 1944 prices for industrial fats and oils advanced 151 percent, grains rose nearly 143 percent, and cattle feed 133 percent. In the war period, now stretching over a little more than 5 years, prices for livestock and poultry and for fruits and vegetables have advanced more than 90 percent; cotton goods, more than 80 percent; lumber, over 70 percent; and dairy products, more than 60 percent. Increases of from 30 to 50 percent have been recorded in prices for cereal products, meats, hides and skins, clothing, woolen and worsted goods, anthracite, paper and pulp, and crude rubber. Since the outbreak of the war, prices for raw materials have risen about 70 percent, while semimanufactured commodities and finished products have advanced approximately 27 percent.

Percentage comparisons of the October 1944 level of wholesale prices with September 1944, October 1943, and August 1939, with corresponding index numbers are given in table 1.

TABLE 1.—Indexes of Wholesale Prices by Groups and Subgroups of Commodities, October 1944, Compared With September 1944, October 1943, and August 1939

[1926=100]

Group and subgroup	October 1944	September 1944	Percent of change	October 1943	Percent of change	August 1939	Percent of change
All commodities.....	104.1	104.0	+0.1	103.0	+1.1	75.0	+38.8
Farm products.....	123.4	122.7	+6	122.2	+1.0	61.0	+102.3
Grains.....	125.1	121.7	+2.8	122.5	+2.1	51.5	+142.9
Livestock and poultry.....	127.1	127.6	-.4	126.1	+8	66.0	+92.6
Other farm products.....	119.9	119.2	+6	118.9	+8	60.1	+99.5
Foods.....	104.2	104.2	0	105.1	-.9	67.2	+55.1
Dairy products.....	110.7	110.7	0	109.1	+1.5	67.9	+63.0
Cereal products.....	94.7	94.4	+3	94.7	0	71.9	+31.7
Fruits and vegetables.....	112.7	115.9	-2.8	115.1	-2.1	58.5	+92.6
Meats.....	106.0	106.0	0	106.2	-.2	73.7	+43.8
Other foods.....	96.8	95.5	+1.4	99.6	-2.8	60.3	+60.5
Hides and leather products.....	116.2	116.0	+2	117.8	-1.4	92.7	+25.4
Shoes.....	126.3	126.3	0	126.4	-.1	100.8	+25.3
Hides and skins.....	107.3	106.1	+1.1	116.0	-7.5	77.2	+30.0
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
Textile products.....	99.4	99.2	+2	97.6	+1.8	67.8	+46.6
Clothing.....	107.4	107.0	+4	107.0	+4	81.5	+31.8
Cotton goods.....	118.8	118.7	+1	112.9	+5.2	65.5	+81.4
Hosiery and underwear.....	71.5	70.8	+1.0	71.4	+1	61.5	+16.3
Rayon.....	30.3	30.3	0	30.3	0	28.5	+6.3
Silk.....	(1)	(1)	---	(1)	---	44.3	---
Woolen and worsted goods.....	112.9	112.9	0	112.5	+4	75.5	+49.5
Other textile products.....	100.9	100.9	0	99.2	+1.7	63.7	+58.4

1 Data not yet available.

TABLE 1.—Indexes of Wholesale Prices by Groups and Subgroups of Commodities, October 1944, Compared With September 1944, October 1943, and August 1939—Con.

Group and subgroup	October 1944	September 1944	Percent of change	October 1943	Percent of change	August 1939	Percent of change
Fuel and lighting materials.....	82.9	83.0	-0.1	81.0	+2.3	72.6	+14.2
Anthracite.....	95.2	95.4	-2	89.9	+5.9	72.1	+32.0
Bituminous coal.....	120.5	120.6	-1	116.4	+3.5	96.0	+25.5
Coke.....	130.7	130.7	0	122.4	+6.8	104.2	+25.4
Electricity.....	(1)	(1)	-----	57.8	-----	75.8	-----
Gas.....	(1)	76.8	-----	77.2	-----	86.7	-----
Petroleum and products.....	63.8	63.8	0	63.5	+5	51.7	+23.4
Metals and metal products.....	103.7	103.8	-1	103.7	0	93.2	+11.3
Agricultural implements.....	97.5	97.5	0	96.9	+6	93.5	+4.3
Farm machinery.....	98.6	98.6	0	98.1	+5	94.7	+4.1
Iron and steel.....	97.1	97.2	-1	97.1	0	95.1	+2.1
Motor vehicles.....	112.8	112.8	0	112.8	0	92.5	+21.9
Nonferrous metals.....	85.8	85.8	0	86.0	-2	74.6	+15.0
Plumbing and heating.....	92.4	92.4	0	90.2	+2.4	79.3	+16.5
Building materials.....	116.3	116.0	+3	112.7	+3.2	89.6	+29.8
Brick and tile.....	104.8	101.5	+3.3	99.0	+5.9	90.5	+15.8
Cement.....	97.5	96.9	+6	93.6	+4.2	91.3	+6.8
Lumber.....	153.8	154.0	-1	146.6	+4.9	90.1	+70.7
Paint and paint materials.....	106.0	105.5	+5	102.8	+3.1	82.1	+29.1
Plumbing and heating.....	92.4	92.4	0	90.2	+2.4	79.3	+16.5
Structural steel.....	107.3	107.3	0	107.3	0	107.3	0
Other building materials.....	103.3	103.3	0	102.2	+1.1	89.5	+15.4
Chemicals and allied products.....	105.0	104.9	+1	100.4	+4.6	74.2	+41.5
Chemicals.....	96.0	96.0	0	96.4	-4	83.8	+14.6
Drugs and pharmaceuticals.....	217.2	217.2	0	165.2	+31.5	77.1	+181.7
Fertilizer materials.....	81.8	81.2	+7	81.3	+6	65.5	+24.9
Mixed fertilizers.....	86.6	86.6	0	86.1	+6	73.1	+18.5
Oils and fats.....	102.0	102.0	0	102.0	0	40.6	+151.2
Housefurnishing goods.....	104.4	104.4	0	102.6	+1.8	85.6	+22.0
Furnishings.....	107.4	107.4	0	107.1	+3	90.1	+19.3
Furniture.....	101.4	101.4	0	98.1	+3.4	81.1	+25.0
Miscellaneous.....	93.6	93.6	0	93.1	+5	73.3	+27.7
Automobile tires and tubes.....	73.0	73.0	0	73.0	0	60.5	+20.7
Cattle feed.....	159.6	159.6	0	159.6	0	68.4	+133.3
Paper and pulp.....	107.2	107.2	0	105.6	+1.5	80.0	+34.0
Rubber, crude.....	46.2	46.2	0	46.2	0	34.9	+32.4
Other miscellaneous.....	97.0	97.0	0	96.4	+6	81.3	+19.3
Raw materials.....	113.2	112.8	+4	111.9	+1.2	66.5	+70.2
Semimanufactured articles.....	94.8	94.7	+1	92.9	+2.0	74.5	+27.2
Manufactured products.....	101.0	100.9	+1	100.0	+1.0	79.1	+27.7
All commodities other than farm products.....	99.8	99.7	+1	98.7	+1.1	77.9	+28.1
All commodities other than farm products and foods.....	98.7	98.6	+1	97.3	+1.4	80.1	+23.2

¹ Data not yet available.

Index Numbers by Commodity Groups, 1926 to October 1944

Index numbers of wholesale prices by commodity groups for selected years from 1926 to 1943, and by months from October 1943 to October 1944, 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	80.0
1937	86.4	85.5	104.6	76.3	77.6	95.7	95.2	82.6	89.7	77.8	86.3
1938	68.5	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
1943	122.6	106.6	117.5	97.4	80.8	103.8	111.4	100.3	102.7	92.2	103.1
<i>1943</i>											
October	122.2	105.1	117.8	97.6	81.0	103.7	112.7	100.4	102.6	93.1	103.0
November	121.4	105.8	116.5	97.7	81.2	103.8	113.1	100.3	102.8	93.2	102.9
December	121.8	105.6	117.0	97.7	82.1	103.8	113.4	100.4	102.8	93.3	103.2
<i>1944</i>											
January	121.8	104.9	117.2	97.7	82.3	103.7	113.5	100.4	104.5	93.2	103.3
February	122.5	104.5	116.9	97.7	83.1	103.7	113.6	100.4	104.2	93.4	103.6
March	123.6	104.6	116.9	97.8	83.0	103.7	114.2	100.4	104.3	93.5	103.8
April	123.2	104.9	116.9	97.8	83.0	103.7	115.2	105.4	104.3	93.5	103.9
May	122.9	105.0	117.0	97.8	83.2	103.7	115.7	105.4	104.3	93.5	104.0
June	125.0	106.5	116.4	97.8	83.3	103.7	115.9	105.2	104.3	93.5	104.3
July	124.1	105.8	116.2	98.0	83.2	103.7	115.9	105.3	104.3	93.6	104.1
August	122.6	104.8	116.0	98.4	83.2	103.8	116.0	105.3	104.4	93.6	103.9
September	122.7	104.2	116.0	99.2	83.0	103.8	116.0	104.9	104.4	93.6	104.0
October	123.4	104.2	116.2	99.4	82.9	103.7	116.3	105.0	104.4	93.6	104.1

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 and 11 of Wholesale Prices, July to December and Year 1943 (Bulletin No. 785).

TABLE 3.—Index Numbers of Wholesale Prices by Special Groups of Commodities

[1926=100]

Year	Raw materials	Semi-manufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods	Year and month	Raw materials	Semi-manufactured 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	October	111.9	92.9	100.0	98.7	97.3
1932	55.1	59.3	70.3	68.3	70.2	November	111.3	92.9	100.2	98.8	97.4
1933	56.5	65.4	70.5	69.0	71.2	December	112.1	93.1	100.2	99.0	97.6
1936	79.9	75.9	82.0	80.7	79.6	1944					
1937	84.8	85.3	87.2	86.2	85.3	January	112.2	93.2	100.2	99.1	97.8
1938	72.0	75.4	82.2	80.6	81.7	February	112.8	93.4	100.4	99.3	98.0
1939	70.2	77.0	80.4	79.5	81.3	March	113.4	93.7	100.5	99.3	98.1
1940	71.9	79.1	81.6	80.8	83.0	April	113.2	93.6	100.8	99.6	98.4
1941	83.5	86.9	89.1	88.3	89.0	May	113.0	93.7	100.9	99.7	98.5
1942	100.6	92.6	98.6	97.0	95.5	June	114.2	93.8	100.9	99.6	98.5
1943	112.1	92.9	100.1	98.7	96.9	July	113.6	93.9	100.9	99.6	98.5
						August	112.7	94.1	100.9	99.7	98.6
						September	112.8	94.7	100.9	99.7	98.6
						October	113.2	94.8	101.0	99.8	98.7

Weekly Fluctuations

Weekly changes in wholesale prices by groups of commodities during September and October 1944 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, September and October 1944

[1926=100]

Commodity group	October 28	October 21	October 14	October 7	September 30	September 23	September 16	September 9	September 2
All commodities	103.9	103.8	103.8	103.9	103.8	103.7	103.6	103.6	103.6
Farm products	123.3	122.8	122.7	123.3	122.8	122.8	122.1	122.2	122.0
Foods	104.1	103.9	103.8	104.1	103.9	104.3	103.8	103.9	104.1
Hides and leather products	116.7	116.7	116.7	116.8	116.5	116.5	116.6	116.5	116.5
Textile products	98.9	98.9	98.8	98.8	98.5	98.3	98.3	98.2	98.1
Fuel and lighting materials	83.5	83.6	83.8	83.8	83.7	83.7	83.7	83.8	83.7
Metals and metal products	103.8	103.8	103.9	103.9	103.8	103.9	103.9	103.8	103.8
Building materials	116.4	116.3	116.1	116.1	115.9	115.9	116.1	116.0	116.0
Chemicals and allied products	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9
Housefurnishing goods	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1
Miscellaneous	93.4	93.4	93.4	93.4	93.7	93.3	93.3	93.3	93.3
Raw materials	113.5	113.2	113.2	113.7	113.2	113.3	112.8	112.8	112.7
Semi-manufactured articles	94.7	94.7	94.6	94.6	94.3	94.1	94.1	94.1	94.1
Manufactured products	101.1	101.2	101.2	101.2	101.1	101.1	101.1	101.1	101.1
All commodities other than farm products	99.6	99.7	99.7	99.7	99.6	99.6	99.6	99.6	99.6
All commodities other than farm products and foods	98.8	98.9	98.9	98.9	98.8	98.8	98.8	98.8	98.7

Labor Turnover

Labor Turnover in Manufacturing, Mining, and Public Utilities, September 1944

FOR every 1,000 workers on factory pay rolls in September, 75 either changed jobs or left manufacturing work. The rate of accessions, 60 per 1,000, was slightly below the August rate and was accompanied by a similar decline in the separation rate.

The military separation rate, 3 per 1,000, was the lowest since the war began. In addition to those leaving to enter the armed forces, 60 per 1,000 quit, 6 were discharged, and 6 were laid off.

A slight decline was reported in the quit and discharge rates for manufacturing as a whole. The discharge rate for all 20 major manufacturing groups and the quit rates in 12 of these either declined or remained the same. Comments from employers indicate that the return of students to school accounted for the majority of quits. Leaving the locality to seek permanent post-war employment was frequently advanced as a reason for quitting.

Although the lay-off rate for manufacturing as a whole was only slightly above the August rate, half of the major industry groups reported a greater rate of lay-off in September than in August. The highest lay-off rate, 17 per 1,000 employees, was reported by the non-ferrous-metals group. Five of the 6 industries composing this group reported increased lay-off rates. Larger cutbacks in the production of aluminum and magnesium resulted in more than doubling the rate of lay-offs in the aluminum smelting and refining industry, while curtailed production of shell casings for chemical warfare accounted for the increase in the lay-off rate from 7 to 35 per 1,000 in nonferrous-metal foundries.

The ordnance group reported lay-offs of 8 for every 1,000 employees in September, which compares with 5 per 1,000 in August. Part of this increase was probably a result of conversion to peacetime products by several firms in the guns and howitzers industry.

Total separation rates increased slightly for both anthracite and metal mining. The latter reflects the large number of lay-offs in the miscellaneous metal-mining industry, which comprises aluminum-ore mines.

The accession rates for both men and women were exactly the same as their quit rates. Although the quit rate for women was considerable higher than that for men, separations other than quits (i. e. lay-offs, discharges, and miscellaneous separations) were the same for both—15 per 1,000 workers. The total separation rate for women was 93 per 1,000 as compared with 62 for men.

TABLE 1.—Monthly Labor-Turnover Rates (per 100 Employees) in Manufacturing¹

Class of turnover and year	January	February	March	April	May	June	July	August	September	October	November	December
Total separation:												
1944.....	6.7	6.6	7.4	6.8	7.1	7.1	6.6	7.8	² 7.5			
1943.....	7.1	7.1	7.7	7.5	6.7	7.1	7.6	8.3	8.1	7.0	6.4	6.6
1939.....	3.2	2.6	3.1	3.5	3.5	3.3	3.3	3.0	2.8	2.9	3.0	3.5
Quit:												
1944.....	4.6	4.6	5.0	4.9	5.3	5.4	5.0	6.2	² 6.0			
1943.....	4.5	4.7	5.4	5.4	4.8	5.2	5.6	6.3	6.3	5.2	4.5	4.4
1939.....	.9	.6	.8	.8	.7	.7	.7	.8	1.1	.9	.8	.7
Discharge:												
1944.....	.7	.6	.7	.6	.6	.7	.7	.7	2.6			
1943.....	.5	.5	.6	.5	.6	.6	.7	.7	.6	.6	.6	.6
1939.....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2	.2	.1
Lay-off: ³												
1944.....	.8	.8	.9	.6	.5	.5	.5	.5	2.6			
1943.....	.7	.5	.5	.6	.5	.5	.5	.5	.5	.5	.7	1.0
1939.....	2.2	1.9	2.2	2.6	2.7	2.5	2.5	2.1	1.6	1.8	2.0	2.7
Military and miscellaneous: ⁴												
1944.....	.6	.6	.8	.7	.7	.5	.4	.4	2.3			
1943.....	1.4	1.4	1.2	1.0	.8	.8	.8	.8	.7	.7	.6	.6
Accession:												
1944.....	6.5	5.5	5.8	5.5	6.4	7.6	6.3	6.3	² 6.0			
1943.....	8.3	7.9	8.3	7.4	7.2	8.4	7.8	7.6	7.7	7.2	6.6	5.2
1939.....	4.1	3.1	3.3	2.9	3.3	3.9	4.2	5.1	6.2	5.9	4.1	2.8

¹ Month-to-month employment changes as indicated by labor-turnover rates are not precisely comparable to those shown by the Bureau's employment and pay-roll reports, as the former are based on data for the entire month while the latter refer, for the most part, to a 1-week period ending nearest the middle of the month. In addition, labor-turnover data, beginning in January 1943, refer to all employees, whereas the employment and pay-roll reports relate only to wage earners. The labor-turnover sample is not so extensive as that of the employment and pay-roll survey, proportionately fewer small plants are included; printing and publishing and certain seasonal industries, such as canning and preserving, are not covered.

² Preliminary. ³ Including temporary, indeterminate, and permanent lay-offs.

⁴ Miscellaneous separations comprise not more than 0.1 in these figures. In 1939 these data were included with quits.

TABLE 2.—Monthly Labor-Turnover Rates (per 100 Employees) in Selected Groups and Industries,¹ September 1944

Group and industry	Total separation		Quit		Discharge		Lay-off		Military and miscellaneous		Total accession	
	September ²	August	September ²	August	September ²	August	September ²	August	September ²	August	September ²	August
<i>Manufacturing</i>												
Ordnance.....	9.0	8.9	7.0	7.0	0.9	1.1	0.8	0.5	0.3	0.3	7.4	7.8
Guns, howitzers, mortars, and related equipment.....	8.0	6.9	4.7	5.2	.6	.8	2.5	.6	.2	.3	4.4	5.3
Ammunition, except for small arms.....	10.4	10.6	8.5	8.4	1.1	1.3	.5	.5	.3	.4	9.4	9.7
Tanks ³	8.6	8.5	5.9	6.5	1.0	1.1	1.4	.6	.3	.3	6.1	7.6
Sighting and fire-control equipment.....	3.9	4.5	2.9	3.2	.4	.7	.3	.3	.3	.3	2.5	2.3
Iron and steel and their products.....	5.6	6.0	4.4	4.7	.4	.5	.5	.4	.3	.4	4.3	5.0
Blast furnaces, steel works, and rolling mills.....	4.0	4.1	3.2	3.4	.2	.2	.3	.2	.3	.3	2.8	3.5
Gray-iron castings.....	7.8	8.9	6.6	7.1	.8	1.0	.1	.4	.3	.4	8.0	8.8
Malleable-iron castings.....	6.4	6.8	4.9	5.8	.5	.4	.7	.3	.3	.3	6.3	5.8
Steel castings.....	6.8	8.0	5.5	6.5	.8	.9	.2	.2	.3	.4	6.5	6.6
Cast-iron pipe and fittings.....	5.7	7.1	5.1	5.8	.3	.4	.1	.5	.2	.4	4.7	5.4
Tin cans and other tinware.....	20.0	16.3	16.0	13.8	2.6	1.7	1.1	.2	.3	.6	15.2	15.7
Wire products.....	3.4	3.2	2.8	2.4	.2	.3	.2	.2	.2	.3	3.2	4.2
Cutlery and edge tools.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Tools (except edge tools, machine tools, files, and saws).....	6.9	6.6	5.7	5.4	.6	.8	.3	.1	.3	.3	5.7	5.9
Hardware.....	5.4	5.5	4.5	4.4	.3	.3	.2	.4	.4	.4	4.3	3.1
Plumbers' supplies.....	9.3	7.5	7.3	5.6	.6	1.2	1.1	.3	.3	.4	5.8	7.9
Stoves, oil burners, and heating equipment ³	9.0	9.7	7.4	7.8	1.0	1.0	.3	.5	.3	.4	10.2	9.2
Steam and hot-water heating apparatus and steam fittings.....	5.4	7.5	4.2	5.9	.5	.7	.4	.3	.3	.6	3.3	5.5
Stamped and enameled ware and galvanizing.....	9.4	9.6	8.0	8.2	.8	.7	.3	.2	.3	.5	8.7	10.6

See footnotes at end of table.

TABLE 2.—Monthly Labor-Turnover Rates (per 100 Employees) in Selected Groups and Industries,¹ September 1944—Continued

Group and industry	Total separation		Quit		Discharge		Lay-off		Military and miscellaneous		Total accession	
	September ²	August	September ²	August	September ²	August	September ²	August	September ²	August	September ²	August
<i>Manufacturing—Continued</i>												
Iron and steel and their products—Con-												
Fabricated structural-metal products.....	9.4	9.9	6.4	7.3	0.9	1.1	1.7	1.0	0.4	0.5	6.2	6.8
Bolts, nuts, washers, and rivets.....	7.3	5.5	3.8	4.4	.5	.7	2.7	.1	.3	.3	3.3	3.8
Forgings, iron and steel.....	5.1	6.4	4.0	4.5	.4	.5	.4	1.0	.3	.4	3.5	3.6
Firearms, 60 caliber and under.....	6.1	8.2	4.1	4.6	.8	.9	1.0	2.3	.2	.4	5.3	6.0
Electrical machinery.....	6.4	6.1	5.2	4.9	.6	.6	.3	.3	.3	.3	4.7	4.5
Electrical equipment for industrial use.....	4.8	4.7	3.8	3.5	.3	.5	.4	.4	.3	.3	3.2	3.2
Radios, radio equipment, and phonographs.....	7.8	8.2	6.6	6.8	.8	.9	.2	.2	.2	.3	5.8	6.0
Communication equipment, except radios.....	6.4	4.8	5.2	3.7	.5	.4	.2	.3	.5	.4	4.4	3.6
Machinery, except electrical.....	5.5	5.9	4.1	4.5	.6	.6	.5	.4	.3	.4	3.7	4.1
Engines and turbines.....	6.1	6.7	4.7	4.6	.5	.8	.6	.9	.3	.4	4.0	4.7
Agricultural machinery and tractors.....	5.5	7.2	4.3	6.0	.5	.5	.3	.3	.4	.4	4.5	5.8
Machine tools.....	4.2	4.0	2.9	2.9	.5	.6	.5	.2	.3	.3	2.8	2.9
Machine-tool accessories.....	4.6	5.4	3.0	3.8	.6	.8	.8	.4	.2	.4	3.1	3.7
Metalworking machinery and equipment, not elsewhere classified.....	4.6	4.5	3.4	3.3	.6	.5	.2	.3	.4	.4	3.1	3.5
Textile machinery.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
General industrial machinery, except pumps.....	5.7	6.3	4.4	4.9	.6	.7	.4	.3	.4	.3	3.6	3.9
Pumps and pumping equipment.....	6.5	5.1	4.9	4.0	.7	.6	.6	.1	.3	.4	4.3	4.4
Transportation equipment, except automobiles.....	8.8	8.9	6.2	6.0	1.2	1.3	1.0	1.1	.4	.5	6.0	6.2
Aircraft.....	8.3	8.5	6.0	6.1	.7	.7	1.2	1.2	.4	.5	4.8	4.9
Aircraft parts.....	6.8	6.3	4.8	4.4	.7	.8	1.1	.8	.2	.3	4.2	4.4
Shipbuilding and repairs.....	10.2	10.8	7.0	6.9	1.9	2.1	.9	1.3	.4	.5	7.8	8.1
Automobiles.....	6.1	6.5	4.6	4.8	.8	1.0	.4	.4	.3	.3	6.4	6.8
Motor vehicles, bodies, and trailers.....	5.5	5.6	4.2	3.8	.7	1.0	.3	.5	.3	.3	6.2	7.1
Motor-vehicle parts and accessories.....	6.3	7.2	4.8	5.5	.8	1.1	.4	.3	.3	.3	6.6	6.7
Nonferrous metals and their products.....	8.1	8.3	5.4	6.1	.6	.8	1.7	1.0	.4	.4	4.5	5.5
Primary smelting and refining, except aluminum and magnesium.....	4.1	5.1	3.3	4.0	.3	.4	.2	.4	.3	.3	3.0	3.1
Aluminum and magnesium smelting and refining.....	17.5	15.6	10.7	11.5	.5	.6	5.6	2.6	.7	.9	4.3	6.7
Rolling and drawing of copper and copper alloys.....	4.5	4.8	3.8	4.1	.3	.3	.2	.1	.2	.3	3.9	5.2
Aluminum and magnesium products.....	8.1	8.9	5.2	6.0	.8	1.0	1.7	1.4	.4	.5	4.2	5.0
Lighting equipment.....	7.8	8.0	5.8	6.4	.6	.7	1.2	.5	.2	.4	10.1	8.6
Nonferrous-metal foundries, except aluminum and magnesium.....	10.5	7.9	6.1	6.2	.6	.7	3.5	.7	.3	.3	5.0	6.4
Lumber and timber basic products.....	9.8	10.5	8.7	9.0	.3	.5	.5	.6	.3	.4	7.6	8.8
Sawmills.....	9.7	10.3	8.6	8.9	.3	.4	.5	.6	.3	.4	7.3	8.9
Planing and plywood mills.....	9.0	9.0	7.6	7.2	.5	.8	.6	.6	.3	.4	7.7	7.2
Furniture and finished lumber products.....	9.6	10.2	8.5	8.7	.6	.6	.3	.6	.2	.3	8.3	8.5
Furniture, including mattresses and bedsprings.....	9.4	10.1	8.2	8.6	.7	.6	.2	.6	.3	.3	8.2	8.4
Stone, clay, and glass products.....	5.9	6.7	4.9	5.3	.3	.4	.3	.6	.4	.4	4.7	5.3
Glass and glass products.....	6.2	7.4	4.9	5.4	.4	.6	.4	.9	.5	.5	5.3	5.2
Cement.....	4.0	3.5	3.3	2.9	.4	.2	1.1	.2	.2	.2	3.5	4.1
Brick, tile, and terra cotta.....	6.4	8.6	5.2	7.0	.2	.6	.6	.4	.4	.4	4.2	6.6
Pottery and related products.....	6.4	7.3	5.7	6.1	.2	.3	.2	.5	.3	.4	5.7	5.7
Textile-mill products.....	7.3	6.9	6.3	6.0	.4	.4	.4	.3	.2	.2	5.9	5.6
Cotton.....	8.4	7.8	7.3	6.8	.5	.5	.4	.2	.2	.3	6.8	6.4
Silk and rayon goods.....	7.2	7.5	6.3	6.2	.5	.6	.2	.3	.2	.4	6.6	6.8
Woolen and worsted, except dyeing and finishing.....	4.3	4.7	3.6	3.8	.2	.3	.3	.4	.2	.2	3.9	3.1
Hosiery, full-fashioned.....	5.1	5.7	4.7	5.1	.1	.3	.2	.2	.1	.1	3.8	3.9
Hosiery, seamless.....	6.5	7.1	6.0	6.4	.2	.3	.2	.2	.1	.2	5.7	6.1

See footnotes at end of table.

TABLE 2.—Monthly Labor-Turnover Rates (per 100 Employees) in Selected Groups and Industries,¹ September 1944—Continued

Group and industry	Total separation		Quit		Discharge		Lay-off		Military and miscellaneous		Total accession	
	September ²	August	September ²	August	September ²	August	September ²	August	September ²	August	September ²	August
<i>Manufacturing—Continued</i>												
<i>Textile-mill products—Continued.</i>												
Knitted underwear.....	6.9	7.6	6.5	6.2	0.2	0.2	0.1	1.1	0.1	0.1	5.2	4.6
Dyeing and finishing textiles, including woolen and worsted.....	4.9	5.7	4.1	4.2	.3	.7	.2	.5	.3	.3	4.0	3.8
Apparel and other finished textile products.....	7.2	7.1	6.2	6.5	.2	.2	.7	.3	.1	.1	5.6	5.6
Men's and boys' suits, coats, and overcoats.....	4.6	5.3	4.3	4.8	.1	.2	.1	.3	.1	(⁵)	4.6	4.5
Men's and boys' furnishings, work clothing, and allied garments.....	7.3	7.3	6.9	6.7	.2	.3	.1	.2	.1	.1	5.6	5.5
Leather and leather products.....	6.8	7.7	6.2	6.8	.3	.3	.1	.3	.2	.3	5.7	6.5
Leather.....	4.5	6.4	3.7	5.3	.3	.3	.2	.5	.3	.3	3.4	4.7
Boots and shoes.....	7.2	8.0	6.6	7.1	.3	.3	.1	.3	.2	.3	6.1	6.9
Food and kindred products.....	10.8	12.6	9.6	10.9	.6	.7	.3	.6	.3	.4	9.9	10.5
Meat products.....	10.0	13.4	8.7	11.5	.6	.7	.4	.7	.3	.5	8.2	10.5
Grain-mill products.....	10.6	13.0	9.6	11.0	.6	.8	.1	.8	.3	.4	9.8	9.5
Tobacco manufactures.....	8.0	7.8	7.5	7.2	.3	.4	.1	.1	.1	.1	7.6	8.3
Paper and allied products.....	8.0	8.0	7.0	6.9	.4	.5	.3	.2	.3	.4	7.1	6.7
Paper and pulp.....	7.5	7.3	6.5	6.2	.4	.5	.3	.2	.3	.4	6.7	6.3
Paper boxes.....	9.0	10.1	8.1	9.0	.5	.6	.2	.2	.2	.3	9.2	8.6
Chemicals and allied products.....	6.3	5.7	4.8	4.4	.6	.6	.6	.3	.3	.4	5.7	6.5
Paints, varnishes, and colors.....	4.7	5.3	3.9	4.3	.4	.6	.1	.1	.3	.3	3.4	5.3
Rayon and allied products.....	6.4	4.8	4.8	4.0	.4	.3	.9	.2	.3	.3	5.1	4.6
Industrial chemicals, except explosives.....	5.3	5.2	4.2	4.1	.5	.6	.2	.1	.4	.4	4.2	4.7
Explosives ⁶	7.2	6.3	6.2	4.7	.6	.9	(⁵)	.2	.4	.5	8.5	9.3
Small-arms ammunition.....	8.0	6.7	5.3	4.9	.8	.8	1.7	.7	.2	.3	7.4	9.9
Products of petroleum and coal.....	4.0	3.8	3.2	3.0	.3	.4	.2	.1	.3	.3	3.2	3.7
Petroleum refining.....	3.9	3.7	3.1	2.9	.3	.4	.2	.1	.3	.3	3.2	3.5
Rubber products.....	7.5	8.0	6.6	6.7	.4	.5	.2	.4	.3	.4	6.0	7.1
Rubber tires and inner tubes.....	6.8	7.4	6.0	6.1	.4	.5	.1	.5	.3	.3	6.3	7.9
Rubber footwear and related products.....	7.8	9.3	7.1	8.2	.3	.5	.2	.2	.2	.4	6.9	6.7
Miscellaneous rubber industries.....	8.3	8.4	7.2	7.1	.4	.6	.4	.2	.3	.5	5.5	6.2
Miscellaneous industries.....	5.9	5.1	4.8	4.0	.4	.5	.4	.3	.3	.3	4.9	3.9
<i>Nonmanufacturing</i>												
Metal mining.....	6.7	6.3	5.1	4.8	.3	.4	.7	.4	.6	.7	3.7	3.9
Iron ore.....	4.1	3.7	3.2	2.7	.1	.2	.3	.2	.5	.6	1.9	2.1
Copper ore.....	7.3	7.7	5.9	5.7	.3	.5	.4	.5	.7	1.0	4.4	4.4
Lead and zinc ore.....	6.5	7.1	5.2	5.8	.5	.4	.3	.3	.5	.6	4.5	4.9
Metal mining, not elsewhere classified, including aluminum ore.....	13.3	9.2	8.6	7.2	.8	.8	3.3	.8	.6	.4	5.5	6.1
Coal mining:												
Anthracite.....	1.8	1.4	1.4	1.1	(⁵)	(⁵)	.2	.1	.2	.2	1.3	1.4
Bituminous.....	4.1	4.3	3.5	3.4	.2	.2	.1	.4	.3	.3	3.0	3.4
Public utilities:												
Telephone.....	4.2	3.8	3.7	3.3	.2	.2	.2	.1	.1	.2	2.9	3.0
Telegraph ³	4.5	3.9	4.0	3.6	.1	.1	.3	.1	.1	.1	4.0	3.6

¹ Since January 1943 manufacturing firms reporting labor turnover have been assigned industry codes on the basis of current products. Most plants in the employment and pay-roll sample, comprising those which were in operation in 1939, are classified according to their major activity at that time, regardless of any subsequent change in major products.

² Preliminary figures.

³ Previously published rates have been revised as follows:

Tanks, February 1943 to June 1944.—Revised data available upon request.
Stoves, oil burners, and heating equipment, September 1943 through June 1944.—Quit rates to 6.8, 5.7, 5.1, 5.9, 5.2, 4.9, 5.6, 7.3, 8.1, and 7.5; lay-off rates to 0.4, 0.6, 0.8, 0.5, 0.7, 1.4, 1.9, 0.8, 0.2, and 0.2.
Telegraph, January 1944 through May 1944.—Total separation rate to 3.5, 3.3, 3.4, 3.4, and 4.0; quit rates to 3.1, 2.9, 2.9, 3.0, and 3.6; total accession rates to 3.6, 3.4, 3.4, 3.4, and 3.6.

⁴ Not available.

⁵ Less than 0.05.

⁶ Data not strictly comparable to those published previous to July.

TABLE 3.—Monthly Labor-Turnover Rates (per 100 Employees)¹ for Men and Women in Selected Industries Engaged in War Production, September 1944²

Group and industry	Total separation		Quit		Total accession	
	Men	Women	Men	Women	Men	Women
All manufacturing	6.2	9.3	4.7	7.8	4.7	7.8
Ordnance	7.6	11.4	5.5	9.4	5.7	10.2
Guns, howitzers, mortars, and related equipment	6.5	13.4	3.9	7.5	3.7	7.0
Ammunition, except for small arms	9.2	11.8	6.9	10.4	7.4	11.7
Tanks	7.1	15.3	5.6	7.4	6.0	6.5
Sighting and fire-control equipment	3.0	5.5	2.2	4.3	1.6	4.1
Iron and steel and their products	5.0	10.1	3.8	8.2	3.8	8.1
Blast furnaces, steel works, and rolling mills	3.6	8.4	2.7	7.5	2.6	5.8
Gray-iron castings	7.7	7.8	6.3	6.8	7.5	9.8
Malleable-iron castings	6.0	10.1	4.8	5.8	6.3	6.0
Steel castings	6.6	9.4	5.4	6.9	6.3	8.0
Cast-iron pipe and fittings	5.6	6.7	5.0	6.3	4.5	6.9
Firearms, 60 caliber and under	5.0	9.4	3.3	6.8	3.4	9.1
Electrical machinery	4.6	8.6	3.3	7.3	3.3	6.2
Electrical equipment for industrial use	3.6	7.1	2.6	5.9	2.1	5.0
Radios, radio equipment, and phonographs	5.0	10.0	3.7	8.8	4.3	6.7
Communication equipment, except radios	4.8	7.7	3.5	6.6	3.1	5.5
Machinery, except electrical	4.6	8.6	3.3	6.7	3.0	5.8
Engines and turbines	5.3	8.5	3.8	6.9	3.5	5.3
Machine tools	3.5	7.9	2.3	6.2	2.1	6.5
Machine-tool accessories	4.2	6.3	2.5	4.7	2.4	5.6
Metalworking machinery and equipment, not elsewhere classified	4.1	7.3	2.9	5.9	2.6	4.9
General industrial machinery, except pumps	4.6	8.8	3.4	7.2	3.0	5.3
Pumps and pumping equipment	5.6	10.0	4.4	7.1	3.9	6.2
Transportation equipment, except automobiles	8.1	10.8	5.4	8.2	5.4	7.7
Aircraft	6.7	10.4	4.7	8.0	3.6	6.6
Aircraft parts	5.4	9.6	3.6	7.0	3.2	5.5
Shipbuilding and repairs	10.1	13.2	6.6	10.1	7.5	12.3
Nonferrous metals and their products	7.3	10.7	4.9	7.2	3.8	6.9
Primary smelting and refining, except aluminum and magnesium	3.8	7.5	3.0	6.5	2.7	7.3
Aluminum and magnesium smelting and refining	17.3	19.4	10.6	11.4	4.2	5.6
Rolling and drawing of copper and copper alloys	3.7	7.0	3.0	6.4	2.6	8.2
Aluminum and magnesium products	7.4	10.7	4.8	6.7	3.9	5.3
Nonferrous-metal foundries, except aluminum and magnesium	8.5	15.1	5.2	8.2	4.4	6.6
Chemicals and allied products	5.1	8.3	3.9	6.8	4.5	8.4
Industrial chemicals, except explosives	4.7	7.3	3.7	6.2	4.0	5.2
Explosives ³	6.3	9.9	5.2	8.9	7.4	11.2
Small-arms ammunition	6.1	8.2	4.0	6.4	4.6	10.5

¹ These figures are presented to show comparative turnover rates and should not be used to estimate employment.

² Data are preliminary.

³ Data not strictly comparable with those published previous to July.

Building Operations

Building Construction in Urban Areas, October 1944

BUILDING construction started in urban areas of the United States during October was valued at 91 million dollars, exceeding the September total by 12 percent. Both Federal and non-Federal building values increased in October. Federal building construction rose by 36 percent, reflecting the installation of large and important naval facilities, while non-Federal building increased 4 percent. The total value of new nonresidential construction started during this month, both Federal and non-Federal, rose 29 percent over September as compared with a 2-percent increase in new residential building and additions, alterations, and repairs.

The volume of work started this month was 21 percent less than in October a year ago, with declines in both Federal and non-Federal construction. The sharp drop of 57 percent in new residential building, however, was partially offset by an increase of 24 percent in addition, alteration, and repair values this October as compared with October 1943.

TABLE 1.—*Summary of Building Construction in All Urban Areas, October 1943, September and October 1944*

Class of construction	Number of buildings			Valuation		
	October 1944	Percent of change from—		October 1944 (in thousands)	Percent of change from—	
		Sep- tember 1944	October 1943		Sep- tember 1944	October 1943
All building construction.....	56,509	+10.1	-5.0	\$91,056	+12.1	-20.8
New residential.....	6,490	+11.3	-52.7	21,855	+1.7	-56.8
New nonresidential.....	8,159	+24.1	+4.6	39,170	+29.2	-2.5
Additions, alterations, and repairs.....	41,860	+7.5	+10.4	30,031	+2.1	+24.1

The total of 7,573 family dwelling units for which permits were issued or Federal contracts awarded during October 1944 was 13 percent above the September figure but 56 percent below that for October 1943. Over nine-tenths of the new dwelling units, or 6,878, were privately financed; 695 were in Federal war housing projects. In October a year ago Federally financed units accounted for over three-tenths of the total.

TABLE 2.—Number and Valuation of New Dwelling Units in All Urban Areas, by Source of Funds and Type of Dwelling, October 1943, September and October 1944

Source of funds and type of dwelling	Number of dwelling units			Valuation		
	October 1944	Percent of change from—		October 1944 (in thousands)	Percent of change from—	
		Sep-tember 1944	Octo-ber 1943		Sep-tember 1944	Octo-ber 1943
All dwellings.....	7,573	+13.3	-55.9	\$21,784	+5.2	-56.7
Privately financed.....	6,878	+10.2	-41.9	19,690	-.4	-48.0
1-family.....	5,284	+6.5	-24.7	15,225	-1.8	-36.4
2-family ¹	733	+27.5	-59.3	1,861	-8.4	-65.0
Multifamily ²	861	+22.1	-71.5	2,604	+15.8	-69.7
Federally financed.....	695	+56.9	-87.0	2,094	+127.1	-83.2

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

Comparison of First 10 Months of 1943 and 1944

Permit valuations and contract values for all building construction as reported in the first 10 months of 1944 are compared with similar data for 1943 in tables 3 and 4. The cumulative value of building construction started thus far in 1944 was nearly 918 million dollars,

TABLE 3.—Valuation of Building Construction in All Urban Areas, by Class of Construction, First 10 Months of 1943 and 1944

Class of construction	Valuation (in thousands of dollars)					
	Total construction			Federal construction		
	First 10 months of—		Percent of change	First 10 months of—		Percent of change
	1944	1943		1944	1943	
All construction.....	917,914	1,076,000	-14.7	273,226	498,327	-45.2
New residential.....	297,825	490,255	-39.3	41,461	172,844	-76.0
New nonresidential.....	360,333	390,826	-7.8	219,787	310,833	-29.3
Additions, alterations, and repairs.....	259,756	194,919	+33.3	11,978	14,650	-18.2

TABLE 4.—Number and Valuation of New Dwelling Units in All Urban Areas, by Source of Funds and Type of Dwelling, First 10 Months of 1943 and 1944

Source of funds and type of dwelling	Number of dwelling units			Valuation (in thousands of dollars)		
	First 10 months of—		Per-cent of change	First 10 months of—		Per-cent of change
	1944	1943		1944	1943	
All dwellings.....	96,355	177,087	-45.6	294,088	478,197	-38.5
Privately financed.....	81,388	101,840	-20.1	254,615	316,584	-19.6
1-family.....	62,461	65,603	-4.8	195,333	216,215	-9.7
2-family ¹	8,258	13,932	-40.7	27,863	38,985	-28.5
Multifamily ²	10,669	22,305	-52.2	31,419	61,384	-48.8
Federal.....	14,967	75,247	-80.1	39,473	161,613	-75.6

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

15 percent less than the valuation of 1 $\frac{1}{10}$ billion dollars for the same period of 1943. Non-Federal building was 12 percent higher, however, while Federal building had decreased in valuation by 45 percent. The 10-month cumulative value of new residential building was nearly two-fifths less this year than in 1943, as compared with a drop of only 8 percent for new nonresidential building and an increase of one-third for additions, alterations, and repairs.

Construction from Public Funds, October 1944

The value of contracts awarded and force-account work started during September and October 1944 and October 1943 on all construction projects, excluding shipbuilding, financed wholly or partially from Federal funds and reported to the Bureau of Labor Statistics is shown in table 5. This table includes construction both inside and outside the corporate limits of cities in urban areas of the United States.

TABLE 5.—Value of Contracts Awarded and Force-Account Work Started on Construction Projects ¹ Financed From Federal Funds, October 1944

Source of funds	Value (in thousands) of contracts awarded and force-account work started in—		
	October 1944 ²	September 1944 ³	October 1943 ³
All Federal funds.....	\$61,726	\$94,479	\$183,260
War public works.....	5,351	7,066	4,919
Regular Federal appropriations ¹	54,185	84,990	146,507
Federal Public Housing Authority.....	2,190	2,423	31,834

¹ Excludes the following amounts for ship construction: October 1944, \$29,697; September 1944, \$37,722; October 1943, \$190,439.

² Preliminary; subject to revision.

³ Revised.

Coverage and Method

Figures on building construction in this report cover the entire urban area of the United States which by Census definition includes all incorporated places with a 1940 population of 2,500 or more and, by special rule, a small number of unincorporated civil divisions. Valuation figures, the basis for statements concerning volume, are derived from the estimates of construction cost 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 urban areas is included in the tabulations.

Reports of building permits which were received in October 1944 for cities containing between 80 and 85 percent of the urban population of the country provide the basis for estimating the total number of buildings and dwelling units and the valuation of private urban construction. Similar data for Federally financed urban building construction are compiled directly from notifications of construction contracts awarded, as furnished by Federal agencies.

The contracts awarded for Federally financed building construction in urban areas were valued at \$27,895,000 in October 1944, \$20,516,000 in September 1944, and \$42,372,000 in October 1943.

Trend of Employment, Earnings, and Hours

Summary of Reports for October 1944

THE total number of employees in nonagricultural establishments was 38,481,000 in October 1944, over 110,000 less than in September and about a million and a quarter less than in October 1943, but the armed forces took almost 2,000,000 men and women during the year. Employment in each of the major industry divisions, with the exception of trade, declined over the month. The increase of 176,000 employees in trade was necessitated primarily by the increased fall volume of retail sales, due in part to gift buying for servicemen.

Industrial and Business Employment

Wage-earner employment in all manufacturing industries declined 142,000 over the month to 12,660,000, as compared with 13,965,000 in October 1943. Employment in each of the durable-goods groups and in all but two of the nondurable-goods groups is below that of

TABLE 1.—Estimated Number of Wage Earners and Indexes of Wage-Earner Employment in Manufacturing Industries, by Major Industry Group¹

Industry group	Estimated number of wage earners (in thousands)				Wage-earner indexes (1939=100)	
	October 1944 ²	September 1944	August 1944	October 1943	October 1944 ²	September 1944
All manufacturing.....	12,660	12,802	12,942	13,965	154.5	156.3
Durable goods.....	7,460	7,570	7,690	8,389	206.6	209.6
Nondurable goods.....	5,200	5,232	5,252	5,576	113.5	114.2
Iron and steel and their products.....	1,633	1,647	1,662	1,731	164.7	166.1
Electrical machinery.....	701	711	716	734	270.4	274.2
Machinery, other.....	1,127	1,137	1,151	1,255	213.3	215.2
Transportation equipment, except automobiles.....	1,913	1,948	1,992	2,324	1205.2	1227.1
Automobiles.....	662	676	684	751	164.6	168.2
Nonferrous metals and their products.....	365	369	378	422	159.0	161.1
Lumber and timber basic products.....	408	423	434	463	97.2	100.6
Furniture and finished lumber products.....	330	333	342	359	100.6	101.6
Stone, clay, and glass products.....	321	326	331	350	109.5	111.0
Textile-mill products and other fiber manufactures.....	1,072	1,077	1,084	1,187	93.8	94.2
Apparel and other finished textile products.....	766	763	765	825	97.0	96.6
Leather and leather products.....	303	303	307	314	87.4	87.3
Food.....	1,053	1,097	1,092	1,045	123.3	128.3
Tobacco manufactures.....	83	82	82	89	89.2	88.1
Paper and allied products.....	298	296	302	313	112.2	111.6
Printing, publishing, and allied industries.....	330	325	332	336	100.8	99.2
Chemicals and allied products.....	604	595	590	740	209.7	206.6
Products of petroleum and coal.....	133	134	135	126	125.6	126.2
Rubber products.....	189	191	191	195	156.6	157.6
Miscellaneous industries.....	369	369	372	406	150.7	150.7

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.

² Preliminary.

year ago. The transportation equipment group declined by more than 400,000 and in the chemicals, machinery, textile, and iron and steel groups, by 100,000 or more. Only the food and petroleum groups employed more wage earners in October 1944 than in October 1943, and in each the increase was less than 10,000.

Further curtailment in many of the war industries is primarily responsible for a decline between September and October of 110,000 wage earners in the durable-goods group as a whole. A greater-than-seasonal decline in the lumber group, owing in part to the difficulty of recruiting labor, also contributed to the over-all decrease.

The decline of 32,000 wage earners in the nondurable-goods group as a whole was brought about by seasonal decreases in the food group, primarily in the canning industry.

Employment in bituminous-coal mining was 343,000 in October—5,000 less than in September and 30,000 less than in October 1943. Each of the important mining States reported fewer coal miners in October than in September. The number of metal miners also declined, reflecting in part the curtailment in aluminum mining.

Public Employment

Regular Federal.—Employment in the executive branch of the Federal Government declined 23,000 in October 1944 to a total of 3,271,000. An increase of approximately 2,000 occurred in the Post Office Department, but declines of 12,000 and 6,000 occurred in the War and Navy Departments, respectively, and smaller declines in a number of the other agencies. Employment outside the continental limits of the United States showed an increase of 5,000 in war agencies but remained practically the same (16,000) in other agencies.

In the Washington metropolitan area, employment declined 5,500 in October 1944 to a total of 259,000. This was 29,000 below the peak in March 1943 and 64,000 above the level in November 1941. Three of every five persons on full-time jobs in October 1944 were women.

Although total employment in Government corporations showed slight change between September and October 1944, the Panama Railroad Co. expanded its activities, while employment in the Federal Reserve Banks and banks of the Farm Credit Administration declined.

Shipbuilding and repair.—Employment on the Federal shipbuilding program declined 23,000 in October 1944 to a total of 1,477,000. Half the decline occurred in the North Atlantic region; the other half was distributed throughout the other regions. Pay rolls did not show proportionate changes because of the fact that in many of the shipyards five workweeks ended during October—instead of the usual four.

Sources of data.—Data for the Federal executive service are reported to the Civil Service Commission, whereas data for the legislative and judicial services and Government corporations are reported to the Bureau of Labor Statistics (table 2). Employment and pay rolls on shipbuilding and repair projects (table 3) are received directly from all shipyards within continental United States. Employees in the United States navy yards are included both in the data for the Federal executive service and in those for shipbuilding and repair.

TABLE 2.—Employment and Pay Rolls in Regular Federal Services, and in Government Corporations, October 1944

[Subject to revision]

Service	Employment			Pay rolls		
	October 1944	September 1944	October 1943	October 1944	September 1944	October 1943
Total.....	3, 315, 851	3, 338, 350	3, 227, 138	\$708, 104, 839	\$713, 292, 650	\$681, 674, 000
Executive ²	3, 270, 519	3, 293, 408	3, 181, 084	700, 237, 000	705, 285, 000	(1)
War agencies ³	2, 426, 755	2, 445, 954	2, 363, 983	531, 062, 000	535, 297, 000	518, 200, 000
Continental United States.....	2, 053, 019	2, 076, 973	2, 025, 039	(1)	(1)	(1)
Outside continental United States ⁴	373, 736	368, 981	338, 944	(1)	(1)	(1)
Other agencies.....	843, 744	847, 474	817, 101	168, 575, 000	169, 355, 000	163, 474, 000
Continental United States.....	827, 920	831, 525	799, 336	(1)	(1)	(1)
Outside continental United States ⁴	15, 824	15, 949	17, 765	(1)	(1)	(1)
Judicial.....	2, 633	2, 641	2, 651	754, 771	776, 729	768, 235
Legislative.....	6, 240	6, 272	6, 135	1, 522, 068	1, 526, 921	1, 502, 366
Government corporations ⁵	36, 459	36, 029	37, 268	5, 591, 000	5, 704, 000	(1)

¹ Data not available.² Includes employees in United States navy yards who are also included under shipbuilding (table 3) and employees on force-account construction who are also included under construction projects (table 4). Pay rolls are estimated.³ 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, Selective Service System, the Petroleum Administration for War, War Refugee Board, and Committee for Congested Production Areas.⁴ Includes Alaska and the Panama Canal Zone.⁵ Data are for employees of the Panama Railroad Co., the Federal Reserve Banks, and banks of the Farm Credit Administration, who are paid out of operating revenues and not out of Federal appropriations. Data for other Government corporations are included under executive service.

TABLE 3.—Total Employment and Pay Rolls in United States Navy Yards and Private Shipyards Within Continental United States, by Shipbuilding Region, October 1944

Shipbuilding region	Employment (in thousands)			Pay rolls (in thousands)		
	October 1944 ¹	September 1944	October 1943	October 1944 ¹	September 1944	October 1943
All regions.....	1, 476. 9	1, 500. 0	1, 715. 3	\$432, 616	\$437, 815	\$451, 288
United States navy yards ²	320. 7	322. 0	325. 7	90, 406	90, 815	90, 506
Private shipyards.....	1, 156. 2	1, 178. 0	1, 389. 6	342, 210	347, 000	360, 782
North Atlantic.....	527. 9	540. 2	634. 4	156, 235	158, 269	(3)
South Atlantic.....	130. 0	132. 0	152. 7	35, 231	36, 435	(3)
Gulf.....	195. 7	198. 2	232. 9	57, 966	60, 777	(3)
Pacific.....	510. 4	513. 5	577. 5	150, 740	150, 672	(3)
Great Lakes.....	54. 8	56. 4	66. 6	17, 324	16, 360	(3)
Inland.....	58. 1	59. 7	51. 2	15, 120	15, 302	(3)

¹ Preliminary.² Includes all navy yards within continental United States constructing or repairing ships, including the Curtis Bay (Md.) Coast Guard Yard.³ Break-down not available.

Construction Employment

Employment on Federally financed projects constituted 55 percent of the total site employment of 913,000 in October 1943, but a decline of 289,000 owing to the completion of war facilities brought it to 35 percent of the 609,000 total in October 1944. Site employment on non-Federal projects, on the other hand, showed little change from October 1943 to October 1944 in its level of approximately 400,000. There was a marked shift, however, from residential to nonresidential building projects.

During the month of October 1944, employment on nonresidential building construction increased 5,200 on Federal projects and 4,800

on non-Federal projects. Early declines on the construction and maintenance of State roads (starting in September) indicate disturbance of the usual seasonal pattern by wartime conditions. Monthly changes on the other types of projects were relatively small.

Source of data.—For construction projects financed wholly or partially from Federal funds, the Bureau of Labor Statistics receives monthly reports on employment and pay rolls at the construction site, directly from the contractors or from the Federal agency sponsoring the project. Force-account employees hired directly by the Federal Government are also included in table 2 under Federal executive service.

Estimates of employment on non-Federal construction projects (except State roads) are obtained by converting the value of work started (compiled from reports on building permits issued, priorities granted, and from certain special reports) into monthly expenditures and employment by means of factors which have been developed from special studies and adjusted to current conditions. For State roads projects, data represent estimates of the Public Roads Administration.

TABLE 4.—*Estimated Employment and Pay Rolls on Construction Within Continental United States, October 1944*

Type of project	Employment (in thousands)			Pay rolls (in thousands)		
	October 1944 ¹	September 1944	October 1943	October 1944 ¹	September 1944	October 1943
New construction, total ²	747.6	760.1	1,083.3	(3)	(3)	(3)
At the construction site.....	609.3	614.4	913.1	(3)	(3)	(3)
Federal projects ⁴	215.1	216.2	504.5	\$47,039	\$43,631	\$99,664
Airports.....	11.4	15.0	53.4	2,448	2,989	9,386
Buildings.....	137.5	133.6	348.4	30,891	27,271	71,347
Residential.....	16.4	17.7	58.1	3,348	3,673	11,685
Nonresidential ⁵	121.1	115.9	290.3	27,543	23,598	59,662
Electrification.....	.6	.6	.5	91	96	85
Reclamation.....	11.0	12.6	18.8	2,434	2,848	3,916
River, harbor, and flood control.....	19.5	19.4	27.8	4,059	3,698	5,743
Streets and highways.....	16.4	16.3	31.4	3,467	3,307	5,502
Water and sewer systems.....	5.5	5.9	6.9	943	962	1,156
Miscellaneous.....	13.2	12.8	17.3	2,706	2,460	2,529
Non-Federal projects.....	394.2	398.2	408.6	(3)	(3)	(3)
Buildings.....	200.7	199.7	213.0	46,763	46,730	47,286
Residential.....	94.3	98.1	143.4	(3)	(3)	(3)
Nonresidential.....	106.4	101.6	69.6	(3)	(3)	(3)
Farm.....	53.5	54.4	52.0	(3)	(3)	(3)
Public utilities.....	88.0	90.6	91.5	(3)	(3)	(3)
Streets and highways.....	35.6	36.1	43.5	(3)	(3)	(3)
State.....	17.1	17.6	22.4	(3)	(3)	(3)
County and municipal.....	18.5	18.5	21.1	(3)	(3)	(3)
Miscellaneous.....	16.4	17.4	8.6	(3)	(3)	(3)
Other ⁶	138.3	145.7	170.2	(3)	(3)	(3)
Maintenance of State roads ⁷	90.5	92.0	89.8	(3)	(3)	(3)

¹ Preliminary.

² Data are for all construction workers (contract and force-account) engaged on new construction, alterations, and on repair work of the type usually covered by building permits. (Force-account employees are workers hired directly by the owner and utilized as a separate work force to perform construction work of the type usually chargeable to capital account.) The construction figure included in the Bureau's nonagricultural employment series covers only employees of construction contractors and on Federal force account, and excludes force-account workers of State and local governments, public utilities, and private firms.

³ Data not available.

⁴ Includes the following force-account employees hired directly by the Federal Government; October 1943, 43,470; September 1944, 28,403; October 1944, 25,885. These employees are also included under the Federal executive service (table 2); all other workers were employed by contractors and subcontractors.

⁵ Includes the following employees and pay rolls for Defense Plant Corporation (RFC) projects: October 1943, 121,000, \$26,791,000; September 1944, 24,900, \$5,793,000; October 1944, 20,400, \$4,700,000.

⁶ Includes central office force of construction contractors, shop employees of special trades contractors, such as bench sheet-metal workers, etc., and site employees engaged on projects which, for security reasons, cannot be shown above.

⁷ Data for other types of maintenance not available.

Detailed Reports for Industrial and Business Employment, September 1944

Estimates of Nonagricultural Employment

ESTIMATES of employment in nonagricultural establishments are shown in table 1. The estimates are based on reports of employers to the Bureau of Labor Statistics, on unemployment-compensation data made available by the Bureau of Employment Security of the Federal Security Agency, and on information supplied by other Government agencies, such as the Interstate Commerce Commission, Civil Service Commission, Bureau of the Census, and the Bureau of Old-Age and Survivors Insurance. The estimates include all wage and salaried workers in nonagricultural establishments but exclude military personnel, proprietors, self-employed persons, and domestic servants.

Estimates of employees in nonagricultural establishments, by States, are published each month in a detailed report on employment and pay rolls.

TABLE 1.—Estimated Number of Employees in Nonagricultural Establishments, by Industry Division

Industry division	Estimated number of wage earners (in thousands)			
	September 1944	August 1944	July 1944	September 1943
Total estimated employment ¹	38, 593	38, 741	38, 731	39, 678
Manufacturing.....	15, 873	16, 020	16, 013	17, 136
Mining.....	826	854	833	880
Contract construction and Federal force-account construction.....	679	700	686	1, 091
Transportation and public utilities.....	3, 793	3, 818	3, 809	3, 688
Trade.....	6, 996	6, 918	6, 942	6, 936
Finance, service, and miscellaneous.....	4, 480	4, 582	4, 618	4, 079
Federal, State, and local government, excluding Federal force-account construction.....	5, 946	5, 869	5, 830	5, 868

¹ Estimates include all full- and part-time wage and salary workers in nonagricultural establishments who are employed during the pay period ending nearest the 15th of the month. Proprietors, self-employed persons, domestic servants, and personnel of the armed forces are excluded.

Industrial and Business Employment

Monthly reports on employment and pay rolls are available for 154 manufacturing industries and for 26 nonmanufacturing industries, including 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 cleaning and dyeing, 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 about 25 percent for wholesale and retail trade, cleaning and dyeing, and insurance, to about 80 percent for public utilities and 90 percent for mining.

The general manufacturing indexes are computed from reports supplied by representative establishments in the 154 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 154 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 period ending nearest the 15th of the month.

INDEXES OF EMPLOYMENT AND PAY ROLLS

Employment and pay-roll indexes, for both manufacturing and nonmanufacturing industries, for July, August, and September 1944, and for September 1943, are presented in tables 3 and 5.

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. Furthermore, no attempt has been made to allocate among the separate industries the adjustments to unemployment-compensation data. Hence, the estimates for individual industries within a group do not in general add to the total for that group.



TABLE 2.—Estimated Number of Wage Earners in Manufacturing Industries ¹

Industry	Estimated number of wage earners (in thousands)			
	September 1944	August 1944	July 1944	September 1943
All manufacturing	12,802	12,942	12,924	13,935
Durable goods	7,570	7,690	7,726	8,319
Nondurable goods	5,232	5,252	5,198	5,616
<i>Durable goods</i>				
Iron and steel and their products	1,647	1,662	1,657	1,721
Blast furnaces, steel works, and rolling mills	476.7	482.0	481.0	511.7
Gray-iron and semisteel castings	72.6	73.1	72.6	78.6
Malleable-iron castings	25.0	24.7	24.3	25.7
Steel castings	72.3	73.5	73.5	81.6
Cast-iron pipe and fittings	15.3	15.5	15.5	15.2
Tin cans and other tinware	41.9	42.0	41.2	35.1
Wire drawn from purchased rods	32.6	32.5	32.9	35.4
Wirework	35.5	35.3	35.5	32.9
Cutlery and edge tools	23.0	22.7	22.8	21.6
Tools (except edge tools, machine tools, files, and saws)	27.0	27.2	27.1	27.0
Hardware	45.6	46.2	45.8	45.5
Plumbers' supplies	22.7	23.0	22.7	23.2
Stoves, oil burners, and heating equipment, not elsewhere classified	63.3	64.0	63.7	57.2
Steam and hot-water heating apparatus and steam fittings	55.1	55.5	55.5	59.2
Stamped and enameled ware and galvanizing	88.3	89.6	89.0	91.5
Fabricated structural and ornamental metalwork	73.9	74.5	76.1	71.7
Metal doors, sash, frames, molding, and trim	12.8	13.5	13.2	13.2
Bolts, nuts, washers, and rivets	25.7	26.2	26.3	29.6
Forgings, iron and steel	35.0	35.1	35.0	40.0
Wrought pipe, welded and heavy riveted	25.3	25.8	26.2	26.7
Screw-machine products and wood screws	43.4	44.2	45.0	48.8
Steel barrels, kegs, and drums	7.3	7.4	6.9	8.5
Firearms ²	43.6	43.7	44.5	66.4
Electrical machinery	711	716	720	725
Electrical equipment	444.4	449.6	449.8	467.2
Radios and phonographs	124.6	124.5	127.1	119.3
Communication equipment	110.2	110.4	112.3	113.2
Machinery, except electrical	1,137	1,151	1,161	1,248
Machinery and machine-shop products	454.2	460.3	462.2	495.5
Engines and turbines ²	69.3	70.3	70.2	69.5
Tractors	57.5	58.7	60.0	55.3
Agricultural machinery, excluding tractors	44.2	44.5	45.4	40.4
Machine tools	75.6	76.0	77.0	100.9
Machine-tool accessories	65.5	66.5	67.8	85.4
Textile machinery	27.0	26.6	26.8	28.2
Pumps and pumping equipment	75.2	77.0	79.0	78.3
Typewriters	11.7	11.4	11.3	11.6
Cash registers, adding and calculating machines	31.9	32.2	32.2	35.8
Washing machines, wringers, and driers, domestic	12.9	13.2	13.6	14.5
Sewing machines, domestic and industrial	9.8	9.5	9.4	10.7
Refrigerators and refrigeration equipment	51.0	52.2	52.2	56.4
Transportation equipment, except automobiles	1,948	1,992	2,027	2,299
Locomotives	35.3	35.8	35.6	34.4
Cars, electric and steam-railroad	57.7	58.1	58.7	58.9
Shipbuilding and boatbuilding ²	1,074.2	1,092.0	1,116.7	1,270.2
Motorcycles, bicycles, and parts	8.9	9.3	9.4	9.9
Automobiles	676	684	678	734
Nonferrous metals and their products	369	378	379	417
Smelting and refining, primary, of nonferrous metals	44.1	47.2	48.3	58.9
Alloying and rolling and drawing of nonferrous metals, except aluminum	69.2	69.5	68.1	75.7
Clocks and watches	26.0	25.9	25.5	25.1
Jewelry (precious metals) and jewelers' findings	13.5	13.8	13.7	15.3
Silverware and plated ware	30.9	30.7	30.6	31.6
Lighting equipment	27.1	27.1	26.5	25.5
Aluminum manufactures	66.4	69.6	72.7	84.8
Sheet-metal work, not elsewhere classified	32.8	32.8	32.3	28.2
Lumber and timber basic products	423	434	431	467
Sawmills and logging camps	233.5	240.1	237.5	256.1
Planing and plywood mills	69.7	71.0	71.3	78.7

See footnotes at end of table.

TABLE 2.—Estimated Number of Wage Earners in Manufacturing Industries¹—Con.

Industry	Estimated number of wage earners (in thousands)			
	September 1944	August 1944	July 1944	September 1943
<i>Durable goods—Continued</i>				
Furniture and finished lumber products.....	333	342	340	356
Mattresses and bedsprings.....	17.6	17.4	16.9	19.3
Furniture.....	153.4	157.2	156.5	167.0
Wooden boxes, other than cigar.....	27.4	28.1	28.2	29.1
Caskets and other morticians' goods.....	12.3	12.7	12.7	11.6
Wood preserving.....	9.8	10.4	10.2	10.0
Wood, turned and shaped.....	21.2	22.0	21.9	21.5
Stone, clay, and glass products.....	326	331	333	352
Glass and glassware.....	88.3	90.0	91.3	89.4
Glass products made from purchased glass.....	10.2	10.1	10.3	10.8
Cement.....	17.3	17.5	17.4	22.8
Brick, tile, and terra cotta.....	41.9	43.0	42.8	48.0
Pottery and related products.....	40.5	41.1	41.4	42.2
Gypsum.....	4.0	4.0	4.1	4.5
Wallboard, plaster (except gypsum), and mineral wool.....	9.6	9.9	9.7	11.1
Lime.....	8.0	8.3	8.2	9.2
Marble, granite, slate, and other products.....	13.4	13.5	13.1	12.6
Abrasives.....	21.1	21.1	21.3	23.9
Asbestos products.....	19.9	20.5	20.6	21.6
<i>Nondurable goods</i>				
Textile-mill products and other fiber manufactures.....	1,077	1,084	1,089	1,185
Cotton manufactures, except smallwares.....	427.5	431.4	434.2	471.0
Cotton smallwares.....	13.0	13.0	13.1	15.7
Silk and rayon goods.....	88.3	88.7	88.5	93.9
Woolen and worsted manufactures, except dyeing and finishing.....	145.8	144.8	145.9	160.3
Hosiery.....	102.9	104.4	104.7	113.2
Knitted cloth.....	10.1	10.3	10.4	11.5
Knitted outerwear and knitted gloves.....	28.4	28.5	28.8	31.9
Knitted underwear.....	34.3	35.2	35.2	39.4
Dyeing and finishing textiles, including woolen and worsted.....	59.4	59.5	60.1	65.2
Carpets and rugs, wool.....	20.1	20.2	19.9	21.1
Hats, fur-felt.....	9.2	9.1	9.2	9.9
Jute goods, except felts.....	3.3	3.3	3.2	3.6
Cordage and twine.....	15.1	15.1	15.3	16.4
Apparel and other finished textile products.....	763	765	747	822
Men's clothing, not elsewhere classified.....	208.0	210.5	208.2	221.2
Shirts, collars, and nightwear.....	51.7	52.1	53.2	56.5
Underwear and neckwear, men's.....	12.2	12.1	11.9	12.8
Work shirts.....	14.7	15.0	15.1	17.8
Women's clothing, not elsewhere classified.....	216.4	214.6	205.0	231.2
Corsets and allied garments.....	14.4	14.4	14.4	16.1
Millinery.....	19.3	19.0	17.4	19.3
Handkerchiefs.....	2.8	2.8	2.9	3.6
Curtains, draperies, and bedspreads.....	13.1	13.3	13.3	15.9
Housefurnishings, other than curtains, etc.....	10.9	10.6	10.4	13.4
Textile bags.....	13.6	14.0	14.0	13.9
Leather and leather products.....	303	307	307	315
Leather.....	39.4	40.0	40.0	41.9
Boot and shoe cut stock and findings.....	15.5	16.0	16.1	16.4
Boots and shoes.....	172.0	173.8	174.0	178.4
Leather gloves and mittens.....	12.5	12.6	12.6	13.6
Trunks and suitcases.....	12.3	12.3	12.1	12.1
Food.....	1,097	1,092	1,052	1,102
Slaughtering and meat packing.....	150.6	156.3	158.7	159.3
Butter.....	22.3	24.0	24.8	22.4
Condensed and evaporated milk.....	14.2	15.1	15.8	13.4
Ice cream.....	15.4	17.3	18.0	15.6
Flour.....	27.8	28.1	29.0	28.9
Feeds, prepared.....	19.8	20.3	19.9	21.4
Cereal preparations.....	8.5	9.1	9.3	10.1
Baking.....	256.6	258.5	258.4	250.5
Sugar refining, cane.....	14.9	15.4	15.2	14.7
Sugar, beet.....	6.7	4.6	4.0	7.7
Confectionery.....	56.5	56.6	54.2	53.5
Beverages, nonalcoholic.....	29.8	31.6	32.2	29.7
Malt liquors.....	52.9	53.5	53.3	48.0
Canning and preserving.....	242.7	219.7	177.2	247.6

See footnotes at end of table.

TABLE 2.—Estimated Number of Wage Earners in Manufacturing Industries¹—Con.

Industry	Estimated number of wage earners (in thousands)			
	September 1944	August 1944	July 1944	September 1943
<i>Nondurable goods—Continued</i>				
Tobacco manufactures.....	82	82	83	88
Cigarettes.....	34.6	34.9	35.0	34.5
Cigars.....	34.4	34.4	34.7	40.1
Tobacco (chewing and smoking) and snuff.....	8.0	7.9	7.8	8.3
Paper and allied products.....	296	302	304	311
Paper and pulp.....	144.5	146.8	146.3	148.5
Paper goods, other.....	42.4	44.8	45.9	47.3
Envelopes.....	9.5	9.5	9.5	10.2
Paper bags.....	13.1	13.6	13.6	12.3
Paper boxes.....	77.7	78.5	79.3	83.0
Printing, publishing, and allied industries.....	325	332	333	330
Newspapers and periodicals.....	109.3	110.2	109.7	112.4
Printing, book and job.....	130.3	133.3	135.0	128.8
Lithographing.....	24.0	24.8	25.1	25.3
Bookbinding.....	27.1	27.9	28.2	29.0
Chemicals and allied products.....	595	590	584	738
Paints, varnishes, and colors.....	29.5	30.0	30.0	29.5
Drugs, medicines, and insecticides.....	49.0	50.0	50.5	46.4
Perfumes and cosmetics.....	12.0	12.2	11.9	11.2
Soap.....	13.5	13.5	13.5	13.2
Rayon and allied products.....	52.7	53.1	52.7	52.4
Chemicals, not elsewhere classified.....	117.0	118.3	118.9	119.0
Explosives and safety fuses ²	83.8	81.2	76.0	86.3
Compressed and liquefied gases.....	5.9	6.1	6.1	6.3
Ammunition, small-arms ²	49.8	47.3	48.1	157.9
Fireworks ²	28.5	30.1	30.5	29.8
Cottonseed oil.....	16.7	12.3	11.3	20.3
Fertilizers.....	19.1	19.1	18.6	19.8
Products of petroleum and coal.....	134	135	134	126
Petroleum refining.....	90.7	91.4	90.5	82.3
Coke and byproducts.....	22.9	23.2	23.1	24.0
Paving materials.....	1.7	1.8	1.8	1.7
Roofing materials.....	9.5	9.6	9.7	9.7
Rubber products.....	191	191	190	195
Rubber tires and inner tubes.....	92.3	91.2	89.6	91.3
Rubber boots and shoes.....	18.5	19.5	19.6	21.4
Rubber goods, other.....	70.4	71.2	71.9	72.7
Miscellaneous industries.....	369	372	375	404
Instruments (professional and scientific) and fire-control equipment ²	61.5	61.6	62.2	71.4
Photographic apparatus.....	27.9	28.8	29.6	30.7
Optical instruments and ophthalmic goods ²	23.4	23.8	23.9	27.5
Pianos, organs, and parts.....	6.8	6.3	6.1	10.4
Games, toys, and dolls.....	16.9	17.0	16.4	15.7
Buttons.....	9.0	9.1	9.2	10.1
Fire extinguishers.....	5.0	5.6	5.6	7.3

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. 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, the sum of the individual industry estimates will not agree with totals shown for the major industry groups.

² Comparable data for the months from January 1939 through June 1944 are available upon request.

TABLE 3.—Indexes of Wage-Earner Employment and Wage-Earner Pay Roll in Manufacturing Industries ¹

[1939 average=100]

Industry	Wage-earner employment				Wage-earner pay roll			
	September 1944	August 1944	July 1944	September 1943	September 1944	August 1944	July 1944	September 1943
All manufacturing.....	156.3	158.0	157.8	170.1	313.1	314.0	310.7	328.0
Durable goods.....	209.6	213.0	214.0	230.4	428.6	432.6	428.5	460.7
Nondurable goods.....	114.2	114.6	113.5	122.6	200.2	198.0	195.6	198.3
<i>Durable goods</i>								
Iron and steel and their products.....	166.1	167.6	167.1	173.6	312.0	309.2	306.2	312.8
Blast furnaces, steel works, and rolling mills.....	122.7	124.1	123.8	131.7	226.7	222.7	224.9	232.7
Gray-iron and semisteel castings.....	124.3	125.2	124.2	134.6	250.8	244.2	243.6	249.5
Malleable-iron castings.....	138.8	136.7	134.8	142.5	292.5	279.7	273.5	275.4
Steel castings.....	240.3	244.4	244.4	271.2	452.0	455.9	434.4	475.8
Cast-iron pipe and fittings.....	92.4	93.7	93.6	91.7	180.5	178.4	177.0	165.0
Tin cans and other tinware.....	131.8	132.1	129.7	110.6	224.8	221.5	212.1	177.9
Wire drawn from purchased rods.....	148.4	148.1	149.9	161.3	247.5	243.5	240.3	262.8
Wirework ²	116.9	116.1	116.7	108.2	237.5	231.5	236.5	203.3
Cutlery and edge tools.....	149.2	147.5	148.0	140.0	310.0	304.6	304.2	282.0
Tools (except edge tools, machine tools, files, and saws).....	176.3	177.4	177.2	176.4	328.6	331.4	327.8	324.6
Hardware.....	128.0	129.7	128.4	127.7	261.1	261.8	257.6	254.0
Plumbers' supplies.....	92.0	93.4	92.3	94.0	166.9	169.9	164.2	156.8
Stoves, oil burners, and heating equipment, not elsewhere classified.....	137.2	138.7	138.1	124.0	262.5	256.2	252.3	219.2
Steam and hot-water heating apparatus and steam fittings.....	181.9	183.2	183.1	195.3	341.3	344.9	338.4	363.6
Stamped and enameled ware and galvanizing.....	159.0	161.3	160.2	164.6	326.6	324.4	319.8	314.5
Fabricated structural and ornamental metal-work.....	208.0	209.8	214.1	201.8	406.6	411.2	417.6	372.1
Metal doors, sash, frames, molding, and trim.....	165.0	173.9	171.0	170.7	302.6	319.6	315.4	325.2
Bolts, nuts, washers, and rivets.....	179.4	182.8	184.0	206.8	347.3	354.3	340.5	386.2
Forgings, iron and steel.....	227.5	228.2	227.7	260.0	455.2	433.5	434.2	488.8
Wrought pipe, welded and heavy riveted.....	302.5	308.3	313.3	319.6	586.2	604.1	600.6	567.7
Screw-machine products and wood screws.....	256.4	261.1	265.7	288.5	502.8	512.1	507.7	549.0
Steel barrels, kegs, and drums.....	119.4	121.2	113.8	140.2	234.6	241.6	214.7	263.8
Firearms ³	871.5	873.5	889.7	1328.2	2002.6	1995.6	1998.0	2043.3
Electrical machinery.....	274.2	276.2	277.8	279.8	500.9	493.1	494.2	487.7
Electrical equipment.....	245.9	248.7	248.8	258.5	457.7	455.6	450.6	457.6
Radios and phonographs.....	286.4	286.2	292.2	274.1	547.0	534.1	542.4	508.8
Communication equipment.....	343.2	343.7	349.6	352.3	561.8	551.9	558.3	531.4
Machinery, except electrical.....	215.2	217.8	219.8	236.2	403.1	406.2	403.5	435.2
Machinery and machine-shop products.....	224.5	227.5	228.4	244.9	411.8	416.5	408.6	440.5
Engines and turbines ³	371.3	376.8	376.3	372.5	772.6	786.3	783.7	773.4
Tractors.....	183.8	187.5	191.7	176.7	291.0	291.0	283.4	269.5
Agricultural machinery, excluding tractors.....	159.0	160.1	163.2	145.4	332.7	319.1	304.4	283.8
Machine tools.....	206.5	207.4	210.2	275.5	366.8	369.2	370.6	455.3
Machine-tool accessories.....	260.4	264.2	269.5	339.4	449.6	449.8	457.9	550.1
Textile machinery.....	123.3	121.3	122.3	128.7	226.3	226.0	225.7	227.1
Pumps and pumping equipment.....	310.2	317.9	326.0	322.9	665.6	669.3	676.1	678.2
Typewriters.....	72.3	70.5	69.4	71.7	144.4	140.1	140.2	143.4
Cash registers, adding and calculating machines.....	162.2	163.4	163.6	181.8	317.0	319.6	315.2	366.1
Washing machines, wringers, and driers, domestic.....	172.3	177.4	182.1	163.9	306.1	310.7	326.9	335.9
Sewing machines, domestic and industrial.....	125.5	120.8	120.2	136.7	261.8	249.4	246.9	300.2
Refrigerators and refrigeration equipment.....	145.2	148.3	148.5	160.6	251.0	267.8	248.8	288.3
Transportation equipment, except automobiles.....	1227.1	1255.3	1277.0	1448.6	2569.4	2606.1	2602.4	2933.1
Locomotives.....	546.0	552.8	550.7	531.0	1222.9	1279.0	1183.3	1116.2
Cars, electric- and steam-railroad.....	235.3	236.9	239.4	240.2	454.2	463.3	466.9	431.9
Shipbuilding and boatbuilding ³	1551.4	1577.1	1612.7	1834.4	3399.3	3379.1	3386.5	3907.7
Motorcycles, bicycles, and parts.....	127.9	133.8	134.5	142.5	244.7	242.7	249.4	252.1
Automobiles.....	164.6	169.9	168.4	182.5	299.9	308.2	302.8	339.3
Nonferrous metals and their products.....	161.1	164.8	165.2	181.8	299.1	306.0	304.7	336.8
Smelting and refining, primary, of nonferrous metals.....	159.5	170.8	174.7	213.1	297.8	315.1	324.8	389.8
Alloying and rolling and drawing of nonferrous metals, except aluminum.....	178.4	179.0	175.5	194.9	330.1	336.6	320.1	367.0
Clocks and watches.....	128.4	127.7	125.9	123.9	268.5	265.8	255.4	242.3
Jewelry (precious metals) and jewelers' findings.....	93.4	95.2	94.9	105.6	155.2	149.0	149.4	158.7
Silverware and plated ware.....	89.8	88.5	87.6	95.8	162.6	157.8	158.2	161.1
Lighting equipment.....	132.3	132.6	129.4	124.7	222.7	234.0	218.9	223.0
Aluminum manufactures.....	282.1	295.6	308.9	360.0	506.3	521.9	550.5	644.6
Sheet-metal work, not elsewhere classified.....	175.0	175.2	172.1	160.2	326.5	321.7	322.5	273.6

See footnotes at end of table.

TABLE 3.—Indexes of Wage-Earner Employment and Wage-Earner Pay Roll in Manufacturing Industries 1—Continued

[1939 average=100]

Industry	Wage-earner employment				Wage-earner pay roll			
	September 1944	August 1944	July 1944	September 1943	September 1944	August 1944	July 1944	September 1943
<i>Durable goods—Continued</i>								
Lumber and timber basic products.....	100.6	103.2	102.4	111.0	188.1	197.8	185.1	197.7
Sawmills and logging camps.....	81.1	83.4	82.5	88.9	154.3	164.8	151.5	162.1
Planing and plywood mills.....	95.9	97.7	98.2	108.3	167.2	167.4	165.5	175.7
Furniture and finished lumber products.....	101.6	104.1	103.5	108.6	186.2	191.4	183.8	183.2
Mattresses and bedsprings.....	95.9	94.8	92.0	105.1	167.5	161.3	155.2	168.9
Furniture.....	96.3	98.8	98.3	104.9	175.0	181.0	173.9	176.7
Wooden boxes, other than cigar.....	108.3	110.9	111.1	114.7	217.7	222.0	213.7	205.3
Caskets and other morticians' goods.....	99.2	102.0	101.8	93.2	172.4	177.8	162.0	143.2
Wood preserving.....	87.4	92.8	90.3	88.7	190.1	201.0	193.0	178.0
Wood, turned and shaped.....	96.4	99.8	99.7	98.0	174.1	180.6	176.2	159.2
Stone, clay, and glass products.....	111.0	112.9	113.4	119.8	187.1	189.0	184.1	188.5
Glass and glassware.....	126.5	129.0	130.7	128.1	200.7	204.3	197.1	193.3
Glass products made from purchased glass.....	101.5	101.3	103.4	107.5	172.6	169.8	165.5	160.5
Cement.....	72.6	73.4	73.2	95.7	115.8	117.8	112.8	139.9
Brick, tile, and terra cotta.....	73.9	75.7	75.5	84.5	119.3	124.1	121.5	128.3
Pottery and related products.....	122.4	124.1	125.0	127.5	189.1	193.0	187.0	185.8
Gypsum.....	80.6	80.0	82.7	90.2	137.3	140.7	140.9	147.8
Wallboard, plaster (except gypsum), and mineral wool.....	118.2	121.9	119.1	136.7	224.9	218.8	217.6	232.2
Lime.....	84.4	87.2	86.4	96.8	164.8	171.1	167.3	172.0
Marble, granite, slate, and other products.....	72.2	72.9	70.7	68.2	107.2	112.6	105.8	94.3
Abrasives.....	273.0	273.0	275.3	308.8	487.3	453.4	452.6	494.4
Asbestos products.....	125.2	128.7	129.4	135.9	252.5	253.1	253.2	260.2
<i>Nondurable goods</i>								
Textile-mill products and other fiber manufactures.....	94.2	94.8	95.2	103.6	169.1	168.2	168.5	172.0
Cotton manufactures, except smallwares.....	108.0	108.9	109.6	118.9	204.4	203.7	206.6	204.8
Cotton smallwares.....	97.9	97.3	98.1	118.0	173.9	173.9	174.7	195.6
Silk and rayon goods.....	73.7	74.1	73.9	78.3	132.8	133.7	130.7	131.5
Woolen and worsted manufactures, except dyeing and finishing.....	97.7	97.0	97.8	107.4	185.1	181.1	184.3	194.9
Hosiery.....	64.7	65.7	65.8	71.2	103.6	105.5	101.6	105.0
Knitted cloth.....	92.7	94.1	95.2	105.0	164.5	160.0	160.9	169.0
Knitted outerwear and knitted gloves.....	101.0	101.5	102.4	113.5	184.5	181.9	180.9	190.5
Knitted underwear.....	89.0	91.3	91.4	102.3	162.5	163.3	159.4	171.9
Dyeing and finishing textiles, including woolen and worsted.....	88.8	88.9	89.9	97.4	148.3	146.2	147.0	150.6
Carpets and rugs, wool.....	78.6	78.9	77.9	82.5	135.4	134.5	132.1	131.0
Hats, fur-felt.....	63.4	62.9	63.4	68.3	119.2	112.6	109.3	116.7
Jute goods, except felts.....	92.2	92.5	89.3	101.3	179.7	173.7	167.7	181.6
Cordage and twine.....	124.7	124.9	126.1	135.8	232.7	229.3	231.2	231.2
Apparel and other finished textile products.....	96.6	96.9	94.6	104.1	174.4	167.1	156.6	163.4
Men's clothing, not elsewhere classified.....	95.1	96.3	95.2	101.1	165.9	160.6	154.6	153.8
Shirts, collars, and nightwear.....	73.4	74.0	75.5	80.2	128.4	127.5	133.4	129.9
Underwear and neckwear, men's.....	75.6	74.6	73.7	79.2	151.2	143.3	142.3	140.5
Workshirts.....	109.3	111.8	112.1	132.2	216.2	208.5	183.2	223.5
Women's clothing, not elsewhere classified.....	79.6	79.0	75.5	85.1	148.4	139.6	126.5	136.1
Corsets and allied garments.....	76.5	76.7	76.5	85.8	131.0	128.7	126.4	139.6
Millinery.....	79.4	78.1	71.6	79.5	137.1	129.3	103.2	113.7
Handkerchiefs.....	58.0	58.8	59.4	73.3	104.7	103.8	104.1	116.5
Curtains, draperies, and bedspreads.....	77.5	78.5	78.4	94.2	149.9	142.3	149.4	163.3
Housefurnishings, other than curtains, etc.....	102.3	100.1	98.2	126.4	189.7	183.5	178.3	229.4
Textile bags.....	113.1	117.2	116.7	116.3	191.1	192.3	190.1	179.2
Leather and leather products.....	87.3	88.3	88.5	90.8	155.4	153.4	153.1	143.1
Leather.....	83.5	84.6	84.6	88.6	146.2	146.2	146.5	135.3
Boot and shoe cut stock and findings.....	82.4	85.1	85.5	86.8	141.6	140.4	141.5	129.5
Boots and shoes.....	78.9	79.7	79.8	81.8	143.1	140.2	139.8	131.1
Leather gloves and mittens.....	124.6	125.7	126.2	136.6	223.0	221.8	214.5	215.5
Trunks and suitcases.....	147.9	147.7	145.7	145.0	224.7	220.6	228.2	215.3
Food.....	128.3	127.8	123.1	129.0	199.8	200.1	196.5	184.8
Slaughtering and meat packing.....	125.0	129.7	131.7	132.2	200.3	210.7	219.6	192.4
Butter.....	124.4	133.5	137.9	124.9	191.6	205.2	215.7	180.3
Condensed and evaporated milk.....	146.6	155.7	162.7	138.0	240.4	255.3	271.0	208.1
Ice cream.....	98.2	110.1	114.4	99.4	139.3	157.9	163.5	129.2
Flour.....	112.1	113.6	116.9	116.6	197.3	196.2	195.3	179.5

See footnotes at end of table.

TABLE 3.—Indexes of Wage-Earner Employment and Wage-Earner Pay Roll in Manufacturing Industries—Continued

[1939 average=100]

Industry	Wage-earner employment				Wage-earner pay roll			
	September 1944	August 1944	July 1944	September 1943	September 1944	August 1944	July 1944	September 1943
<i>Nondurable goods—Continued</i>								
Food—Continued.								
Feeds, prepared.....	128.3	132.0	129.5	138.8	225.9	221.5	224.3	221.0
Cereal preparations.....	114.6	122.0	125.2	135.3	201.4	208.3	216.2	227.1
Baking.....	110.8	112.0	112.0	108.6	168.7	167.5	168.0	155.3
Sugar refining, cane.....	105.6	108.9	107.2	104.1	171.7	172.5	168.4	167.2
Sugar, beet.....	64.0	44.6	38.7	73.6	86.2	64.2	55.7	100.3
Confectionery.....	113.5	113.8	108.9	107.6	191.6	188.3	178.2	164.3
Beverages, nonalcoholic.....	140.1	148.8	151.6	139.5	188.3	206.4	213.0	172.3
Malt liquors.....	146.5	148.2	147.8	132.9	216.1	223.9	225.5	186.5
Canning and preserving.....	180.5	163.4	131.8	184.2	334.6	306.2	242.8	304.4
Tobacco manufactures.....	88.1	88.3	88.6	94.8	163.1	157.6	157.1	154.1
Cigarettes.....	126.1	127.2	127.7	125.6	202.3	195.9	196.9	179.8
Cigars.....	67.6	67.6	68.2	78.8	137.6	133.4	132.3	139.5
Tobacco (chewing and smoking) and snuff.....	87.4	86.0	84.6	90.5	143.8	135.6	132.7	132.1
Paper and allied products.....	111.6	113.9	114.4	117.1	184.6	186.0	184.9	176.7
Paper and pulp.....	105.1	106.8	106.4	108.0	179.1	180.6	178.6	168.4
Paper goods, other.....	112.7	119.0	122.0	125.6	181.1	187.3	194.1	183.6
Envelopes.....	109.4	109.5	109.6	117.7	166.3	165.4	167.2	170.1
Paper bags.....	118.5	122.4	122.4	111.0	201.6	199.6	194.4	175.0
Paper boxes.....	112.4	113.5	114.6	120.0	180.0	178.8	175.8	177.4
Printing, publishing, and allied industries.....	99.2	101.1	101.6	100.7	139.0	137.9	138.0	128.9
Newspapers and periodicals.....	92.1	92.9	92.5	94.7	119.6	118.4	117.1	114.5
Printing, book and job.....	103.2	105.5	106.9	102.0	151.5	149.4	151.9	133.1
Lithographing.....	92.2	95.2	96.5	97.3	132.8	132.3	132.4	126.1
Bookbinding.....	105.3	108.4	109.3	112.4	177.1	182.9	181.3	179.8
Chemicals and allied products.....	206.6	204.7	202.7	256.1	362.6	357.7	355.5	438.4
Paints, varnishes, and colors.....	104.9	106.4	106.8	104.8	166.0	169.1	167.1	156.2
Drugs, medicines, and insecticides.....	178.8	182.4	184.4	169.2	260.0	265.2	267.2	242.2
Perfumes and cosmetics.....	116.2	117.5	115.1	107.8	164.9	159.2	160.9	150.6
Soap.....	99.1	99.5	99.5	97.4	171.3	165.8	162.9	156.3
Rayon and allied products.....	109.2	110.0	109.2	108.5	176.1	175.7	174.0	170.3
Chemicals, not elsewhere classified.....	168.1	170.0	170.9	171.1	292.8	295.1	297.6	285.5
Explosives and safety fuses ³	1155.4	1119.1	1048.3	1190.2	1781.6	1725.0	1646.0	1855.2
Compressed and liquefied gases.....	148.5	153.8	154.0	159.4	262.9	271.7	270.4	266.3
Ammunition, small-arms ³	1168.8	1109.6	1126.9	3702.6	2232.2	2224.8	2271.1	7134.7
Fireworks ³	2458.5	2596.5	2632.8	2574.8	6727.2	6949.5	6957.9	6588.7
Cottonseed oil.....	109.7	81.0	74.6	133.6	224.3	154.2	143.6	243.5
Fertilizers.....	101.7	101.5	99.1	105.3	232.3	226.6	224.7	214.2
Products of petroleum and coal.....	126.2	127.3	126.7	119.0	221.0	220.7	223.0	195.0
Petroleum refining.....	124.6	125.5	124.3	113.0	213.3	214.0	215.6	182.4
Coke and byproducts.....	105.5	107.0	106.5	110.5	189.9	186.8	191.7	187.1
Paving materials.....	69.0	74.3	75.5	70.9	142.0	152.5	156.0	122.8
Roofing materials.....	117.9	119.7	120.6	120.3	219.0	218.0	218.6	207.8
Rubber products.....	157.6	158.1	157.4	161.2	288.8	285.4	277.2	273.4
Rubber tires and inner tubes.....	170.6	168.5	165.6	168.6	300.8	294.3	280.9	277.2
Rubber boots and shoes.....	125.0	131.4	132.1	144.1	226.6	233.4	237.0	248.8
Rubber goods, other.....	136.0	137.5	138.9	140.4	248.3	247.1	245.2	238.7
Miscellaneous industries.....	150.7	152.0	153.5	165.1	289.7	286.0	288.9	297.1
Instruments (professional and scientific) and fire-control equipment ³	556.6	557.1	562.3	645.4	1038.6	1031.9	1082.0	1167.0
Photographic apparatus.....	161.6	166.6	171.7	177.6	268.4	270.8	271.9	270.9
Optical instruments and ophthalmic goods ³	201.7	205.2	205.5	236.8	344.0	341.3	337.8	379.0
Pianos, organs, and parts.....	89.1	83.4	79.8	137.1	150.4	158.5	144.3	260.9
Games, toys, and dolls.....	90.3	91.2	88.0	84.1	181.8	181.5	169.8	141.7
Buttons.....	82.0	82.7	84.2	92.2	167.7	153.8	159.6	164.4
Fire extinguishers.....	549.1	560.0	561.3	732.6	1126.3	1076.2	1126.2	1318.0

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. Indexes for individual industries have been adjusted to levels indicated by the 1939 Census of Manufactures, but not to Federal Security Agency data.

² Revisions have been made as follows in the indexes published for earlier months: *Wirework*.—June 1944 pay-roll index to 230.7.

³ Comparable indexes for the months from January 1939 through June 1944 are available upon request.

TABLE 4.—Estimated Number of Wage Earners in Selected Nonmanufacturing Industries

Industry	Estimated number of wage earners (in thousands)			
	September 1944	August 1944	July 1944	September 1943
Coal mining:				
Anthracite.....	67.5	64.5	64.5	70.0
Bituminous.....	348.	352	351	374
Metal mining.....	72.7	75.4	77.3	95.7
Iron.....	26.4	27.1	27.4	32.5
Copper.....	22.5	23.8	25.2	31.4
Lead and zinc.....	15.0	15.4	15.5	18.8
Gold and silver.....	5.6	5.6	5.7	6.5
Miscellaneous.....	3.2	3.5	3.5	6.5
Telephone ^{1 2}	407	412	412	410
Electric light and power ²	201	203	203	209
Street railways and busses ²	230	230	230	229
Hotels (year-round) ²	352	353	352	348
Power laundries.....	241	246	253	250
Cleaning and dyeing.....	79.9	79.9	82.6	80.1
Class I steam railroads ³	1,428	1,449	1,443	1,373

¹ Data are available upon request back to January 1937.² Data include salaried personnel.³ Source—Interstate Commerce Commission. Data include salaried personnel.

TABLE 5.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries

[1939 average=100]

Industry	Employment indexes				Pay-roll indexes			
	Sep-tem-ber 1944	Aug-ust 1944	July 1944	Sep-tem-ber 1943	Sep-tem-ber 1944	Aug-ust 1944	July 1944	Sep-tem-ber 1943
Coal mining:								
Anthracite.....	81.5	77.9	77.9	84.5	150.1	145.8	130.6	144.2
Bituminous.....	93.9	95.0	94.7	101.0	207.8	215.6	194.4	202.4
Metal mining.....	82.4	85.5	87.6	108.5	130.8	136.6	135.1	171.6
Iron.....	131.3	134.6	136.2	161.3	212.0	219.9	211.9	260.5
Copper.....	94.2	100.0	105.6	131.7	153.3	161.5	168.4	219.3
Lead and zinc.....	96.3	98.9	99.8	121.1	176.7	182.8	177.0	212.4
Gold and silver.....	22.7	22.7	23.0	26.3	28.7	29.9	28.2	33.3
Miscellaneous.....	81.1	87.6	88.3	164.3	136.7	148.6	144.7	266.5
Quarrying and nonmetallic mining.....	84.3	86.7	86.4	95.6	158.2	165.3	160.7	168.0
Crude-petroleum production ¹	83.0	84.1	84.1	81.7	136.4	132.7	136.5	124.4
Public utilities:								
Telephone ²	128.2	129.6	129.7	129.0	159.4	156.6	156.8	149.9
Telegraph ³	122.2	122.8	123.9	128.2	177.9	177.9	179.3	164.3
Electric light and power.....	82.4	83.1	83.2	85.5	115.4	115.3	114.6	111.4
Street railways and busses.....	118.7	118.9	118.8	118.0	169.7	171.5	170.3	157.6
Wholesale trade.....	95.0	95.5	95.1	93.9	136.4	136.3	135.9	127.9
Retail trade.....	96.6	94.1	95.5	97.4	128.1	126.8	128.3	120.2
Food.....	106.3	104.6	104.4	104.5	139.2	141.7	142.4	129.5
General merchandise.....	109.6	102.8	104.5	110.6	139.0	132.8	136.7	130.5
Apparel ⁴	108.2	97.6	101.8	108.4	146.6	133.3	139.2	133.6
Furniture and housefurnishings.....	62.5	62.8	63.4	65.5	86.9	86.9	88.4	85.3
Automotive.....	65.7	66.9	66.6	62.9	96.8	98.2	97.5	86.1
Lumber and building materials.....	90.0	92.6	92.1	92.2	121.3	133.9	131.8	126.2
Hotels (year-round) ⁵	109.0	109.4	109.2	108.0	159.0	158.8	157.4	143.7
Power laundries.....	106.8	109.0	112.1	110.5	159.5	159.8	165.1	146.2
Cleaning and dyeing.....	118.4	118.4	122.3	118.7	185.5	178.6	187.3	170.6
Class I steam railroads ⁶	144.6	146.7	146.1	138.9	(7)	(7)	(7)	(7)
Water transportation ⁸	258.7	255.3	249.1	170.3	602.6	585.2	585.6	384.4

¹ Does not include well drilling or rig building.² Data are available upon request back to January 1937.³ Excludes messengers and approximately 6,000 employees of general and division headquarters and of cable companies.⁴ Revisions have been made as follows in indexes previously published: *Retail trade—Apparel group—Pay-roll index* June 1944 to 145.4.⁵ Cash payments only—additional value of board, room, and tips, not included.⁶ Source—Interstate Commerce Commission.⁷ Not available.⁸ 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.

AVERAGE EARNINGS AND HOURS

Average weekly earnings and hours and average hourly earnings for July, August, and September 1944, where available, are given in table 6 for both manufacturing and nonmanufacturing industries. The average weekly earnings for individual industries 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 computed by multiplying the average weekly hours by the corresponding average hourly earnings.

TABLE 6.—Earnings and Hours in Manufacturing and Nonmanufacturing Industries

Industry	Average weekly earnings ¹			Average weekly hours ¹			Average hourly earnings ¹		
	September 1944	August 1944	July 1944	September 1944	August 1944	July 1944	September 1944	August 1944	July 1944
							Cents	Cents	Cents
All manufacturing.....	\$46.25	\$45.86	\$45.43	44.9	45.2	44.6	103.1	101.6	101.8
Durable goods.....	52.18	51.82	51.07	46.1	46.7	45.7	113.1	111.1	111.6
Nondurable goods.....	37.67	37.15	37.05	43.0	43.0	43.0	87.6	86.5	86.2
<i>Durable goods</i>									
Iron and steel and their products.....	51.24	50.25	50.01	46.6	46.7	46.0	110.0	107.5	108.6
Blast furnaces, steel works, and rolling mills.....	55.43	53.80	54.58	46.3	46.4	45.9	119.8	116.3	118.9
Gray-iron and semisteel castings.....	51.94	50.23	50.77	47.6	47.3	47.4	109.9	106.9	107.1
Malleable-iron castings.....	52.16	50.62	50.44	48.7	48.4	48.1	107.6	105.2	104.9
Steel castings.....	52.64	52.16	49.54	46.6	46.7	44.1	113.0	111.7	112.4
Cast-iron pipe and fittings.....	41.34	40.44	40.07	46.7	46.3	45.8	88.6	87.3	87.4
Tin cans and other tinware.....	40.36	39.54	38.51	45.1	45.0	44.1	89.6	87.9	87.3
Wirework.....	51.10	49.89	50.69	47.8	47.6	48.1	107.0	104.8	105.4
Cutlery and edge tools.....	44.07	43.64	43.59	45.9	46.1	46.2	95.9	94.6	94.3
Tools (except edge tools, machine tools, files, and saws).....	45.27	45.36	44.83	46.2	47.0	46.6	98.1	96.6	96.3
Hardware.....	45.57	44.85	44.64	46.4	46.8	46.5	98.2	95.7	95.9
Plumbers' supplies.....	47.56	47.67	46.59	45.4	46.2	45.4	104.2	102.5	102.1
Stoves, oil burners, and heating equipment, not elsewhere classified.....	47.64	45.98	45.66	46.2	46.1	45.9	102.9	99.7	99.5
Steam and hot-water heating apparatus and steam fittings.....	48.38	48.41	47.52	47.0	48.1	46.8	102.8	100.7	101.6
Stamped and enameled ware and galvanizing.....	47.50	46.60	46.20	45.2	45.6	45.0	105.0	102.2	102.7
Fabricated structural and ornamental metalwork.....	54.70	54.83	54.56	48.1	48.8	48.5	113.8	112.3	112.6
Metal doors, sash, frames, molding, and trim.....	49.60	49.68	49.86	47.0	47.1	47.3	105.5	105.4	105.6
Bolts, nuts, washers, and rivets.....	48.46	48.61	46.57	46.0	47.2	44.4	105.4	103.0	104.9

See footnotes at end of table.

TABLE 6.—Earnings and Hours in Manufacturing and Nonmanufacturing Industries—Continued

Industry	Average weekly earnings ¹			Average weekly hours ¹			Average hourly earnings ¹		
	September 1944	August 1944	July 1944	September 1944	August 1944	July 1944	September 1944	August 1944	July 1944
							Cents	Cents	Cents
<i>Durable goods—Continued</i>									
Iron and steel and their products—Con.									
Forgings, iron and steel	\$59.95	\$56.93	\$56.79	47.3	46.8	46.2	127.0	121.7	123.5
Screw-machine products and wood screws	50.34	50.49	49.14	48.3	48.6	47.6	105.0	103.9	103.2
Steel barrels, kegs, and drums	42.62	43.27	40.95	43.2	45.6	42.7	98.6	94.9	95.0
Firearms	60.38	59.95	58.94	45.8	46.7	45.6	131.8	128.3	129.3
Electrical machinery	48.46	47.75	47.22	46.1	46.3	45.7	105.1	103.1	103.2
Electrical equipment	50.96	50.42	49.76	46.4	46.7	46.0	110.2	108.0	108.2
Radios and phonographs	41.62	40.68	40.56	45.9	45.5	45.3	90.5	89.4	89.5
Communication equipment	45.93	44.97	44.72	44.9	45.5	45.1	101.1	98.4	98.4
Machinery, except electrical	54.44	54.15	53.33	48.0	48.4	47.5	113.5	112.0	112.3
Machinery and machine-shop products	53.21	53.05	51.85	47.6	48.2	46.8	111.6	110.0	110.5
Engines and turbines	58.79	58.96	58.84	47.3	48.0	47.3	124.6	123.1	124.9
Tractors	53.46	52.40	51.65	46.8	46.6	46.0	114.3	112.4	112.4
Agricultural machinery, excluding tractors	55.27	52.68	54.09	47.7	47.1	47.6	115.9	111.9	113.6
Machine tools	57.07	57.33	56.80	49.8	50.4	50.2	114.4	113.8	113.1
Machine-tool accessories	59.31	58.35	58.44	49.1	49.0	49.3	120.9	119.3	118.8
Textile machinery	47.73	47.37	48.10	48.5	48.4	48.6	98.4	97.9	99.0
Typewriters	48.09	47.87	48.64	48.7	48.9	49.5	98.7	98.0	98.3
Cash registers, adding and calculating machines	59.19	59.23	58.34	48.9	49.3	49.1	122.0	121.0	119.7
Washing machines, wringers, and driers, domestic	47.08	46.45	47.53	45.0	45.3	45.4	104.7	102.4	104.6
Sewing machines, domestic and industrial	56.35	55.81	55.59	51.2	50.1	50.6	111.5	112.2	110.8
Refrigerators and refrigeration equipment	49.09	51.26	47.56	45.1	47.3	44.4	108.7	108.3	107.1
Transportation equipment, except automobiles	60.85	60.32	59.29	47.0	47.5	46.8	129.4	127.1	126.7
Locomotives	63.55	65.66	60.97	47.2	49.3	45.7	134.5	133.2	133.4
Cars, electric and steam-railroad	50.91	51.59	51.45	44.4	45.7	44.9	114.4	112.6	114.5
Aircraft and parts, excluding aircraft engines	54.37	54.73	54.43	46.4	47.2	47.2	117.1	115.7	115.5
Aircraft engines	60.86	61.51	59.21	45.7	46.8	44.9	133.5	131.7	131.8
Shipbuilding and boatbuilding	65.40	63.96	62.69	47.9	47.8	47.1	136.8	133.9	133.1
Motorcycles, bicycles, and parts	53.05	50.31	51.30	49.2	47.4	47.8	107.8	106.2	107.4
Automobiles	55.96	56.92	56.43	43.5	45.2	43.7	128.6	126.0	129.1
Nonferrous metals and their products	48.77	48.69	48.34	46.3	46.5	46.0	105.4	104.7	105.1
Smelting and refining, primary, of nonferrous metals	49.53	48.96	49.33	46.2	46.0	45.8	107.3	106.4	107.6
Alloying and rolling and drawing of nonferrous metals, except aluminum	53.35	54.18	52.55	47.4	48.1	47.1	112.5	112.6	111.6
Clocks and watches	43.69	43.63	42.48	46.8	46.7	46.1	93.7	93.5	92.1
Jewelry (precious metals) and jewelers' findings	43.23	40.71	40.97	44.4	43.0	43.3	96.3	93.1	93.2
Silverware and plated ware	47.46	46.98	47.55	46.7	46.7	47.0	102.3	100.8	101.4
Lighting equipment	43.87	46.12	44.23	42.2	45.3	43.1	104.3	101.9	102.7
Aluminum manufactures	49.38	48.54	49.01	46.4	46.0	46.1	106.5	105.6	106.4
Lumber and timber basic products	34.89	35.78	33.74	43.4	44.7	42.4	80.4	80.1	79.6
Sawmills and logging camps	33.85	35.21	32.73	42.6	44.4	41.5	79.4	79.3	78.8
Planing and plywood mills	38.19	37.53	37.05	46.0	45.6	45.3	83.3	82.7	81.9
Furniture and finished lumber products	36.58	36.70	35.39	44.1	44.9	43.6	82.9	81.7	81.2
Furniture	36.92	37.24	35.94	43.7	44.8	43.4	84.8	83.6	83.2
Caskets and other morticians' goods	40.14	40.25	36.75	45.1	45.3	42.8	89.1	89.1	85.9
Wood preserving	34.76	34.62	34.15	43.9	44.9	43.9	79.2	77.1	77.8
Stone, clay, and glass products	39.65	39.35	38.12	43.5	44.0	42.4	91.2	89.5	89.9
Glass and glassware	39.77	39.60	37.66	41.3	42.2	39.7	96.1	93.9	94.9
Glass products made from purchased glass	35.35	34.84	33.48	44.3	44.5	43.1	80.3	78.7	77.8
Cement	42.89	42.98	41.28	45.3	46.2	44.2	94.6	93.0	93.3
Brick, tile, and terra cotta	33.39	33.74	33.06	41.5	42.7	41.7	79.8	78.6	78.9
Pottery and related products	35.80	36.06	34.58	41.2	41.4	39.4	88.2	88.1	88.7
Gypsum	44.11	45.49	44.13	47.6	48.5	48.3	92.6	93.8	91.4
Lime	38.32	38.49	38.02	48.1	49.6	48.7	79.5	77.7	78.4
Marble, granite, slate, and other products ²	39.13	40.71	39.44	43.3	45.1	44.1	91.1	90.2	89.1
Abrasives	50.13	46.64	46.26	49.3	47.3	46.8	101.7	98.7	98.9
Asbestos products	48.26	47.05	46.85	48.5	48.2	48.2	99.4	97.6	97.3

See footnotes at end of table.

TABLE 6.—Earnings and Hours in Manufacturing and Nonmanufacturing Industries—Continued

MANUFACTURING—Continued

Industry	Average weekly earnings ¹			Average weekly hours ¹			Average hourly earnings ¹		
	September 1944	August 1944	July 1944	September 1944	August 1944	July 1944	September 1944	August 1944	July 1944
<i>Nondurable goods</i>									
Textile-mill products and other fiber manufactures.....	\$30.09	\$29.73	\$29.64	41.8	41.8	41.7	Cents 72.0	Cents 71.1	Cents 71.0
Cotton manufactures, except smallwares.....	27.26	26.90	27.12	42.2	42.2	42.4	64.6	63.7	63.9
Cotton smallwares.....	33.27	33.30	33.18	42.7	43.0	43.3	78.0	77.5	77.0
Silk and rayon goods.....	28.85	28.92	28.33	41.2	41.9	40.9	70.0	68.9	69.3
Woolen and worsted manufactures, except dyeing and finishing.....	35.47	34.95	35.35	41.8	41.6	42.1	84.9	84.1	84.0
Hosiery.....	29.23	29.34	28.16	38.3	38.8	37.4	76.5	75.8	75.5
Knitted cloth.....	33.22	31.87	31.60	44.3	43.2	43.6	74.4	72.9	72.4
Knitted outerwear and knitted gloves.....	30.38	29.91	29.51	40.0	40.1	40.0	75.5	73.9	73.2
Knitted underwear.....	26.83	26.36	25.68	40.5	40.6	40.0	65.9	64.8	63.9
Dyeing and finishing textiles, including woolen and worsted.....	34.66	34.08	33.87	44.9	44.7	44.4	77.2	76.3	76.2
Carpets and rugs, wool.....	39.73	39.31	39.13	43.0	43.3	43.4	92.9	91.1	90.4
Hats, fur-felt.....	43.59	42.84	41.34	41.3	40.7	40.0	106.6	106.0	104.2
Jute goods, except felts.....	34.70	33.45	33.44	45.0	43.7	44.6	77.1	76.5	75.0
Cordage and twine.....	33.15	32.65	32.57	45.4	45.1	45.3	73.0	72.2	71.7
Apparel and other finished textile products.....	31.77	30.44	29.28	38.2	37.7	37.3	83.2	80.7	78.5
Men's clothing, not elsewhere classified.....	32.83	31.65	30.86	38.8	38.3	38.0	84.7	82.3	81.1
Shirts, collars, and nightwear.....	24.14	23.87	24.42	36.5	36.7	37.2	66.1	65.1	65.5
Underwear and neckwear, men's.....	26.98	25.88	25.98	37.6	36.6	36.7	71.6	70.6	70.9
Work shirts.....	21.80	20.55	18.01	38.2	36.8	32.8	55.2	54.1	53.4
Women's clothing, not elsewhere classified.....	39.92	37.77	35.46	37.2	36.8	36.2	104.2	100.8	96.3
Corsets and allied garments.....	29.93	29.12	28.75	39.9	40.0	39.8	74.8	72.9	72.4
Millinery.....	42.01	40.26	35.10	34.6	33.7	32.4	99.1	96.2	89.8
Handkerchiefs.....	23.45	23.12	22.91	37.4	37.0	36.9	62.8	62.6	62.1
Curtains, draperies, and bedspreads.....	25.83	24.24	25.63	36.4	36.1	37.4	70.4	66.9	68.3
Housefurnishings, other than curtains, etc.....	32.59	32.23	31.80	41.9	41.6	41.5	77.7	77.4	76.6
Textile bags.....	29.40	28.54	28.29	42.3	41.7	42.0	70.0	68.8	67.7
Leather and leather products.....	34.05	33.16	33.01	41.5	41.2	41.2	82.0	80.6	80.1
Leather.....	43.53	43.02	43.09	45.7	45.5	45.6	95.1	94.6	94.6
Boot and shoe cut stock and findings.....	34.83	33.40	33.48	43.9	42.9	42.7	80.7	79.0	79.5
Boots and shoes.....	32.20	31.18	30.99	40.7	40.3	40.3	79.0	77.1	76.5
Leather gloves and mittens.....	31.23	30.76	29.65	38.3	38.6	37.6	82.2	80.4	79.4
Trunks and suitcases.....	32.37	32.48	32.69	40.1	40.2	40.5	79.4	79.8	79.8
Food.....	37.71	37.95	38.52	44.5	45.0	45.6	84.7	84.4	84.5
Slaughtering and meat packing.....	43.98	44.69	45.87	47.9	48.6	49.9	92.1	92.2	92.1
Butter.....	34.37	34.13	34.58	47.6	48.1	48.4	72.0	71.0	70.7
Condensed and evaporated milk.....	37.30	37.28	38.06	50.3	50.6	50.7	74.5	74.0	75.1
Ice cream.....	39.04	39.42	39.27	45.6	47.8	47.9	81.2	79.3	79.1
Flour.....	44.26	42.08	41.96	51.1	49.7	49.6	86.7	84.8	84.8
Cereal preparations.....	44.84	43.58	44.05	47.1	46.0	46.7	95.3	94.7	94.3
Baking.....	38.93	38.31	38.42	45.9	45.7	45.8	85.0	83.9	83.9
Sugar refining, cane.....	39.08	37.94	37.63	45.3	44.6	43.8	85.9	85.1	85.9
Sugar, beet.....	33.70	36.06	36.05	34.5	37.5	35.8	97.7	96.2	100.6
Confectionery.....	31.30	30.49	30.08	42.1	42.2	41.6	73.9	72.4	72.5
Beverages, nonalcoholic.....	35.44	36.50	37.09	43.8	45.7	46.2	80.8	79.8	80.7
Malt liquors.....	52.15	53.56	53.96	46.3	47.3	47.3	112.8	113.5	114.2
Canning and preserving.....	30.05	30.27	29.75	39.5	39.9	40.3	76.5	76.5	74.3
Tobacco manufactures.....	31.43	30.27	30.04	43.4	42.3	42.4	72.4	71.5	70.9
Cigarettes.....	34.15	32.79	32.84	44.3	43.1	43.2	77.0	76.0	76.0
Cigars.....	29.12	28.20	27.67	42.7	41.7	41.9	68.5	67.7	66.2
Tobacco (chewing and smoking) and snuff.....	29.08	27.86	27.71	42.3	41.2	41.0	68.7	67.6	67.6
Paper and allied products.....	39.67	39.10	38.72	46.3	46.2	45.7	85.8	84.7	84.7
Paper and pulp.....	43.00	42.67	42.42	48.3	48.2	47.9	89.2	88.4	88.6
Envelopes.....	36.62	36.58	36.66	44.3	44.5	44.9	82.3	81.8	81.7
Paper bags.....	34.59	33.18	32.31	44.7	43.4	43.0	77.8	76.7	75.5
Paper boxes.....	35.28	34.71	33.76	43.8	43.9	42.9	80.6	79.3	79.1
Printing, publishing, and allied industries.....	45.60	44.43	44.12	41.4	41.1	41.2	110.1	108.0	107.2
Newspapers and periodicals.....	49.92	48.88	48.65	39.0	38.5	38.3	126.5	125.8	125.3
Printing, book and job.....	44.26	42.67	42.70	42.6	42.3	42.5	105.0	100.1	99.7
Lithographing.....	46.98	45.31	44.76	45.1	44.3	44.2	104.7	102.7	101.4

See footnotes at end of table.

TABLE 6.—Earnings and Hours in Manufacturing and Nonmanufacturing Industries—Continued

Industry	Average weekly earnings ¹			Average weekly hours ¹			Average hourly earnings ¹		
	September 1944	August 1944	July 1944	September 1944	August 1944	July 1944	September 1944	August 1944	July 1944
<i>Nondurable goods—Continued</i>									
Chemicals and allied products.....	\$44.03	\$43.82	\$44.00	45.7	45.6	45.5	Cents 96.4	Cents 96.2	Cents 96.6
Paints, varnishes, and colors.....	46.15	46.44	45.66	47.4	47.9	47.2	98.1	97.2	96.9
Drugs, medicines, and insecticides.....	35.21	34.37	34.42	42.6	42.4	42.0	82.7	81.7	82.2
Soap.....	49.26	47.47	46.65	48.8	47.8	47.6	101.0	99.3	97.9
Rayon and allied products.....	39.22	38.85	38.78	43.0	43.1	43.0	91.2	90.2	90.2
Chemicals, not elsewhere classified.....	52.31	51.88	52.15	46.8	47.0	46.8	111.9	110.6	111.4
Explosives and safety fuses.....	47.27	47.25	48.13	45.9	46.5	46.7	103.0	101.7	103.0
Ammunition, small-arms.....	45.03	45.31	45.55	46.2	46.6	46.8	97.6	97.3	97.3
Cottonseed oil.....	27.80	25.88	26.18	52.1	47.9	48.1	53.3	53.9	54.3
Fertilizers.....	32.52	31.65	32.05	45.3	44.8	45.7	71.7	70.6	70.1
Products of petroleum and coal.....	55.67	55.27	56.27	46.4	46.9	46.9	120.1	117.9	119.9
Petroleum refining.....	58.24	58.06	59.08	45.9	46.7	46.8	126.8	124.5	126.5
Coke and byproducts.....	49.29	47.80	49.24	46.5	46.3	46.4	106.3	103.3	106.2
Roofing materials.....	47.78	46.83	46.65	49.8	49.5	49.1	96.0	94.6	95.0
Rubber products.....	50.99	50.24	49.17	45.7	45.6	45.0	111.7	110.2	109.4
Rubber tires and inner tubes.....	59.33	58.62	57.01	46.5	46.4	45.5	127.3	126.4	125.6
Rubber boots and shoes.....	40.83	39.99	40.40	44.5	43.9	44.4	91.7	91.0	91.0
Rubber goods, other.....	42.77	42.28	41.48	44.8	45.0	44.5	95.7	94.0	93.6
Miscellaneous industries.....	44.17	43.10	43.23	45.4	45.1	45.2	97.4	95.7	95.5
Instruments (professional and scientific) and fire-control equipment.....	55.02	53.79	55.74	49.0	48.4	49.9	112.7	111.5	112.1
Pianos, organs, and parts.....	49.12	46.11	43.85	48.7	46.9	44.2	101.1	98.8	99.6

NONMANUFACTURING

Coal mining:							Cents	Cents	Cents
Anthracite.....	\$47.45	\$48.21	\$43.22	39.9	40.8	35.8	118.7	117.9	119.4
Bituminous.....	50.95	52.22	47.20	42.0	44.0	39.5	121.6	119.0	119.9
Metal mining.....	44.75	44.99	43.46	43.9	44.7	42.9	101.6	100.3	101.0
Quarrying and nonmetallic mining.....	40.51	41.16	40.33	46.8	47.9	46.3	87.1	86.1	87.1
Crude-petroleum production.....	55.42	53.24	54.85	45.9	46.1	45.3	117.2	113.0	118.7
Public utilities:									
Telephone ³	39.41	38.33	38.33	43.0	42.6	42.6	92.1	90.2	90.3
Telegraph ⁴	37.72	37.54	37.48	46.5	46.8	46.5	81.2	80.2	80.5
Electric light and power.....	49.06	48.91	48.12	43.9	44.0	42.7	111.3	110.4	111.8
Street railways and busses.....	48.26	48.53	48.12	50.4	51.0	50.7	94.3	93.9	93.5
Wholesale trade.....	42.61	42.34	42.36	42.9	43.1	42.8	99.4	98.1	98.9
Retail trade ²	27.09	27.64	27.83	41.8	43.3	43.2	71.2	70.6	70.6
Food ²	31.36	32.57	32.15	40.5	42.7	42.4	72.0	71.2	71.2
General merchandise.....	22.39	22.81	23.09	36.6	38.2	38.6	60.9	60.5	60.5
Apparel ²	28.24	28.56	28.67	38.1	39.0	38.6	81.8	80.3	81.0
Furniture and housefurnishings ²	37.93	37.68	37.93	44.1	44.2	44.2	87.6	87.0	87.0
Automotive.....	41.68	41.36	41.73	46.3	46.8	46.6	92.0	90.9	90.9
Lumber and building materials.....	37.74	37.50	37.15	43.5	43.7	43.8	88.8	87.9	87.1
Hotels (year-round) ⁵	22.89	22.72	22.51	44.0	44.4	44.4	51.7	50.8	50.5
Power laundries.....	27.72	27.17	27.19	43.9	43.8	44.1	63.7	62.6	62.1
Cleaning and dyeing.....	31.70	30.62	31.08	44.5	43.9	44.4	73.7	71.9	72.2
Brokerage.....	54.25	55.30	56.65	(6)	(6)	(6)	(6)	(6)	(6)
Insurance.....	43.88	44.51	45.01	(6)	(6)	(6)	(6)	(6)	(6)
Private building construction.....	53.71	52.90	52.81	40.1	40.0	40.6	133.9	132.3	130.2

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 furnish man-hour data, average hours and average hourly earnings for individual industries are based on a smaller sample than are weekly earnings. Data for the current and immediately preceding months are subject to revision.

² Revisions have been made as follows in data published for earlier months:

Marble, granite, slate, and other products.—May 1944 average weekly earnings to \$39.85.

Retail trade total.—April and May average weekly hours, 40.0 and 39.9; average hourly earnings, 71.5 cents and 72.3 cents.

Food group.—Average hourly earnings, March, 70.3 cents; April, 70.9 cents; May, 71.3 cents.

Apparel group.—February through May, average weekly hours, 36.7, 36.5, 36.4, 36.6; March through May, average hourly earnings, 73.9 cents, 75.5 cents, 75.7 cents.

Furniture group.—February average hourly earnings, 83.7 cents.

³ Data available upon request back to January 1937.

⁴ Land lines, excluding general and division headquarters personnel and messengers.

⁵ Cash payments only; additional value of board, room, and tips not included.

⁶ Not available.

Civilian Labor Force, October 1944

THE civilian labor force declined by 160,000 persons between September and October 1944 to a total of 52,870,000, according to the Bureau of the Census sample Monthly Report on the Labor Force. During the 1-month interval, employment declined by 10,000 persons, while unemployment went down by 150,000 to a record low of 630,000.

The reduction in civilian employment between September and October was the result of divergent movements in agricultural and nonagricultural activity. The number of persons employed in agriculture increased by 80,000 as fall harvesting continued. This was more than offset by a decline of 90,000 in nonagricultural employment which closely followed the pattern between September and October of the past 2 years.

Considering that the net strength of the armed forces increased by almost 2,000,000 during the past year, the volume of civilian employment has been well sustained. Nonagricultural employment declined by only 280,000 between October 1943 and October 1944, a decrease of 750,000 men being partially offset by an increase of 470,000 women.

The volume of unemployment this October was about 140,000 below that recorded in any previous month. For the most part, the unemployed group consists of persons between jobs who find work within a relatively short period of time.

*Civilian Labor Force in the United States, Classified by Employment Status and by Sex, September and October 1940-44*¹

[Source: U. S. Department of Commerce, Bureau of the Census]

Item	Estimated number (in thousands) of persons 14 years of age and over ²									
	1944		1943		1942		1941		1940	
	October	September	October	September	October	September	October	September	October	September
Total civilian labor force.....	52,870	53,030	53,080	53,910	54,630	54,410	54,070	54,990	53,840	54,390
Unemployment ³	630	780	910	960	1,460	1,490	3,460	4,170	6,530	6,200
Employment.....	52,240	52,250	52,170	52,950	53,170	52,920	50,610	50,820	47,310	48,190
Nonagricultural.....	43,490	43,580	43,770	43,900	43,790	44,060	41,730	41,520	37,730	37,900
Agricultural.....	8,750	8,670	8,400	9,050	9,380	8,860	8,880	9,300	9,580	10,290
<i>Males</i>										
Civilian labor force.....	34,410	34,590	35,310	35,700	38,820	38,970	39,940	40,650	40,610	40,820
Unemployment ³	310	400	490	490	890	940	2,320	2,880	4,760	4,440
Employment.....	34,100	34,190	34,820	35,210	37,930	38,030	37,620	37,770	35,850	36,380
Nonagricultural.....	27,320	27,430	28,070	28,270	30,370	30,750	30,110	30,060	27,400	27,590
Agricultural.....	6,780	6,760	6,750	6,940	7,560	7,280	7,510	7,710	8,450	8,790
<i>Females</i>										
Civilian labor force.....	18,460	18,440	17,770	18,210	15,810	15,440	14,130	14,340	13,230	13,570
Unemployment ³	320	380	420	470	570	550	1,140	1,290	1,770	1,760
Employment.....	18,140	18,060	17,350	17,740	15,240	14,890	12,990	13,050	11,460	11,810
Nonagricultural.....	16,170	16,150	15,700	15,630	13,420	13,310	11,620	11,460	10,330	10,310
Agricultural.....	1,970	1,910	1,650	2,110	1,820	1,580	1,370	1,590	1,130	1,500

¹ Estimates for period prior to November 1943 revised April 24, 1944.

² All data exclude persons in institutions.

³ Includes persons on public emergency projects prior to July 1

Labor Chronology

Chronology of Labor Events, July–September 1944

JULY

1944

- July 1. The President approved an act extending to the Virgin Islands the provisions of the Selective Training and Service Act of 1940, as amended. (Source: Public Law 413.)
- July 4–11. The National War Labor Board extended wage controls to all building contractors in the United States employing eight or fewer workers; likewise to firms in the automotive repair and tire industry in Region X (California, Nevada, and Arizona), and jewelry stores and watch-repair establishments in Region IX (Colorado, New Mexico, Wyoming, Utah, and Idaho). (Source: OWI, NWLB, B-1655.) Subsequently wage controls were similarly extended to (1) the automotive industry in Region IX (Aug. 8); (2) the painting and decorating industry in Los Angeles (Aug. 8); (3) employers engaged primarily in the distribution and recapping or retreading of tires in New York State and certain counties in New Jersey (Aug. 8); (4) cleaning and dyeing industry in Denver, Colo. (Aug. 21) and Englewood, Calif. (Sept. 26); (5) the custom-tailoring industry in Los Angeles County (Sept. 5); (6) the commercial-printing industry in Los Angeles region (Sept. 5); and (7) precious-jewelry industry in Philadelphia (Sept. 26). (Sources: B-1698, B-1740, B-1763.) On August 30, all employers in the Territory of Alaska were included. (Source: B-1727.) (See also Chron. item for May 27, M. L. R. Sept. 1944.)
- July 6. The NWLB announced the revision of its General Order No. 6, to provide that the hiring of an employee at a rate lower than the rate (or minimum of the range of rates) properly established in a plant for a particular job is a wage or salary decrease and requires the Board's approval. (Source: OWI, NWLB, B-1624.)
- July 7. The NWLB, in a case involving the Riverside and Dan River Mills, Inc. (Danville, Va.) and the Textile Workers Union of America, C.I.O., ruled that the management has the right (1) to make day-to-day changes in work assignment which it considers necessary for the efficient operation of its business, subject to union protest through established grievance procedure, and (2) to institute whatever technological changes it deems essential to the efficient operation of its business. With regard to point (2), a trial period was provided, with the consent of both parties, to test the technological changes and their effect on employees, after which any questions raised by the union would be considered through the usual grievance procedure. For any other changes introduced by the management, the Board recommended the three procedural steps of (1) collective bargaining, (2) actual operation, and (3) grievance procedure and arbitration. (Source: OWI, NWLB, B-1627.)
- July 10. The Office of Price Administration announced the establishment of the Office of Industry Advisory Committees (see Chron. item for June 9, 1943, M. L. R. Aug. 1943). Seven steps were outlined in a new program affecting the 484 existing industry advisory committees. (Source: OWI, OPA-4516.)

1944

- July 11. The War Production Board announced that within the next 5 weeks four orders would be issued, designed to enable industry to make preparations for limited reconversion to peacetime operation. The orders would provide for (1) the lifting of the current restrictions on the use of aluminum and magnesium, (2) the making of the minimum number of models necessary for strictly experimental purposes, (3) the placing of unrated orders for machine tools and equipment, and (4) the manufacture of civilian articles by individual manufacturers with facilities and manpower not needed for the war effort. (Source: OWI, WPB-6087.)
- July 11. The N.W.L.B., in a case affecting the Siver Steel Casting Co. (Chicago), by a vote of 8 to 4 (the industry members dissenting), ordered a cash payment in lieu of the liberalized vacation allowance in the company's union contract for the period 1943-44 which had expired while the case was pending before the Board. The majority opinion stated that though the Government in 1944 for the first time since the war began was urging employers to give actual vacations, in 1943 (because of the urgency of war production) employers and the Government had asked employees to accept vacation pay and to stay on the job. (Source: OWI, N.W.L.B., B-1629.) On August 7 the Board unanimously resolved that employees who attend State guard camps may be given a 2-week leave of absence with pay, without prior approval of the Board. (Source: B-1686.) On August 26, the Board, in upholding two decisions of the Third Regional W.L.B. at Philadelphia, which denied demands of the International Association of Machinists, A. F. of L., for 2 weeks' vacation after 5 years of service, stated that it had no general rule that such a vacation is to be ordered in each case regardless of circumstances. (Source: B-1719.)
- July 12. The N.W.L.B. adopted a resolution codifying its principles regarding labor disputes involving employers engaged in intrastate commerce. (For summary, see M. L. R. Sept. 1944, p. 520.)
- July 12. The N.W.L.B. approved an order of its Second Regional Board at New York, directing a progressive vacation plan for the workers of the Truck Equipment Co. Inc., of Buffalo, N. Y. The plan provides for vacations of 40 hours after 1 year of service, 50 hours after 2 years, 60 hours after 3 years, 70 hours after 4 years, and 80 hours after 5 years. (Source: OWI, N.W.L.B., B-1697.)
- July 17. The War Food Administration announced that 63,637 Mexican farm workers had been imported and were working in 17 Western States. Additional Mexicans were scheduled to be brought in from Mexico, to maintain a work force of 75,000 for the 1944 harvest season. (Source: OWI, Dept. of Agriculture, AG-1057; see also Chron. item for Apr. 14, 1944, M. L. R. Sept. 1944.) On September 15, the W.P.B. announced that 16,000 natives of the British West Indies, who had been working on farms in the United States, would be used to relieve labor shortages in foundries. (Source: OWI, WPB-6475.) On September 30, 1944, there were 16,587 Jamaican and 4,898 Bohemian agricultural workers in the United States, who had been transported by the Office of Labor of the War Food Administration. (Source: Farm Labor, U. S. Dept. of Agriculture, Oct. 13, 1944, p. 11.)
- July 19. The W.P.B. and the National Housing Agency announced jointly a limited program of house construction, designated as H-2 housing, to relieve housing shortages for resident—as distinct from immigrant—workers in congested war production areas. (Immigrant workers are already provided for by the H-1 housing program.) It was expected that construction would reach a probable quarterly volume of approximately 25,000 units during 1945. Maximum selling price of H-2 housing is \$6,000, and the maximum rent, \$50; in exceptional cases, because of high construction costs, the corresponding figures are \$7,500 and \$62.50. (Source: OWI-3409.)

1944

- July 21. The War Production Board, in releasing a statement of its production executive committee, outlining the procedure by which the committee handles cutbacks and other production adjustments which might provide for increased civilian production, announced that cutbacks were not yet a significant problem. The committee would review "every program cutback proposed by a procurement service involving a reduction of as much as \$1,000,000 in the total value of the items to be delivered in the current month or in any one of the succeeding 6 months, under all prime contracts for the same procurement item." The committee would also be notified of each change in any single contract reducing the value of items to be delivered during the succeeding 3 months by \$200,000 or more. (Source: OWI, WPB-6131.) By August 1, cutback cases reviewed by the committee indicated that only 14,925 workers out of a total of nearly 10,000,000 munitions workers would be laid off, and some of them not until the beginning of 1945. Practically all would be immediately reemployed in other work. (Source: OWI-3465.) On July 14 the WMC announced that there was a net shortage of approximately 200,000 workers in absolutely essential war industries. (Source: PM-4627.)
- July 23. The War Manpower Commission announced the creation of an Industry Associations Committee "to encourage specific industries and industrial groups to cooperate in the exchange of applied new discoveries, ideas, and methods that have resulted in a reduction of manpower requirements." More than 750 industries, divided into 12 groups, will participate voluntarily in the work of the committee. (Source: OWI, PM-4637.)
- July 25. The NWLB adopted a resolution providing for the handling of cases in which there is "a demand for any general wage increase beyond the limits of the existing wage-stabilization policy." (For discussion see M. L. R. Sept. 1944, p. 518.)
- July 27. The NWLB unanimously amended a directive order of its Fourth Regional Board at Atlanta, Ga. (which prohibited employees from carrying on union business on company property during working hours without the written consent of the company) by including a provision that the term "working hours" is not to include the lunch period or time before or after work. (Source: OWI, NWLB, B-1702.)
- July 27. The NWLB announced a 5-point program designed to relieve the manpower shortage in gray-iron, malleable-iron and steel foundries. (Source: OWI, NWLB, B-1667.)
- July 28. The War Food Administration reported its nation-wide survey of in-plant feeding, which covered 2,056 selected manufacturing plants working on war contracts. According to the report, some 5 million workers in about half of the United States manufacturing plants engaged in war work can obtain midshift meals on the job. (Source: OWI, Dept. of Agriculture, AG-1068. For summary, see M. L. R. Oct. 1944, p. 746; see also Chron. item for Jan. 13, 1944, M. L. R. June 1944.)

AUGUST

- Aug. 3. The President, by Executive order, authorized and directed the Secretary of War to take over the transportation systems of the Philadelphia Transportation Co., whose operators had gone out on a strike on Aug. 1—the day on which 8 newly trained Negro operators were to make trial runs without passengers. (Source: OWI, S-43; White House release of Aug. 3.)
- Aug. 3. The War Manpower Commission announced the termination of the manning-table plan (see Chron. item for Nov. 6, 1942, M. L. R. Feb. 1943) which provided for an orderly withdrawal of workers from war industries into the armed forces. (For discussion, see M. L. R. Sept. 1944, p. 518.)

1944

- Aug. 3. The NWLB approved a general order delegating to the Secretary of War authority to establish wage or salary schedules for civilian employees of the War Department in Government owned and operated installations in the Territory of Hawaii. (Source: OWI, NWLB, B-1708.) Similar authority was delegated on August 26 to the Secretary of the Navy with respect to civilians employed by the Navy Department. (Source: B-1744.)
- Aug. 4. The Director of War Mobilization issued a directive providing for the establishment of employment ceilings in war and other essential industries. (For summary, see M. L. R. Sept. 1944, p. 516.) On August 5, the War Manpower Commission issued regulations governing the employment of certain classes of workers in areas with ceiling programs. (For summary, see M. L. R. Sept. 1944, p. 519, and Oct. 1944, p. 749.)
- Aug. 6. The NWLB, with the labor members dissenting, vacated an order of its Trucking Commission directing maintenance-of-membership and check-off clauses in a dispute case, in which the union was neither certified as sole collective-bargaining representative of the employees nor recognized as such by the company. (Source: OWI, NWLB, B-1687.)
- Aug. 11. The President, by Executive order, directed the Office of Defense Transportation to take over the operation of 103 motor-carrier systems of the Mid-West Operators' Association. The operators refused to put into effect wage increases ordered by the NWLB. By October 21, eight carriers had complied with the Board's orders and were released from Government control. (Source: White House, Release of August 11, 1944; OWI, ODT-698.)
- Aug. 14. The Navy took over five of the largest machine shops in San Francisco, after the local machinists' union had ignored the NWLB's order that the union ban on overtime and Sunday work be removed from 104 machine shops in the San Francisco area. The ban had been imposed on April 13, 1944, after the employers' group had refused to sign a stipulation providing that an agreement which expired on March 31 would remain in effect until replaced by a new one. On August 19, at the request of the Secretary of the Navy, the NWLB by unanimous action changed the terms and conditions of employment in the 104 machine shops, as follows: (1) The requirement of preferential hiring of members of Lodge 68 of the International Association of Machinists, A. F. of L., was withdrawn; (2) union participation in the scheduling of vacations was canceled; and (3) provisions in the expired labor agreement which required the consent of Lodge 68 to any action or its participation in any procedure were withdrawn. (Source: OWI, NWLB, B-1694.)
- Aug. 15. The WPB and the WMC jointly announced that though war production had the first claim, there would be a maximum resumption of civilian production consistent with war production needs. (Source: OWI-3488.) At the same time the WPB described the new spot authorization procedure, established by Priorities Regulation No. 25, as "a method for authorizing civilian production through field offices of the War Production Board, when labor, facilities, and materials are available and are no longer needed for war or essential civilian production." (Source: OWI, WPB-6294.) The first approval of an application for civilian production under the spot-authorization order was announced by the WPB on September 6. (Source: WPB-6406.)
- Aug. 20. The WMC announced a 6-point shopping-extension program calling for the convenient availability of commercial and professional services to war workers in order to prevent unnecessary absenteeism. Besides the extension of services in communities, the program calls for the installation of various services in war plants, such as pick-up laundry services, facilities for the payment of bills, and automobile-repair shops on plant parking lots. (Source: OWI, PM-4653.)

1944

Aug. 29. The WMC announced plans for dispatching specially trained men from Washington to lead 20 special recruiting teams into the field to help regional, State, and local WMC directors meet urgent inter-regional manpower quotas, totaling 96,000 for the ensuing 2 months. The largest and most pressing need for workers was in Region XII (the West Coast) and Region V (Kentucky, Michigan, and Ohio). (Source: OWI, PM-4661.) On August 31, the WMC announced that the "Can You Spare a Worker" movement originated by the regional management committee in Region V, and designed to shift men voluntarily from less-essential to war work, was flourishing. (Source: PM-4662 and 4668.) On September 6 the WMC announced an acute need for more than 200,000 additional workers in several of the Nation's heavy war production areas. (Source: PM-4669.)

Aug. 29. The President asked the Director of the Bureau of the Budget to undertake the preparation of plans for gathering statistics useful for eventual reconversion to peacetime production. The Bureau of the Budget announced that in conjunction with other agencies it would take a census of manufactures for 1944, and also prepare information on employment and unemployment, and on consumers' incomes, expenditures, and savings. (Source: White House release, Aug. 29, 1944.)

On September 18, the President asked the Director of the Bureau of the Budget to reexamine the programs, organization, and staffing of Government agencies, and to submit recommendations including plans for (1) the liquidation of war agencies and the reassignment of their permanent or continuing functions, (2) the reduction of Government personnel to a peace footing, and (3) the simplification and adaptation of administrative structure to peacetime requirements. (Source: White House release, Sept. 18, 1944.)

SEPTEMBER

Sept. 4. The President's Committee on Fair Employment Practice announced the signing of its first working agreement with a union, providing for the elimination of discrimination in employment. This agreement was signed with the war-policy division of the United Automobile Aircraft and Agricultural Implement Workers of America (C. I. O.) and provided for the settlement of bona-fide complaints of discrimination involving any U. A. W.-C. I. O. officer or a plant in which the union has a local. (Source: OWI-3534.) During the first 6 months of 1944 the President's Committee had adjusted satisfactorily 702 cases and had otherwise closed 1,237; during this period there were altogether 2,100 cases pending with the Committee. (Source: OWI-3480.)

Sept. 5. The WPB announced a unanimous agreement between Government agencies represented on the Board on a program designed to provide the utmost stimulus to reconversion upon Germany's defeat. Under the agreement there will be only one preference rating, in addition to the present emergency AAA rating, and this rating will apply only to military programs during the war against Japan. No programming of civilian production will be necessary, but the WPB will retain its Industry Divisions and its Industry Division Requirements Committees to prevent anyone from procuring an unreasonable amount of any material or product. (Source: OWI, WPB-6416.)

Sept. 6. The Director of War Mobilization announced the decision of the War Food Administration to remove from the rationing list on September 17 the following foods: Fruit spreads (jams, jellies, and fruit butters), certain canned vegetables (beans, corn, peas, pumpkin or squash, asparagus, and mixed vegetables), and certain related canned products (baked beans, tomato sauce or paste, tomato pulp or puree, soups, and baby foods). (Source: White House release, Sept. 6, 1944.) On September 30, blue tokens (see

1944

Chron. item for Oct. 7, 1943, M. L. R. Feb. 1944) were withdrawn from circulation, because all remaining processed-food point values would be increased to multiples of 10 and the making of change in tokens would not be necessary. (Source: OWI, OPA-4780 and 4791.)

- Sept. 7. The Director of War Mobilization submitted to the President a report on reconversion, embodying recommendations and a summary of the programs prepared by Government agencies for a return to civilian production with maximum employment when Germany surrenders. (Source: White House, Reconversion, A Report to the President, Sept. 7, 1944; for summary, see M. L. R., Nov. 1944, p. 965.) On July 13, the Surplus War Property Administration had announced the establishment of a price policy designed to accelerate the disposal of Government surplus used machine tools, with a view not only to creating ampler opportunities for post-war employment but also to preventing loss to national production through depreciation of the tools. (Source: Surplus War Property Administration, press release of July 13; see also first Chron. item for July 11, this issue.)
- Sept. 8. The NWLB announced its ruling that union representatives investigating and adjusting grievances are to be given credit for the time worked in the computation of premium pay for the sixth and seventh days of work. (Source: OWI, NWLB, B-1738.)
- Sept. 13. The NWLB vacated a directive order of its Tenth Regional Board at San Francisco, which had ordered the inclusion of a sick-leave provision in a collective-bargaining agreement. The Board stated that it would normally not order a sick-leave plan in a dispute case. (Source: OWI, NWLB, B-1777.)
- Sept. 14. The WMC instructed its field staff to authorize industries to assign planning engineers and technicians to the development of programs for reconversion to civilian production. However, no civilian-production plan which interfered with war work of high urgency would be authorized. Actual resumption or expansion of civilian production still requires certification by the WMC, except (1) in establishments, in critical West Coast labor areas, employing fewer than 50 (or fewer than 100 if in other areas) and (2) certain other cases in which increased production does not involve the hiring of additional workers. (Source: OWI, PM-4675.)
- Sept. 19. The President, in response to a formal notification by the National Mediation Board, created two emergency boards to investigate disputes between several railroad carriers (Chicago, North Shore & Milwaukee Railroad Co., Chicago, Aurora & Elgin Railroad Co., and Union Railway Co., Memphis, Tenn.) and certain of their employees in Tennessee, Illinois, and Wisconsin. (Source: White House release, Sept. 19, 1944.)
- Sept. 19. The NWLB announced the unanimous adoption of two resolutions with respect to bonus and overtime payments for employees in local transit companies as compensation for an increased and unusual wartime work load. Bonuses and overtime payments must conform to the formula and policies expressed in the resolutions. (Source: OWI, NWLB, B-1751 and B-1751-A.)
- Sept. 20. The NWLB announced that any employer may pay a Christmas or year-end bonus of \$25 or less to each of his employees without the Board's approval. (Source: OWI, NWLB, B-1753.) On September 27, the Board authorized employers to award, without its approval, prizes in war bonds (not in excess of \$250 in face value) to employees for the sale of war bonds during the Sixth War Loan Drive, provided the employers file a statement of the amounts and basis of the awards. (Source: OWI, NWLB, B-1764.)

1944

- Sept. 21. The NWLB announced that employers who have job-classification rate ranges may hire 25 percent of all new employees at rates above the minimum of the ranges. Previously (see Chron. item for April 23, M. L. R., Sept. 1944) employers were restricted in hiring at rates above the minimum to 25 percent of the number hired for each separate job classification. (Source: OWI, NWLB, B-1755.)
- Sept. 22. The NWLB announced that it would not consider it a violation of the wage-stabilization regulation if employers close their shops on V-E (Victory in Europe) Day and pay their employees at straight-time rates or earnings for hours not worked. (Source: OWI, NWLB, B-1758.)
- Sept. 27. The WMC announced the lifting of all manpower controls for veterans of the present war. (Source; OWI, PM-4682; for discussion, see M. L. R., Nov. 1944, p. 971; see also Chron. item for Dec. 20, 1943, M. L. R., Feb. 1944.) On September 7 the WMC had announced that more than half a million jobs had been found for the 1,279,000 veterans who had already returned home. The demonstration centers formed in various cities as models in guidance and placement of veterans (see Chron. item for Dec. 20, 1943, M. L. R., Feb. 1944) had been absorbed into an expanded guidance and placement service in the 1,500 full-time and 2,200 part-time offices of the USES. The WMC estimated that 50 to 60 percent of the veterans who had held jobs of a permanent nature before entering the war were returning to their former jobs. (Source: PM-4667.) As for wounded veterans, the WMC on September 13 made its first report on the adoption by industry of the WMC's Selective Placement program for the employment of handicapped veterans. Under the program some 2,000 employers in Connecticut, Pennsylvania, California, and Michigan were already analyzing 2 million jobs for the possibility of their being filled by handicapped veterans. (Source: PM-4673.)

Recent Publications of Labor Interest

December 1944

Absenteeism and Labor Turnover

The ABC of absenteeism and labor turnover. Washington 25, U. S. Department of Labor, Division of Labor Standards, 1944. 7 pp. (Special bull. No. 17.) 5 cents, Superintendent of Documents, Washington 25.

Brief description of simple methods of computing absenteeism and labor-turnover rates.

The recording of sickness absence in industry (a preliminary report). London, Medical Research Council, Industrial Health Research Board, 1944. 17 pp. (Report No. 85.) 4d. net.

Teamwork and labor turnover in the aircraft industry of southern California. By Elton Mayo and George F. F. Lombard. Boston 63, Harvard University, Graduate School of Business Administration, October 1944. 30 pp., charts. (Business research studies No. 32.) \$1.

A study based upon field research. It is stated that the survey indicates that management has been in a significant way responsible for the absences and turnover for which workers are so widely blamed. Although the study deals with wartime conditions, the authors believe that defects in management methods, if continued in the post-war period, will have serious effects on the country's industrial structure.

Cooperative Movement

Cooperation in the United States and foreign countries: A list of bibliographies. Compiled by Anne L. Baden. Washington 25, Library of Congress, Division of Bibliography, 1943. 35 pp.; mimeographed. Limited free distribution.

Cooperative organizations and the restoration of European farm production. (In International Labor Review, Montreal, October 1944, pp. 419-450. Reprints of article are available at 10 cents each. Distributed in United States by Washington branch of I. L. O.)

Examines cooperative machinery in the war-torn countries with respect to the marketing of various farm products and purchasing of various farm supplies. The report points out that the best measure of the worth of cooperatives is the fact that the Nazis, their avowed enemies, have everywhere made use of them and their facilities instead of destroying them.

Cooperative associations in Europe and their possibilities for post-war reconstruction. By Florence E. Parker and Helen I. Cowan. Washington 25, U. S. Bureau of Labor Statistics, 1944. 280 pp. (Bull. No. 770.) 35 cents, Superintendent of Documents, Washington 25.

Co-ops plan for the post-war world. Chicago 5 (608 South Dearborn Street), Cooperative League of the U. S. A., 1944. 63 pp., maps, illus. 50 cents.

Report of the International Cooperative Reconstruction Conference in Washington, D. C., January 19 and 20, 1944. The purpose of the conference was to determine what cooperatives in the United States and elsewhere could do in international post-war reconstruction. It adopted a 14-point program, which included authorization of an International Cooperative Trading and Manufacturing Association, the launching of a Freedom Fund to be used in the rehabilitation of cooperatives in countries in the theaters of war, and other measures designed to spread knowledge of the cooperative movement and its practice.

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.

L'Organisation Internationale du Travail et le mouvement coopératif. By Maurice Colombain. Quebec, 1944. 26 pp. (Cahiers de l'École des Sciences Sociales, Politiques et Économiques, l'Université Laval, Vol. III, No. 6.) 15 cents.

Describes the work being done by the International Labor Organization, through its Cooperative Service, in the field of cooperation. Among the activities noted are the collection and publication of statistics and descriptive data on all types of cooperatives, the making of special studies on various phases of the cooperative movement, issuance of an international directory of cooperatives, and the publication of a news service (Cooperative Information) showing current developments in various countries.

Peace through cooperation. By J. Henry Carpenter. New York, Harper & Bros., 1944. 113 pp. \$1.25.

Advances the theme that the cooperative movement is a force "for just and righteous living and as a way toward peace."

Handbook on major regional farm supply purchasing cooperatives, 1942 and 1943. By Joseph G. Knapp. Washington 25, U. S. Farm Credit Administration, Cooperative Research and Service Division, 1944. 53 pp.; mimeographed. (Miscellaneous report No. 73.)

Gives detailed reports on 17 individual cooperative wholesale associations in the United States which purchase farm supplies, showing business done in the various commodities handled.

Cost and Standards of Living

Cost of clothing for moderate-income families, 1935-44. Washington 25, U. S. Bureau of Labor Statistics, 1944. 30 pp., charts. (Bull. No. 789; reprinted from Monthly Labor Review, July 1944, with additional data.) 10 cents, Superintendent of Documents, Washington 25.

Wartime earnings and spending in Honolulu, 1943. By Lenore A. Epstein. Washington 25, U. S. Bureau of Labor Statistics, 1944. 36 pp., charts. (Bull. No. 788; reprinted from Monthly Labor Review, April 1944, with additional data.) 10 cents, Superintendent of Documents, Washington 25.

Economic and Social Problems

Curbing inflation through taxation. New York, Tax Institute, Inc., 1944. 261 pp., bibliography. \$2.50.

Symposium conducted by the Tax Institute in February 1944. Some of the topics discussed were consumer spending during the war; the public debt; and sales, income, and social-security taxes. Four of the papers describe the experiences of Russia, Italy, Canada, and England, respectively, in curbing inflation through fiscal devices.

Social policy in dependent territories. Montreal, International Labor Office, 1944. 185 pp. (Studies and reports, Series B, No. 38.) \$1. Distributed in United States by Washington branch of I. L. O.

Prepared to explain the background, nature, and potentialities of the decisions of the International Labor Organization concerning minimum standards of social policy in dependent territories.

Germany under fascism, 1933 to the present day. By Jürgen Kuczynski. London, W. C. 1, Frederick Muller, Ltd., 1944. 239 pp. 9s. 6d. net.

The first part of this volume deals with the structure and economic policy of German fascism; part 2 surveys labor conditions and policies since 1933, including an examination of wartime labor policies up to 1943.

Industrialization and trade: The changing world pattern and the position of Britain. By A. J. Brown. London, Royal Institute of International Affairs, 1943. 71 pp. 2s. net.

Sets the current and recent industrialization of overseas countries in perspective as a phase in general economic development; shows how it is likely to proceed; and examines some of the implications as they will affect world trade, with particular reference to the United Kingdom.

Swedish economic policy during the war. By Karin Kock. Manchester, England, Manchester Statistical Society, [1943]. 12 pp.

Discusses Sweden's economic and financial problems brought about by the war and measures taken to solve them. Wartime changes in employment and the cost of living are also treated.

Education and Training

From learning to earning: Birth and growth of a young people's college. By P. I. Kitchen. London, Faber & Faber, Ltd., 1944. 168 pp., illus. 8s. 6d. net.

Description of a small-scale experiment for helping young workers to obtain further education.

Industry and education. London, S. W. 1, Federation of British Industries, Education Committee, 1944. 20 pp.

Indicates the educational background that is desirable for the administrative, managerial, and technical sides of productive industry; points out causes of the present failure of the British educational system to give the necessary training; and suggests means of bridging the gap. Recommendations are also made whereby industry could itself supplement the national education system.

First report of Building Apprenticeship and Training Council, [Great Britain], December 1943. London, 1944. 25 pp. 6d. net.

Training operatives for machine shops—a works instructor's handbook. By National Institute of Industrial Psychology. London, Sir Isaac Pitman & Sons, Ltd., 1944. 35 pp. 2s. net.

Based on practice that has proved effective in application.

Training programs in the nonferrous metal-mining industry. Washington 25, U. S. War Manpower Commission, Bureau of Training, Apprentice-Training Service, 1944. 62 pp.; mimeographed. (Technical bull. No. T-118.)

Post-war educational development in India. Report by Central Advisory Board of Education. Delhi, Bureau of Education, 1944. 118 pp., chart. 1s.

Treats the different levels of education separately, from primary to university work, and discusses the necessary adjuncts to a successful education system, such as teacher training and care of the health of school children.

Employment and Unemployment

The disposition of surplus machine tools by the War Department following World War I. By Caroline Buck Reeves. Washington 25, U. S. Bureau of Labor Statistics, 1944. 47 pp., charts; mimeographed. (Historical study No. 75.) Free.

One section of the report deals with employment in the manufacture of machine tools in 1914 and 1918 and the effect of curtailment of production on employment.

Economic problems of the reconversion period. Fourth report of the House Special Committee on Post-War Economic Policy and Planning, pursuant to H. Res. 408. Washington 25, U. S. Government Printing Office, 1944. 79 pp., charts. (Union calendar No. 608; House report No. 1855, 78th Cong., 2d sess.)

Transitional unemployment and reemployment are among the problems considered.

The national output at full employment in 1950. By Everett E. Hagen and Nora Boddy Kirkpatrick. (In *American Economic Review*, Washington 6 (722 Jackson Place NW.), September 1944, pp. 472-500; charts. \$1.25.)

The authors do not make a forecast of national output in 1950, but estimate what it will be under certain assumptions, the major assumption being substantially full employment, which they define as allowing for unemployment of about 2 million persons. It is stated that substantially full employment will mean a far greater national output than the country has ever achieved in peacetime.

Prospects of permanent full employment. By Vladimir S. Woytinsky and Albert Halasi. (In *International Postwar Problems*, Quarterly Review of American Labor Conference on International Affairs, New York 17) 9 East 46th Street, September 1944, pp. 498-523. \$1.)

Mr. Woytinsky emphasizes the importance of a gradual use of accumulated wartime reserves or savings, without price inflation, as a means of maintaining

post-war consumption, prosperity, and full employment in the United States. Mr. Halasi stresses the point of view that dependence on the spending of war reserves will not be sufficient and that direct intervention by the Government, at least by means of fiscal policies designed to prevent unemployment, will become necessary.

Is unemployment chronic? By Edward G. Bennion. (In *Harvard Business Review*, Vol. XXIII, No. 1, New York 18 (330 West 42d Street), autumn 1944, pp. 115-128; charts. \$1.50.)

The schism between business and government, in the author's opinion, can largely be explained by the failure of businessmen to understand the economic theories on which governmental policy is based. These theories, so far as they relate to unemployment, are described as being derived principally from the studies of J. M. Keynes, and are summarized in the article in "the simplest terms possible." It is stated that the Keynes' theory has so completely supplanted earlier economic thinking that it is "literally, the only unemployment theory in existence."

Pennsylvania employment—the war and after. By George L. Leffler and Mary Virginia Brown. State College, Pa., Pennsylvania State College, Bureau of Business Research, 1944. 36 pp.; mimeographed. (Bull. No. 15.)

Summary of information regarding changes in volume of employment, by industry and area, and in pay rolls and average earnings. The authors discuss the problem of maintaining full employment after the war and state that the amount of governmental control and regulation that will be necessary will be in inverse ratio to the success of business in sustaining prosperity and full employment.

Full employment and financial policy. London, S. W. 1, Labor Party, 1944. 8 pp. Continuation of financial and price controls in Great Britain is advocated, together with planned national development and cooperation between nations through an international development board.

Handicapped Workers

Jobs for disabled veterans. By Brig. Gen. Frank T. Hines. (In *Casualty & Surety Journal*, New York 7 (60 John Street), November 1944, pp. 1-10; illus.)

Statement of various phases of the work involved in retraining and reemploying disabled veterans of World War II.

Operations manual for placement of the physically handicapped. Washington 25, U. S. Civil Service Commission, 1944. 473 pp. 3d ed. 60 cents, Superintendent of Documents, Washington 25.

The manual covers around 3,000 individual positions in 162 governmental establishments and private establishments having Government contracts.

Physically handicapped workers. By Ross A. McFarland. (In *Harvard Business Review*, Vol. XXIII, No. 1, New York 18 (330 West 42d Street), autumn 1944, pp. 1-31. \$1.50.)

The first section of the article deals with experience in the employment of handicapped workers in war industries. Procedures followed by various industries in handling these workers are summarized and the advantages and disadvantages in employing them are cited. The second section, dealing with war veterans, reviews provisions for their rehabilitation and discusses the problems they will face when the war is over.

Health and Medical Care

Dust in steel foundries. London, Ministry of Labor and National Service, Factory Department, 1944. 23 pp. 6d. net.

First report of a committee appointed to consider methods of preventing the production or inhalation of dust and the possibility of reducing the use of materials containing free silica in steel foundries.

Health and medical services for public employees [in the United States]—a selected list of references. Washington 25, U. S. Civil Service Commission, Library, September 1944. 14 pp.; processed.

The incidence of illness and the volume of medical services among 9,000 canvassed families [in the United States]. By Selwyn D. Collins. Washington 25, Federal Security Agency, U. S. Public Health Service, 1944. Various paging; charts.

Collection of 23 reprints from the Public Health Service's weekly periodical, Public Health Reports.

Medical services in continental countries: 5, Holland. (In British Medical Journal, London, September 23, 1944, pp. 65, 66 of supplement. 1s. 6d.)

Medical services in Sweden, Poland, Denmark, and Yugoslavia were described in the issues of the British Medical Journal for June 24, July 15, August 12, and August 19, 1944, respectively.

The British Nation's health. By J. M. Mackintosh. London, Pilot Press, Ltd., 1944. 64 pp., charts, illus. (Target for tomorrow, No. 5.) 3s. 6d.

Cites facts to show how far the country has gone in insuring better health and the improvements still required.

Report of the Advisory Committee on the Treatment and Rehabilitation of Miners in the Wales Region Suffering from Pneumokoniosis. London, Ministry of Fuel and Power, 1944. 18 pp. 3d. net.

Specific recommendations are made for future action in the treatment and rehabilitation of cases.

Housing

Houses for tomorrow. By Thomas R. Carskadon. New York, Public Affairs Committee, Inc., 1944. 32 pp., charts. (Public affairs pamphlet No. 96.) 10 cents.

Urges the division of building effort between public and private activities so that the job may be done most effectively, and recommends abandonment of a localized building enterprise with a limited market.

Ninth annual report reviewing the activities of the Detroit Housing Commission, for the year of 1943. Detroit, Mich., 1944. 77 pp., map, illus.

Discussion of housing demand and the measures taken to meet it.

A review of the activities of the Housing Authority of the County of Los Angeles, 1938-43. Los Angeles, 1944. 120 pp., charts, plans, illus.

Traces development of the housing program from the passage of enabling legislation to the management and activities of completed projects.

Homes for war workers and families of low income: Report of the Philadelphia Housing Authority, July 1, 1941-June 30, 1943. Philadelphia, [1944?]. 44 pp., illus.

Industrial Accidents and Workmen's Compensation

Annual report on industrial accidents in Illinois for 1943: Part I, Summary of industrial injuries reported in 1943 as compensable under the Workmen's Compensation and Occupational Diseases Acts. Chicago 6, Illinois Department of Labor, Division of Statistics and Research, 1944. 72 pp.; mimeographed.

The second part of this report, not yet published, will cover compensation cases closed during 1943.

1943 annual accident report, [Pennsylvania]: Part I, All reported injuries; Part II, Compensable injuries in Pennsylvania industries; Part III, Injuries to women in Pennsylvania industries. Harrisburg, Pennsylvania Department of Labor and Industry, Bureau of Research and Information, [1944?]. 108, 34, and 46 pp.; mimeographed.

Quarry accidents in the United States during the calendar year 1942. By William W. Adams and Virginia E. Wrenn. Washington 25, U. S. Department of the Interior, Bureau of Mines, 1944. 89 pp. (Bull. No. 458.) 15 cents, Superintendent of Documents, Washington 25.

A comparative study of occupational injuries in men and women. By J. L. Barritt, M. D., T. W. Wills, A. C. Dick, M. D. (In *Industrial Medicine*, Chicago (605 North Michigan Avenue), September 1944, pp. 669-673; charts, illus. 50 cents.)

The writers point out that the success of women workers in industry depends on their being placed in employment adapted to their physical and mental capabilities; otherwise, numerous breakdowns will occur and ill-considered legislation will be enacted.

Conservation of manpower for war plant production: Twenty-five experts discuss all phases of the accident-reduction problem. Boston, Massachusetts Safety Council, 1943. 92 pp. \$1.50.

Workmen's compensation up to date. By W. H. Thompson. London, Labor Research Department, 1944. 72 pp. 2s.

Popular outline of British workmen's compensation legislation.

Industrial Relations

Aircraft industry union contracts. New York 17, National Industrial Conference Board, Inc., September 1944. 20 pp.

Part 1 lists the unions that claim jurisdiction over workers in the aircraft industry, and their reported membership; in part 2, three representative union agreements in the industry are reproduced.

The foreman's guide to labor relations. Washington 25, U. S. Department of Labor, Division of Labor Standards, 1944. 28 pp. (Bull. No. 66.) 10 cents, Superintendent of Documents, Washington 25.

Handling grievances. Philadelphia, Chamber of Commerce and Board of Trade, Industrial Bureau, 1944. 8 pp. (Industrial relations bulletin No. 1.) 10 cents.

Suggests practices and techniques that have been used successfully in settling grievances.

Industrial relations handbook. London, Ministry of Labor and National Service, 1944. 260 pp. 3s. 6d. net.

Account of the organization of employers and workers in Great Britain; collective bargaining and joint negotiating machinery; conciliation and arbitration; and statutory regulation of wages in certain industries.

Labor baron: A portrait of John L. Lewis. By James A. Wechsler. New York, William Morrow & Co., 1944. 278 pp., bibliography. \$3.

Analysis and interpretation of the role the president of the United Mine Workers has played in the labor, industrial, and political life of America during the past quarter of a century.

Management's stake in collective bargaining. New York 18 (330 West 42d Street), American Management Association, 1944. 51 pp. (Personnel series No. 81.)

The pamphlet contains four papers: The function of collective bargaining; Trends and principles established in wartime bargaining; The scope of collective bargaining; and Management's stake in collective bargaining, the latter paper being by the chairman of the National War Labor Board.

What the factory worker really thinks about post-war jobs and labor unions. Report of survey conducted by the Opinion Research Corporation of Princeton, N. J. (In *Factory Management and Maintenance*, New York 18 (330 West 42d Street), October 1944, pp. 81-92; charts. 35 cents.)

First of a series of surveys of the attitudes of factory workers. The information, it is stated, was obtained by personal interviews with workers on the streets near the plants where they were employed.

Industry Reports

The printing trades. By Jacob Loft. New York, Farrar & Rinehart, Inc., 1944. 301 pp., bibliography. \$3.

Third of a series on "Labor in Twentieth Century America," by the same publishers. Gives an account of industry and labor problems in newspaper and commercial printing fields from 1899 to 1939. The book also traces the development of collective bargaining and arbitration in the five national printing unions, and evaluates their contributions to the American labor movement.

La industria de la leche en Puerto Rico. San Juan, Junta de Salario Mínimo, División de Investigaciones y Estadísticas, 1944. 43 pp.; mimeographed.

Report of an official investigation of the milk industry in Puerto Rico, giving statistics of employment, hours worked, and hourly and weekly wages, in dairies and pasteurizing plants, respectively, in August and September 1943. The report also includes some data on these subjects from other studies for earlier periods back to 1938-39, and a tabulation of cost-of-living indexes from March 1941 to January 1944.

Statistical digest from 1938. London, Ministry of Fuel and Power, 1944. 68 pp. (Cmd. 6538.) 1s. 6d.

Statistics of coal mines in Great Britain are given by years from 1938 to 1943, inclusive, and for the first quarter of 1944. Production, employment, absenteeism, wages, and other items are included.

Labor Organizations and Their Activities

Labor in politics. By Beulah Amidon. (In Survey Graphic, New York 3 (112 East 19th Street), September 1944, pp. 390-393 et seq. 30 cents.)

Description of the origin and activities of the Political Action Committee of the Congress of Industrial Organizations, and of the National Citizens' Political Action Committee.

States exercise varied controls over labor unions. (In Business Week, New York 18 (330 West 42d Street), August 26, 1944, p. 28. 20 cents.)

The effect of legislative control of labor unions by 10 State governments is shown in a tabular statement.

The trade-union movement in the framework of French war economy, 1939-40. By Henry W. Ehrmann. (In Journal of Politics, Gainesville, Fla., August 1944, pp. 263-293. \$1.)

Shows the changing relations of organized labor with the French Government and the latter's failure to utilize the labor movement.

The trade-union movement in Germany, past, present, future. By Hans Gottfurcht, chairman, Trade Union Center for German Workers in Great Britain. London, N. W. 3 (20 East Heath Road, Flat 3), Trade Union Center for German Workers in Great Britain, July 1944. 33 pp.; mimeographed.

Reviews the development of the German trade-union movement and its destruction and replacement by the Labor Front under Nazism, and outlines a plan for reconstructing trade-unions.

Trade unions and the war situation. London, Trades Union Congress, [1943]. 30 pp. 3d.

Summary of discussions dealing with the war situation and relations with communist groups, at the annual meeting of the British Trades Union Congress at Southport in September 1943.

Post-War Reconstruction

After the war—what? The post-war program of the CIO maritime committee. Washington 4, Congress of Industrial Organizations, 1944. 31 pp.

National planning for a public works program. By Norman M. Pearson. (In Southwestern Social Science Quarterly, Austin, Tex., September 1944, pp. 77-99. 75 cents.)

Outline of the development of national public-works programs since the first World War. It is stated that in planning a Federal public-works program to provide employment in the coming post-war period a basic problem is the location of policy formulation as between the executive and Congress, comparable to that involved in post-war foreign policy. The author concludes that adequate planning requires a staff agency either in Congress or the executive branch, or a joint staff serving both.

A statistical summary of the Radford area, Giles, Montgomery, and Pulaski Counties, and the city of Radford, Virginia: Statistical data on war and pre-war employment and industry for use by local groups formulating plans for the post-war period. Washington 25, U. S. Bureau of Labor Statistics, Employment and Occupational Outlook Branch, Post-War Division, 1944. 16 pp., charts; mimeographed. (Industrial area statistical summary No. 15.) Free.

A summary of the proceedings of the second national wartime conference of the National Council of Scientific, Professional, Art, and White Collar Organizations, held June 2 and 3, 1944, in New York City. New York 22 (135 East 52d Street), National Council of Scientific, Professional, Art, and White Collar Organizations, 1944. 52 pp. 25 cents.

Subjects of the four panel discussions here summarized included planning for full employment, problems of standards of living, international collaboration of the professions in the post-war world, and post-war readjustment and retraining of the professions. Among the findings of the conference was a proposal that the National Wartime Conference be continued and that henceforth it be known as the National Council of Scientific, Professional, Art, and White Collar Organizations.

The international post-war settlement. London, S. W. 1, Labor Party, 1944. 7 pp.

Report prepared by the national executive committee of the British Labor Party for presentation at the annual conference of the party in London, May 29-June 2, 1944.

Remobilization for peace. By Sir Ronald Davison. London, Pilot Press, Ltd., 1944. 56 pp., illus. (Target for tomorrow, No. 12.)

Deals with problems of demobilization in Great Britain, plans already adopted to meet some of them, and unsolved questions. In the author's view, Government regulation to remobilize for peace is justified to insure an orderly transition from economic war to economic security.

Work, the future of British industry. London, Conservative and Unionist Party Organization, Central Committee on Post-War Problems, 1944. 47 pp. 6d.

Statement of lasting principles and salient facts concerning twentieth-century industry, according to the introduction, and not a political program.

Prices

Wholesale prices [in the United States], July-December and year 1943. Washington 25, U. S. Bureau of Labor Statistics, 1944. 60 pp. (Bull. No. 785.) 10 cents, Superintendent of Documents, Washington 25.

Price index numbers of commodities and services used by farmers [in Canada]. Ottawa, Department of Trade and Commerce, Dominion Bureau of Statistics, 1944. 21 pp., charts. 10 cents.

The New Zealand wartime prices index. Wellington, Government Printer, 1944. 23 pp. 9d.

Summarizes events leading to adoption of the wartime prices index and describes the manner in which it is compiled.

Social Security

Social security in America: Addresses at National Conference on Social Security, sponsored by Chamber of Commerce of the United States, January 1944.

[Washington, Chamber of Commerce of the United States], 1944. 103 pp. \$1.

The addresses covered various phases of social security: Employment and unemployment compensation, veterans' rehabilitation and reemployment, old-age and survivors insurance, and health insurance.

UE guide to group insurance. New York 22 (11 East 51st Street), United Electrical, Radio and Machine Workers of America, 1944. 127 pp.

Handbook designed to help organizers and locals negotiate group insurance with employers. Describes types, contents, preparation, and administration of good group-insurance plans.

Beveridge on Beveridge: Recent speeches of Sir William Beveridge. Edited by Joan S. Clarke. London, S. W. 1, Social Security League, [1944?]. 40 pp. 1s.

Deals with a number of questions raised in the Beveridge social-insurance report.

La Caja de Pensiones, [Ecuador]. By F. A. López Arteta. (In Boletín de Informaciones y de Estudios Sociales y Económicos, Instituto Nacional de Previsión, Quito, March 1944, pp. 7-77.)

An account, with statistics (receipts, investments, and benefits to workers), of the Ecuadoran social-insurance system from its beginning through 1942, and pertinent legislation through 1942 reproduced or summarized.

Social insurance in Nazi-controlled countries. By Erna Magnus. (In *Political Science Quarterly*, Columbia University, New York 27, September 1944, pp. 388-419. \$1.)

Surveys the policies regarding social insurance applied to the Nazi-controlled areas, provisions concerning workers transferred from these areas for employment in Germany, and coordination with the German social-insurance scheme of the various types of social insurance existing in the territories annexed by Germany.

Social security in New Zealand—a simple guide for the people. By A. M. Finlay. Christchurch (N. Z.), London, etc., Whitcombe & Tombs, Ltd., [1943]. 72 pp. 2s.6d.

Describes the benefits under the various parts of the social-security legislation.

Wages and Hours of Labor

Intercity variations in wage levels. Washington 25, U. S. Bureau of Labor Statistics, 1944. 14 pp. (Bull. No. 793; reprinted from *Monthly Labor Review*, August 1944.) 5 cents, Superintendent of Documents, Washington 25.

1944 salary survey [in 78 Minnesota municipalities of over 2,500 population]. Minneapolis 14, Municipal Reference Bureau and League of Minnesota Municipalities, Information Service, 1944. In 6 parts, various paging; mimeographed.

Statistics of annual salaries of municipal employees, from mayors down to laborers, by occupation and locality, in 1942 and 1944.

Average hourly earnings in the airframe industry, 1943. Washington 25, U. S. Bureau of Labor Statistics, 1944. 35 pp. (Bull. No. 790; reprinted from *Monthly Labor Review*, May 1944, with additional data.) 10 cents, Superintendent of Documents, Washington 25.

Compensation and service of railroad employees—statistical tables, 1942. Chicago, U. S. Railroad Retirement Board, 1944. 178 pp.

All tables show the number of employees distributed by the amount of compensation and the number of months of service credited for 1942. The tables are arranged in seven groups, the first group giving grand totals and totals by class of employer (class I railroads, class I switching and terminal companies, Railway Express Agency, Pullman Company, class II and class III railroads, switching and terminal companies other than class I, electric railroads, and car loan companies). The other groups of tables give data by occupation for class I railroads, and by selected occupations for certain other types of employers. Separate groups of tables are given for male Negro employees and for female white employees.

Pay by the year is labor's goal. By Roger William Riis. (In *Survey Graphic*, New York 3 (112 East 19th Street), October 1944, pp. 422, 429, 430. 30 cents.)

Account of various plans for wage payments on an annual basis, and a brief discussion of efforts that are being made by labor organizations to obtain guaranteed-wage provisions in collective agreements.

Studies of the effects of long working hours. By Max D. Kossoris. Washington 25, U. S. Bureau of Labor Statistics, 1944. 14 pp. (Serial No. R. 1653; reprinted from *Monthly Labor Review*, June 1944.) Free.

Working Conditions (General)

The Australian foundry: Working conditions and how to improve them. Melbourne, Department of Labor and National Service, Industrial Welfare Division, 1944. 39 pp., illus. (Bull. No. 3.)

Factory inspection in China. By T. K. Djang. (In *International Labor Review*, Montreal, September 1944, pp. 284-299. Reprints of article are available at 10 cents each. Distributed in United States by Washington branch of I. L. O.)

Factory inspection in Britain. By Sir Wilfrid Garrett, Chief Inspector of Factories. (In *Labor and Industry in Britain*, British Information Services, New York, Washington, etc., September 1944, pp. 147-151, 155.)

Factory orders [in Great Britain], 1944 edition. London, Ministry of Labor and National Service, 1944. 388 pp. 5s. net.

Orders are classified by subject, such as safety, working hours, overtime, and home work.

Factory and Workshop Acts, [Ireland], 1901-20: Report for 1943. Dublin, Department of Industry and Commerce, [1944]. 12 pp. 4d.

Reviews operations under the factory legislation and lists laws relating to conditions of work in factories and workshops.

General Reports

America unlimited. By Eric Johnston. New York, Doubleday, Doran & Co., Inc., 1944. 254 pp. \$2.50.

In this book the president of the Chamber of Commerce of the United States expresses his views on a wide variety of subjects, including "management and labor" and "taxes and jobs."

Condiciones económicas y sociales de la República de Cuba. By Carlos M. Raggi Ageo. Habana, Ministerio de Trabajo, 1944. 215 pp.

Survey of economic and social conditions in Cuba, with data, some as late as 1943, on industrial and other distribution of the Cuban population, findings of cost-of-living inquiries, wage levels and wage control, unemployment and measures for its relief, labor organizations and their function in collective bargaining, etc.

Labor and labor relations in the new industries of Southwest China. By Kuo-heng Shih and Ju-K'ang T'ien. New York (129 East 52d Street), Institute of Pacific Relations, International Secretariat, 1943. 45 pp.; mimeographed. (Social change in Southwest China, Case study No. 2.) 50 cents.

Two case studies dealing with male and female workers, respectively, in two different factories.

Industrial labor under war conditions [in India]. By L. G. Joshi. (In Indian Journal of Social Work, Bombay, June 1944, pp. 7-24. \$1 in United States.)

[*Report of New Zealand Department of Labor for year ended March 31, 1944.* Wellington, 1944. 25 pp.

Covers operations under the existing labor legislation and wartime changes in regulations.

Zona de protectorado y de los territorios de soberanía de España en el Norte de África—anuario estadístico, 1942. Madrid, Spain, Ministerio de Trabajo, Dirección General de Estadística, 1943. 398 pp., maps, charts.

This statistical annual for the Spanish protectorate in Morocco and Spanish possessions in North Africa includes indexes of cost of living for 1942 and some earlier years; statistics of seasonal harvest migration for 1942; and statistics for 1941 of union membership, unemployment among union members, minimum and maximum daily wages (by industries), industrial accidents, and construction of low-cost houses.

