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EMPLOYMENT AND PAY ROLLS

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Employment and Pay Rolls

SUMMARY FOR SEPTEMBER 1938

Total Nonagricultural Employment

THERE was a marked increase in employment in September with approximately 475,000 people reemployed since August in all non-agricultural occupations. The total gain since June was about 650,000. These figures do not include employees on projects of the Works Progress Administration and other Federal emergency agencies. They also exclude temporary cannery employees who are not part of the normal labor supply, but are drawn into industry during the packing season. Since June 113,000 such workers have been hired.

A greater than seasonal gain of about 245,000 wage earners was estimated for manufacturing industries in September, including 17,000 hired by canneries. Factory wage disbursements were larger in September than in August by \$8,100,000 per week.

Retail stores showed a gain of 197,000 employees, which is larger than usual in this month. Wholesale firms increased their forces by 14,000, anthracite and bituminous-coal mine operators hired 28,000 additional wage earners, nearly 5,000 workers were reemployed in metal mines, and smaller numbers of employees were added by telephone and telegraph companies, hotels, insurance firms, and dyeing and cleaning firms. Steam railroads increased their forces for the fourth consecutive month, the September gain being more than 22,000.

The improvement in the employment picture was evidenced by the fact that reporting firms in 42 States and the District of Columbia showed more workers engaged in manufacturing and nonmanufacturing industries in September than in August. Among the important industrial States showing gains were Michigan, Indiana, New York, Pennsylvania, Ohio, Massachusetts, Illinois, and New Jersey.

Employment in September on work programs of the Federal Government increased on construction projects financed by P. W. A. funds, on the low-cost housing projects of the United States Housing Authority, on construction projects financed by regular Federal appropriations, on Federal projects under The Works Program, and on projects operated by the Works Progress Administration. Decreases in employment were reported on construction jobs financed by the

Reconstruction Finance Corporation, work projects of the National Youth Administration, and for the Civilian Conservation Corps. In the regular services of the Federal Government increases occurred in the judicial and legislative services and decreases in the executive and military services.

Industrial and Business Employment

Employment gains in September were noted in 73 of the 87 manufacturing industries surveyed by the Bureau of Labor Statistics and in 10 of the 16 nonmanufacturing industries covered. Pay-roll increases were shown by 71 of the manufacturing and 8 of the non-manufacturing industries.

For all manufacturing industries combined the employment expansion was 3.6 percent and the pay-roll gain 5.5 percent as compared with usual August-September seasonal gains of 1.2 percent and 1.0 percent, respectively. The durable-goods group of industries showed a rise of 5.0 percent in the employment level. Activity in automobile plants, preparatory to the introduction of new models, was reflected in a 35.2 percent employment gain. Hardware and machine tool firms showed employment gains of 10.3 percent and 6.6 percent, respectively, and steel mills added 1.2 percent to their forces. Other durable-goods industries of major importance which showed gains in September were electrical machinery, furniture, shipbuilding, sawmills, millwork, and foundries and machine shops.

Employment in the nondurable-goods group increased by 2.6 percent. The usual large seasonal employment gains were reported in the canning, cottonseed oil, beet sugar, confectionery, fertilizers, and millinery industries. There were also substantial additions to the personnel in clothing, silk and rayon goods, knit goods, and cotton-goods factories.

Retail stores reported 6.3 percent more employees on their rolls. This increase was larger than seasonal and was shared by such important lines of trade as apparel, general merchandising, furniture, lumber and building materials, and food. Wholesale trade showed a seasonal employment gain of 1.0 percent affecting most lines of trade. The largest increases were reported by dealers in farm products, assemblers and country buyers, and firms selling metals, dry goods and apparel, paper goods, and plumbing and heating supplies.

Anthracite mines increased their forces by 23.4 percent from the exceptionally low level of the previous month, and bituminous-coal mines had 4.2 percent more men on their rolls. Metal mines reported the second employment gain (8.5 percent) since September 1937, in response to increased demand and rising prices.

A preliminary report of the Interstate Commerce Commission indicated a gain of 2.4 percent, or 22,068, in the number of employees on

class I railroads. The total number on their pay rolls in September was 961,868. Corresponding pay-roll figures for September were not available when this report was prepared. For August they amounted to \$148,793,156 as against \$142,721,392 for July, an increase of 4.3 percent.

Hours and earnings.—The average hours worked per week by factory wage earners was 36.9 in September, a gain of 1.7 percent since August. The corresponding average hourly earnings were 63.2 cents or 0.1 percent higher in September than in August, while average weekly earnings stood at \$23.32, a gain of 1.8 percent since August.

Of the 14 nonmanufacturing industries for which man-hour data are available, 4 showed gains in average hours worked per week and 8 showed increases in average hourly earnings. Average weekly earnings were higher for 6 of the 16 nonmanufacturing industries surveyed.

Prior to January 1938 the wording of the definition on the schedules for public utilities, wholesale and retail trade, hotels, and brokerage and insurance firms called for the inclusion of higher-salaried employees such as corporation officers, executives, and others whose duties are mainly supervisory. These employees have, for the most part, always been excluded from employment reports for other industries, and beginning with January it was requested that they be omitted also for the industries named above. For this reason the average hours worked per week, average hourly earnings, and average weekly earnings for these industries are not comparable with the figures appearing in issues of this pamphlet dated earlier than January 1938.

Employment and pay-roll indexes and average weekly earnings in September 1938 for all manufacturing industries combined, for selected nonmanufacturing industries, and for class I railroads, with percentage changes over the month and year intervals except in the few industries for which data are not available, are presented in table 1.

TABLE 1.—Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, September 1938

Industry	Employment			Pay roll			Average weekly earnings		
	Index Sep- tember 1938	Percentage change from—		Index Sep- tember 1938	Percentage change from—		Average in Sep- tember 1938	Percentage change from—	
		Aug- ust 1938	Sep- tember 1937		Aug- ust 1938	Sep- tember 1937		Aug- ust 1938	Sep- tember 1937
All manufacturing industries combined ¹	(1923-25 = 100) 88.8	+3.6	-18.5	(1923-25 = 100) 81.0	+5.5	-22.4	\$23.32	+1.8	-4.8
Class I steam railroads ²	53.8	+2.4	-15.1	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Coal mining:	(1929 = 100)			(1929 = 100)					
Anthracite ³	46.4	+23.4	-20.2	29.4	+46.8	-14.1	20.64	+19.0	+7.6
Bituminous ³	83.5	+4.2	-16.0	71.9	+12.0	-20.9	23.03	+7.4	-5.8
Metaliferous mining.....	55.8	+8.5	-33.6	46.7	+6.9	-43.2	26.44	-1.5	-14.5
Quarrying and nonmetallic mining.....	44.6	+ ⁽⁶⁾	-18.5	38.4	-2.2	-23.5	21.68	-2.3	-6.1
Crude petroleum producing.....	71.5	-1.2	-8.5	66.5	-4	-6.5	34.39	+8	+2.1
Public utilities:									
Telephone and telegraph.....	74.9	+2	-6.1	92.6	+1.5	+4	31.05	+1.3	+6.8
Electric light and power and manufactured gas.....	92.5	-2	-6.2	98.4	-6	-5.4	33.32	-4	+9
Electric-railroad and motor-bus operation and maintenance.....	69.3	-2	-5.9	68.4	-1.6	-4.4	32.27	-1.4	+1.6
Trade:									
Wholesale.....	88.5	+1.0	-4.8	74.3	+8	-5.1	29.18	-2	-2
Retail.....	85.0	+6.3	-6.3	69.7	+4.4	-6.3	20.82	-1.8	0
General merchandising.....	98.4	+13.9	-5.1	87.1	+10.6	-5.7	17.56	-2.9	-6
Other than general merchandising.....	81.5	+4.1	-6.6	66.1	+2.8	-6.5	23.70	-1.3	+1
Hotels (year-round) ⁴	91.8	+1.6	-4.1	78.7	+1.7	-4.4	14.60	+1	-3
Laundries ⁵	96.5	-1.1	-7.3	81.4	-2.0	-5.8	17.07	-1.0	+1.6
Dyeing and cleaning ⁶	107.7	+2.6	-4.5	81.7	+10.0	-4.7	20.82	+7.2	-2
Brokerage.....	(¹)	-1.4	-13.2	(¹)	-1.5	-19.9	34.72	-1	-7.7
Insurance.....	(¹)	+6	+2.9	(¹)	-8	-1.8	35.08	-1.5	-4.5
Building construction.....	(¹)	-4	-31.4	(¹)	-5	-32.8	29.66	-1	-2.1

¹ Revised indexes—Adjusted to 1935 Census of Manufactures. Indexes for earlier months and years given in August issue of this pamphlet.

² Does not include railroad repair shops.

³ Preliminary. Source: Interstate Commerce Commission.

⁴ Not available.

⁵ Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of this pamphlet.

⁶ Less than 1/10 of 1 percent.

⁷ Average weekly earnings not strictly comparable with figures published in issues of this pamphlet dated earlier than January 1938, as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

⁸ Cash payments only; the additional value of board, room, and tips cannot be computed.

Public Employment

There was an increase of 10,000 during the month ending September 15 in the number working on P. W. A. projects, resulting from marked gains in employment on both Federal and non-Federal projects financed from P. W. A. A. 1938 funds. Of the 119,000 at work in September 19,000 were working on Federal and non-Federal projects financed from N. I. R. A. funds, 81,000 on non-Federal projects financed from E. R. A. A. 1935, 1936, and 1937 funds, and 19,000 on Federal and non-Federal projects financed with P. W. A. A. 1938 funds. Monthly pay-roll disbursements on P. W. A. projects amounted to \$9,980,000.

For the first time data on employment and pay rolls for low-cost housing projects of the United States Housing Authority are shown. During the month ending September 15, over 400 men were working on new construction and demolition; pay rolls were \$72,000. These figures pertain only to new projects under the United States Housing Authority and not to those formerly under the Public Works Administration.

On construction projects financed from regular Federal appropriations employment continued to increase during the month ending September 15, primarily as the result of an expansion in road work and river, harbor, and flood-control projects. The only types of projects for which decreases in the number working were reported were: Electrification projects other than those under the Rural Electrification Administration, locks and dams, naval vessels, and miscellaneous projects. In September 264,000 men were at work on all types of projects financed from regular Federal appropriations, a gain of 11,000 during the month and of 41,000 from September 1937. Pay-roll disbursements of \$27,503,000 were \$3,025,000 more than in the preceding month.

During the month ending September 15 nearly 3,000 men were at work on construction projects financed by the Reconstruction Finance Corporation, slightly less than the number working during the preceding period. Pay rolls of \$395,000 were also less for the month.

An important increase in employment occurred on projects operated by the Works Progress Administration, on which 3,120,000 were working in September and for which pay rolls amounted to \$164,907,000. On Federal projects under The Works Program for which reports represent activity in the month ending September 15, 118,000 were working, a small increase from August. Inasmuch as the employees worked a larger number of hours, pay rolls amounted to \$6,020,000 or \$226,000 more than in August. Employment on work projects of the National Youth Administration decreased. Data on employment and pay rolls for Student Aid in September will not be available until next month.

In the regular services of the Federal Government increases in the number working occurred in the judicial and legislative services and small decreases occurred in the executive and military services. Of the 870,000 employees in the executive service in September, 118,000 were working in the District of Columbia and 752,000 outside the District. Force-account employees (workers who are on the Federal pay roll and are engaged on construction projects) were 10 percent of the total number of employees in the executive service. Increases in employment in September occurred in the Post Office Department, the Department of the Interior, and in the administrative offices of the

P. W. A. Among those departments reporting marked decreases were the War Department and the Department of Agriculture.

Due to the end of an enlistment period the number of workers in the Civilian Conservation Corps decreased 17,000 in September. Of the 317,000 in camps in September 279,000 were enrollees, 5,000 reserve officers, 300 nurses, 1,600 educational advisers, and 31,000 supervisory and technical employees. Pay-roll disbursements to all groups of workers totaled \$14,467,000 for the month.

More than 8,000 workers were added to the pay rolls of State-financed road projects during the month ending September 15. This increase brought the total to 205,000, a gain of 12,000 from September 1937. The number working on new road construction in September was 32,000 and on maintenance 173,000. For both types of road work pay-roll disbursements were \$13,951,000, a gain of \$468,000 from August.

A summary of Federal employment and pay-roll disbursements for August and September is given in table 2.

TABLE 2.—*Summary of Federal Employment and Pay Rolls, September 1938*¹

[Preliminary figures]

Class	Employment		Per-centage change	Pay rolls		Per-centage change
	Septem-ber	August		Septem-ber	August	
Federal services:						
Executive.....	870,031	² 872,521	-0.3	\$131,865,390	² \$132,221,162	-0.3
Judicial.....	2,170	2,075	+4.6	544,404	563,538	-3.4
Legislative.....	5,300	5,299	+1.7	1,235,210	1,228,571	+5
Military.....	339,127	341,325	-6	27,346,929	26,887,384	+1.7
Construction projects:						
Financed by P. W. A. ⁴	118,886	108,926	+9.1	9,979,680	9,262,059	+7.7
U. S. H. A. low-cost housing.....	436	275	+58.5	71,947	23,742	+203.0
Financed by R. F. C. ⁵	2,829	2,959	-4.4	395,189	424,674	-6.9
Financed by regular Federal appropriations.....	263,721	252,599	+4.4	27,503,233	24,478,120	+12.4
Federal projects under The Works Program.....	117,518	117,459	+1	6,020,021	5,793,779	+3.9
Projects operated by W. P. A.....	3,120,399	3,063,758	+1.8	164,906,987	162,381,189	+1.6
National Youth Administration:						
Work projects.....	220,756	221,307	-2	3,927,491	3,888,640	+1
Student Aid.....	(⁶)	² 1,780	-----	(⁶)	² 5,696	-----
Civilian Conservation Corps.....	317,252	334,257	-5.1	14,467,301	14,945,948	-3.2

¹ Includes data on projects financed wholly or partially from Federal funds.

² Includes force-account and supervisory and technical employees shown under other classifications to the extent of 118,076 employees and pay-roll disbursements of \$14,469,770 for September and 115,657 employees and pay-roll disbursements of \$14,327,299 for August.

³ Revised.

⁴ Data covering P. W. A. projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds and Public Works Administration Appropriation Act of 1938 funds are included. These data are not shown under The Works Program. Includes 80,860 wage earners and \$7,068,139 pay roll for September; 87,543 wage earners and \$7,327,300 pay roll for August, covering Public Works Administration projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 18,984 wage earners and \$1,197,309 pay roll for September; 3,455 and \$225,539 pay roll for August, covering Public Works Administration projects financed from funds provided by the Public Works Administration Appropriation Act of 1938.

⁵ Includes 241 employees and pay-roll disbursements of \$20,152 for September and 197 employees and pay-roll disbursements of \$13,101 for August on projects financed by the RFC Mortgage Co.

⁶ Data not available.

Purchases From Public Funds

The value of material orders placed on projects financed from regular Federal appropriations during the third quarter of 1938 amounted to \$113,674,000. Approximately 387,000 man-months of labor were involved in the final fabrication of these materials. On P. W. A. projects orders were placed for \$51,993,000 worth of materials, for which it is estimated 148,000 man-months of labor were required in final fabrication processes.

The value of material orders placed on the various programs financed by Federal funds during the third quarter of 1938, the second quarter of 1938, and the third quarter of 1937, and the man-months of employment created in the final fabrication of the materials used are shown in table 3.

TABLE 3.—Value of Material Orders Placed on Projects Financed Wholly or Partially From Federal Funds and Number of Man-Months of Labor Created

[Subject to revision]

Program	Value of material orders placed			Man-months of labor created in final fabrication		
	Third quarter of 1938	Second quarter of 1938	Third quarter of 1937	Third quarter of 1938	Second quarter of 1938	Third quarter of 1937
Public Works Administration ¹	\$51,993,271	\$51,217,783	\$78,759,593	147,972	145,220	222,014
U. S. H. A. low-cost housing.....	94,219			236		
Reconstruction Finance Corporation ²	1,568,564	2,256,444	3,258,042	5,494	5,327	7,522
Regular Federal appropriations.....	113,673,966	85,308,721	90,096,143	286,837	218,604	225,904
Federal projects under The Works Program:						
Construction.....	8,133,096	13,086,761	27,651,985	21,743	34,575	73,721
Professional, technical, and clerical.....	69,009	115,360	187,092	231	323	601
Projects operated by W. P. A.....	(³)	94,914,514	57,303,258	(³)	280,928	174,479
Rentals and services on projects operated by W. P. A.....	(³)	48,342,335	41,632,998	(³)	(³)	(³)
National Youth Administration:						
Work projects.....	(³)	1,096,657	722,146	(³)	3,245	2,200
Rentals and services on work projects.....	(³)	604,725	383,447	(³)	(³)	(³)

¹ Data covering projects financed from E. R. A. A. 1935, 1936, 1937 and P. W. A. A. 1938 funds are included. These data are not shown under The Works Program. Includes low-cost housing projects financed from funds of N. I. R. A. and E. R. A. A., 1935.

² Includes RFC Mortgage Company.

³ Data not available.

DETAILED TABLES FOR SEPTEMBER 1938

Industrial and Business Employment

MONTHLY reports on employment and pay rolls are available for the following groups: 87 manufacturing industries; 16 nonmanufacturing industries, including private building construction; and class I steam railroads. The reports for the first two of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics, and in virtually all industries the samples are large enough to be entirely representative. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.

EMPLOYMENT, PAY ROLLS, HOURS, AND EARNINGS

The indexes of employment and pay rolls as well as average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries in September 1938 are shown in table 4. Percentage changes from August 1938 and September 1937 are also given.

The indexes for the manufacturing industries have been adjusted to the 1935 Census of Manufactures and are not comparable to those published in the July 1938 and earlier issues of this pamphlet. Electric and steam railroad repair shops have been excluded from the new series in keeping with the reclassification for the 1937 Census of Manufactures. This eliminates the duplication that has resulted heretofore, as steam railroad repair shop figures are included in the summaries released by the Interstate Commerce Commission.

The average hours worked per week, average hourly earnings, and average weekly earnings for all manufacturing industries combined now relate to 87 industries, instead of 89 as heretofore, because of the exclusion of electric and steam railroad repair shops. This exclusion also affects the averages for the durable-goods group because these industries were classified in that group. The average hours and hourly earnings for the 87 manufacturing industries combined, and for the manufacturing groups, are weighted on the basis of estimated employment for the separate industries. As these estimates have been affected by the revision of the indexes, it follows that the weighted averages for August and September differ from the averages that would result if the former estimates of employment were used as weights. Revised averages for earlier months will be computed and made available in the near future.

The indexes and averages for the iron and steel group and the non-ferrous metal products group have been affected by the transfer of the stamped and enameled ware industry from the latter group to the

former. The indexes, hours, and hourly earnings for the knit goods industry are now weighted on the basis of four subdivisions (hosiery, knitted outerwear, knitted underwear, and knitted cloth) for which separate figures are now given. Tractor manufacturing establishments have been transferred from the engine-turbine-water wheel-windmill industry to the agricultural industry, thereby affecting the figures for both industries.

The revised series of employment and pay-roll indexes, as well as average hours worked per week, average hourly earnings, and average weekly earnings for July, August, and September 1938, where available, are presented in table 5. The July and August averages, where given, may differ in some instances from those previously published, not only because of the foregoing, but also because of revisions necessitated by the inclusion of late reports and other causes.

The weekly average earnings shown in tables 4 and 5 are computed by dividing the total weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As all reporting establishments do not supply man-hour data, average hours worked per week and average hourly earnings are necessarily based on data supplied by a smaller number of reporting firms. The size and composition of the reporting sample varies slightly from month to month and therefore the average hours per week, average hourly earnings, and average weekly earnings shown in tables 4 and 5 are not strictly comparable from 1 month to another, even after revisions. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movements of earnings and hours over the period shown. The changes from the preceding month, expressed as percentages, are based on identical lists of firms for the 2 months, but the changes from September 1937 are computed from chain indexes based on the month-to-month percentage changes.

TABLE 4.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, September 1938

MANUFACTURING

[Indexes are based on 3-year average, 1923-25=100, and are adjusted to 1935 Census of Manufactures. Not comparable to indexes published in pamphlets prior to August 1938. Comparable series available upon request]

Industry	Employment			Pay rolls			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Index Sep- tember 1938	Percentage change from—		Index Sep- tember 1938	Percentage change from—		Sep- tember 1938	Percentage change from—		Sep- tember 1938	Percentage change from—		Sep- tember 1938	Percentage change from—	
		August 1938	Sep- tember 1937		August 1938	Sep- tember 1937		August 1938	Sep- tember 1937		August 1938	Sep- tember 1937		August 1938	Sep- tember 1937
All manufacturing industries.....	88.8	+3.6	-18.5	81.0	+5.5	-22.4	\$23.32	+1.8	-4.8	36.9	+1.7	(?)	<i>Cents</i> 63.2	+0.1	(?)
Durable goods.....	75.8	+5.0	-29.2	68.7	+7.8	-35.1	25.80	+3.2	-8.3	36.0	+1.7	(?)	70.8	+7	(?)
Nondurable goods.....	101.6	+2.6	-8.9	94.9	+3.7	-7.8	21.33	+1.0	+1.2	37.5	+1.7	(?)	57.7	-5	(?)
<i>Durable goods</i>															
Iron and steel and their products, not including machinery.....	81.7	+2.9	-29.6	68.6	+5.1	-40.3	24.60	+2.2	-15.2	33.0	+1.9	(?)	75.3	+2	(?)
Blast furnaces, steel works, and rolling mills..	85.1	+1.2	-32.9	67.6	+3.5	-47.1	25.25	+2.3	-21.4	30.0	+1.4	-21.0	83.9	+6	-(?)
Bolts, nuts, washers, and rivets.....	81.9	+4.9	-28.9	72.8	+10.2	-36.0	22.79	+5.1	-9.8	32.3	+6.0	-13.3	70.6	-7	+4.0
Cast-iron pipe.....	64.6	+2.5	-10.2	53.8	+1.4	-11.4	19.77	-1.2	-1.3	34.2	-4	-3.0	57.4	-7	+1.7
Cutlery (not including silver and plated cutlery) and edge tools.....	77.6	+4.1	-19.1	67.3	+10.6	-26.8	21.82	+6.3	-9.6	36.8	+6.4	-8.9	60.0	-7	-9
Forgings, iron and steel.....	43.5	+4.8	-39.3	37.7	+9.2	-47.2	25.45	+4.2	-12.9	34.5	+4.5	-13.6	73.9	-3	+5
Hardware.....	66.9	+10.3	-32.1	65.7	+13.9	-34.4	23.86	+3.3	-3.5	35.3	+3.3	-1.9	65.8	+(?)	-1.6
Plumbers' supplies.....	73.2	+2	-13.9	59.6	+4.0	-18.4	23.21	+3.8	-4.9	35.0	+2.9	-5.8	66.3	+8	+7
Stamped and enameled ware.....	121.6	+6.6	-27.3	119.9	+9.1	-27.3	23.67	+2.3	+2	37.9	+2.3	+9	62.6	+2	-3
Steam- and hot-water heating apparatus and steam fittings.....	69.8	+1.2	-21.0	53.3	-3.9	-32.9	23.00	-5.1	-15.0	33.3	-6.2	-15.3	69.1	+9	+1
Stoves.....	79.7	+4.9	-26.7	69.2	+12.6	-25.5	25.71	+7.4	+1.7	39.4	+8.9	+5	65.9	-1.1	+1.8
Structural and ornamental metalwork.....	60.5	+1.1	-29.2	49.7	-2.8	-36.0	26.01	-3.5	-9.7	35.7	-3.0	-11.2	72.9	-9	+1.7
Tin cans and other tinware.....	97.6	-1.9	-16.7	103.0	-3.7	-18.4	22.85	-1.8	-1.8	38.2	-2.3	-3.1	59.9	+6	+1.4
Tools (not including edge tools, machine tools, files, and saws).....	74.8	+4.1	-23.7	67.4	+7.0	-30.4	22.28	+2.9	-8.7	36.4	+3.3	-8.5	61.5	-3	-8
Wirework.....	127.9	+20.4	-31.5	134.2	+34.6	-28.8	25.31	+11.7	+1.5	36.9	+8.3	+4.5	68.7	+3.2	-5
Machinery, not including transportation equipment.	85.5	+1.7	-34.5	78.6	+3.3	-41.1	25.57	+1.5	-10.2	35.4	+1.8	(?)	72.1	+(?)	(?)
Agricultural implements (including tractors)...	90.6	-9.2	-49.6	87.1	-8.9	-57.2	26.55	+4	-15.0	34.7	+5	-11.4	76.9	+(?)	-3.7
Cash registers, adding machines, and calculating machines.....	136.4	+1.0	-12.0	120.8	+3	-21.8	28.62	-7	-11.0	35.3	-1.1	-13.3	81.8	+2	+2.6
Electrical machinery, apparatus, and supplies..	77.4	+4.5	-36.2	73.0	+7.8	-40.6	26.07	+3.1	-6.8	35.3	+3.2	-8.1	73.7	-(?)	+1.4
Engines, turbines, water wheels, and windmills..	83.1	+6	-24.8	90.0	+1	-26.2	28.00	-6	-2.0	35.6	-7	-5.7	78.8	+1	+4.5
Foundry and machine-shop products.....	77.7	+7	-32.1	68.1	+1.3	-40.3	25.02	+6	-13.0	35.2	+6	-13.1	71.0	+1	+9
Machine tools.....	114.2	+6.6	-31.8	107.8	+10.6	-43.4	26.87	+3.7	-16.8	36.3	+2.5	-17.7	74.1	+1.2	+1.0

Radios and phonographs.....	93.5	+5.2	-49.3	83.5	+10.7	-49.6	22.21	+5.2	-7	37.5	+4.9	+1.5	59.4	+4	-2.3
Textile machinery and parts.....	59.8	+3.6	-26.6	53.8	+7.0	-37.7	23.42	+3.3	-15.1	35.3	+4.4	-15.2	66.5	-1.1	+4
Typewriters and parts.....	121.6	+3.4	-21.8	115.7	+18.3	-26.7	22.85	+14.4	-11.7	35.4	+14.0	-6.6	64.6	+4	+3
Transportation equipment.....	63.8	+25.1	-40.0	64.8	+29.9	-36.6	32.65	+3.9	+5.7	36.4	+3.4	(9)	89.7	+5	(2)
Aircraft.....	755.5	-4	-14.5	727.2	+2.0	-4.6	29.87	+2.5	+7.5	40.1	+5	+3.2	75.1	+1.3	+7.8
Automobiles.....	64.9	+35.2	-42.2	66.3	-41.1	-37.5	33.81	+4.3	+7.3	36.3	+4.9	+6.1	93.3	-6	+2.1
Cars, electric- and steam-railroad.....	27.7	+14.0	-54.7	25.7	+15.3	-58.5	25.48	+1.2	-8.7	35.0	+9	-6.4	72.8	+3	-2.3
Locomotives.....	16.1	-11.0	-69.6	11.1	-15.7	-79.8	22.13	-5.3	-33.6	29.0	-6.7	-33.7	76.4	+1.5	+3
Shipbuilding.....	89.9	+8	-19.9	92.3	+2.6	-19.0	30.60	+1.7	+2.3	36.5	+1.4	+1.1	83.7	-2	+1.0
Nonferrous metals and their products.....	87.8	+5.8	-21.7	81.2	+9.6	-26.4	24.98	+3.6	-6.0	37.8	+4.7	(9)	66.1	-7	(2)
Aluminum manufactures.....	136.3	+6.1	-21.6	138.8	+10.4	-20.6	26.04	+4.0	+1.4	38.8	+4.9	-5	67.2	-9	+1.9
Brass, bronze, and copper products.....	92.7	+4.2	-22.7	89.1	+6.8	-27.1	26.32	+2.6	-5.5	36.9	+2.9	-3.1	71.3	-3	-2.8
Clocks and watches and time-recording devices.....	79.9	+2.8	-28.3	78.1	+11.2	-36.2	20.66	+8.1	-11.4	36.3	+9.8	-9.8	56.9	-1.5	-1.4
Jewelry.....	96.0	+10.8	-7.0	81.4	+16.2	-10.9	23.95	+4.8	-4.7	41.0	+6.8	+1.4	57.7	-1.6	-5.1
Lighting equipment.....	76.0	+11.9	-27.4	68.8	+19.1	-30.8	24.99	+6.5	-5.6	38.0	+7.1	-6.6	65.9	-5	+2.2
Silverware and plated ware.....	58.9	+2.3	-14.0	53.2	+9.8	-22.9	23.27	+7.3	-11.2	36.7	+7.6	-11.6	62.5	-1.4	-7
Smelting and refining—copper, lead, and zinc.....	65.4	+3.6	-25.5	60.3	+4.3	-31.2	25.95	+7	-7.7	37.7	0	-6.9	68.8	+6	-8
Lumber and allied products.....	65.9	+3.0	-18.0	60.1	+3.4	-17.2	21.33	+4	+1.0	40.3	-3	(9)	52.6	-6	(2)
Furniture.....	79.0	+3.9	-19.2	68.1	+9.0	-17.5	21.53	+5.0	+1.6	39.8	+1.2	-1.2	52.5	-3	-5
Lumber:															
Millwork.....	54.0	+2.1	-11.8	45.6	-1	-9.7	22.21	-2.2	+2.9	41.7	-7	+3.1	53.4	-1.4	-1
Sawmills.....	53.6	+2.2	-18.8	50.7	+9	-19.0	20.89	-1.3	-4	40.3	-1.1	-4	52.5	-5	-6
Stone, clay, and glass products.....	67.8	+2.3	-18.9	58.3	+3.2	-24.2	22.98	+9	-6.5	36.2	+5	(9)	63.2	-2	(2)
Brick, tile, and terra cotta.....	51.2	+2.5	-19.1	38.6	+3.7	-25.2	19.77	+1.2	-6.7	38.0	-1.0	-4.9	51.6	+1.0	-3.5
Cement.....	68.0	-2.6	-9.9	63.4	-3.0	-11.8	25.96	-5	-2.9	37.4	-1.0	-5.3	69.4	+6	+2.5
Glass.....	82.1	+4.3	-26.0	82.6	+5.1	-31.0	24.13	+7	-5.9	34.4	+1.7	-7.5	70.5	-7	+9
Marble, granite, slate, and other products.....	43.0	-7	-18.2	31.3	-2.1	-25.3	24.31	-1.5	-7.4	35.7	-8	-10.0	67.1	-1.1	-7
Pottery.....	74.9	+3.7	-9.0	64.1	+9.3	-14.9	21.22	+5.4	-6.5	35.7	+4.0	-10.7	61.9	-7	+1.6
<i>Nondurable goods</i>															
Textiles and their products.....	97.9	+2.9	-8.8	84.1	+5.1	-6.7	17.04	+2.1	+2.4	35.4	+1.7	(9)	48.2	+9	(2)
Fabrics.....	86.6	+1.8	-10.2	74.8	+1.9	-11.2	16.42	+1	-1.0	36.3	+4	(2)	46.2	-2	(2)
Carpets and rugs.....	72.7	+7.5	-26.2	60.9	+10.0	-18.9	22.31	+2.3	+6.7	34.9	+2.8	+13.6	63.9	-5	-3.0
Cotton goods.....	83.2	+2.3	-11.3	71.1	+3.9	-16.0	13.82	+1.5	-5.7	36.2	+1.3	+3.7	38.3	+1	-8.7
Cotton small wares.....	76.1	+6.0	-14.1	70.7	+9.0	-15.0	17.95	+2.8	-1.3	39.0	+4.1	+2.5	46.4	-6	-5.3
Dyeing and finishing textiles.....	104.1	+2.2	-5.9	89.7	+2.6	-5.6	20.68	+4	+2	38.7	+7	+6.9	52.8	-4	-6.6
Hats, fur-felt.....	90.0	+2.2	-4.8	95.0	+9.0	+16.1	26.85	+6.7	+21.5	36.4	+3.1	+21.4	71.1	-2.1	+1
Knit goods.....	111.8	+2.4	-7.6	116.2	+4.0	-4.0	18.14	+1.6	+9.2	36.6	+1.9	+5.4	51.0	0	-1.4
Hosiery.....	140.7	+1.8	-4.4	159.5	+3.4	-1.6	19.65	+1.6	+2.7	36.4	+1.8	+4.8	51.8	+9	-1.8
Knitted outerwear.....	80.1	+7.6	-5.2	71.6	+9.8	+4	17.27	+2.0	+5.9	38.2	+3.1	+5.7	44.8	+9	-4
Knitted underwear.....	69.1	+1.0	-17.5	59.3	+2.7	-15.8	14.39	+1.7	+2.1	34.6	+1.5	+6.5	41.6	-1	-2.7
Knitted cloth.....	150.3	-(9)	-20.1	128.1	+1.6	-15.2	19.06	+1.7	+6.1	40.7	+8	+8	47.0	+1.2	+2.9
Silk and rayon goods.....	63.2	+3.0	-21.0	50.7	+1.1	-25.0	16.03	-1.9	-5.0	35.7	-2.3	+1.7	44.5	+1	-6.6
Woolen and worsted goods.....	72.7	+3.2	-1.3	57.5	-7.3	-4.2	18.39	-4.3	-2.8	35.0	-4.3	+8.0	52.7	-1	-10.5
Wearing apparel.....	122.1	+5.0	-6.7	99.5	+10.1	+1.0	18.72	+4.9	+8.2	33.9	+4.2	(2)	53.9	0	(2)
Clothing, men's.....	107.5	+3.1	-8.7	80.1	+7.7	-4.5	19.33	+4.4	+4.5	32.3	+3.9	+6.4	50.4	+5	-3.7
Clothing, women's.....	177.1	+6.8	-6.7	137.6	+7.4	+4.6	20.69	+7	+11.7	34.0	+3.0	+12.0	55.4	-1.8	-1.6
Corsets and allied garments.....	97.3	+2.8	-3.4	96.1	+12.1	+1.9	16.54	+9.1	+5.6	36.2	+8.9	+8.3	45.7	-(9)	-2.7
Men's furnishings.....	138.1	+8.6	-1.8	124.9	+14.1	+6.7	14.17	+5.0	+10.3	34.9	+4.3	+20.7	35.7	-2.4	-6.0
Millinery.....	79.3	+16.2	+4	91.6	+53.8	+15.3	28.29	+32.3	+18.2	40.1	+16.2	+8.8	69.0	+10.4	-2.0
Shirts and collars.....	117.8	+4	-5.2	97.4	+4.3	-7.5	12.79	+3.9	-1.8	35.0	+3.1	+6.4	36.7	-2	-8.5

See footnotes at end of table.

TABLE 4.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, September 1938—Continued

MANUFACTURING—Continued

Industry	Employment			Pay rolls			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Index Sep- tember 1938	Percentage change from—		Index Sep- tember 1938	Percentage change from—		Sep- tember 1938	Percentage change from—		Sep- tember 1938	Percentage change from—		Sep- tember 1938	Percentage change from—	
		August 1938	Sep- tember 1937		August 1938	Sep- tember 1937		August 1938	Sep- tember 1937		August 1938	Sep- tember 1937		August 1938	Sep- tember 1937
Nondurable goods—Continued															
Leather and its manufactures.....	92.2	-0.4	-4.7	73.9	-3.9	-1.1	\$18.98	-3.4	+3.9	38.8	-4.5	(?)	Cents		
Boots and shoes.....	93.8	- .9	-2.6	70.9	-3.5	+3.3	17.87	-4.7	+5.8	36.3	-5.4	+3.7	52.4	+1.4	(?)
Leather.....	78.3	+1.6	-13.5	78.5	+1.2	-12.4	24.21	- .4	+1.0	38.7	- .2	+2.2	62.9	- .1	-7.7
Food and kindred products.....	142.7	+3.2	-6.2	136.7	+4.3	-4.4	23.43	+1.1	+1.9	41.3	+8.9	(?)	57.6	-1.8	(?)
Baking.....	145.6	+ .7	-2.4	143.5	+2.7	-3.1	25.86	+2.0	- .7	42.8	+3.0	- .7	61.0	-1.1	-3.0
Beverages.....	250.3	-3.7	-5.7	207.6	-7.6	-6.2	33.12	-4.0	- .4	39.2	-4.2	-2.7	85.4	+ .2	+2.8
Butter.....	103.7	-5.8	-6.7	90.0	-4.7	-2.8	22.76	+1.2	+4.5	46.9	+ .2	+2.5	48.3	+1.1	+2.9
Canning and preserving.....	272.0	+8.3	-17.1	238.1	+16.8	-17.5	15.83	+7.9	-2.8	38.3	+9.1	+ .6	42.5	-5.9	-2.8
Confectionery.....	87.9	+22.9	- .3	90.9	+31.2	+1.1	19.22	+6.7	+1.4	42.1	+13.4	+2.3	46.2	-5.9	-1.6
Flour.....	77.4	- .9	-2.5	81.4	+3.1	- .7	27.72	+4.1	+1.8	46.1	+3.2	-1.7	50.9	+1.0	+ .8
Ice cream.....	83.4	-10.4	-7.8	70.1	-12.7	-5.4	28.19	-2.6	+3.1	46.0	-5.2	-1.0	60.7	+1.8	+2.1
Slaughtering and meat packing.....	95.5	+1.3	- .3	108.7	+3.7	+1.2	28.66	+2.3	+1.5	41.9	+3.1	+2.3	68.6	- .6	- .4
Sugar, beet.....	100.2	+34.1	+2.9	97.3	+43.7	- .9	25.00	+7.2	-2.9	41.3	+14.1	-6.1	61.7	-4.5	+1.9
Sugar refining, cane.....	92.7	+2.9	+15.7	84.8	+5.9	+24.1	24.59	+2.9	+7.9	40.3	+3.7	+8.1	61.0	- .7	-4.8
Tobacco manufactures.....	66.3	+3.1	- .6	61.0	+3.4	- .3	16.98	+ .2	+ .2	37.1	+1.2	(?)	45.8	- .9	(?)
Chewing and smoking tobacco and snuff.....	62.6	+3.7	+2.3	71.8	+8.6	- .5	17.97	+4.8	-2.8	35.5	+4.3	-3.2	50.7	+3.0	+2
Cigars and cigarettes.....	66.8	+3.1	- .8	59.6	+2.8	- .1	16.72	- .3	+1.1	37.3	+ .8	+1.2	45.2	-1.0	+5
Paper and printing.....	104.3	+1.6	-7.8	101.1	+3.2	-7.1	27.91	+1.6	+ .7	33.0	+1.1	(?)	78.5	+ .3	(?)
Boxes, paper.....	98.8	+4.2	-7.7	105.4	+8.3	-3.0	21.74	+4.0	+5.0	40.8	+4.8	+2.8	53.8	- .8	+2.1
Paper and pulp.....	104.0	+1.1	-10.5	101.6	- .3	-12.3	23.92	-1.4	-2.1	39.1	- .7	+ .5	61.3	- .6	-2.4
Printing and publishing:															
Book and job.....	98.9	-(?)	-9.1	88.2	+2.4	-9.2	29.68	+2.4	- .3	37.5	+1.2	-2.9	80.0	+ .7	+2.5
Newspapers and periodicals.....	105.1	+2.6	-3.2	106.4	+5.2	-2.1	37.26	+2.6	+1.1	36.2	+1.1	- .6	98.8	+ .9	+2.2
Chemicals and allied products, and petroleum refining.....	113.0	+4.5	-13.5	113.9	+1.7	-13.0	23.35	-2.6	+ .7	38.3	+ .7	(?)	74.4	-2.5	(?)
Petroleum refining.....	121.0	- .7	-7.6	134.6	-2.5	-6.7	34.58	-1.8	+ .9	35.3	-1.9	- .8	98.4	- .1	+1.2
Other than petroleum refining.....	111.1	+6.0	-14.9	114.1	+3.4	-15.0	25.67	-2.4	0	39.5	+1.4	(?)	65.3	-2.9	(?)
Chemicals.....	112.5	+2.0	-19.6	121.4	+ .3	-20.2	29.90	-1.6	- .7	38.3	-1.2	-1.4	78.1	- .6	+4
Cottonseed—oil, cake, and meal.....	113.5	+66.0	-22.0	95.1	+66.7	-23.5	12.93	+ .5	-2.9	50.8	+9.3	-5.6	25.3	-6.7	+4.4
Druggists' preparations.....	110.0	+1.7	-7.0	120.6	+2.9	-5.0	23.44	+1.2	+3.1	39.4	+ .2	-3.1	58.7	+1.1	+1.3
Explosives.....	84.9	+3.7	-7.9	93.1	-(?)	-10.2	30.16	-3.5	-1.8	37.7	-2.5	-3.2	80.1	-1.1	+ .7

Fertilizers.....	82.1	+19.2	-12.6	77.4	+18.3	-19.4	17.58	-8	-7.5	38.3	+2.6	-6.4	45.9	-3.6	-6
Paints and varnishes.....	112.5	+1.7	-12.1	114.5	+3.0	-11.0	27.70	+1.2	+1.4	39.7	+1.3	+5	69.9	-1.1	+1.0
Rayon and allied products.....	315.2	+7.3	-17.1	308.2	+6.7	-16.5	24.02	-5	+7	37.7	-4	-4	63.8	-2	+1.2
Soap.....	92.6	+2.1	-2.5	94.6	+3.8	-2.9	29.10	+1.6	-3	39.7	+1.6	-2	73.5	+1	-3
Rubber products.....	75.9	+4.7	-22.2	76.7	+10.4	-21.4	26.91	+5.4	+1.0	35.9	+5.7	(?)	75.8	-4	(?)
Rubber boots and shoes.....	58.0	+7.2	-26.9	57.7	+13.4	-31.1	22.79	+5.8	-5.6	37.7	+5.4	-5.3	60.5	+4	-1.2
Rubber tires and inner tubes.....	61.9	+2.2	-27.2	67.3	+11.2	-23.8	31.27	+8.8	+5.0	33.0	+8.9	+7.8	94.6	+5	-2.4
Rubber goods, other.....	121.0	+6.9	-13.2	116.6	+8.2	-12.7	22.73	+1.2	+5	38.5	+2.3	+2.5	59.4	-8	-2.8

NONMANUFACTURING

[Indexes are based on 12-month average, 1929=100]

Coal mining:															
Anthracite ¹	46.4	+23.4	-20.2	29.4	+46.8	-14.1	\$20.64	+19.0	+7.6	22.1	+18.8	+4.9	91.1	+0.6	+0.7
Bituminous ¹	83.5	+4.2	-16.0	71.9	+12.0	-20.9	23.03	+7.4	-5.8	26.2	+9.8	-6.2	88.6	-4	-8
Metalliferous mining.....	55.8	+8.5	-33.6	46.7	+6.9	-43.2	26.44	-1.5	-14.5	40.0	-1.1	-8.6	66.4	-4	-6.2
Quarrying and nonmetallic mining.....	44.6	+	-18.5	38.4	-2.2	-23.5	21.68	-2.3	-6.1	40.6	-1.4	-5.7	53.5	-7	-6
Crude-petroleum producing.....	71.5	-1.2	-8.5	66.5	-4	-6.5	34.39	+8	+2.1	40.2	-6	+6	83.8	+1.1	+6
Public utilities:															
Telephone and telegraph ¹	74.9	+2	-6.1	92.6	+1.5	+4	31.05	+1.3	+6.8	39.1	+1.2	+1.6	81.1	+1	+4.2
Electric light and power and manufactured gas ¹	92.5	-2	-6.2	98.4	-6	-5.4	33.32	-4	+9	39.8	-1.5	-1.5	83.6	+7	+1.9
Electric-railroad and motorbus operation and maintenance ¹	69.3	-2	-5.9	68.4	-1.6	-4.4	32.27	-1.4	+1.6	44.8	-1.2	-3.3	71.3	-2	+4.8
Trade:															
Wholesale ¹	88.5	+1.0	-4.8	74.3	+8	-5.1	29.18	-2	-2	42.1	-6	-1.6	69.7	+2	+5
Retail ¹	85.0	+6.3	-6.3	69.7	+4.4	-6.3	20.82	-1.8	0	42.3	-9	-6	53.2	-1.4	+1.5
General merchandising ¹	98.4	+13.9	-5.1	87.1	+10.6	-5.7	17.56	-2.9	-6	38.6	+2	+1.1	48.1	-3.2	-1.9
Other than general merchandising ¹	81.5	+4.1	-6.6	66.1	+2.8	-6.5	23.70	-1.3	+1	43.4	-1.0	-9	54.8	-7	+2.4
Hotels (year-round) ¹ ² ³	91.8	+1.6	-4.1	78.7	+1.7	-4.4	14.60	+1	-3	46.4	-1.3	-4.4	31.0	+1.4	+2.2
Laundries ¹	96.5	-1.1	-7.3	81.4	-2.0	-5.8	17.07	-1.0	+1.6	41.9	-1.4	-1.7	41.3	+5	+3.4
Dyeing and cleaning ¹	107.7	+2.6	-4.5	81.7	+10.0	-4.7	20.82	+7.2	-2	43.4	+4.2	-1.3	48.4	+2.5	+1.3
Brokerage ¹	(?)	-1.4	-13.2	(?)	-1.5	-19.9	34.72	-1	-7.7	(?)	(?)	(?)	(?)	(?)	(?)
Insurance ¹	(?)	+6	+2.9	(?)	-8	-1.8	35.08	-1.5	-4.5	(?)	(?)	(?)	(?)	(?)	(?)
Building construction.....	(?)	-4	-31.4	(?)	-5	-32.8	29.06	-1	-2.1	32.9	-8	-5.4	90.3	-8	+2.9

¹ Average weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments, as all reporting firms do not furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample. Hours and earnings for all manufacturing industries now relate to 87 industries instead of 89 which were covered in the July and prior issues of the pamphlet. The two industries excluded are electric and steam-railroad repair shops. The averages for the durable goods group have also been affected by this exclusion. See text in section headed, "Employment, Pay Rolls, Hours, and Earnings."

² Not yet computed.

³ Less than $\frac{1}{10}$ of 1 percent.

⁴ Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1933 issue of this pamphlet.

⁵ Average weekly earnings, hourly earnings, and hours not strictly comparable with figures published in pamphlets prior to January 1933 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

⁶ Cash payments only; the additional value of board, room, and tips cannot be computed.

⁷ Not available.

TABLE 5.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries*

MANUFACTURING

[Indexes are based on 3-year average, 1923-25=100, and are adjusted to 1935 Census of Manufactures. Not comparable to indexes published in pamphlets prior to August 1938. Comparable series available upon request]

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Sep- tember 1938	Aug- ust 1938	July 1938	Sep- tember 1938	Aug- ust 1938	July 1938	Sep- tember 1938	Aug- ust 1938	July 1938	Sep- tember 1938	Aug- ust 1938	July 1938	Sep- tember 1938	Aug- ust 1938	July 1938
All manufacturing industries.....	88.8	85.7	81.9	81.0	76.8	70.6	\$23.32	\$22.90	\$22.06	36.9	36.3	34.7	<i>Cents</i> 63.2	<i>Cents</i> 62.9	<i>Cents</i> 63.5
Durable goods.....	75.3	71.7	70.3	68.7	63.7	58.6	25.80	24.98	23.53	36.0	35.4	33.2	70.8	70.2	70.4
Nondurable goods.....	101.6	99.0	92.9	94.9	91.5	84.1	21.33	21.25	20.83	37.5	38.9	35.9	57.7	57.8	58.3
<i>Durable goods</i>															
Iron and steel and their products, not including machinery.....	81.7	79.4	76.7	68.6	65.3	57.4	24.60	24.11	21.91	33.0	32.4	29.7	75.3	75.3	75.3
Blast furnaces, steel works, and rolling mills....	85.1	84.0	82.4	67.6	65.3	56.8	25.25	24.70	21.70	30.0	29.6	26.0	83.9	83.5	84.0
Bolts, nuts, washers, and rivets.....	81.9	78.1	77.2	72.8	66.0	58.5	22.79	21.62	19.37	32.3	30.7	27.3	70.6	70.6	70.9
Cast-iron pipe.....	64.6	63.0	61.7	53.8	53.0	51.9	19.77	20.00	20.02	34.2	34.3	34.4	57.4	57.8	57.9
Cutlery (not including silver and plated cutlery) and edge tools.....	77.6	74.5	63.9	67.3	60.9	52.1	21.82	20.63	20.59	35.8	34.6	33.6	60.0	60.8	62.5
Forgings, iron and steel.....	43.5	41.5	38.5	37.7	34.5	28.9	25.45	24.48	22.05	34.5	33.0	29.5	73.9	74.1	74.8
Hardware.....	66.9	60.6	56.5	65.7	57.6	48.3	23.86	23.03	20.77	36.3	35.2	31.8	65.8	65.7	65.2
Plumbers' supplies.....	73.2	73.1	72.5	59.6	57.3	55.3	23.21	22.33	21.70	35.0	34.0	33.0	66.3	65.5	65.6
Stamped and enameled ware.....	121.6	114.1	105.1	119.9	109.9	92.0	23.67	23.13	21.14	37.9	37.0	34.0	62.6	62.7	61.8
Steam and hot-water heating apparatus and steam fittings.....	69.8	69.0	67.1	53.3	55.5	51.5	23.00	24.27	23.18	33.3	35.2	33.4	69.1	69.2	69.1
Stoves.....	79.7	76.0	68.2	69.2	61.5	52.0	25.71	23.95	22.51	39.4	36.0	34.4	65.9	66.6	66.1
Structural and ornamental metalwork.....	60.5	59.8	59.1	49.7	51.2	48.8	26.01	26.94	26.01	35.7	36.9	35.8	72.9	73.1	72.8
Tin cans and other tinware.....	97.6	99.5	91.4	103.0	107.0	94.4	22.85	23.40	22.44	38.2	39.2	38.1	59.9	59.7	58.9
Tools (not including edge tools, machine tools, files, and saws).....	74.8	71.9	69.7	67.4	63.0	57.6	22.28	21.64	20.40	36.4	35.2	32.7	61.5	61.3	61.8
Wirework.....	127.9	106.2	109.6	134.2	99.8	91.6	25.31	22.64	19.87	36.9	34.0	30.6	68.7	66.7	65.1
Machinery, not including transportation equipment.....	85.5	84.1	82.9	78.6	76.1	72.7	25.57	25.08	24.34	35.4	34.6	33.5	72.1	72.0	72.4
Agricultural implements (including tractors)....	90.6	99.5	100.6	87.1	95.6	98.6	26.55	26.43	27.05	34.7	34.5	34.7	76.9	76.8	78.1
Cash registers, adding machines, and calculating machines.....	136.4	135.0	137.5	120.8	120.5	123.1	28.62	28.82	28.93	35.3	35.7	35.8	81.8	81.6	81.7
Electrical machinery, apparatus, and supplies.....	77.4	74.0	73.0	73.0	67.7	64.1	26.07	25.28	24.33	35.3	34.2	32.7	73.7	73.8	74.2
Engines, turbines, water wheels, and wind-mills.....	83.1	82.6	82.1	90.0	89.9	85.9	28.00	28.13	27.05	35.6	35.9	34.6	78.8	78.7	78.5

Foundry and machine-shop products.....	77.7	77.1	75.8	68.1	67.2	63.7	25.02	24.87	23.99	35.2	34.9	33.7	71.0	70.9	71.0
Machine tools.....	114.2	107.1	110.6	107.8	97.4	94.2	26.87	25.86	24.26	36.3	35.4	33.3	74.1	73.2	72.8
Radios and phonographs.....	93.5	88.9	81.6	83.5	75.5	72.4	22.21	21.20	22.11	37.5	35.7	36.3	59.4	59.5	61.0
Textile machinery and parts.....	59.8	57.7	53.9	53.8	50.2	45.3	23.42	22.78	21.92	35.3	33.9	33.2	66.5	67.3	66.1
Typewriters and parts.....	121.6	117.7	115.5	115.7	97.9	91.5	22.85	19.97	19.02	35.4	31.0	29.3	64.6	64.3	65.0
Transportation equipment.....	63.8	61.0	55.5	64.8	49.9	51.0	32.65	31.22	29.43	38.4	35.3	33.8	89.7	88.8	88.3
Aircraft.....	755.5	758.7	794.6	727.2	712.8	736.5	29.87	29.10	28.78	40.1	39.8	39.4	75.1	74.1	74.0
Automobiles.....	64.9	48.0	53.1	66.3	47.0	47.4	33.81	32.33	29.56	36.3	34.6	31.8	98.3	93.6	93.0
Cars, electric, and steam-railroad.....	27.7	24.3	22.8	25.7	22.3	20.2	25.48	25.26	24.45	35.0	34.7	32.9	72.8	72.8	74.3
Locomotives.....	16.1	18.0	20.2	11.1	13.1	15.5	22.13	23.37	24.51	29.0	31.1	32.1	76.4	75.2	76.4
Shipbuilding.....	89.9	89.1	93.8	92.3	90.0	99.9	30.60	29.99	30.90	36.5	35.9	37.0	83.7	83.6	83.1
Nonferrous metals and their products.....	87.8	83.0	79.1	81.2	74.1	67.0	24.98	24.14	22.93	37.8	36.2	34.3	66.1	66.6	66.8
Aluminum manufactures.....	136.3	128.5	122.0	138.8	125.8	111.5	26.04	24.89	23.07	38.8	36.9	33.9	67.2	67.5	68.1
Brass, bronze, and copper products.....	92.7	89.0	86.1	89.1	83.4	77.9	26.32	25.63	24.74	36.9	35.9	34.7	71.3	71.5	71.4
Clocks and watches and time-recording devices.....	79.9	77.7	73.6	78.1	70.3	59.6	20.66	19.11	17.11	36.3	33.0	29.5	56.9	57.8	57.8
Jewelry.....	95.0	86.7	79.2	81.4	70.1	61.2	23.95	22.70	21.49	41.0	38.6	36.2	57.7	57.7	58.6
Lighting equipment.....	76.0	67.9	62.8	68.8	57.8	49.6	24.99	23.83	21.33	38.0	35.0	31.5	65.9	68.1	67.9
Silverware and plated ware.....	58.9	57.5	50.8	53.2	48.5	38.1	23.27	23.13	20.55	36.7	35.9	31.7	62.5	64.6	64.7
Smelting and refining—copper, lead, and zinc.....	65.4	63.1	63.5	60.3	57.9	56.8	25.95	25.72	25.09	37.7	37.6	37.7	68.8	68.4	67.7
Lumber and allied products.....	65.9	64.0	60.7	60.1	58.1	48.7	21.33	21.02	18.64	40.3	40.5	38.6	52.6	52.3	51.1
Furniture.....	79.0	76.0	71.2	68.1	62.5	51.3	21.53	20.43	17.87	39.8	39.3	34.3	52.5	52.2	52.2
Lumber:															
Millwork.....	51.0	52.8	50.9	45.6	45.6	41.6	22.21	22.79	21.52	41.7	41.8	39.4	53.4	54.6	54.5
Sawmills.....	53.6	52.4	49.8	50.7	50.2	41.6	20.89	20.90	18.29	40.3	40.9	37.0	52.5	51.9	50.2
Stone, clay, and glass products.....	67.8	66.3	64.6	58.3	56.5	53.1	22.98	22.77	21.90	36.2	35.9	34.7	63.2	63.4	63.3
Brick, tile, and terra cotta.....	51.2	49.9	48.8	38.6	37.2	35.1	19.77	19.56	18.83	38.0	38.3	37.0	51.6	51.1	51.1
Cement.....	68.0	69.0	70.3	63.4	65.4	66.0	25.96	26.08	26.13	37.4	37.8	37.8	69.4	69.0	69.0
Glass.....	82.1	78.7	74.7	82.6	78.6	69.1	21.13	23.95	22.15	34.4	33.6	31.5	73.5	71.2	70.4
Marble, granite, slate, and other products.....	43.0	43.3	41.0	31.3	32.0	33.5	24.31	24.37	24.93	35.7	35.7	36.4	67.1	67.7	68.8
Pottery.....	74.9	72.3	69.5	64.1	58.7	53.1	21.22	20.40	19.14	35.7	34.4	32.5	61.9	62.9	62.3
<i>Nondurable goods</i>															
Textiles and their products.....	97.9	95.1	86.6	84.1	80.0	66.6	17.04	16.87	15.67	35.4	34.7	32.6	49.2	48.9	48.2
Fabrics.....	86.6	85.1	80.4	74.8	73.4	65.7	16.42	16.56	15.72	36.3	36.1	33.9	46.2	46.4	46.8
Carpets and rugs.....	72.7	67.6	62.8	60.9	55.4	44.7	22.31	21.65	18.82	34.9	34.3	29.8	63.9	63.2	63.2
Cotton goods.....	83.2	81.3	78.2	71.1	68.4	63.7	13.82	13.67	13.23	36.2	35.6	33.9	38.3	39.1	39.1
Cotton small wares.....	76.1	71.8	67.7	70.7	64.9	58.8	17.98	17.09	16.37	39.0	38.7	35.6	46.4	46.6	47.3
Dyeing and finishing textiles.....	104.1	101.9	97.0	89.7	87.4	73.3	20.65	20.75	19.60	38.7	38.3	35.7	52.8	53.8	54.6
Hats, fur-felt.....	90.0	88.1	79.8	95.0	87.2	71.9	26.85	25.21	23.85	36.4	35.3	34.3	71.1	73.1	70.1
Knit goods.....	111.8	109.2	104.6	116.2	111.7	98.2	18.14	17.88	16.41	36.6	35.9	32.9	51.0	51.6	51.5
Hosiery.....	140.7	138.2	133.0	159.5	154.3	134.2	19.65	19.38	17.51	36.4	35.7	32.2	54.8	55.5	55.3
Knitted outerwear.....	80.1	74.4	69.2	71.6	65.2	56.7	17.27	16.89	15.65	38.2	37.1	35.4	44.8	44.6	43.9
Knitted underwear.....	69.1	68.4	66.6	59.3	57.7	54.2	14.39	14.12	13.58	34.6	34.1	32.4	41.6	41.6	41.6
Knitted cloth.....	150.3	150.3	137.2	128.1	126.1	111.4	19.06	18.91	17.47	40.7	40.4	38.3	47.0	47.0	47.5
Silk and rayon goods.....	63.2	61.3	55.0	50.7	50.2	42.2	16.03	16.22	15.17	35.7	36.7	33.7	44.5	43.8	44.4
Woolen and worsted goods.....	72.7	75.1	68.4	57.5	62.1	55.5	18.39	19.21	18.85	35.0	36.4	35.4	52.7	52.9	53.4
Wearing apparel.....	122.1	116.3	98.9	99.5	90.4	66.0	18.72	17.68	15.50	33.9	32.5	30.2	53.9	53.1	50.8
Clothing, men's.....	107.5	104.3	89.8	80.1	74.4	57.4	19.33	18.40	16.37	32.3	31.3	28.3	59.4	58.6	58.2
Clothing, women's.....	177.1	165.9	134.6	137.6	128.1	86.0	20.69	20.23	17.14	34.0	32.9	31.3	55.4	54.8	52.1

See footnotes at end of table.

TABLE 5.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries—Continued

[Indexes are based on 3-year average, 1923-25=100, and are adjusted to 1935 Census of Manufactures. Not comparable to indexes published in pamphlets prior to August 1938. Comparable series available upon request]

Industry	Employment index			Pay-roll index			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Sep-tem-ber 1938	Aug-ust 1938	July 1938	Sep-tem-ber 1938	Aug-ust 1938	July 1938	Sep-tem-ber 1938	Aug-ust 1938	July 1938	Sep-tem-ber 1938	Aug-ust 1938	July 1938	Sep-tem-ber 1938	Aug-ust 1938	July 1938
<i>Nondurable goods—Continued</i>															
Textiles and their products—Continued.													<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Wearing apparel—Continued.															
Corsets and allied garments.....	97.3	94.7	93.2	96.1	85.8	82.5	\$16.54	\$15.27	\$14.92	36.2	33.3	31.9	45.7	46.0	46.7
Men's furnishings.....	138.1	127.2	120.5	124.9	109.5	94.0	14.17	13.46	12.17	34.9	33.8	32.2	35.7	36.0	35.0
Millinery.....	79.3	68.2	49.9	91.6	59.6	36.4	28.29	21.98	18.41	40.1	34.3	30.9	69.0	62.3	60.7
Shirts and collars.....	117.8	117.3	107.5	97.4	93.4	77.8	12.79	12.17	11.14	35.0	33.9	30.9	36.7	36.4	37.4
Leather and its manufactures.....	92.2	92.6	89.3	73.9	76.9	69.4	18.98	19.76	18.51	36.8	38.4	36.0	52.4	51.6	51.5
Boots and shoes.....	93.8	91.6	91.4	70.9	75.1	67.0	17.87	18.85	17.48	36.3	38.4	35.8	50.1	49.3	49.2
Leather.....	78.3	77.0	73.9	78.5	77.5	72.1	24.21	21.15	23.44	38.7	38.7	37.4	62.9	62.7	62.8
Food and kindred products.....	142.7	138.3	128.6	136.7	131.1	128.5	23.43	23.17	24.53	41.3	39.7	41.0	57.6	58.6	59.9
Baking.....	145.6	144.5	145.0	143.5	139.8	142.8	25.85	25.33	25.79	42.8	41.6	42.3	61.0	61.5	61.2
Beverages.....	250.3	260.0	259.6	297.6	322.0	322.8	33.12	34.51	34.73	39.2	40.8	41.2	85.4	85.2	85.1
Butter.....	103.7	110.1	110.9	90.0	94.4	95.9	22.76	22.89	23.01	46.9	47.7	47.9	48.3	47.8	47.6
Canning and preserving.....	272.0	251.2	178.6	238.1	203.8	157.2	15.83	14.07	16.06	38.3	35.1	38.2	42.5	42.9	42.9
Confectionery.....	87.9	71.6	67.5	90.9	69.3	63.1	19.22	18.03	17.47	42.1	37.0	35.4	46.2	49.0	49.6
Flour.....	77.4	78.1	77.9	81.4	78.9	79.4	27.72	26.53	27.06	46.1	44.7	45.4	59.9	58.9	59.3
Ice cream.....	83.4	93.1	94.7	70.1	80.3	80.6	28.19	28.92	28.69	46.0	48.3	48.1	60.7	59.8	59.4
Slaughtering and meat packing.....	95.5	94.2	94.7	108.7	104.8	107.9	28.66	27.93	28.63	41.9	40.6	41.6	68.6	68.9	69.1
Sugar, beet.....	100.2	74.7	53.2	97.3	67.7	53.1	25.00	23.33	25.66	41.3	36.2	36.6	61.7	64.6	71.7
Sugar refining, cane.....	92.7	90.1	88.1	84.8	80.1	81.3	24.59	23.90	24.82	40.3	38.8	41.7	61.0	61.6	59.9
Tobacco manufactures.....	68.3	64.3	61.5	61.0	59.0	57.1	10.96	16.89	17.18	37.1	36.7	37.2	45.8	46.2	46.0
Chewing and smoking tobacco and snuff.....	62.6	60.4	59.8	71.8	66.1	68.8	17.97	17.17	18.07	35.5	34.0	35.5	50.7	50.7	51.1
Cigars and cigarettes.....	66.8	64.8	61.7	59.6	58.0	55.6	16.72	16.82	16.96	37.3	37.0	37.4	45.2	45.9	45.6
Paper and printing.....	104.3	102.7	101.5	101.1	98.0	95.9	27.91	27.48	27.10	38.0	37.7	37.0	76.5	76.0	76.7
Boxes, paper.....	98.8	94.8	92.4	105.4	97.3	93.0	21.74	20.90	20.42	40.8	38.9	37.6	53.8	54.2	54.7
Paper and pulp.....	104.0	102.8	101.6	101.6	101.9	96.9	23.92	21.26	23.37	39.1	39.4	37.8	61.3	61.7	61.9
Printing and publishing:															
Book and job.....	98.9	99.0	97.7	88.2	86.2	85.0	29.68	29.01	28.96	37.5	37.1	36.9	80.0	79.3	80.0
Newspapers and periodicals.....	105.1	102.5	102.1	106.4	101.1	101.1	37.26	36.25	36.39	36.2	36.1	35.9	98.8	97.1	97.8
Chemicals and allied products, and petroleum refining.....	113.0	108.1	105.0	118.9	116.9	111.1	28.35	29.02	28.48	38.3	38.1	36.9	74.4	76.3	77.3
Petroleum refining.....	121.0	121.9	121.8	134.6	138.1	135.3	34.58	35.25	34.60	35.3	36.0	35.2	98.4	98.6	98.8
Other than petroleum refining.....	111.1	104.8	101.0	114.1	110.4	103.7	25.67	26.16	25.54	39.5	39.0	37.7	65.3	67.2	68.2
Chemicals.....	112.5	110.3	107.8	121.4	121.0	114.5	29.90	30.39	29.40	38.3	38.8	37.3	78.1	78.5	78.7
Cottonseed—oil, cake, and meal.....	113.5	68.4	59.3	95.1	57.0	51.2	12.93	12.83	13.31	50.8	46.8	48.3	25.3	26.8	26.7
Druggists' preparations.....	110.0	108.2	107.1	120.6	117.2	111.3	23.44	24.48	23.46	39.4	39.3	37.5	58.7	58.9	60.9
Explosives.....	84.9	81.9	80.5	93.1	93.1	89.4	30.16	31.26	30.52	37.7	38.6	36.7	80.1	80.9	83.2

Fertilizers.....	82.1	68.9	64.0	77.4	65.4	63.1	17.58	17.70	18.55	33.3	37.3	38.0	45.9	47.5	48.7
Paints and varnishes.....	112.5	110.6	110.8	114.5	111.2	111.0	27.70	27.39	27.38	39.7	39.2	38.8	69.9	70.0	70.7
Rayon and allied products.....	315.2	293.9	270.5	308.2	289.0	249.5	24.02	24.16	22.68	37.7	37.8	35.1	63.8	63.9	64.5
Soap.....	92.6	90.7	87.6	94.6	91.2	87.1	29.10	28.04	28.32	39.7	39.0	38.6	73.5	73.5	73.6
Rubber products.....	75.9	72.5	68.7	76.7	69.5	64.1	26.91	25.39	24.94	35.9	33.9	32.3	75.8	76.0	77.4
Rubber boots and shoes.....	58.0	54.1	42.3	57.7	50.9	36.7	22.79	21.54	19.86	37.7	35.8	33.3	60.5	60.2	59.7
Rubber tires and inner tubes.....	61.9	60.6	60.7	67.3	60.6	60.0	31.27	28.73	28.43	33.0	30.3	30.0	94.6	94.1	94.5
Rubber goods, other.....	121.0	113.2	106.6	116.6	107.7	95.0	22.73	22.34	20.81	38.5	37.7	35.3	59.4	59.7	59.9

NONMANUFACTURING

[Indexes are based on 12-month average, 1929=100]

Coal mining:															
Anthracite ¹	46.4	37.6	44.6	29.4	20.0	20.2	\$20.64	\$17.35	\$14.76	22.1	18.6	14.4	91.1	90.5	91.6
Bituminous ²	83.5	80.1	78.5	71.9	64.2	54.8	23.03	21.38	19.16	29.2	23.6	21.3	88.6	88.8	88.3
Metalliferous mining.....	55.8	51.4	49.7	46.7	43.7	38.0	26.44	26.62	24.01	40.0	39.5	35.1	66.4	67.7	66.7
Quarrying and nonmetallic mining.....	44.6	44.6	44.1	38.4	39.2	37.0	21.68	22.17	21.38	40.6	41.2	39.2	53.5	53.7	54.2
Crude-petroleum producing.....	71.5	72.4	72.3	66.5	66.8	66.7	34.39	34.11	33.94	40.2	40.5	39.8	83.8	82.9	84.2
Public utilities:															
Telephone and telegraph ³	74.9	74.8	74.9	92.6	91.3	90.9	31.05	30.25	30.19	39.1	38.6	38.4	81.1	81.3	82.7
Electric light and power and manufactured gas ⁴	92.5	92.7	92.3	98.4	98.9	98.3	33.32	33.54	33.40	39.8	40.4	39.4	83.6	83.4	84.9
Electric-railroad and motorbus operation and maintenance ⁵	69.3	69.5	70.1	68.4	69.5	69.0	32.27	32.73	32.19	44.8	45.3	44.5	71.3	71.4	71.3
Trade:															
Wholesale ⁶	88.5	87.6	86.8	74.3	73.7	73.6	29.18	29.35	29.71	42.1	42.3	42.1	69.7	69.9	70.6
Retail ⁷	85.0	80.0	81.1	69.7	66.8	68.1	20.82	21.38	21.72	42.3	42.7	42.6	53.2	54.6	55.9
General merchandising ⁸	98.4	86.4	87.9	87.1	78.8	80.4	17.56	18.12	18.33	38.6	38.7	39.0	48.1	49.8	49.8
Other than general merchandising ⁹	81.5	78.3	79.3	66.1	64.3	65.6	23.70	23.98	24.41	43.4	43.8	43.6	54.8	53.0	57.7
Hotels (year-round) ^{10 11}	91.8	90.4	90.7	78.7	77.4	77.4	14.60	14.64	14.65	46.4	47.1	46.7	31.0	30.7	31.2
Laundries ¹²	96.5	97.5	97.8	81.4	83.1	83.0	17.07	17.36	17.24	41.9	42.5	42.3	41.3	41.1	41.1
Dyeing and cleaning ¹³	107.7	105.0	108.6	81.7	74.3	77.5	20.82	19.47	19.85	43.4	42.0	42.0	48.4	46.8	47.6
Brokerage ¹⁴	-1.4	+1.0	+2.4	-1.5	+4	+3.1	34.72	34.71	34.53	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
Insurance ¹⁵	+6	+7	+6	-8	-2.5	-1.0	35.08	35.70	35.63	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
Building construction ¹⁶	-4	+2.6	+1.3	-5	+3.6	+1.8	29.66	29.69	29.52	32.9	32.9	33.0	90.3	90.3	89.5

¹ Average weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments, as all reporting firms do not furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample. Hours and earnings for all manufacturing industries now relate to 87 industries instead of 89 which were covered in the July and prior issues of the pamphlet. The two industries excluded are electric- and steam-railroad repair shops. The averages for the durable goods group have also been affected by this exclusion. See text in section headed, "Employment, Pay Rolls, Hours, and Earnings."

² Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of this publication.

³ Average weekly earnings, hourly earnings, and hours not strictly comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

⁴ Cash payments only; the additional value of board, room, and tips cannot be computed.

⁵ Indexes of employment and pay rolls are not available; percentage changes from preceding month substituted.

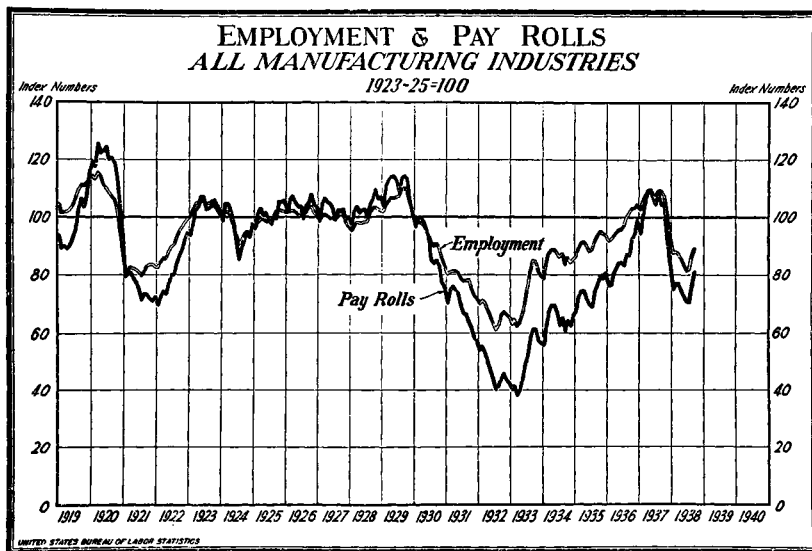
⁶ Not available.

⁷ Less than 1/10 of 1 percent.

INDEXES OF EMPLOYMENT AND PAY ROLLS

Indexes of employment and pay rolls are given in table 6 for all manufacturing industries combined, for the durable- and nondurable-goods groups of manufacturing industries, and for 13 nonmanufacturing industries, including 2 subgroups under retail trade, by months, from September 1937 to September 1938, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to September 1938.

The indexes of factory employment and pay rolls are computed from returns supplied by representative manufacturing establishments



in 87 manufacturing industries and relate to wage earners only. Formerly 89 manufacturing industries were covered in the Bureau's monthly survey, but two of these—electric and steam railroad repair shops—are now excluded. The base used in computing the indexes is the 3-year average 1923–25 as 100. In September 1938 reports were received from 25,037 manufacturing establishments employing 4,029,026 workers, whose weekly earnings were \$93,948,394. The employment reports received from these establishments cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 87 industries included in the monthly survey of the Bureau of Labor Statistics.

The indexes for the nonmanufacturing industries are based on the 12-month average for 1929 as 100. Figures for mining, laundries, dyeing and cleaning, and building construction cover wage earners

only, but the figures for public utilities, trade, hotels, brokerage, and insurance relate to all employees, except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum producing they cover wage earners and clerical field force.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and amount of pay rolls for the pay period ending nearest the 15th of the month.

TABLE 6.—*Indexes of Employment and Pay Rolls in Selected Manufacturing¹ and Non-manufacturing² Industries, September 1937 to September 1938, Inclusive*

Industry	Employment												
	1937					1938							
	Avg. 1937	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. Sept.
<i>Manufacturing</i>													
All industries.....	105.8	109.0	107.2	101.1	94.5	87.8	88.2	87.7	85.7	83.4	81.6	81.9	85.7 88.8
Durable goods ¹	104.0	105.3	106.6	100.8	91.7	81.7	80.1	79.3	77.0	75.0	72.4	70.3	71.7 75.3
Nondurable goods ¹	107.6	111.5	107.8	101.4	97.2	93.7	95.9	95.8	94.0	91.5	90.3	92.9	99.0 101.6
<i>Nonmanufacturing</i>													
Anthracite mining.....	60.2	58.1	61.5	60.9	61.4	59.6	60.0	59.3	57.0	52.8	56.0	44.6	37.6 46.4
Bituminous-coal mining.....	99.3	99.4	102.4	101.4	99.4	96.9	95.5	93.2	85.8	82.2	80.2	78.5	80.1 83.5
Metalliferous mining.....	76.8	84.1	82.9	75.4	70.4	67.4	63.6	62.3	61.6	58.8	56.0	49.7	51.4 55.8
Quarrying and nonmetallic mining.....	51.4	54.7	53.3	49.9	43.9	38.2	37.8	38.9	41.7	43.7	43.6	44.1	44.6 44.5
Crude-petroleum producing.....	76.5	78.2	77.5	77.2	76.5	75.3	74.2	73.6	73.8	73.2	72.8	72.3	72.4 71.7
Telephone and telegraph.....	77.8	79.8	79.6	78.9	78.0	77.8	75.7	74.9	74.8	75.0	74.8	74.9	74.8 74.8
Electric light and power, and manufactured gas.....	95.6	98.6	98.5	97.3	96.1	93.8	92.6	92.0	91.8	91.7	92.2	92.3	92.7 92.5
Electric-railroad and motorbus operation and maintenance ¹	73.1	73.7	73.4	73.2	72.8	72.3	71.2	70.8	71.1	70.6	70.4	70.1	69.5 69.6
Wholesale trade.....	92.0	93.0	94.0	93.5	93.3	91.0	90.4	89.1	88.5	87.3	87.2	86.8	87.6 83.4
Retail trade.....	89.8	90.7	92.1	91.7	100.4	84.1	82.4	83.0	88.2	83.8	83.6	81.1	80.0 85.0
General merchandising.....	104.3	103.7	108.1	109.8	145.9	91.5	88.8	90.5	101.0	92.4	91.9	87.9	86.4 98.4
Other than general merchandising.....	85.9	87.3	87.9	86.9	88.5	82.1	80.7	81.0	84.9	81.5	81.4	79.3	78.3 81.5
Year-round hotels.....	94.9	95.7	96.9	96.6	94.9	94.3	94.5	93.4	93.5	93.7	92.2	90.7	90.4 91.8
Laundries.....	103.6	104.1	99.9	97.5	97.0	96.8	95.7	94.8	95.4	96.2	96.6	97.8	97.5 96.5
Dyeing and cleaning.....	107.5	112.8	110.5	103.5	99.2	96.8	95.6	98.5	111.8	109.9	110.8	108.6	105.0 107.7
<i>Pay rolls</i>													
<i>Manufacturing</i>													
All industries.....	102.0	104.4	104.5	92.9	84.2	75.0	76.9	77.1	74.6	72.9	70.8	70.6	76.8 81.0
Durable goods ¹	103.5	105.8	108.2	94.8	81.0	67.1	67.2	67.4	65.6	64.2	61.7	58.6	63.7 68.7
Nondurable goods ¹	100.4	102.9	100.3	90.8	87.7	84.0	87.8	87.9	84.7	82.6	80.9	84.1	91.5 94.9

¹ 3-year average, 1922-25=100—adjusted to 1935 Census of Manufactures. Comparable indexes for earlier months are in August issue of pamphlet and November issue of Monthly Labor Review.

² 12-month average for 1929=100. Comparable indexes are in November 1934 and subsequent issues of Employment and Pay Rolls, or in February 1935 and subsequent issues of Monthly Labor Review, except for anthracite and bituminous-coal mining, year-round hotels, laundries, and dyeing and cleaning. Indexes for these industries from January 1929 forward have been adjusted to the 1935 census and are presented in the January 1938 and subsequent issues of Employment and Pay Rolls.

³ Includes: Iron and steel, machinery, transportation equipment, railroad repair shops, nonferrous metals, lumber and allied products, and stone, clay, and glass products.

⁴ Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.

TABLE 6.—Indexes of Employment and Pay Rolls in Selected Manufacturing and Non-manufacturing Industries, September 1937 to September 1938, Inclusive—Continued

Industry	Pay rolls													
	1937					1938								
	Avg. 1937	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
<i>Nonmanufacturing</i>														
Anthracite mining.....	46.9	34.2	55.4	49.0	51.3	46.5	46.1	47.3	39.0	38.3	49.7	20.2	20.1	29.4
Bituminous-coal mining.....	58.5	90.9	100.7	91.1	95.1	70.4	74.0	68.4	56.3	55.3	57.0	56.8	64.2	71.9
Metalliferous mining.....	74.0	82.2	81.7	71.6	65.1	59.1	55.8	56.3	53.3	51.2	46.1	38.0	43.7	46.7
Quarrying and nonmetallic mining.....	45.4	50.1	49.3	41.7	33.4	27.7	28.6	30.2	33.9	38.3	37.3	37.0	39.2	38.2
Crude-petroleum producing.....	68.2	71.2	69.9	70.2	69.8	68.2	69.6	68.0	68.0	66.7	67.6	66.7	66.8	66.4
Telephone and telegraph.....	89.6	92.3	94.9	91.4	94.7	93.7	89.9	92.6	91.6	91.3	90.9	90.9	91.3	92.6
Electric light and power, and manufactured gas.....	99.6	104.0	105.3	103.8	102.4	98.9	98.5	98.6	97.6	97.4	98.6	98.3	98.9	98.4
Electric-railroad and motorbus operation and maintenance ^a	70.6	71.6	71.4	71.8	71.9	70.6	70.2	69.9	70.0	71.2	69.7	69.0	69.5	68.6
Wholesale trade.....	76.6	78.3	79.3	78.3	77.8	75.4	75.3	74.7	74.6	75.1	73.8	73.6	73.7	74.2
Retail trade.....	73.1	74.4	75.9	75.3	80.6	70.1	68.4	68.6	72.2	70.0	69.5	68.1	66.8	69.7
General merchandising.....	92.5	92.4	96.2	97.1	123.3	84.6	81.5	82.2	89.4	84.4	84.3	80.4	78.8	87.1
Other than general merchandising.....	69.1	70.7	71.7	70.8	71.8	67.1	65.7	65.8	68.6	67.0	66.4	65.6	64.3	66.1
Year-round hotels.....	80.6	82.4	84.1	84.3	82.6	81.6	83.6	80.9	80.5	80.5	79.6	77.4	77.4	78.8
Laundries.....	83.0	86.4	83.4	81.1	81.1	80.1	79.1	78.6	80.6	80.9	81.8	83.0	83.1	81.4
Dyeing and cleaning.....	77.6	85.7	83.6	73.7	68.6	65.5	65.2	68.2	87.2	80.7	83.3	77.5	74.3	81.7

^a Not including electric-railroad car building and repairing.

TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES

A comparison of employment and pay rolls, by States and geographic divisions, in August and September 1938, is shown in table 7 for all groups combined, and for all manufacturing industries combined based on data supplied by reporting establishments. The percentage changes shown, unless otherwise noted, are unweighted—that is, the industries included in the manufacturing group and in the grand total have not been weighted according to their relative importance.

The totals for all manufacturing industries combined include figures for miscellaneous manufacturing industries in addition to the 87 manufacturing industries presented in table 4. The totals for all groups combined include all manufacturing industries, each of the nonmanufacturing industries presented in table 4 (except building construction), and seasonal hotels.

Similar comparisons showing only percentage changes are available in mimeographed form for "all groups combined," for "all manufacturing," for anthracite mining, bituminous-coal mining, metalliferous mining, quarrying and nonmetallic mining, crude-petroleum producing, public utilities, wholesale trade, retail trade, hotels, laundries, dyeing and cleaning, brokerage and insurance.

TABLE 7.—Comparison of Employment and Pay Rolls in Identical Establishments in August and September 1938, by Geographic Divisions and by States

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll September 1938	Percentage change from August 1938	Amount of pay roll (1 week) September 1938	Percentage change from August 1938	Number of establishments	Number on pay roll September 1938	Percentage change from August 1938	Amount of pay roll (1 week) September 1938	Percentage change from August 1938
				<i>Dollars</i>					<i>Dollars</i>	
New England	13,815	839,748	+2.4	19,013,389	+3.5	3,616	568,673	+2.5	12,183,120	+4.3
Maine.....	906	56,100	-1.1	1,100,181	-0.6	302	44,859	-0.5	839,062	-0.7
New Hampshire.....	665	41,296	+7	836,763	+1.5	213	34,310	+0.8	682,661	+1.1
Vermont.....	512	17,142	-1.2	37,449	-0.2	155	9,889	-2.5	200,901	-2.4
Massachusetts.....	¹ 8,051	452,379	+2.5	10,552,176	+3.1	¹ 7,732	262,678	+2.6	5,733,884	+4.0
Rhode Island.....	1,222	88,233	+6.4	1,826,508	+6.9	423	69,029	+7.6	1,335,999	+8.0
Connecticut.....	2,450	184,536	+1.9	4,325,293	+4.8	731	147,908	+1.8	3,331,613	+5.9
Middle Atlantic	31,602	1,989,250	+4.1	50,974,052	+4.9	6,396	1,137,055	+3.2	28,203,953	+4.8
New York.....	19,668	911,391	+4.3	23,138,319	+4.7	² 2,553	422,686	+5.0	11,479,847	+7.6
New Jersey.....	4,407	339,408	+2.8	8,596,071	+3.9	1,509	262,771	+1.7	7,650,242	+2.9
Pennsylvania.....	7,532	738,391	+4.3	17,239,657	+5.6	2,314	451,598	+2.8	10,221,157	+3.4
East North Central	25,924	1,942,954	+6.3	50,350,498	+7.9	8,552	1,376,033	+7.3	36,027,076	+9.6
Ohio.....	7,653	525,175	+4.1	13,154,510	+6.0	2,496	375,417	+4.0	9,526,994	+7.1
Indiana.....	² 2,947	258,524	+8.3	3,602,606	+9.4	¹ 1,054	186,246	+9.8	4,448,241	+11.7
Illinois.....	⁴ 6,656	551,651	+2.1	14,153,552	+2.0	2,444	393,596	+2.8	9,163,878	+2.4
Michigan.....	4,181	390,954	+19.7	11,937,312	+23.4	¹ 1,031	293,801	+23.6	9,207,638	+26.5
Wisconsin.....	⁵ 4,387	227,246	-0.3	5,453,045	-1.4	⁶ 1,588	151,979	-3.4	3,627,425	-3.2
West North Central	12,662	458,313	+1.9	10,810,277	+3	2,580	211,323	-3	5,015,244	-1.2
Minnesota.....	⁷ 2,717	123,173	+0.8	3,151,134	-7	632	43,135	-2.6	1,211,329	-3.2
Iowa.....	2,103	65,881	+2.0	1,499,639	+1.4	407	36,253	+2.6	872,852	+2.4
Missouri.....	3,041	167,672	+2.4	3,868,076	+2	843	89,414	-9	1,982,115	-2.7
North Dakota.....	583	5,871	+3.4	137,911	+2.2	53	665	-4.9	18,976	-2
South Dakota.....	474	8,250	+2.3	207,271	+0.8	34	2,003	+4	51,581	+3.4
Nebraska.....	1,442	30,094	+3.1	662,332	+1.0	144	10,265	+4.0	245,053	+1.2
Kansas.....	⁸ 2,302	55,572	+4.2	1,283,914	+5	467	24,590	+7	638,038	+1.5
South Atlantic	11,430	849,908	+2.5	16,159,569	+3.6	2,994	575,280	+2.2	9,991,450	+3.2
Delaware.....	235	15,019	-3.3	334,952	-0.5	85	10,852	-5.3	236,513	-0.4
Maryland.....	1,605	127,283	+3.7	2,934,818	+7	637	86,639	+2.1	1,941,835	+1.9
District of Columbia.....	1,137	39,670	+1.2	1,051,908	+3.9	39	3,303	+3.9	113,800	+6.0
Virginia.....	2,122	116,703	+4.8	2,185,643	+4.2	465	80,311	+5.1	1,509,411	+4.7
West Virginia.....	1,273	135,907	+3.0	3,285,438	+6.9	252	50,615	+4.9	1,181,716	+5.9
North Carolina.....	1,632	175,469	+1.3	2,674,459	+3.8	690	158,633	+1.3	2,407,285	+4.1
South Carolina.....	809	85,311	+2.4	1,194,728	+1.9	238	76,998	+2.2	1,044,811	+1.6
Georgia.....	1,543	113,199	+2.2	1,751,943	+3.7	387	86,603	+1.9	1,212,566	+4.7
Florida.....	1,074	41,395	+3.7	745,680	+1.9	201	21,215	+2.2	343,513	+1.3
East South Central	4,880	286,443	+3.3	5,382,581	+6.2	1,065	171,920	+2.9	3,072,605	+6.9
Kentucky.....	1,409	79,645	+2.6	1,735,769	+8.8	291	32,182	+2.2	709,864	+16.3
Tennessee.....	1,378	100,750	+2.4	1,824,073	+3.8	375	72,275	+2.1	1,288,352	+3.7
Alabama.....	1,493	86,302	+4.3	1,527,436	+6.8	298	55,071	+3.1	901,208	+5.1
Mississippi.....	600	19,746	+7.2	300,353	+4.1	101	12,392	+9.1	173,181	+5.6

¹ Includes banks and trust companies, construction, municipal, agricultural, and office employment, amusement and recreation, professional services, and trucking and handling.

² Includes laundering and cleaning, and water, light, and power.

³ Weighted percentage change.

⁴ Includes automobile and miscellaneous services, restaurants, and building and contracting.

⁵ Includes construction but not public works.

⁶ Does not include logging.

⁷ Includes banks, real estate, pipe-line transportation, trucking and transfer, railroads (other than repair shops), motor transportation (other than operation and maintenance), water transportation, hospitals, clinics, personal, business, mechanical repair, and miscellaneous services, and building construction.

⁸ Includes financial institutions, miscellaneous services, and restaurants.

⁹ Weighted percentage change including hired farm labor.

TABLE 7.—Comparison of Employment and Pay Rolls in Identical Establishments in August and September 1938, by Geographic Divisions and by States—Continued

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll September 1938	Percentage change from August 1938	Amount of pay roll (1 week) September 1938	Percentage change from August 1938	Number of establishments	Number on pay roll September 1938	Percentage change from August 1938	Amount of pay roll (1 week) September 1938	Percentage change from August 1938
				<i>Dollars</i>					<i>Dollars</i>	
West South Central.	5,949	228,283	+3.1	5,027,320	+1.7	1,359	112,645	+3.6	2,439,575	+1.7
Arkansas..... ¹⁰	1,121	32,869	+5.1	571,137	+4.0	307	20,481	+5.8	346,110	+6.1
Louisiana.....	1,146	59,085	+5.2	1,172,445	+4.0	258	32,800	+8.7	611,869	+5.4
Oklahoma.....	1,514	44,808	+1.3	1,099,689	+7	145	11,306	+9	273,510	+8
Texas.....	2,168	91,521	+1.9	2,184,049	+4	649	48,048	+(11)	1,208,086	-1.0
Mountain.....	4,575	131,788	+3.0	3,202,796	+2.9	583	38,811	-1.4	919,033	-3.0
Montana.....	709	16,113	+3.5	453,329	+2.3	80	4,354	-5.6	116,978	-5.4
Idaho.....	548	11,131	+2.3	268,150	+1.1	63	3,843	+1.7	95,035	+6
Wyoming.....	350	9,324	+2.0	267,023	+4.9	45	1,751	-5.1	53,610	-9.4
Colorado.....	1,353	45,839	+3.1	1,067,505	+2.0	204	15,144	+1.1	359,542	-4.5
New Mexico.....	313	7,134	+1.6	145,085	+2	30	936	-3.8	16,615	-9.1
Arizona.....	479	14,984	+10.5	385,446	+7.3	41	2,914	+7	73,948	+2.8
Utah.....	622	23,910	+2	525,725	+3.7	102	9,150	-4.2	182,296	+2.1
Nevada.....	201	3,353	-2.1	95,563	-3.2	18	719	-3.9	21,009	+5
Pacific.....	10,713	487,336	+2.8	13,353,849	+1.2	2,615	262,691	+4.2	6,871,305	+2.6
Washington.....	3,054	100,390	+5.7	2,554,428	+2.5	551	53,392	+8.3	1,323,897	+2.3
Oregon.....	1,481	56,647	+5.7	1,445,448	+3.9	314	33,857	+8.5	854,698	+5.4
California..... ¹²	6,178	330,299	+1.4	9,353,973	+4	1,750	175,542	+2.3	4,692,710	+2.2

¹⁰ Includes automobile dealers and garages, and sand, gravel, and building stone.¹¹ Less than $\frac{1}{10}$ of 1 percent.¹² Includes banks, insurance, and office employment.

INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in August and September 1938 is made in table 8 for 13 metropolitan areas which had a population of 500,000 or over in 1930. Cities within these areas, but having a population of 100,000 or over, are not included. Data concerning them are presented in a supplementary tabulation which is available on request.

Footnotes to the table indicate which cities are excluded. The figures represent reports from cooperating establishments and cover both full- and part-time workers in the manufacturing and nonmanufacturing industries presented in table 4, with the exception of building construction, and include also miscellaneous industries.

Revisions made in the figures after they have gone to press, chiefly because of late reports by cooperating firms, are incorporated in the supplementary tabulation mentioned above. This supplementary tabulation covers these 13 metropolitan areas as well as other metropolitan areas and cities having a population of 100,000 or more according to the 1930 census of population.

TABLE 8.—Comparison of Employment and Pay Rolls in Identical Establishments in August and September 1938, by Principal Metropolitan Areas

Metropolitan area	Number of establishments	Number on pay roll, September	Percentage change from August	Amount of pay roll (1 week) September	Percentage change from August
New York, N. Y. ¹	14,363	593,817	+4.4	\$16,110,513	+5.2
Chicago, Ill. ²	4,507	414,538	+2.1	11,285,256	+1.9
Philadelphia, Pa. ³	2,087	181,878	+2.5	4,819,927	+3.3
Detroit, Mich.	1,786	230,261	+24.9	7,508,848	+26.1
Los Angeles, Calif. ⁴	3,044	150,420	+3.0	4,305,343	+2.3
Cleveland, Ohio.	1,774	117,536	+4.7	3,052,760	+7.4
St. Louis, Mo.	1,532	119,744	+7	2,735,167	-2.8
Baltimore, Md.	1,152	95,512	+1.5	2,209,145	+1.0
Boston, Mass. ⁵	1,562	102,676	+7	2,921,472	+4.9
Pittsburgh, Pa.	1,173	158,749	+2.6	3,806,069	+1.4
San Francisco, Calif. ⁶	1,700	81,004	-1.2	2,336,232	-3.4
Buffalo, N. Y.	882	68,548	+5.7	1,920,976	+7.1
Milwaukee, Wis.	1,169	92,400	+2.2	2,360,832	-1.9

¹ Does not include Elizabeth, Jersey City, Newark, or Paterson, N. J., nor Yonkers, N. Y.

² Does not include Gary, Ind.

³ Does not include Camden, N. J.

⁴ Does not include Long Beach, Calif.

⁵ Figures relate to City of Boston only.

⁶ Does not include Oakland, Calif.

Public Employment

Employment created by the Federal Government includes employment in the regular agencies of the Government, employment on the various construction programs wholly or partially financed by Federal funds, and employment on relief-work projects.

EXECUTIVE SERVICE OF THE FEDERAL GOVERNMENT

Statistics of employment and pay rolls for the executive service of the Federal Government in August and September 1938 are given in table 9.

TABLE 9.—Employment and Pay Rolls for the Executive Service of the U. S. Government, August and September 1938¹

[Subject to revision]

Item	Employment		Percentage change	Pay rolls		Percentage change
	September	August ²		September	August ²	
Entire service:						
Total.....	870,031	872,521	-0.3	\$131,865,390	\$132,221,162	-0.3
Regular appropriation.....	718,708	725,059	-0.9	112,906,844	113,522,828	-0.5
Emergency appropriation.....	66,321	64,735	+2.4	8,895,663	8,749,999	+1.7
Force-account (regular and emergency).....	85,002	82,727	+2.8	10,062,883	9,948,335	+1.2
Inside the District of Columbia:						
Total.....	118,024	116,972	+0.9	20,970,339	20,927,004	+0.2
Regular appropriation.....	100,913	100,288	+0.6	18,280,547	18,251,942	+0.2
Emergency appropriation.....	12,367	12,188	+1.5	1,932,158	1,902,096	+1.6
Force-account (regular and emergency).....	4,744	4,496	+5.5	757,634	772,966	-2.0
Outside the District of Columbia:						
Total.....	752,007	755,549	-0.5	110,895,051	111,294,158	-0.4
Regular appropriation.....	617,795	624,771	-1.1	94,626,297	95,270,886	-0.7
Emergency appropriation.....	53,954	52,547	+2.7	6,963,505	6,847,903	+1.7
Force-account (regular and emergency).....	80,258	78,231	+2.6	9,305,249	9,175,369	+1.4

¹ Data include number of employees receiving pay during the last pay period of the month.

² Revised.

CONSTRUCTION PROJECTS FINANCED BY THE PUBLIC WORKS ADMINISTRATION

Details concerning employment, pay rolls, and man-hours worked during September on construction projects financed by Public Works Administration funds are given in table 10, by type of project.

TABLE 10.—Employment and Pay Rolls on Projects Financed From Public Works Administration Funds, September 1938¹

[Subject to revision]

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed ²	Weekly average				
Federal projects financed from National Industrial Recovery Act funds						
All projects.....	9,779	9,188	\$782,926	1,229,077	\$0.637	\$652,337
Building construction.....	739	604	79,605	73,751	1.079	67,291
Naval vessels.....	462	451	67,544	75,935	.889	17,716
Public roads ⁴	(5)	5,623	363,464	696,390	.522	354,000
Reclamation.....	1,628	1,457	179,712	242,434	.741	118,562
River, harbor, and flood control.....	1,151	928	82,043	127,359	.644	85,160
Water and sewerage.....	175	124	10,408	12,968	.803	6,438
Miscellaneous.....	1	1	150	240	.625	1,170
Federal projects financed from Public Works Administration Appropriation Act 1938 funds						
All projects.....	10,207	8,470	\$769,695	1,018,180	\$0.756	\$2,384,667
Building construction.....	7,178	5,929	525,199	662,253	.793	1,748,502
Electrification.....	154	150	6,205	6,260	.991	195,819
River, harbor, and flood control.....	71	58	5,490	7,239	.758	6,613
Ship construction.....	97	73	5,428	7,568	.717	4,341
Streets and roads.....	116	92	6,372	9,662	.659	109,956
Water and sewerage.....	13	13	587	754	.779	5,862
Miscellaneous.....	1,883	1,553	139,714	213,410	.655	302,591
Professional, technical, and clerical.....	695	602	80,700	111,034	.727	10,983
Non-Federal projects financed from National Industrial Recovery Act funds						
All projects ⁶	9,263	7,867	\$931,306	841,633	\$1.107	\$1,617,715
Building construction ⁶	4,413	3,808	527,414	388,001	1.359	627,902
Railroad construction.....	177	169	4,941	8,680	.569	0
Streets and roads.....	719	556	34,973	49,727	.703	63,849
Water and sewerage.....	2,732	2,252	263,361	252,074	1.045	387,495
Miscellaneous.....	1,222	1,082	100,617	143,151	.703	538,469
Projects financed from Emergency Relief Appropriation Act 1935, 1936, and 1937 funds ⁷						
All projects ⁸	80,860	67,681	\$7,068,139	8,277,627	\$0.854	\$12,868,259
Building construction ⁸	54,013	45,129	4,939,556	5,375,847	.919	8,624,278
Electrification.....	1,464	1,231	110,189	152,954	.720	528,712
Heavy engineering.....	5,717	4,833	572,825	668,291	.857	1,132,175
Reclamation.....	970	853	96,868	120,431	.804	170,025
River, harbor, and flood control.....	334	302	25,290	38,063	.665	53,769
Streets and roads.....	8,088	6,638	421,976	791,297	.533	790,918
Water and sewerage.....	10,145	8,612	893,873	1,119,413	.799	1,235,240
Miscellaneous.....	129	83	7,553	11,331	.667	333,142

¹ Data are for the month ending on the 15th.

² Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.

³ Includes weekly average for public roads.

⁴ Under the jurisdiction of the Bureau of Public Roads.

⁵ Not available; weekly average included in total for all projects.

⁶ Includes data for workers engaged in construction of underground tunnel, who, because of the additional risk involved, were paid at rates higher than those usually paid for building construction.

⁷ These data are also included in separate tables covering projects financed by The Works Program.

⁸ Includes a maximum of 1,332 and an average of 1,073 employees working on low-cost housing projects financed from E. R. A. 1935 funds who were paid \$129,191 for 128,196 man-hours of labor. Material orders in the amount of \$165,107 were placed for these projects. These data are also included in separate tables covering projects financed from The Works Program.

TABLE 10.—Employment and Pay Rolls on Projects Financed From Public Works Administration Funds, September 1938—Continued

Type of project	Wage earners		Monthly pay-roll disbursements	Number of mau-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed	Weekly average				
	Non-Federal projects financed from Public Works Administration Appropriation Act 1938 funds					
All projects.....	8, 777	6, 380	\$427, 614	557, 409	\$0. 767	\$2, 353, 869
Building construction.....	4, 889	3, 527	229, 961	293, 813	. 782	1, 130, 791
Heavy engineering.....	227	193	34, 787	24, 291	1. 432	204, 477
River, harbor, and flood control ..	76	60	4. 178	4, 436	. 942	2, 099
Streets and roads.....	2, 180	1, 611	100, 183	150, 100	. 667	202, 469
Water and sewerage.....	1, 306	964	53, 073	84, 163	. 690	655, 154
Miscellaneous.....	30	25	532	606	. 878	67, 979

Construction projects financed by the Public Works Administration are those projects authorized by title II of the National Industrial Recovery Act of June 16, 1933. This program of public works was extended to June 30, 1937, by the Emergency Relief Appropriation Act of 1935 and title II of the First Deficiency Appropriation Act of 1936. The First Deficiency Appropriation Act of 1936, cited as the Emergency Relief Appropriation Act of 1936, reappropriated unobligated funds originally made available under the Emergency Relief Appropriation Act of 1935 and authorized the use of \$300,000,000 from funds on hand or received from the sale of securities. The Public Works Administration was continued until July 1, 1939, by the Public Works Administration Extension Act of 1937, and the Public Works Administration Appropriation Act of 1938 further continued the program to June 30, 1941.

Federal construction projects for which data are included in table 10 are financed by allotments made by the Public Works Administration to the various agencies and departments of the Federal Government from funds provided under the National Industrial Recovery Act. The major portion of the low-cost housing program now under way, however, is financed by funds provided under the Emergency Relief Appropriation Act of 1935. Federal construction projects are also financed by allotments from funds provided under the Public Works Administration Appropriation Act of 1938. The work is performed either by commercial firms which have been awarded contracts or by day labor hired directly by the Federal agencies.

Non-Federal projects are financed by allotments made by the Public Works Administration from funds available under either the National Industrial Recovery Act, the Emergency Relief Appropriation Act of 1935, the First Deficiency Appropriation Act of 1936, the Public Works Administration Extension Act of 1937, or the Public Works Administration Appropriation Act of 1938. Most of

the allotments have been made to the States and their political subdivisions, but occasionally allotments have been made to commercial firms. In financing projects for the States or their political subdivisions from funds appropriated under the National Industrial Recovery Act, the Public Works Administration makes a direct grant of not more than 30 percent of the total labor and material cost. When funds provided under the Emergency Relief Appropriation Act of 1935, the First Deficiency Appropriation Act of 1936, the Public Works Administration Extension Act of 1937, or the Public Works Administration Appropriation Act of 1938 are used to finance a non-Federal project, as much as 45 percent of the total cost may be furnished in the form of a grant. The remaining 55 percent or more of the cost is financed by the recipient. When circumstances justify such action, the Public Works Administration may provide the grantee with the additional funds by means of a loan. Allotments to commercial enterprises are made only as loans. All loans made by the Public Works Administration carry interest charges and have a definite date of maturity. Collateral posted with the Public Works Administration to secure loans may be offered for sale to the public. In this way a revolving fund is provided which enlarges the scope of the activities of the Public Works Administration.

Commercial loans have been made, for the most part, to railroads. Railroad work financed by loans made by the Public Works Administration falls under three headings: First, construction work in the form of electrification, the laying of rails and ties, repairs to buildings, bridges, etc.; second, the building and repairing of locomotives and passenger and freight cars in shops operated by the railroads; and third, locomotive and passenger- and freight-car building in commercial shops.

THE WORKS PROGRAM

By authority of Public Resolution No. 11, Seventy-fourth Congress, approved April 8, 1935, the President, in a series of Executive orders, inaugurated a broad program of work to be carried out by 61 units of the Federal Government. The Works Program was continued by title II of the First Deficiency Appropriation Act of 1936, cited as the Emergency Relief Appropriation Act of 1936, and was further continued by the Emergency Relief Appropriation Act of 1937. The Emergency Relief Appropriation Act of 1938 extended this program to June 30, 1939. Employment created by this program includes employment on Federal projects and employment on projects operated by the Works Progress Administration. Federal projects are those conducted by Federal agencies which have received allotments from The Works Program fund. Projects operated by the Works Progress

Administration are those projects conducted under the supervision of the Works Progress Administration with the cooperation of States, cities, or counties.

A record of employment, pay rolls, and man-hours worked on projects financed by The Works Program in September is shown in table 11, by type of project.

TABLE 11.—*Employment and Pay Rolls on Projects Financed by The Works Program, September 1938*¹

[Subject to revision]

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed	Weekly average				
	Federal projects					
All projects.....	2 117,518	107,759	\$6,020,021	12,496,120	\$0.482	\$1,778,012
Building construction.....	42,202	39,606	2,182,229	4,123,707	.529	413,619
Electrification.....	324	316	19,645	48,430	.406	3,384
Forestry ²	10,009	8,752	460,644	1,028,453	.448	45,932
Grade-crossing elimination ⁴	4,194	3,219	219,844	360,619	.610	286,412
Hydroelectric power plants ⁵	2,419	2,022	76,390	274,700	.278	18,426
Plant, crop, and livestock conservation ³	14,574	13,098	744,079	1,908,087	.390	65,123
Professional, technical, and clerical.....	3,661	3,553	232,877	361,176	.645	17,081
Public roads ⁴	2,859	2,155	131,951	250,618	.527	180,413
Reclamation.....	29,623	28,428	1,636,754	3,401,281	.481	374,196
River, harbor, and flood control.....	2,493	2,125	176,936	298,317	.593	147,895
Streets and roads.....	2,885	2,584	60,678	245,988	.247	67,773
Water and sewerage.....	790	680	14,404	53,442	.270	13,880
Miscellaneous.....	1,485	1,221	63,590	141,302	.450	143,878
	P. W. A. projects financed from Emergency Relief Appropriation Act funds of 1935, 1936, and 1937 ⁶					
All projects.....	2 80,860	67,681	\$7,068,139	8,277,627	\$0.854	\$12,868,259
Building construction.....	54,013	45,129	4,939,556	5,375,847	.919	8,624,278
Electrification.....	1,464	1,231	110,189	152,954	.720	528,712
Heavy engineering.....	5,717	4,833	572,825	668,291	.857	1,132,175
Reclamation.....	970	853	96,868	120,431	.804	170,025
River, harbor, and flood control.....	334	302	25,299	38,063	.665	53,769
Streets and roads.....	8,088	6,638	421,976	791,297	.533	790,918
Water and sewerage.....	10,145	8,612	893,873	1,119,413	.799	1,235,240
Miscellaneous.....	129	83	7,553	11,331	.667	333,142
	Projects operated by Works Progress Administration ⁷					
All projects.....	2 3,120,399	-----	\$164,906,987	329,670,236	\$0.500	(⁸)

¹ Unless otherwise noted data are for the month ending on the 15th.

² Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.

³ The data for the Bureau of Entomology and Plant Quarantine, under plant, crop, and livestock conservation, and the Bureau of Forest Service, under forestry, are for a calendar month.

⁴ These data are for projects under the jurisdiction of the Bureau of Public Roads.

⁵ These data are for projects under construction in Puerto Rico.

⁶ Includes data for 79,528 employees working on non-Federal projects and 1,332 employees working on low-cost housing projects. These data are included in separate tables covering projects under the jurisdiction of the Public Works Administration.

⁷ Data are for the calendar month. Not available by type of project.

⁸ Represents number of names on pay roll for week ending September 24, 1938.

⁹ Data on a monthly basis are not available.

Table 12 shows the employment, pay rolls, and man-hours worked on work projects of the National Youth Administration from the beginning of the program in January 1936 to September 1938, inclusive. Similar data for Student Aid are shown from September 1935, the starting date, to August 1938, inclusive.

TABLE 12.—*Employment and Pay Rolls on National Youth Administration Projects Financed by The Works Program From Beginning of Program Through September 1938*¹

[Subject to revision]

Year and month	Number of persons employed	Pay-roll disbursements	Number of man-hours worked	Average earnings per hour	Value of material orders placed
Work projects					
January 1936 to September 1938, inclusive.....	-----	\$90, 120, 131	243, 075, 590	\$0. 371	² \$9, 017, 670
January to December 1936.....	-----	28, 883, 589	75, 827, 799	. 381	-----
January to December 1937.....	-----	32, 601, 360	87, 082, 351	. 374	-----
January 1938.....	144, 797	2, 549, 914	6, 895, 608	. 370	-----
February 1938.....	151, 406	2, 667, 226	7, 288, 377	. 366	-----
March 1938.....	154, 567	2, 751, 797	7, 610, 360	. 362	-----
April 1938.....	158, 082	2, 760, 533	7, 673, 809	. 360	-----
May 1938.....	172, 134	2, 967, 134	8, 286, 913	. 358	-----
June 1938.....	202, 184	3, 437, 299	9, 519, 163	. 361	-----
July 1938.....	213, 072	3, 685, 148	10, 332, 962	. 357	-----
August 1938.....	221, 307	3, 888, 640	11, 125, 311	. 350	-----
September 1938.....	220, 756	3, 927, 491	11, 421, 877	. 344	-----
Student Aid					
September 1935 to August 1938, inclusive.....	-----	\$69, 016, 876	231, 844, 564	\$0. 298	(³)
September to December 1935.....	-----	6, 363, 503	19, 612, 976	. 324	-----
January to December 1936.....	-----	25, 888, 559	85, 424, 616	. 303	-----
January to December 1937.....	-----	24, 188, 039	83, 028, 847	. 291	-----
January 1938.....	307, 544	2, 001, 786	6, 930, 595	. 287	-----
February 1938.....	319, 707	2, 162, 506	7, 584, 382	. 285	-----
March 1938.....	328, 037	2, 217, 742	7, 781, 022	. 285	-----
April 1938.....	353, 902	2, 256, 566	7, 920, 942	. 285	-----
May 1938.....	326, 044	2, 393, 532	8, 355, 521	. 286	-----
June 1938.....	217, 447	1, 538, 947	5, 123, 792	. 300	-----
July 1938.....	-----	-----	-----	-----	-----
August 1938 ⁴	1, 780	5, 696	31, 871	. 179	-----

¹ Data are for a calendar month.

² Data on a monthly basis are not available. This total represents expenditures through June 30, 1938, and includes rentals and services and some sponsors' contributions.

³ No expenditures for materials on this type of project.

⁴ Student Aid program was not active.

⁵ Revised.

CIVILIAN CONSERVATION CORPS

The Civilian Conservation Corps was created by an act of Congress approved June 28, 1937, and succeeded the Emergency Conservation Work which had been set up in April 1933.

Employment and pay-roll data for the Civilian Conservation Corps are collected by the Bureau of Labor Statistics from the War Department, the Department of Agriculture, the Department of Commerce, and the Department of the Interior. The monthly pay of the enrolled personnel is \$30 per month. Assistant leaders, not to exceed 10.

percent of the total number of enrollees, may receive up to \$36 per month, and leaders, not to exceed 6 percent, may receive up to \$45 per month.

Employment and pay rolls in the Civilian Conservation Corps in August and September 1938 are presented in table 13.

TABLE 13.—Employment and Pay Rolls in the Civilian Conservation Corps, August and September 1938 ¹

[Subject to revision]

Group	Number of employees		Amount of pay rolls	
	September	August	September	August
All groups.....	317, 252	334, 257	\$14, 467, 301	\$14, 945, 948
Enrolled personnel ²	279, 110	296, 222	8, 617, 163	9, 249, 228
Reserve officers.....	5, 068	5, 105	1, 363, 251	1, 317, 846
Nurses ³	283	278	29, 379	29, 009
Educational advisers ³	1, 566	1, 570	201, 607	259, 976
Supervisory and technical ³	31, 225	31, 082	4, 115, 401	4, 089, 889

¹ Data on number of employees refer to employment on last day of month. Amount of pay rolls are for the entire month.

² September data include 3,960 enrollees and pay roll of \$90,766 outside continental United States; in August the corresponding figures were 3,771 enrollees and \$87,718.

³ Included in executive service, table 9.

CONSTRUCTION PROJECTS FINANCED BY RECONSTRUCTION FINANCE CORPORATION

Statistics of employment, pay rolls, and man-hours worked on construction projects financed by the Reconstruction Finance Corporation in September are presented in table 14, by type of project.

TABLE 14.—Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, By Type of Project, September 1938 ¹

[Subject to revision]

Type of project	Maximum number of wage earners ²	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
All projects.....	2, 829	\$395, 189	447, 971	\$0. 882	\$671, 112
Building construction ³	488	37, 934	42, 941	. 883	61, 249
Water and sewerage.....	2, 226	349, 854	391, 557	. 893	595, 571
Miscellaneous.....	115	7, 401	13, 473	. 549	14, 292

¹ Data are for the month ending on the 15th.

² Maximum number employed during any 1 week of the month by each contractor.

³ Includes 241 employees; pay-roll disbursements of \$20,152; 17,561 man-hours worked; and material orders placed of \$25,506 on projects financed by RFC Mortgage Co.

CONSTRUCTION PROJECTS FINANCED FROM REGULAR FEDERAL APPROPRIATIONS

When a construction contract is awarded or force-account work is started by a department or agency of the Federal Government, the Bureau of Labor Statistics is immediately notified, on forms supplied

by the Bureau, of the name and address of the contractor, the amount of the contract, and the type of work to be performed. Blanks are then mailed by the Bureau to the contractor or Government agency doing the work. These reports are returned to the Bureau and show the number of men on pay rolls, and the amounts disbursed for pay, the number of man-hours worked on the project, and the value of the different types of materials for which orders were placed during the month.

Data concerning employment, pay rolls, and man-hours worked on construction projects financed from regular Federal appropriations during September are given in table 15, by type of project.

TABLE 15.—*Employment and Pay Rolls on Construction Projects Financed From Regular Federal Appropriations, by Type of Project, September 1938*¹

[Subject to revision]

Type of project	Number of wage earners		Monthly pay roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum ² number employed	Weekly average				
All projects.....	3 263, 721	249, 001	\$27, 503, 233	40, 035, 344	\$0. 687	\$40, 488, 980
Building construction.....	16, 624	13, 654	1, 549, 382	1, 602, 782	. 967	3, 531, 954
Electrification:						
Rural Electrification Administration projects ⁴	6, 739	5, 568	397, 182	756, 236	. 525	2, 346, 478
Other than Rural Electrification Administration projects.....	215	148	11, 204	13, 625	. 822	23, 829
Forestry.....	78	78	6, 502	13, 367	. 486	3, 317
Heavy engineering.....	126	106	17, 143	19, 729	. 869	17, 704
Public roads ⁵	(6)	114, 216	11, 023, 415	18, 567, 261	. 594	18, 399, 670
Reclamation.....	18, 600	17, 225	2, 404, 113	2, 876, 911	. 836	3, 249, 411
River, harbor, and flood control:						
Dredging, dikes, revetments, etc.....	46, 035	39, 860	4, 477, 216	7, 159, 947	. 625	3, 622, 158
Locks and dams.....	11, 445	10, 624	1, 253, 587	1, 755, 199	. 714	2, 023, 052
Ship construction:						
Naval vessels.....	41, 965	40, 754	5, 813, 684	6, 397, 727	. 909	5, 362, 547
Other than naval vessels.....	2, 521	2, 251	250, 938	316, 244	. 793	1, 227, 202
Streets and roads.....	3, 839	3, 453	216, 942	433, 138	. 501	517, 337
Water and sewerage.....	347	269	23, 827	34, 600	. 689	86, 894
Miscellaneous.....	971	795	58, 098	88, 578	. 656	77, 427

¹ Data are for the month ending on the 15th.

² Maximum number employed during any 1 week of the month by each contractor, and Government agency doing force-account work.

³ Includes weekly average for public-roads projects.

⁴ Financed by Rural Electrification Administration loans.

⁵ Under the jurisdiction of the Bureau of Public Roads.

⁶ Not available, weekly average included in total for all projects.

STATE-ROADS PROJECTS

A record of employment and pay-roll disbursements in the construction and maintenance of roads financed wholly from State or local funds in September 1938, compared with August 1938 and September 1937, is presented in table 16.

TABLE 16.—*Employment and Pay Rolls on Construction and Maintenance of State Roads, September 1938, August 1938, and September 1937*¹

[Subject to revision]

Item	Number of employees ²			Pay-roll disbursements		
	September 1938	August 1938	September 1937	September 1938	August 1938	September 1937
Total.....	265, 248	196, 790	193, 660	\$13, 951, 370	\$13, 482, 090	\$12, 843, 370
New roads.....	32, 054	26, 649	26, 632	2, 151, 590	1, 970, 730	1, 884, 330
Maintenance.....	173, 194	170, 141	167, 028	11, 799, 780	11, 512, 260	10, 959, 040

¹ Data are for the month ending on the 15th and are for projects financed wholly from State or local funds.

² Average number working during month.

*Purchases from Public Funds*¹

The value of material orders placed on construction projects financed by Federal funds in the third quarter of 1938 is presented in table 17.

In the third quarter of 1938, on the Public Works Administration program, orders were placed for materials valued at approximately \$51,993,000. Of this amount \$15,897,000 was expended for iron and steel products, \$7,754,000 for machinery, \$4,873,000 for cement and concrete products, and \$3,773,000 for forest products.

Previous sections of this report have shown the number of workers employed at the site of construction projects financed from Federal funds. The direct employment, however, is only a partial picture, as the manufacture of the materials used on the projects also creates a large amount of employment.

Estimates have been made of the man-months of labor that have been, or will be created in fabricating the materials used on the various programs (see table 3). The estimates include only the labor required in the fabrication of material in the form in which it is to be used. No estimate is made of the labor required in producing the raw materials or in transporting them to the point of manufacture. In manufacturing structural steel, for example, the only labor included is that occurring in the fabricating mills; no estimate is made for the labor created in mining, smelting, and transporting the ore; nor for the labor in the blast furnaces, the open-hearth furnaces, and the blooming mills.

The information concerning man-months of labor created in fabricating materials is obtained by sending a questionnaire to each firm receiving an award for materials to be financed from Federal or State funds. The manufacturer is requested to make an estimate of the number of man-hours created in his plant in manufacturing the materials specified in the contract. For materials purchased directly by

¹ Unless otherwise specified, data presented in this section are as of the 15th of the month.

contractors the Bureau estimates the man-months of labor created. This estimate is based upon the findings of the Census of Manufactures, 1935.

TABLE 17.—*Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Third Quarter of 1938*¹

[Subject to revision]

Type of material	Public Works Administration ²	U. S. H. A. low-cost housing	Reconstruction Finance Corporation ³	Regular Federal appropriations	Federal construction under The Works Program
All materials.....	\$51,993,271	\$94,219	\$1,568,564	\$113,673,966	\$8,133,096
Textiles and their products.....	104,447	518	-----	65,028	14,288
Awnings, tents, canvas, etc.....	1,479	-----	-----	1,708	3,926
Carpets and rugs.....	25	-----	-----	-----	2,035
Cordage and twine.....	6,807	518	-----	10,417	2,527
Cotton goods.....	754	-----	-----	1,015	2,644
Felt goods.....	6,446	-----	-----	1,019	46
Jute goods.....	2,848	-----	-----	600	700
Linoleum.....	84,820	-----	-----	32,683	757
Sacks and bags.....	453	-----	-----	799	1,258
Upholstering materials, n. e. c.....	-----	-----	-----	-----	10
Waste.....	815	-----	-----	16,787	385
Forest products.....	3,772,567	14,957	44,191	4,175,201	745,918
Cork products.....	31,124	-----	-----	10,034	2,635
Lumber and timber products, n. e. c.....	2,303,164	14,957	39,924	3,817,827	651,904
Planing-mill products.....	1,420,300	-----	4,267	342,058	91,296
Window and door screens and weather-strip.....	17,919	-----	-----	5,282	83
Chemicals and allied products.....	527,946	667	42,348	893,936	160,651
Ammunition and related products.....	2,275	-----	-----	-----	-----
Chemicals, miscellaneous.....	11,148	-----	-----	8,043	10,095
Compressed and liquefied gases.....	9,461	667	5,680	25,080	7,777
Explosives.....	133,382	-----	36,342	662,069	39,818
Paints and varnishes.....	371,680	-----	326	200,744	111,961
Stone, clay, and glass products.....	13,341,357	34,386	231,838	34,191,340	2,583,123
Asbestos products, n. e. c.....	26,732	-----	-----	762	337
Brick, hollow tile, and other clay products.....	2,809,798	-----	18,083	458,441	130,209
Cement.....	2,898,708	1,884	158,822	15,876,353	1,402,040
Concrete products.....	1,974,492	31,752	885	678,841	171,239
Crushed stone.....	795,036	-----	408	6,065,888	167,118
Glass.....	290,396	-----	9,431	98,926	12,138
Lime.....	31,240	-----	-----	1,089	2,579
Marble, granite, slate, and other stone products.....	1,314,025	-----	774	1,218,399	81,168
Minerals and earths, ground or otherwise treated.....	801	-----	-----	852	119
Sand and gravel.....	1,696,108	750	38,814	9,366,142	535,468
Tiling, floor and wall, and terrazzo.....	703,227	-----	2,935	183,318	53,027
Wall plaster, wall board, and insulation board.....	800,704	-----	1,686	242,329	27,681
Iron and steel and their products, not including machinery.....	15,896,987	14,338	460,664	19,385,842	1,800,664
Bolts, nuts, washers, etc.....	403,332	-----	916	229,075	25,883
Cast-iron pipe and fittings.....	1,096,852	-----	1,669	383,322	68,812
Doors, shutters and window sash and frames, molding and trim (metal).....	1,272,546	-----	2,580	934,817	34,604
Forgings, iron and steel.....	161,222	-----	2,400	678,621	19,642
Hardware, miscellaneous.....	766,484	1,550	40,063	475,169	142,162

¹ This table includes certain items which are not actually construction materials, i. e., fuel, transportation equipment, tools, furniture, etc. Data for projects operated by Works Progress Administration were not available at the time this report was prepared. For a summary of data for the second quarter of 1938, including information on projects operated by Works Progress Administration, see table 18.

² Includes material orders placed on Public Works Administration projects financed by the Emergency Relief Appropriation Acts of 1935, 1936, and 1937, and P. W. A. A. 1938 funds. Data on low-cost housing projects financed from N. I. R. A. and E. R. A. A. 1935 funds are also included.

³ Includes projects financed by RFC Mortgage Co.

TABLE 17.—*Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Third Quarter of 1938—Continued*

Type of material	Public Works Administration	U. S. H. A. low-cost housing	Reconstruction Finance Corporation	Regular Federal appropriations	Federal construction under The Works Program
Iron and steel and their products—Con.					
Heating and ventilating equipment.....	\$3, 442, 630	-----	\$15, 730	\$752, 274	\$41, 470
Nails and spikes.....	108, 785	-----	492	61, 652	35, 792
Rail fastenings, excluding spikes.....	6, 627	-----	70	971	111
Rails, steel.....	135, 726	-----	-----	32, 804	-----
Springs, steel.....	80	-----	-----	-----	-----
Steel-works and rolling-mill products, n. e. c.....	1, 841, 272	\$5, 366	363, 088	5, 085, 444	555, 485
Stoves and ranges, other than electric.....	6, 896	-----	-----	-----	529
Structural and reinforcing steel.....	5, 867, 100	5, 522	42, 414	9, 591, 946	703, 274
Tools, other than machine tools.....	29, 553	-----	-----	38, 010	95, 062
Wire products, n. e. c.....	420, 029	-----	242	652, 410	67, 614
Wrought pipe.....	337, 873	1, 900	-----	469, 327	7, 224
Nonferrous metals and their products.....	724, 110	1, 898	9, 128	538, 995	77, 974
Aluminum manufactures.....	32, 223	-----	2, 273	41, 992	15
Copper products.....	138, 183	-----	378	26, 050	337
Lead products.....	25, 486	-----	-----	2, 551	200
Nonferrous-metal alloys and products, n. e. c.....	84, 857	-----	587	206, 116	2, 358
Sheet-metal work.....	435, 918	1, 898	5, 890	261, 816	74, 984
Zinc products.....	7, 443	-----	-----	431	80
Machinery, not including transportation equipment.....	7, 754, 124	-----	649, 355	34, 386, 906	860, 753
Electrical machinery, apparatus, and supplies.....	2, 843, 656	-----	108, 217	8, 483, 677	145, 826
Elevators and elevator equipment.....	525, 996	-----	1, 360	523, 713	16, 826
Engines, turbines, tractors, and water-wheels.....	1, 091, 435	-----	7, 666	6, 831, 461	115, 912
Foundry and machine-shop products, n. e. c.....	2, 766, 733	-----	520, 080	16, 929, 291	519, 895
Machine tools.....	160, 618	-----	15	190, 979	27, 134
Meters (gas, water, etc.) and gas generators.....	45, 436	-----	-----	-----	-----
Pumps and pumping equipment.....	204, 447	-----	2, 117	1, 393, 436	34, 312
Refrigerators and refrigerating and ice-making apparatus.....	55, 803	-----	-----	34, 409	488
Transportation equipment—air, land and water.....	37, 455	-----	39	80, 200	59, 868
Boats, steel and wooden (small).....	2, 690	-----	-----	25, 042	1, 570
Carriages and wagons.....	1, 287	-----	-----	751	493
Motor vehicles, passenger.....	1, 169	-----	-----	7, 789	1, 203
Motor vehicles, trucks.....	32, 309	-----	39	46, 618	56, 602
Miscellaneous.....	9, 834, 278	27, 455	122, 001	19, 956, 458	1, 820, 857
Belting, miscellaneous.....	61	-----	-----	907	95
Coal.....	13, 772	1, 289	-----	158, 504	2, 216
Cresote.....	706	-----	-----	68	3, 993
Electric wiring and fixtures.....	2, 307, 585	-----	5, 641	4, 964, 704	144, 933
Furniture, including store and office fixtures.....	1, 199, 821	-----	-----	16, 515	14, 920
Instruments, professional and scientific.....	42, 413	-----	-----	21, 677	1, 039
Mattresses and bed springs.....	3, 907	-----	-----	-----	-----
Models and patterns.....	1, 706	-----	-----	1, 040	1
Paper products.....	5, 683	-----	-----	5, 698	2, 469
Paving materials and mixtures, n. e. c.....	597, 691	-----	-----	2, 263, 511	282, 927
Petroleum products.....	686, 796	1, 956	24, 122	5, 443, 645	447, 502
Photographic apparatus and materials.....	7, 829	-----	-----	20, 583	2, 096
Plumbing supplies, n. e. c.....	2, 059, 095	-----	21, 658	515, 019	145, 007
Radio apparatus and supplies.....	2, 446	-----	-----	42	-----
Roofing materials, n. e. c.....	659, 243	-----	5, 913	126, 024	62, 305
Rubber goods.....	32, 296	-----	12, 319	23, 350	21, 613
Steam and other packing, pipe and boiler covering, and gaskets.....	122, 165	-----	4	62, 206	2, 620
Theatrical scenery and stage equipment.....	26, 210	-----	-----	390	177
Window shades and fixtures.....	72, 889	-----	-----	12, 226	437
Other materials.....	1, 991, 964	24, 210	52, 344	6, 320, 259	686, 507

Table 18 shows the value of material orders placed on construction projects financed by Federal funds during the second quarter of 1938, by type of project.

TABLE 18.—*Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Second Quarter of 1938*¹

[Subject to revision]

Type of material	Total	Projects				
		Public Works Administration ²	Reconstruction Finance Corporation ³	Regular Federal	Federal Construction under The Works Program	Operated by W. F. A.
All materials.....	\$247, 880, 880	\$51, 217, 783	\$2, 256, 444	\$85, 308, 721	\$13, 086, 761	\$96, 011, 171
Textiles and their products.....	10, 096, 118	115, 678	-----	57, 735	18, 455	9, 904, 250
Forest products.....	16, 546, 460	3, 689, 945	32, 569	4, 081, 757	1, 115, 637	7, 629, 532
Chemicals and allied products.....	3, 763, 465	462, 010	58, 594	598, 964	323, 422	2, 320, 175
Paints and varnishes.....	1, 832, 721	267, 224	1, 820	184, 909	258, 985	1, 119, 783
Other chemicals.....	1, 930, 744	194, 786	57, 074	414, 055	64, 437	1, 200, 392
Stone, clay, and glass products.....	77, 791, 021	13, 766, 716	242, 993	20, 898, 157	2, 855, 245	40, 027, 910
Brick, hollow tile, and other clay products.....	7, 761, 690	3, 161, 554	1, 703	512, 153	133, 024	3, 953, 256
Cement.....	26, 220, 676	3, 694, 249	184, 658	9, 475, 877	1, 164, 644	11, 701, 243
Concrete products.....	7, 382, 391	2, 056, 222	433	604, 748	308, 320	4, 412, 668
Crushed stone.....	14, 153, 911	585, 823	121	3, 458, 991	479, 518	9, 629, 458
Sand and gravel.....	15, 940, 250	1, 583, 430	49, 117	5, 226, 332	514, 214	8, 567, 157
Other stone, clay, and glass products.....	6, 332, 103	2, 685, 438	6, 961	1, 620, 056	255, 525	1, 764, 123
Iron and steel and their products, not including machinery.....	46, 352, 051	15, 523, 573	514, 996	13, 849, 487	3, 228, 308	13, 235, 687
Cast-iron pipe and fittings.....	5, 563, 219	1, 733, 265	1, 408	357, 683	133, 922	3, 336, 941
Heating and ventilating equipment.....	4, 725, 674	3, 320, 507	11, 539	913, 571	75, 871	404, 186
Structural and reinforcing steel.....	16, 658, 043	5, 683, 791	109, 793	6, 596, 255	1, 134, 602	3, 133, 602
Tools, other than machine tools.....	1, 397, 216	29, 359	-----	24, 957	137, 743	1, 205, 157
Other products of iron and steel.....	18, 007, 899	4, 756, 651	392, 256	5, 957, 021	1, 746, 170	5, 155, 801
Nonferrous metals and their products.....	1, 462, 512	675, 115	1, 136	318, 401	99, 180	368, 680
Machinery, not including transportation equipment.....	44, 916, 079	7, 904, 720	1, 224, 435	29, 407, 622	2, 365, 733	4, 013, 569
Electrical machinery, apparatus, and supplies.....	13, 384, 103	3, 011, 598	78, 065	8, 480, 780	369, 378	1, 444, 282
Foundry and machine-shop products, n. e. c.....	19, 864, 597	3, 008, 865	1, 131, 115	12, 590, 341	1, 443, 792	1, 690, 484
Other machinery.....	11, 667, 379	1, 884, 257	15, 255	8, 336, 501	552, 563	878, 803
Transportation equipment—air, land, and water.....	1, 809, 600	53, 608	-----	85, 774	109, 301	1, 560, 917
Motor vehicles, trucks.....	1, 733, 742	45, 716	-----	30, 419	96, 690	1, 560, 917
Other transportation equipment.....	75, 858	7, 892	-----	55, 355	12, 611	-----
Miscellaneous.....	45, 143, 574	9, 026, 418	181, 421	16, 010, 324	2, 971, 460	16, 953, 451
Coal.....	243, 686	19, 760	-----	141, 761	12, 965	69, 200
Furniture, including store and office fixtures.....	1, 655, 769	789, 802	-----	183, 684	57, 962	624, 321
Paving materials and mixtures.....	10, 667, 601	463, 850	150	1, 353, 383	237, 141	8, 613, 077
Petroleum products.....	7, 354, 215	842, 162	21, 183	3, 752, 553	768, 923	1, 969, 394
Plumbing supplies, n. e. c.....	4, 273, 838	2, 074, 755	15, 647	505, 809	268, 293	1, 409, 334
Rubber goods.....	356, 951	52, 681	33, 390	35, 251	24, 281	211, 448
Other materials.....	20, 591, 514	4, 783, 508	111, 051	10, 038, 383	1, 601, 895	4, 056, 877

¹ This table includes certain items which are not actually construction materials, i. e., fuel, transportation equipment, tools, furniture, etc.

² Includes material orders placed on P. W. A. projects financed by the Emergency Relief Appropriation Acts of 1935, 1936, and 1937.

³ Includes projects financed by RFC Mortgage Co.

The value of material orders placed on Federal professional, technical, and clerical projects financed by The Works Program, by type of material, for the third quarter of 1938, the second quarter of 1938, and the third quarter of 1937 is shown in table 19.

TABLE 19.—Value of Material Orders Placed on Federal Professional, Technical, and Clerical Projects Financed by The Works Program

[Subject to revision]

Type of material	Third quarter of 1938	Second quarter of 1938	Third quarter of 1937
All materials.....	\$69,009	\$115,360	\$187,092
Computing machines.....	2,303	2,382	2,846
Furniture.....	1,288	14,404	6,487
Office supplies.....	9,535	21,663	35,291
Stationery.....	966	2,486	7,719
Typewriters.....	1,249	1,053	5,791
Other office machines.....	1,503	4,368	911
Other materials.....	47,089	34,224	81,621
Rental of machinery and equipment.....	5,096	34,770	46,426

Rentals and services on projects operated by the Works Progress Administration for the second quarter of 1938, the first quarter of 1938, and the second quarter of 1937 are shown in table 20, by type of rental and service.

TABLE 20.—Rentals and Services on Projects Operated by Works Progress Administration

[Subject to revision]

Type of rental and service	Second quarter of 1938 ¹	First quarter of 1938 ²	Second quarter of 1937 ³
All rentals and services.....	\$48,342,335	\$53,147,699	\$39,128,795
Motor vehicles.....	21,969,993	22,831,410	18,726,163
Teams and wagons.....	680,229	935,965	1,313,122
Paving, road building, and construction equipment.....	17,932,573	18,650,797	11,723,627
Other equipment (including office equipment).....	1,111,723	1,819,063	836,416
Space rentals and services.....	2,921,491	3,043,525	2,359,397
Other services (including utilities).....	3,726,326	5,866,939	4,169,570

¹ Quarterly period ending June 30, 1938.

² Quarterly period ending Mar. 31, 1938.

³ Quarterly period ending June 30, 1937.

Table 21 shows rentals and services on work projects of the National Youth Administration for the first and second quarters of 1938.

TABLE 21.—Rentals and Services on Work Projects of National Youth Administration

[Subject to revision]

Type of rental and service	Second quarter of 1938 ¹	First quarter of 1938 ²
All rentals and services.....	\$804,725	\$730,346
Motor vehicles.....	109,525	140,502
Teams and wagons.....	7,541	9,769
Paving, road building, and construction equipment.....	41,577	47,509
Other equipment (including office equipment).....	85,985	104,607
Space rentals and services.....	262,340	315,476
Other services (including utilities).....	97,754	112,483

¹ Quarterly period ending June 30, 1938.

² Quarterly period ending Mar. 31, 1938.

In connection with the administration of the Public Contracts Act the Bureau of Labor Statistics has been collecting data on supply contracts awarded by Federal agencies of the United States for the manufacture or furnishing of materials, supplies, articles, and equipment in any amount exceeding \$10,000.

The first public contracts were awarded under the Act in September 1936.

Table 22 shows the value of public contracts awarded under the Act for materials during the third quarter of 1938, the second quarter of 1938, and the third quarter of 1937.

TABLE 22.—Value of Supply Contracts Awarded by the Federal Government, Which Contain Agreements to Comply with the Public Contracts Law, by Type of Material

[Subject to revision]

Type of materials	Value of contracts awarded		
	Third quarter 1938 ¹	Second quarter 1938 ²	Third quarter 1937 ³
All materials.....	\$47,436,081	\$107,654,209	\$57,515,870
Food and kindred products.....	1,607,230	3,124,817	2,621,496
Canned fruits and vegetables.....	697,077	348,854	1,266,861
Canned sea foods.....	37,426	-----	88,251
Cereal preparations.....	74,063	15,356	12,741
Coffee and tea.....	238,207	533,240	185,984
Condensed and evaporated milk.....	74,063	708,005	39,559
Feeds, prepared, for animals and fowls.....	46,479	151,679	218,793
Flour and other grain mill products.....	116,356	200,753	241,740
Meat-packing products.....	-----	308,235	162,620
Sugar.....	288,615	185,026	208,205
Miscellaneous subsistence stores and supplies.....	109,007	673,709	190,742
Textiles and their products.....	5,825,582	15,241,385	8,001,485
Canvas bags and covers.....	102,963	187,703	18,975
Clothing (overcoats, suits, trousers, etc.).....	300,042	1,805,399	332,138
Clothing, manufacture only ⁴	517,498	227,833	-----
Cordage and twine, including thread.....	19,290	430,038	26,102
Cotton gloves.....	-----	155,800	21,910
Cotton goods (drills, prints, sheeting, etc.).....	1,738,189	7,844,393	2,207,275
Cotton shirts.....	11,500	-----	17,540
Furnishing goods, men's, n. e. c.	825,448	1,071,864	1,125,423
Housefurnishing goods (pillow cases, sheets, etc.).....	333,239	253,434	66,633
Knit goods (hosiery, underwear, etc.).....	611,246	1,810,262	576,922
Woolen goods (flannels, suiting, etc.).....	664,273	470,987	3,094,815
Work clothing.....	55,215	676,204	137,830
Miscellaneous textile products.....	646,519	607,448	375,922
Forest products.....	1,378,481	1,161,667	477,191
Furniture.....	875,135	156,766	52,559
Lumber and timber products, n. e. c.	33,410	212,763	173,213
Planing-mill products.....	12,769	-----	-----
Treated lumber and timber.....	86,493	126,114	251,419
Miscellaneous forest products.....	370,674	666,024	-----
Chemicals and allied products.....	3,693,421	2,840,834	3,097,764
Ammunition and related products.....	2,647,104	495,886	1,034,660
Compressed and liquefied gases.....	-----	192,071	-----
Explosives.....	79,900	247,448	1,416,936
Linseed oil.....	130,611	11,453	65,036
Paints and varnishes.....	163,388	94,016	26,282
Soap and soap chips.....	51,014	155,375	171,520
Miscellaneous chemicals.....	621,404	1,644,585	383,330

See footnotes at end of table.

TABLE 22.—Value of Supply Contracts Awarded by the Federal Government, Which Contain Agreements to Comply With the Public Contracts Law, by Type of Material—Continued

Type of materials	Value of contracts awarded		
	Third quarter 1938	Second quarter 1938	Third quarter 1937
Products of asphalt, coal, and petroleum	\$5,486,390	\$21,940,483	\$5,923,095
Asphalt, oil, tar, and mixtures.....	656,061	2,751,356	456,871
Coal and coke.....	331,157	1,969,100	542,440
Fuel oil.....	2,268,153	9,009,413	971,748
Gasoline.....	2,120,526	5,214,353	3,604,984
Lubricating oils and greases.....	.....	2,118,668	60,425
Miscellaneous coal and petroleum products.....	110,993	877,593	291,627
Leather and its manufactures	300,929	2,464,195	2,176,170
Boots and shoes.....	280,554	1,872,982	1,767,361
Boots and shoe cut stock.....	.....	128,975	103,479
Gloves.....	20,375	54,897	29,380
Shoe upper-leather.....	.....	259,030	257,275
Miscellaneous leather goods.....	.....	148,291	18,675
Stone, clay, and glass products	4,326,734	14,329,641	2,868,924
Brick.....	40,930	103,915	.....
Cement.....	1,892,893	6,018,173	1,682,376
Concrete pipe.....	201,577	210,887	14,360
Concrete, ready mixed.....	359,584	969,054	64,695
Crushed stone.....	230,392	3,017,041	150,161
Glass.....	.....	33,106	10,800
Granite and marble.....	48,817	594,376	.....
Riprap stone.....	124,340	.....	133,578
Sand and gravel.....	920,864	2,661,542	527,896
Soil, black earth.....	149,750	26,400	34,630
Terra cotta.....	.....	50,064	.....
Tile, clay, including drain.....	22,826	.....	.....
Vitrified clay and terra-cotta pipe.....	15,467	.....	45,622
Miscellaneous stone, clay, and glass products.....	313,292	636,783	204,806
Iron and steel and their products, not including machinery	3,782,628	9,223,361	7,470,544
Bolts, nuts, rivets, washers, etc.....	10,575	23,899	75,345
Cast-iron pipe and fittings.....	52,366	165,171	200,701
Fencing materials.....	.....	.....	69,032
Forgings, iron and steel.....	555,304	626,327	3,567,341
Hardware, miscellaneous.....	37,265	25,200	36,076
Metal furniture.....	212,781	121,303	127,226
Metal shingles and roofing.....	.....	.....	42,081
Pipe and fittings, n. e. c.....	14,462	85,415	97,635
Plumbing fixtures and supplies.....	.....	17,901	10,335
Rails, steel.....	43,589	505,220	79,348
Reinforcing steel.....	512,821	830,008	665,778
Steel pipe and fittings.....	81,984	272,453	132,737
Steel sheets, plates, shapes, and strips.....	311,768	190,377	619,083
Stoves and ranges, other than electric.....	.....	216,869	26,791
Structural steel, fabricated, and sheet-steel piling.....	574,942	2,278,551	820,563
Tools, other than machine tools.....	.....	272,846	145,964
Wire products.....	29,505	183,915	44,750
Miscellaneous iron and steel products.....	1,345,264	3,401,906	700,755
Nonferrous metals and their alloys	1,943,504	1,598,494	2,198,352
Aluminum manufactures.....	247,884	254,469	278,237
Brass products.....	133,131	128,169	650,351
Bronze products.....	90,296	.....	43,750
Copper products.....	138,865	38,612	33,386
Fixtures, gas and electric.....	53,060	28,183	40,143
Lead products.....	15,255	.....	.....
Magnesium.....	22,176	14,299	54,367
Nickel.....	52,213	12,080	53,750
Plated ware.....	65,083	.....	12,420
Sheet-metal work.....	12,609	871,957	23,738
Tin.....	446,404	38,600	482,947
Zinc.....	23,217	.....	72,573
Miscellaneous nonferrous metals and alloys.....	642,711	212,116	443,690

See footnotes at end of table.

TABLE 22.—Value of Supply Contracts Awarded by the Federal Government, Which Contain Agreements to Comply with the Public Contracts Law, by Type of Material—Continued

Type of materials	Value of contracts awarded		
	Third quarter 1938	Second quarter 1938	Third quarter 1937
Machinery, not including transportation equipment and electrical equipment.	\$5,364,181	\$5,162,139	\$8,185,930
Air-conditioning equipment.....	30,268	34,088	108,228
Engines, turbines, tractors, and parts.....	1,134,936	974,217	3,577,476
Filter and purification equipment.....	10,424	13,382	—
Laundry machinery and equipment.....	54,125	36,081	12,750
Machine tools.....	1,561,171	615,051	284,030
Office equipment.....	58,772	59,239	296,092
Phonographs and accessories.....	34,500	—	43,300
Power shovels and draglines.....	70,946	331,619	46,596
Printing and publishing machinery.....	11,168	240,297	78,025
Pumps and pumping equipment.....	148,493	155,057	606,959
Refrigerators and refrigerating and ice-making machinery.....	36,341	92,918	—
Road machinery.....	167,160	91,486	—
Windlasses, winches, and capstans.....	22,815	313,351	53,745
Miscellaneous machinery and parts.....	2,023,072	2,205,353	3,078,729
Electrical machinery, apparatus, and supplies.	3,937,706	4,129,420	7,314,981
Batteries.....	82,966	75,832	317,748
Circuit breakers and switches.....	229,918	623,897	822,667
Electric cable, wire, and other conductors.....	470,088	994,404	1,281,851
Generators and spare parts.....	2,058,919	572,157	518,266
Heaters and ranges.....	6,719	28,057	—
Lamps, incandescent, and X-ray tubes.....	—	—	30,914
Motors.....	—	18,179	10,628
Radio equipment and supplies.....	76,924	534,047	1,593,680
Spark plugs.....	15,090	81,767	—
Switchboards, relay and control equipment.....	89,883	200,138	422,263
Telephone and telegraph apparatus.....	285,710	229,490	129,235
Transformers.....	243,892	395,290	1,499,711
Welding equipment.....	—	71,314	—
Miscellaneous electrical machinery, apparatus, and supplies.....	377,597	305,848	688,613
Transportation equipment.	3,119,629	13,184,215	2,201,331
Aircraft.....	2,132,704	6,890,371	83,785
Aircraft parts and equipment.....	267,356	3,163,114	840,463
Boats and boat equipment.....	15,085	243,419	76,208
Motor vehicles, passenger.....	32,160	228,103	236,741
Motor vehicles, trucks.....	515,122	2,202,511	905,269
Miscellaneous transportation equipment.....	157,202	456,697	58,865
Miscellaneous.	6,669,166	13,253,553	4,973,607
Brooms, brushes, bristles, etc.....	53,652	90,549	159,740
Dental goods and equipment.....	—	34,117	—
Instruments, professional and scientific.....	3,551,795	596,521	1,608,543
Linoleum.....	—	62,765	—
Paper and allied products.....	189,471	4,791,574	557,681
Photographic apparatus and materials.....	260,598	614,887	314,899
Printing, publishing, and subscriptions.....	205,411	202,721	455,148
Rubber products.....	—	232,269	190,903
Slag.....	—	766,136	—
Steam and other packing, pipe and boiler covering.....	—	429,012	38,624
Surgical and orthopedic supplies and appliances.....	106,917	667,171	212,310
Tobacco manufactures.....	43,115	94,096	38,471
Other materials.....	795,063	2,798,649	1,093,113
Rentals, services, etc. ¹	1,463,144	1,873,101	304,175

¹ For period ending Sept. 30, 1938.

² For period ending June 30, 1938. Revised.

³ For period ending Sept. 30, 1937. Revised.

⁴ Labor only. Materials furnished by U. S. Government.

⁵ Includes equipment rental, repairs, aerial surveys, etc.

The value of public contracts awarded for materials by Federal agencies totalled \$47,436,000 during the third quarter of 1938. Of the contracts awarded in the third quarter of 1938, \$5,826,000 was for textiles and textile products; \$5,487,000, for asphalt, coal, and petroleum; \$5,364,000, for machinery, not including transportation equipment and electrical equipment; and \$4,327,000, for stone, clay, and glass products.

