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EMPLOYMENT AND PAY ROLLS

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Employment and Pay Rolls

SUMMARY OF REPORTS FOR DECEMBER 1937

THERE were estimated decreases in December of 276,000 in employment and \$15,300,000 in weekly pay rolls in all manufacturing industries combined and in the 16 nonmanufacturing industries surveyed each month by the United States Bureau of Labor Statistics.

Approximately 747,000 fewer workers were employed by these industries in December 1937 than in the same month a year ago and weekly pay rolls were \$19,100,000 smaller than in December 1936. The average number employed in the year 1937, however, was over 1,000,000 higher than the average for the year 1936 and weekly pay rolls for 1937 were \$50,900,000 larger.

A preliminary tabulation by the Interstate Commerce Commission showed that class I railroads employed 995,725 workers in December, exclusive of executives, officials, and staff assistants, a decrease of 52,050 since November.

Employment in the executive, judicial, and military services of the Federal Government was greater in December than in the preceding month, while employment in the legislative service decreased. An increase in the employment level occurred on Federal projects under The Works Program, projects operated by the Works Progress Administration, and on work projects of the National Youth Administration and Student Aid. Decreases in the number of workers employed occurred on P. W. A. construction projects, projects financed from regular Federal appropriations, and on projects financed by the Reconstruction Finance Corporation. There was a decrease in the number of workers in the Civilian Conservation Corps.

Industrial and Business Employment

Decreased employment from November to December was shown in 13 of the 16 nonmanufacturing industries surveyed by the Bureau of Labor Statistics and in 79 of the 89 manufacturing industries covered. Pay rolls were lower in 10 of the nonmanufacturing and 72 of the manufacturing industries.

For all manufacturing industries combined, it is estimated that 513,000 wage earners (6.4 percent) were laid off between November and December. Although employment declines in factories have been noted for December in 13 of the preceding 18 years, the present drop

was the largest with but one exception (1920). Because of the shortening of work schedules and the spreading of work, factory pay rolls fell more sharply than employment, the estimated decline in weekly wage disbursements being \$17,600,000 or 9.6 percent.

A comparison with December 1936 shows that the factory employment level was 9.7 percent (797,000) lower in December 1937 and that weekly wage disbursements were 15 percent (\$29,203,000) lower. The average employment index for 1937 was 99.3 on the basis of the 1923-25 average as 100; this was 8.1 percent above the 1936 level. In terms of workers the increase between the two years was 624,000. The average 1937 pay-roll index was 98.0, a gain of 18.9 percent compared with the 1936 level. In terms of weekly wage disbursements, the increase was nearly \$31,700,000.

The most pronounced percentage decreases in manufacturing employment from November to December were in industries for which sharp seasonal curtailment is generally reported in December. Beet-sugar plants, having passed the peak of seasonal activity, reduced their forces 42.0 percent and canning and preserving establishments reported a decline of 24.9 percent, reflecting seasonal reductions in operations. Radio and phonograph factories also reported a sharp seasonal decline (20.9 percent) in number of workers. Due to the decrease in production schedules, employment in the automobile industry declined 15.2 percent from November to December and weekly pay rolls fell 27.8 percent. Electric and steam railroad car-building companies reported 15.2 percent fewer employees in December. The decrease of 15.2 percent in employment in the stove industry was somewhat larger than seasonal and the 14.8 percent decline in the stamped and enameled ware industry was also more pronounced than the usual December declines. Plants manufacturing plumbers' supplies reported a decrease (partly seasonal) of 11.0 percent in employment, and firms manufacturing jewelry reported a seasonal decline of 10.3 percent.

Decreases in employment ranging from 9.0 percent to 10.2 percent were reported in marble, slate, and granite works; in steam railroad repair shops; in sawmills; and in factories making brick, tile, and terra cotta; wirework; cottonseed oil, cake, and meal; and rayon.

Other industries of major importance in which substantial declines were shown included blast furnaces, steel works, and rolling mills; foundries and machine shops; men's clothing; glass; silk and rayon goods; cotton goods; and paper and pulp.

Among the 10 manufacturing industries reporting gains in numbers of workers over the month interval were fertilizers (8.3 percent), cane sugar refining (6.6 percent), cast-iron pipe (4.0 percent), boots and shoes (3.7 percent), and woolen and worsted goods (2.1 percent). The

increases in cane sugar refining and wool were contraseasonal and the gains in the remaining three industries were larger than seasonal. Smaller increases were reported in the millinery, fur-felt hat, electric railroad repair shop, slaughtering and meat packing, and chewing and smoking tobacco industries.

In the nonmanufacturing group retail trade was the only industry which increased employment to any appreciable extent. Christmas trade was largely responsible for the increase of 9.2 percent in employment in retail stores. The December index of employment in retail trade (100.1) was above the average for the year 1929 (100.0), and was at the highest level of any month since December 1930. The major portion of this increase was in the general merchandising group of retail establishments (department, variety, and general merchandising stores and mail-order houses) in which a gain of 31.8 percent or 284,000 workers was shown. Employment in this group in December 1937 exceeded the level of any preceding month, including December 1929. Employment in other lines of retail trade increased by 1.8 percent or approximately 46,500 workers. There were substantial employment gains in stores dealing in jewelry, apparel, hardware, furniture and housefurnishings, and in wood, coal, and ice firms. Retail lumber and building material dealers reported a greater-than-seasonal decline and retail automobile dealers also reported fewer workers. Retail food stores showed an employment decrease of 0.5 percent.

Anthracite mines reported a somewhat less-than-seasonal increase of 0.6 percent in employment from November to December and insurance firms hired a small additional number of workers. In the 13 nonmanufacturing industries reporting losses in employment, the most pronounced decline was in the private building construction industry. While employment in this industry normally recedes from November to December, the current decrease of 17.2 percent is larger than the December decreases shown in 4 of the preceding 5 years for which data are available. Other industries in which substantial declines, largely seasonal, were reported were quarrying and non-metallic mining (12.0 percent) and dyeing and cleaning (4.2 percent). Metal mines further reduced their working forces in December, employment falling 6.6 percent over the month interval. Bituminous-coal mines reported a decrease of 2.0 percent in number of workers and year-round hotels also reported a seasonal curtailment of 1.8 percent. In the remaining industries surveyed (crude petroleum producing, telephone and telegraph, power and light and manufactured gas, electric railroad and motorbus operation, wholesale trade, laundries, and brokerage) the decreases ranged from 1.6 percent to 0.3 percent.

Aggregate employment in the combined 16 nonmanufacturing industries surveyed showed a net increase (237,000 workers) between November and December, and aggregate weekly pay rolls were \$2,300,000 greater in December than in the preceding month. Comparisons of the averages for 1937 with the averages for 1936 show that only one industry, anthracite mining, had fewer workers and smaller pay rolls in the current year. The 16 nonmanufacturing industries combined employed 382,600 more workers in 1937 than in 1936 and paid out \$19,246,000 more per week in wages and salaries. The 1937 employment level exceeded the 1936 level by 27.4 percent in metalliferous mining, by 7.9 percent in the telephone and telegraph industry, and by 10.4 percent in private building construction. Gains in average employment between 1936 and 1937 ranging from 4.5 percent to 6.1 percent were shown in wholesale trade, retail trade, electric light and power, hotels, and laundries.

There were 52,050 fewer workers (exclusive of executives, officials, and staff assistants) employed by class I railroads in December than in November according to a preliminary report of the Interstate Commerce Commission. This report showed 995,725 such workers on pay rolls in December, a decrease of 5.0 percent since November. December pay-roll figures were not available when this report was prepared. For November, the wage disbursements were \$154,856,765, a decrease of 8.3 percent or \$14,081,513 from October.

Hours and earnings.—The average hours worked per week by factory wage earners was 34.4 in December according to reports covering full- and part-time workers. This average was 3.1 percent below the November figure. Average hourly earnings fell 0.1 percent to 66.6 cents and average weekly earnings fell 3.4 percent to \$22.93. Comparisons with December 1936 show that current average hours were 16.5 percent lower, average hourly earnings, 12.2 percent higher, and average weekly earnings, 5.9 percent lower than a year ago.

Of the 14 nonmanufacturing industries for which man-hour data are available, 6 showed gains over the month interval in average hours worked per week and 5 showed increases in average hourly earnings. Average weekly earnings were higher in 6 of the 16 nonmanufacturing industries covered.

A summary is presented in table 1 of employment and pay-roll indexes and average weekly earnings in December 1937 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.

TABLE 1.—*Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, December 1937*

Industry	Employment			Pay roll			Average weekly earnings		
	Index, December 1937	Percentage change from—		Index, December 1937	Percentage change from—		Average in December 1937	Percentage change from—	
		November 1937	December 1936		November 1937	December 1936		November 1937	December 1936
All manufacturing industries combined ¹	(1923-25=100) 88.6	-6.4	-9.7	(1923-25=100) 80.9	-9.6	-15.0	\$22.93	-3.4	-5.9
Class I steam railroads ²	56.4	-5.1	-6.9	(³)	(³)	(³)	(³)	(³)	(³)
Coal mining:	(1929=100)			(1929=100)					
Anthracite.....	50.9	+6	-7.2	47.2	+4.6	-14.8	27.02	+3.9	-8.2
Bituminous.....	80.5	-2.0	-4.0	81.3	+4.4	-4.5	25.49	+6.5	-4
Metalliferous mining.....	70.4	-6.6	+9.4	65.1	-9.0	+12.9	29.43	-2.5	+3.2
Quarrying and nonmetallic mining.....	43.9	-12.0	-11.2	33.4	-20.1	-15.3	19.32	-9.2	-4.7
Crude-petroleum producing.....	76.5	-9	+5.6	69.8	-7	+13.9	34.11	+3	+7.8
Public utilities:									
Telephone and telegraph.....	78.0	-1.1	+5.9	94.7	+3.6	+14.9	31.44	+4.7	+8.5
Electric light and power and manufactured gas.....	96.1	-1.2	+3.0	102.4	-1.4	+9.1	34.38	-.2	+5.9
Electric-railroad and motorbus operation and maintenance.....	72.8	-.5	+4	71.9	+1	+3.7	32.26	+6	+3.2
Trade:									
Wholesale.....	93.3	-.3	+2.5	77.8	-7	+6.9	30.00	-.4	+4.3
Retail.....	100.1	+9.2	+5	80.6	+7.0	+6.2	21.55	-2.0	+5.6
Generalmerchandising.....	144.7	+31.8	+9	123.5	+27.2	+6.3	18.59	-3.5	+5.3
Other than generalmerchandising.....	88.4	+1.8	+4	71.7	+1.3	+6.2	24.57	-.5	+5.8
Hotels (year-round) ⁴	87.3	-1.8	+3.9	76.3	-2.0	+9.3	15.25	-.2	+5.1
Laundries.....	87.3	-.8	-.3	79.2	+(⁵)	+4.0	17.03	+8	+4.4
Dyeing and cleaning.....	77.1	-4.2	-7	58.9	-6.9	+2.7	19.09	-2.8	+3.4
Brokerage.....	(⁵)	-1.6	-6.9	(⁵)	-2.6	-6.1	38.36	-1.0	+9
Insurance.....	(⁵)	+2	+1.8	(⁵)	-.8	+4.3	38.91	-.9	+2.5
Building construction.....	(⁵)	-17.2	-13.9	(⁵)	-22.7	-10.9	28.53	-6.7	+3.5

¹ Revised indexes. Adjusted to 1933 Census of Manufactures.

² Preliminary. Source: Interstate Commerce Commission.

³ Not available.

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

⁵ Less than 1/10 of 1 percent.

Public Employment

During the month ending on December 15, 1937, 105,000 workers were employed on P. W. A. construction projects. Compared with the period ending in mid-November this represented a decrease of 16,000, or 13.5 percent. Employment reductions on this work, as on other construction programs, was in part seasonal. Federal and non-Federal N. I. R. A. projects employed more than 34,000 workers; and projects financed from E. R. A. A. 1935, 1936, and 1937 funds, 70,000. Pay-roll disbursements on all P. W. A. projects totaled \$8,990,000.

Construction projects financed from regular Federal appropriations employed 181,000 workers. This was a decrease of over 30,000 com-

pared with the period ending in mid-November. The decreases reported on nonresidential building construction, forestry, public roads, dredging, dikes, and revetments, naval vessels, and miscellaneous projects offset increases in employment on electrification projects, locks and dams, ship construction and repair other than naval vessels, and streets and roads. Employment on residential building construction projects, underpasses, and water and sewerage construction projects remained virtually the same. Pay-roll disbursements amounted to \$17,162,000, a reduction of \$3,142,000, from the preceding month.

Employment on construction projects financed by the Reconstruction Finance Corporation totaled 4,000 for the period from mid-November to mid-December. Decreases were shown in the number of workers employed on building construction and water and sewerage projects, while an increase occurred on miscellaneous projects. Pay-roll disbursements amounting to \$550,000 were \$52,000 less than during the month ending in mid-November.

With the expansion of The Works Program to meet increasing unemployment, the number of workers engaged on projects of The Works Program was 2,280,000 in December, a net increase of more than 118,000 since November. Of the total number working on this program 186,000 were employed on Federal projects under The Works Program, 1,668,000 on projects operated by the Works Progress Administration, and 426,000 on work projects of the National Youth Administration and on Student Aid. Pay rolls for the program as a whole totaled \$98,980,000 and were \$1,199,000 greater than in November.

Increases in employment in the regular services of the Federal Government were reported in the executive, judicial, and military services, while employment in the legislative service decreased. Of the 889,000 employees in the executive service in December, 114,000 were working in the District of Columbia and 775,000 outside the District. Approximately 85.2 percent of the total number of employees in the executive service were paid from regular appropriations and 7.1 percent from emergency funds. Day labor hired by the Federal Government for construction work (force-account) was 7.7 percent of the total employment in the executive service. Among the departments reporting pronounced increases in employment were the Post Office Department, the Department of Commerce, and the Department of the Interior. Decreases occurred in the Department of Agriculture and the Department of Labor.

Workers employed in the Civilian Conservation Corps numbered 338,000, a decrease of more than 12,000 compared with November. Decreases in employment were registered for all groups of workers

with the exception of nurses. Of the total number in camps during the current month 292,000 were enrolled workers, 5,000 reserve officers, 300 nurses, 2,000 educational advisers, and 39,000 other supervisory and technical workers. Pay rolls for all groups of workers exceeded \$16,070,000.

For the month ending December 15, 170,000 workers were employed on road projects financed wholly from State funds, more than 22,000 less than during the preceding period. Of the total, 24,000, or 14 percent, were working on new construction and 146,000, or 86 percent, on maintenance and repairs. Pay-roll disbursements for both types of work amounted to \$10,377,000.

A summary of Federal employment and pay-roll statistics for November and December is given in table 2.

TABLE 2.—*Summary of Federal Employment and Pay Rolls, December 1937*¹

[Preliminary figures]

Class	Employment		Per- cent- age change	Pay rolls		Per- cent- age change
	Decem- ber	Novem- ber		December	November	
Federal services:						
Executive ²	\$89,550	\$ 821,271	+8.3	\$137,217,360	\$124,664,980	+10.1
Judicial.....	2,008	1,969	+5	514,920	547,685	-6.0
Legislative.....	5,188	5,345	-2.9	1,209,723	1,219,978	-8
Military.....	326,667	323,403	+1.0	25,856,294	24,659,262	+4.9
Construction projects:						
Financed by P. W. A. ⁴	104,718	121,102	-13.5	8,989,667	10,959,110	-18.0
Financed by R. F. C. ⁵	4,028	4,421	-8.9	550,135	602,221	-8.7
Financed by regular Federal appropriations.....	180,594	211,004	-14.4	17,162,379	20,303,903	-15.5
Federal projects under The Works Program.....	186,133	184,654	+8	10,173,186	10,857,382	-6.3
Projects operated by W. P. A.....	1,668,085	1,566,697	+6.5	84,570,148	82,714,339	+2.2
National Youth Administration:						
Work projects.....	137,929	\$ 126,852	+8.7	2,397,423	\$ 2,232,473	+7.4
Student Aid.....	288,131	\$ 233,269	+1.7	1,839,242	\$ 1,976,864	-7.0
Civilian Conservation Corps.....	338,217	350,714	-3.6	16,070,030	16,335,123	-1.6

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 109,488 employees and pay-roll disbursements of \$13,385,359 for December and 112,827 employees and pay-roll disbursements of \$13,706,612 for November.

³ Revised.

⁴ Data covering P. W. A. projects financed from E. R. A. A. 1935, 1936, and 1937 funds are included. These data are not shown under The Works Program. Includes 70,228 wage earners and \$5,685,040 pay roll for December; 80,541 wage earners and \$6,814,004 pay roll for November covering P. W. A. projects financed from E. R. A. A. 1935, 1936, and 1937 funds.

⁵ Includes 116 employees and \$9,760 pay-roll disbursements for December and 167 employees and \$11,824 pay-roll disbursements for November on projects financed by the RFC Mortgage Co.

The value of material orders placed on projects financed wholly or partially from Federal funds during the fourth quarter of 1937 amounted to \$250,064,000. It is estimated that approximately 562,000 man-months of labor were created in the final fabrication of these materials. In the corresponding quarter of 1936 the value of material orders placed amounted to \$294,533,000 and 833,000 man-months of labor were created in final fabrication, and in the third quarter of

1937 material orders valued at \$283,000,000 were placed and 662,000 man-months of labor were created in final fabrication.

The value of material orders placed on the various programs financed by Federal funds during the fourth quarter of 1937, the third quarter of 1937, and the fourth quarter of 1936, 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		
	Fourth quarter of 1937	Third quarter of 1937	Fourth quarter of 1936	Fourth quarter of 1937	Third quarter of 1937	Fourth quarter of 1936
Total.....	\$250,063,579	\$282,999,979	\$294,532,906	562,331	662,378	832,917
Public Works Administration ¹	50,240,810	74,186,957	110,699,534	139,643	209,868	317,108
Reconstruction Finance Corporation ²	4,591,658	3,089,971	6,832,882	10,509	7,601	14,144
Regular Federal appropriations ³	72,156,428	86,144,157	53,642,121	184,584	215,997	137,897
Federal projects under The Works Program:						
Construction.....	16,103,046	19,375,780	32,400,924	41,851	51,726	85,764
Professional, technical, and clerical.....	156,523	161,265	347,609	488	507	1,146
Projects operated by W. P. A.....	61,096,814	57,303,258	90,236,094	182,246	174,480	275,619
Rentals and services on projects operated by Works Progress Administration.....	44,151,434	41,632,998	(4)	(4)	(4)	(4)
National Youth Administration:						
Work projects.....	883,739	722,146	373,742	3,010	2,199	1,239
Rentals and services on work projects.....	683,127	383,447	(4)	(4)	(4)	(4)

¹ Data covering P. W. A. projects financed from E. R. A. A. 1935, 1936, and 1937 funds are included. These data are not shown under The Works Program.

² Includes RFC Mortgage Co. Does not include projects for which contracts were awarded before March 15, 1934.

³ Does not include projects for which contracts were awarded before July 1, 1934.

⁴ Data not available.



DETAILED REPORTS FOR DECEMBER 1937

Industrial and Business Employment

MONTHLY reports on employment and pay rolls are available for the following groups: 89 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, average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries in December 1937 are shown in table 4. Percentage changes from November 1937 and December 1936 are also given.

Indexes of employment and pay rolls as well as average hours worked per week, average hourly earnings, and average weekly earnings for October, November, and December 1937, are presented in table 5. The October and November figures may differ in some instances from those previously published because of revisions necessitated by the inclusion of late reports and other causes.

Average weekly 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 the two following tables are not strictly comparable from month to month. The sample, however, is believed to sufficiently adequate in virtually all instances to indicate the general movements of earnings and hours over the period shown.

TABLE 4.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December 1937*

MANUFACTURING

[Indexes are based on 3-year average 1923-25=100 and are adjusted to 1933 Census of Manufactures. Not comparable to indexes published in pamphlets prior to October 1936. Comparable series available on request]

Industry	Employment			Pay rolls			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Index De- cember 1937	Percentage change from—		Index De- cember 1937	Percentage change from—		De- cember 1937	Percentage change from—		De- cember 1937	Percentage change from—		De- cember 1937	Percentage change from—	
		No- vember 1937	De- cember 1936		No- vember 1937	De- cember 1936		No- vember 1937	De- cember 1936		No- vember 1937	De- cember 1936		No- vember 1937	De- cember 1936
All manufacturing industries.....	88.6	-6.4	-9.7	80.9	-9.6	-15.0	\$22.93	-3.4	-5.9	34.4	-3.1	-16.5	66.6	-0.1	+12.2
Durable goods.....	84.3	-8.8	-9.1	77.0	-14.3	-17.6	24.95	-6.2	-9.4	34.4	-5.6	-19.8	72.9	-.3	+13.3
Nondurable goods.....	93.3	-4.1	-10.3	85.8	-3.6	-12.0	20.66	+5	-1.9	34.3	-2	-12.8	60.0	+8	+10.6
<i>Durable goods*</i>															
Iron and steel and their products, not including machinery.....	90.0	-8.3	-10.4	71.9	-16.1	-30.3	22.49	-8.6	-22.3	30.1	-7.6	-31.0	76.1	-.1	+13.9
Blast furnaces, steel works, and rolling mills..	99.6	-8.3	-8.9	75.5	-18.7	-34.5	22.47	-11.3	-28.1	27.3	-11.1	-37.1	82.8	-(*)	+13.7
Bolts, nuts, washers, and rivets.....	73.5	-8.7	-12.3	66.1	-16.0	-32.8	20.39	-8.0	-23.4	29.7	-8.0	-33.2	68.9	+2	+14.5
Cast-iron pipe.....	60.2	+4.0	-10.0	44.3	+4.1	-15.7	19.65	+2	-6.3	33.7	+3	-17.9	58.1	-.1	+13.8
Cutlery (not including silver and plated cutlery) and edge tools.....	83.9	-5.0	-3.7	74.6	-7.3	-12.6	22.32	-2.4	-9.3	37.5	-3.4	-18.7	61.2	+2.0	+12.8
Forgings, iron and steel.....	60.6	-6.3	-11.2	49.0	-12.2	-27.5	24.60	-6.3	-18.3	33.7	-5.5	-25.7	73.3	-.8	+10.5
Hardware.....	84.0	-8.3	-12.2	80.6	-19.3	-30.6	21.63	-12.0	-20.9	32.2	-9.3	-30.3	67.2	-3.2	+12.3
Plumbers' supplies.....	79.8	-11.0	-8.7	55.3	-12.9	-20.6	21.96	-2.2	-13.1	32.3	-3.9	-25.4	67.9	+1.8	+16.8
Steam and hot-water heating apparatus and steam fittings.....	61.8	-6.7	-15.5	49.1	-7.5	-27.1	22.90	-.9	-13.7	32.8	-.6	-26.3	69.6	-.3	+16.4
Stoves.....	77.2	-15.2	-28.4	56.0	-13.8	-41.7	21.26	+1.7	-18.6	33.3	+2.1	-23.8	65.4	+9	+8.1
Structural and ornamental metalwork.....	69.5	-7.3	-1.0	68.2	-8.5	+3.8	27.59	-1.3	+4.8	38.4	-1.8	-8.9	72.0	+6	+15.3
Tin cans and other tinware.....	91.3	-5.8	-3.4	94.4	-5.4	+1.0	23.10	+4	+4.5	37.6	+2	-6.4	62.2	+6	+12.6
Tools (not including edge tools, machine tools, files, and saws).....	87.6	-4.5	-9.0	82.4	-8.7	-21.1	21.96	-4.4	-13.4	35.2	-4.3	-24.2	62.2	-.4	+14.2
Wirework.....	161.2	-10.2	-14.1	136.1	-16.2	-25.4	21.47	-6.7	-13.2	31.5	-6.4	-27.3	68.2	-.3	+19.2
Machinery, not including transportation equipment.....	113.1	-6.8	-.9	110.6	-8.7	-2.6	27.25	-2.0	-1.8	36.9	-2.7	-15.3	73.1	+6	+15.4
Agricultural implements.....	139.6	-2.4	+35.6	173.5	-6.0	+42.8	27.67	-3.6	+5.2	37.3	-4.1	-8.5	74.4	+5	+16.0
Cash registers, adding machines, and calculating machines.....	129.0	-3.4	+6.9	137.9	-2.3	+12.2	33.05	+1.1	+4.9	39.6	-.1	-7.3	84.1	+1.2	+13.2
Electrical machinery, apparatus, and supplies..	104.7	-7.4	-1.1	102.9	-9.9	-.1	27.01	-2.7	+1.1	36.1	-2.9	-14.4	74.8	+2	+16.7

Engines turbines, tractors, and water wheels.....	141.2	-4.5	+14.3	143.6	-7.3	+22.1	31.32	-3.0	+6.8	37.9	-3.3	-6.9	82.9	+3	+14.4
Foundry and machine-shop products.....	98.1	-6.4	-1.3	93.0	-8.7	-7.2	26.47	-2.4	-5.9	37.0	-3.4	-18.6	71.3	+6	+15.2
Machine tools.....	148.1	-3.8	+13.3	149.0	-5.6	+10.0	31.03	-1.9	-3.0	42.2	-1.5	-11.5	73.5	-4	+9.5
Radios and phonographs.....	124.0	-20.9	-38.8	98.7	-19.7	-41.0	20.90	+1.5	-3.6	33.2	+5	-12.1	63.0	+9	+10.9
Textile machinery and parts.....	73.7	-5.2	-4.2	63.4	-9.6	-19.6	23.53	-4.7	-16.0	35.7	-3.9	-21.2	66.1	-9	+7.0
Typewriters and parts.....	127.0	-8.2	-11.5	106.6	+6	-22.5	22.40	+9.6	-12.5	35.2	+8.1	-21.0	63.7	+1.5	+10.8
Transportation equipment.....	105.5	-13.4	-13.6	92.4	-23.0	-23.6	27.40	-11.1	-11.5	31.2	-10.9	-22.5	88.1	-5	+13.6
Aircraft.....	781.0	-1.8	+13.0	700.7	-3.4	+13.0	28.06	-1.6	+(?)	39.8	-1.6	-11.2	70.4	-6	+13.4
Automobiles.....	112.9	-15.2	-18.6	90.8	-27.8	-33.1	26.44	-14.8	-17.2	29.2	-14.6	-28.3	90.5	-5	+14.9
Cars, electric- and steam-railroad.....	55.8	-15.2	-1.8	65.0	-19.9	-8.5	27.93	-5.6	+10.5	36.9	-4.1	-3.8	75.7	-1.5	+14.8
Locomotives.....	59.5	-3.5	+35.7	53.7	+4.4	+70.7	35.15	+8.3	+25.8	43.5	+5.1	+3.1	80.8	+3.0	+22.0
Shipbuilding.....	104.8	-1.0	+16.6	126.5	+4.2	+39.5	32.69	+5.1	+19.6	37.9	+2.2	-8.8	85.0	+1.4	+6.8
Railroad repair shops.....	52.7	-8.2	-13.9	55.7	-12.0	-15.0	30.48	-4.2	-1.2	41.5	-3.6	-7.0	73.3	-5	+5.7
Electric railroad.....	63.5	+7	+2	70.1	+2.8	+4.0	31.38	+2.1	+3.8	44.8	+2.0	-1.3	68.6	+5	+5.2
Steam railroad.....	51.9	-9.0	-14.9	54.7	-13.2	-16.6	30.33	-4.6	-1.9	41.2	-4.1	-7.5	73.7	-6	+5.8
Nonferrous metals and their products.....	98.9	-8.8	-11.4	86.5	-13.4	-18.0	23.49	-5.1	-7.4	35.1	-5.8	-20.2	66.6	+9	+16.1
Aluminum manufactures.....	114.1	-7.6	-3.1	110.7	-13.4	-3.5	24.18	-6.2	-4	35.3	-8.2	-16.5	68.6	+2.1	+19.3
Brass, bronze, and copper products.....	97.0	-8.1	-16.6	80.3	-12.8	-28.1	23.36	-5.2	-13.8	31.9	-5.2	-28.2	73.0	(?)	+19.9
Clocks and watches and time-recording devices.....	115.3	-7.8	-5.0	105.3	-14.0	-10.7	20.72	-6.8	-6.1	35.4	-8.2	-19.2	58.6	+1.6	+16.6
Jewelry.....	89.9	-10.3	-3.1	70.6	-10.4	-5.3	23.53	-1	-2.3	38.2	-4.3	-8.8	61.3	+5.5	+6.6
Lighting equipment.....	87.1	-8.9	-14.2	72.1	-23.6	-30.8	21.31	-16.1	-19.3	31.7	-16.0	-29.0	67.5	-2	+13.9
Silverware and plated ware.....	76.1	-4.0	+3.6	67.7	-6.8	-5.1	24.18	-2.9	-8.6	37.7	-3.1	-18.2	64.1	+1	+7.5
Smelting and refining—copper, lead, and zinc.....	85.3	-3.0	+5.2	80.2	-4.3	+14.4	27.73	-1.3	+8.6	40.2	(?)	-5.6	69.0	-1.2	+15.0
Stamped and enameled ware.....	122.6	-14.8	-24.5	114.7	-18.9	-30.1	21.69	-4.9	-7.6	35.0	-5.5	-21.3	61.8	+7	+17.3
Lumber and allied products.....	58.1	-8.5	-13.4	48.4	-12.2	-20.0	18.62	-4.0	-7.6	36.3	-2.9	-16.6	51.3	-1.6	+11.0
Furniture.....	74.5	-6.3	-15.1	60.0	-8.8	-23.4	19.27	-2.6	-9.6	36.0	-2.8	-20.5	53.7	+3	+13.6
Lumber:															
Millwork.....	47.6	-7.0	-11.9	42.8	-7.6	-15.6	20.38	-7	-4.3	37.0	-2.2	-19.6	55.2	+1.6	+18.8
Sawmills.....	42.8	-10.1	-12.7	33.9	-16.2	-18.5	17.56	-6.8	-6.8	36.4	-3.0	-13.2	48.8	-3.8	+7.4
Stone, clay, and glass products.....	63.2	-7.3	-5.8	54.5	-14.3	-7.8	21.86	-7.6	-2.2	33.8	-7.3	-15.3	64.9	+8	+15.4
Brick, tile, and terra cotta.....	41.1	-9.5	-15.7	30.8	-15.3	-24.7	17.95	-6.4	-10.7	33.8	-5.5	-20.4	53.5	(?)	+13.5
Cement.....	60.5	-8.5	-2.3	58.0	-13.8	-1.3	24.34	-5.9	+1.0	36.1	-5.9	-11.5	67.4	(?)	+13.6
Glass.....	100.0	-6.2	-6	95.8	-14.4	+7	23.01	-8.7	+1.3	32.4	-9.5	-13.2	71.2	+1.0	+16.6
Marble, granite, slate, and other products.....	38.0	-9.5	-7.2	30.8	-11.0	-7.3	23.64	-1.6	+2	35.1	-3.7	-8.4	67.5	+2.2	+9.2
Pottery.....	74.1	-3.6	-3.1	59.7	-14.7	-8.4	21.19	-11.5	-5.5	34.9	-7.6	-16.9	63.1	+6	+15.0
<i>Non durable goods</i>															
Textiles and their products.....	88.2	-4.1	-17.1	88.7	-3.9	-27.4	15.42	+3	-12.4	30.3	-1.0	-19.7	51.1	+7	+8.6
Fabrics.....	84.0	-3.7	-17.4	68.9	-3.6	-28.8	15.36	0	-13.9	31.4	-2	-21.0	49.0	-4	+9.2
Carpets and rugs.....	78.3	-8.6	-20.0	54.4	+9.5	-43.6	16.50	+19.8	-29.6	25.6	+20.8	-39.3	64.4	-8	+14.7
Cotton goods.....	89.0	-2.4	-12.3	74.1	-3.5	-24.5	13.13	-1.1	-14.1	30.9	-1.9	-21.8	42.3	+4	+10.0
Cotton small wares.....	84.9	-7.0	-19.8	74.9	-5.2	-29.9	16.47	+1.9	-12.5	33.5	+1.2	-19.2	50.0	-3	+9.1
Dyeing and finishing textiles.....	105.3	-3.2	-14.3	86.5	-2.8	-25.7	19.81	+4	-13.4	34.0	-7	-20.0	58.0	+1.1	+8.7
Hats, fur-felt.....	83.5	+6	-2.4	64.9	+6.3	-21.3	21.13	+5.7	-19.3	30.8	+9.5	-22.3	70.6	-1.5	+5.5
Knit goods.....	103.3	-7.7	-15.2	95.1	-15.3	-24.6	16.00	-8.2	-11.1	31.7	-6.0	-18.6	51.3	-2.1	+9.1
Silk and rayon goods.....	63.2	-6.5	-22.3	48.1	-5.3	-29.7	14.75	+1.2	-9.6	32.0	+7	-16.8	46.0	-1	+9.6
Woolen and worsted goods.....	61.1	+2.1	-33.3	49.6	+15.9	-41.2	18.69	+13.6	-11.8	31.7	+14.3	-20.8	59.2	-3	+11.5
Wearing apparel.....	95.6	-5.3	-16.7	65.2	-5.0	-24.4	15.60	+4	-9.3	28.2	-2.7	-16.9	55.3	+2.8	+7.6
Clothing, men's.....	84.0	-7.3	-22.0	55.5	-9.2	-34.6	15.61	-2.1	-16.3	25.2	-3.7	-26.0	62.4	+1.2	+12.1
Clothing, women's.....	131.0	-2.9	-14.9	86.0	+2.2	-17.0	17.85	+5.2	-2.5	29.4	+5	-9.3	56.8	+5.7	+6.9

See footnotes at end of table.

TABLE 4.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December 1937—Continued*
MANUFACTURING—Continued

Industry	Employment		Pay rolls		Average weekly earnings		Average hours worked per week		Average hourly earnings						
	Index December 1937	Percentage change from—		Index December 1937	Percentage change from—		December 1937	Percentage change from—		December 1937	Percentage change from—				
		No- vember 1937	De- cember 1936		No- vember 1937	De- cember 1936		No- vember 1937	De- cember 1936		No- vember 1937	De- cember 1936	No- vember 1937	De- cember 1936	
<i>Nondurable goods—Continued</i>															
Textiles and their products—Continued.															
<i>Wearing apparel—Continued.</i>															
Corsets and allied garments.....	87.6	-6	-1.9	79.7	-2.9	-9.4	14.85	-2.3	-7.6	32.0	-3.3	-12.1	46.7	+1.5	+6.9
Men's furnishings.....	118.8	-8.9	-15.5	89.8	-13.5	-22.0	13.16	-5.0	-7.5	31.5	-4.5	-20.7	36.6	-6	+6.6
Millinery.....	44.1	+8	-1.7	27.4	+2.4	-6.2	18.00	+1.5	-4.7						
Shirts and collars.....	106.3	-7.3	-13.4	87.3	-14.9	-22.1	12.11	-8.3	-10.0	30.2	-8.9	-17.6	41.0	+1.3	+9.5
Leather and its manufactures.	81.8	+1.9	-13.0	58.4	+8.6	-25.4	16.61	+6.6	-14.3	31.1	+8.9	-19.9	53.6	-1.7	+6.0
Boots and shoes.....	83.8	+3.7	-10.9	53.2	+15.6	-25.5	15.25	+11.4	-16.4	30.1	+12.4	-21.0	51.1	-2.1	+5.1
Leather.....	78.6	-5.2	-20.1	78.5	-5.1	-25.2	22.23	+(?)	-6.4	35.2	-2	-15.0	63.8	+9	+10.4
Food and kindred products.	107.3	-6.4	-3.0	110.4	-4.7	-14.4	24.93	+1.8	+7.6	40.5	+2	-4.0	61.2	+1.8	+11.6
Baking.....	131.6	-2.7	-5	127.4	-2.3	-6.3	25.22	+4	+6.8	41.4	+(?)	-6	61.3	+2	+7.1
Beverages.....	187.4	-3.6	+3.5	202.0	-5.0	+7.7	31.65	-1.5	+4.0	37.9	-2.4	-2.8	84.4	+8	+7.1
Butter.....	81.6	-2.6	-(?)	65.8	-2.2	+4.5	22.27	+4	+4.5						
Canning and preserving.....	89.1	-24.9	-8.0	86.6	-22.2	-4.6	16.22	+3.6	+3.6	33.6	-9	-12.3	49.6	+4.6	+18.7
Confectionery.....	87.2	-5.1	-3.8	86.8	-3.3	+6	18.11	+1.9	+4.5	39.7	+1.9	-4.8	45.6	-2	+11.9
Flour.....	75.1	-1.3	+1.0	74.0	-3.5	+6.3	25.52	-2.3	+5.3	42.7	-2.5	-5.1	58.9	+3	+9.6
Ice cream.....	63.7	-2.2	+4.1	60.4	-1.8	+9.6	29.25	+3	+5.4	46.6	+6	+1.1	61.7	+3	+4.7
Slaughtering and meat packing.....	90.9	+4	-8.6	104.7	+2.3	+3.1	28.89	+1.9	+12.8	42.2	+2.7	-3.8	68.0	-5	+17.5
Sugar, beet.....	146.1	-42.0	-15.3	135.8	-49.2	-10.6	21.98	-12.4	+5.6	40.4	-18.5	-12.6	55.6	+9.4	+22.9
Sugar refining, cane.....	75.0	+6.6	+8.8	72.4	+8.5	+22.1	26.87	+1.7	+12.3	43.0	+5.1	+5	60.8	-3.1	+10.8
Tobacco manufactures	60.8	-3.3	-3.9	55.7	-2.6	+5	16.88	+8	-14.7	37.1	-9	-1.7	45.5	+1.4	+7.9
Chewing and smoking tobacco and snuff.....	56.9	+3	+9	67.9	+6.5	+4.9	18.11	+6.2	+3.9	35.8	+6.7	-5.4	51.1	-2	+10.3
Cigars and cigarettes.....	61.2	-3.8	-4.5	54.2	-3.9	-2	16.62	-1	+4.6	37.3	-1.6	-1.3	44.9	+1.5	+7.4
Paper and printing.	104.1	-2.2	-1.8	100.8	-7	-1.8	27.62	+1.5	0	37.6	0	-9.4	76.5	+1.1	+8.6
Boxes, paper.....	96.9	-6.3	-8.9	92.8	-6.6	-14.4	19.78	-3.6	-5.9	37.3	+4.5	-16.8	53.4	+8	+12.4
Paper and pulp.....	109.4	-3.6	-3.0	98.8	-6.2	-9.0	22.47	-2.7	-6.3	35.6	-2.6	-18.0	63.1	+(?)	+14.4
Printing and publishing:															
Book and job.....	98.0	-3	+6	95.9	+3.0	+2.9	30.75	+3.3	+2.2	39.7	+2.7	-2.2	78.3	+6	+4.7
Newspapers and periodicals.....	106.6	-3	+6	108.4	+2.2	+2.9	38.45	+2.5	+2.2	37.7	+1.8	-2.8	99.1	+1.3	+5.3
Chemicals and allied products, and petroleum refining															
Other than petroleum refining.....	115.4	-5.7	-3.3	120.3	-7.2	+1.9	25.06	-1.6	+5.4	38.5	-2.5	-6.0	66.2	+6	+12.1
Chemicals.....	122.6	-5.5	-5.0	130.4	-8.0	-1.6	29.51	-2.6	+3.6	37.4	-3.2	-8.9	78.9	+6	+14.0

Cottonseed—oil, cake, and meal.....	109.9	-9.2	+12.1	104.8	-7.3	+27.7	13.48	+2.1	+14.0	55.0	+1.3	+9	24.7	+8	+12.8
Druggists' preparations.....	110.5	-1.8	+3.7	124.0	-1.4	+10.2	24.40	+4	+6.2	39.8	+1.5	-9	57.7	-1.0	+6.1
Explosives.....	94.7	-7	+1.6	100.3	-5.9	+2.4	29.48	-5.2	+7	37.8	-5.2	-6.6	78.0	+1	+7.9
Fertilizers.....	81.6	+8.3	+1.5	82.3	+6.3	+15.0	16.74	-1.9	+13.2	38.2	-9	-9	43.9	-1.0	+15.3
Paints and varnishes.....	121.1	-5.4	-5.0	116.1	-6.9	-4.5	26.40	-1.6	+6	37.8	-2.4	-9.4	69.9	+8	+10.8
Rayon and allied products.....	336.8	-9.9	-7.1	313.5	-13.0	-2.4	22.98	-3.4	+5.0	35.3	-4.5	-7.7	65.1	+1.2	+14.1
Soap.....	94.6	-5.7	-4.2	111.2	-4.9	+6.7	28.58	+9	+11.5	38.7	-1.2	-3.4	74.3	+2.1	+15.7
Petroleum refining.....	120.2	-3.0	+5	137.9	-1.8	+15.4	34.88	+1.3	+14.8	36.3	+1.0	-5	97.1	+3	+15.7
Rubber products.....	86.0	-5.4	-15.6	77.1	-6.0	-26.4	23.90	-0.6	-12.7	31.1	-1.7	-19.4	78.9	+1	+8.2
Rubber boots and shoes.....	68.0	-5.4	-17.5	54.6	-12.1	-28.9	20.08	-7.0	-13.8	33.6	-6.7	-19.6	59.8	-4	+8.3
Rubber goods, other than boots, shoes, tires, and inner tubes.....	120.9	-5.7	-12.2	110.9	-8.9	-20.3	21.15	-3.3	-9.2	34.5	-4.6	-17.1	61.3	+1.3	+10.9
Rubber tires and inner tubes.....	76.6	-5.2	-17.2	70.8	-2.8	-28.9	26.91	+2.5	-14.2	28.0	+3.0	-21.4	96.7	-4	+9.3

NONMANUFACTURING

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

Coal mining:															
Anthracite.....	50.9	+0.6	-7.2	47.2	+4.6	-14.8	27.02	+3.9	-8.2	28.9	+2.1	-16.7	92.0	+1.5	+9.5
Bituminous.....	80.5	-2.0	-4.0	81.3	+4.4	-4.5	25.49	+6.5	-4	29.1	+8.3	-12.7	86.6	-1.4	+10.2
Metalliferous mining.....	70.4	-6.6	+9.4	65.1	-9.0	+12.9	29.43	-2.5	+3.2	43.1	-2	-2.9	68.6	-2.2	+6.3
Quarrying and nonmetallic mining.....	43.9	-12.0	-11.2	33.4	-20.1	-15.3	19.32	-9.2	-4.7	34.7	-10.2	-15.4	55.8	+1.7	+12.0
Crude-petroleum producing.....	76.6	-9	+5.6	69.8	-7	+13.9	34.11	+3	+7.8	40.1	+9	-3	83.8	-5	+7.6
Public utilities:															
Telephone and telegraph.....	78.0	-1.1	+5.9	94.7	+3.6	+14.9	31.44	+4.7	+8.5	39.2	+3.8	+1.5	84.1	+9	+6.9
Electric light and power and manufactured gas.....	96.1	-1.2	+3.0	102.4	-1.4	+9.1	34.38	-2	+5.9	40.2	-4	-1.3	85.7	-1	+8.2
Electric-railroad and motorbus operation and maintenance.....	72.8	-5	+4	71.9	+1	+3.7	32.26	+6	+3.2	45.7	-3	-2.1	69.7	+8	+5.6
Trade:															
Wholesale.....	93.3	-3	+2.5	77.8	-7	+6.9	30.00	-4	+4.3	42.5	-5	-1.6	69.9	-2	+6.6
Retail.....	100.1	+9.2	+5	80.6	+7.0	+6.2	21.55	-2.0	+5.6	43.2	+1.2	-2.2	54.8	-3.3	+8.7
General merchandising.....	144.7	+31.8	+9	123.5	+27.2	+6.3	18.59	-3.5	+5.3	40.4	+6.4	-2.6	50.1	-7.9	+11.1
Other than general merchandising.....	88.4	+1.8	+4	71.7	+1.3	+6.2	24.57	-5	+5.8	44.4	+4	-1.7	56.9	-1.1	+7.5
Hotels (year-round) ¹	87.3	-1.8	+3.9	76.3	-2.0	+9.3	15.25	-2	+5.1	47.4	-1.1	-4.1	32.2	+4	+7.8
Laundries.....	87.3	-8	-3	79.2	(²)	+4.0	17.03	+8	+4.4	42.0	+1.1	-2.6	40.5	-4	+7.2
Dyeing and cleaning.....	77.1	-4.2	-7	58.9	-6.9	+2.7	19.09	-2.8	+3.4	40.2	-1.5	-3.3	49.1	-2	+7.5
Brokerage.....	(³)	-1.6	-6.9	(³)	-2.6	-6.1	38.36	-1.0	+9	(³)	(³)	(³)	(³)	(³)	(³)
Insurance.....	(³)	+2	+1.8	(³)	-8	+4.3	38.91	-9	+2.5	(³)	(³)	(³)	(³)	(³)	(³)
Building construction.....	(³)	-17.2	-13.9	(³)	-22.7	-10.9	28.53	-6.7	+3.5	30.9	-6.4	-7.4	91.9	-(⁴)	+12.1

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. Percentage changes over year are computed from indexes. Percentage changes over month in average weekly earnings for the manufacturing groups, for all manufacturing industries combined, and for retail trade are also computed from indexes.

² Less than $\frac{1}{10}$ of 1 percent.

³ Cash payments only; the additional value of board, room, and tips cannot be computed.

⁴ Not available.

TABLE 5.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December, November, and October, 1937*

MANUFACTURING

[Indexes are based on 3-year average 1923-25=100 and are adjusted to 1933 Census of Manufactures. Not comparable to indexes published in pamphlets prior to October 1956. Comparable series available on request]

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	December 1937	November 1937	October 1937	December 1937	November 1937	October 1937	December 1937	November 1937	October 1937	December 1937	November 1937	October 1937	December 1937	November 1937	October 1937
All manufacturing industries.....	88.6	94.7	100.5	80.9	89.5	100.1	\$22.93	\$23.92	\$25.39	34.4	35.4	37.6	Cents 68.6	Cents 68.7	Cents 68.6
Durable goods.....	84.3	92.4	97.6	77.0	89.9	101.7	24.95	26.80	28.83	34.4	36.4	39.1	72.9	73.3	73.0
Nondurable goods.....	93.3	97.3	103.6	85.8	89.0	98.2	20.68	20.54	21.37	34.3	34.4	35.9	60.0	59.6	59.6
<i>Durable goods</i>															
Iron and steel and their products, not including machinery.....	90.0	98.1	105.8	71.9	85.7	108.8	22.49	24.84	28.50	30.1	32.6	37.0	76.1	76.3	76.8
Blast furnaces, steel works, and rolling mills.....	99.6	108.6	117.5	75.5	92.9	118.9	22.47	25.33	29.96	27.3	30.7	35.7	82.8	82.8	83.7
Bolts, nuts, washers, and rivets.....	73.5	80.5	84.8	66.1	78.7	96.9	20.39	22.34	25.94	29.7	32.3	38.2	68.9	69.2	68.0
Cast-iron pipe.....	60.2	57.9	62.1	44.3	42.6	46.3	19.65	19.68	19.98	33.7	33.5	34.4	58.1	58.5	57.7
Cutlery (not including silver and plated cutlery) and edge tools.....	83.9	88.3	89.8	74.6	80.5	85.9	22.32	22.94	24.06	37.5	38.9	40.4	61.2	60.2	60.6
Forgings, iron and steel.....	60.6	64.7	71.6	49.0	55.8	67.6	24.60	26.22	28.86	33.7	35.6	39.5	73.3	74.1	73.3
Hardware.....	84.0	91.5	94.4	80.6	99.9	114.5	21.63	24.55	27.26	32.2	35.4	39.3	67.2	69.4	69.3
Plumbers' supplies.....	79.8	89.6	93.6	55.3	63.5	76.2	21.96	22.45	25.83	32.3	33.6	39.0	67.9	66.8	66.4
Steam and hot-water heating apparatus and steam fittings.....	61.8	66.3	73.5	49.1	53.1	66.6	22.90	23.18	26.24	32.8	33.1	37.7	69.6	69.8	69.4
Stoves.....	77.2	91.1	108.3	56.0	65.0	94.2	21.26	21.02	25.59	33.3	32.3	39.3	65.4	65.5	65.4
Structural and ornamental metalwork.....	69.5	75.0	79.1	68.2	74.5	81.6	27.59	27.99	29.04	38.4	39.3	40.9	72.0	71.4	71.2
Tin cans and other tinware.....	91.3	96.8	100.8	94.4	99.8	107.5	23.10	23.07	23.85	37.6	37.5	38.6	62.2	61.9	62.0
Tools (not including edge tools, machine tools, files, and saws).....	87.6	91.7	97.0	82.4	90.3	100.7	21.96	22.95	24.20	35.2	36.7	39.0	62.2	62.2	61.9
Wirework.....	161.2	179.5	187.2	136.1	162.3	202.3	21.47	23.00	26.79	31.5	33.5	37.9	68.2	68.7	70.8
Machinery, not including transportation equipment.....	113.1	121.4	128.9	110.6	121.2	134.2	27.25	27.79	28.86	36.9	37.9	39.9	73.1	72.6	72.0
Agricultural implements.....	139.6	143.0	150.5	173.5	184.5	203.5	27.67	28.74	30.14	37.3	38.9	40.6	74.4	74.1	74.5
Cash registers, adding machines, and calculating machines.....	129.0	133.6	136.3	137.9	141.2	148.4	33.05	32.61	33.61	39.6	39.7	41.1	84.1	82.7	82.5
Electrical machinery, apparatus, and supplies.....	104.7	113.1	119.3	102.9	114.3	124.8	27.01	27.74	28.65	36.1	37.2	39.0	74.8	74.6	73.6
Engines, turbines, tractors, and water wheels.....	141.2	147.8	152.5	143.6	155.0	159.4	31.32	32.38	32.36	37.9	39.3	39.4	82.9	82.8	82.5
Foundry and machine-shop products.....	98.1	104.8	110.4	93.0	101.8	113.5	26.47	27.12	28.69	37.0	38.3	40.6	71.3	70.8	70.6
Machine tools.....	148.1	153.9	157.7	149.0	157.9	170.3	31.03	31.63	33.31	42.2	42.9	45.1	73.5	73.8	73.9

Radios and phonographs.....	124.0	156.7	200.5	98.7	123.0	165.5	20.90	20.74	21.67	33.2	33.2	35.6	63.0	62.5	61.1
Textile machinery and parts.....	73.7	77.7	82.8	63.4	70.2	80.9	23.53	24.50	26.26	35.7	37.0	39.3	66.1	66.6	67.2
Typewriters and parts.....	127.0	138.4	147.9	106.6	106.0	128.4	22.40	20.43	23.17	35.2	32.5	37.0	63.7	62.7	62.6
Transportation equipment.....	105.5	121.8	122.7	92.4	120.0	129.9	27.40	31.03	33.37	31.2	35.1	37.7	88.1	88.9	88.6
Aircraft.....	781.0	795.0	784.0	700.7	725.3	723.0	28.06	27.89	28.17	39.8	39.7	40.6	70.4	70.2	69.5
Automobiles.....	112.9	133.2	133.9	90.8	125.8	138.3	26.44	31.23	34.07	29.2	34.3	37.3	90.5	91.3	91.4
Cars, electric- and steam-railroad.....	55.8	65.8	67.9	65.0	81.1	82.5	27.93	29.61	29.13	36.9	38.5	38.9	75.7	76.9	74.8
Locomotives.....	59.5	61.6	64.1	53.7	51.4	56.0	35.15	32.47	34.08	43.5	41.4	44.0	80.8	78.5	77.4
Shipbuilding.....	104.8	105.9	106.8	126.5	121.4	124.4	32.69	31.02	31.54	37.9	36.9	37.3	85.0	83.8	83.0
Railroad repair shops.....	52.7	57.4	59.0	55.7	63.3	64.9	30.48	31.61	31.58	41.5	43.0	43.2	73.3	73.6	73.4
Electric railroad.....	63.5	63.1	63.3	70.1	68.2	68.0	31.38	30.63	30.46	44.8	43.6	43.7	68.6	68.5	68.0
Steam railroad.....	51.9	57.0	58.7	54.7	63.0	64.9	30.33	31.78	31.76	41.2	43.0	43.2	73.7	74.1	73.8
Nonferrous metals and their products.....	98.9	108.4	112.7	86.5	99.9	109.9	23.49	24.63	26.18	35.1	37.3	39.7	68.5	65.9	65.8
Aluminum manufactures.....	114.1	123.5	104.7	110.7	127.8	115.9	24.18	25.82	27.63	35.3	38.5	40.4	68.6	67.2	68.4
Brass, bronze, and copper products.....	97.0	105.5	113.1	80.3	92.1	106.7	23.36	24.77	26.76	31.9	33.7	36.7	73.0	73.4	73.0
Clocks and watches and time-recording devices.....	115.3	125.0	127.5	105.3	122.3	132.7	20.72	22.22	23.62	35.4	38.6	41.1	58.5	57.6	57.5
Jewelry.....	89.9	100.3	106.4	70.6	78.8	89.4	23.53	24.09	25.80	38.2	40.3	43.2	61.3	58.9	59.2
Lighting equipment.....	87.1	95.6	100.1	72.1	94.4	104.3	21.31	25.07	26.18	31.7	38.3	39.9	67.5	65.4	65.7
Silverware and plated ware.....	76.1	79.3	80.8	67.7	72.6	80.7	24.18	24.84	27.10	37.7	38.8	42.4	64.1	64.1	64.3
Smelting and refining—copper, lead, and zinc.....	85.3	88.0	92.1	80.2	83.8	90.9	27.73	27.90	29.10	40.2	39.9	41.7	69.0	69.8	69.8
Stamped and enameled ware.....	122.6	144.0	154.0	114.7	141.5	156.4	21.69	22.76	23.70	35.0	37.1	39.1	61.8	61.2	60.6
Lumber and allied products.....	58.1	63.5	69.5	48.4	55.1	65.3	18.02	19.48	21.23	36.3	37.2	40.3	51.3	52.8	53.3
Furniture.....	74.5	79.5	86.8	60.0	65.8	76.8	19.27	19.66	21.11	30.0	37.0	40.4	53.7	53.2	52.4
Lumber:															
Millwork.....	47.6	51.2	54.3	42.8	46.3	51.7	20.38	20.58	21.90	37.0	37.7	40.2	55.2	54.7	54.5
Sawmills.....	42.8	47.6	52.7	33.9	40.4	49.4	17.56	18.99	21.13	36.4	37.3	40.2	48.8	52.0	53.6
Stone, clay, and glass products.....	63.2	63.2	71.4	54.5	63.6	68.6	21.86	23.71	24.74	33.8	36.5	38.7	64.9	64.4	63.9
Brick, tile, and terra cotta.....	41.1	45.5	50.0	30.8	36.4	44.2	17.95	19.18	21.19	33.8	35.8	39.6	53.5	53.4	53.3
Cement.....	60.5	66.1	69.2	58.0	67.3	72.2	24.34	25.73	26.34	36.1	38.2	39.1	67.4	67.4	67.3
Glass.....	100.0	106.7	109.9	95.8	111.9	119.2	23.01	25.21	26.10	32.4	35.8	37.5	71.2	70.5	70.0
Marble, granite, slate, and other products.....	38.0	42.1	43.4	30.8	34.6	37.8	23.64	23.88	25.37	35.1	36.2	38.7	67.5	66.3	66.2
Pottery.....	74.1	76.9	78.6	59.7	70.0	72.9	21.19	24.05	24.29	34.9	37.9	39.8	63.1	63.1	62.1
<i>Nondurable goods</i>															
Textile and their products.....	88.2	92.0	98.8	68.7	71.5	84.2	15.42	15.37	16.87	30.3	30.6	32.8	51.1	50.9	52.1
Fabrics.....	84.0	87.2	91.9	68.9	71.5	81.0	15.36	15.24	16.45	31.4	31.5	33.0	49.0	49.2	49.4
Carpets and rugs.....	78.3	85.7	88.7	54.4	49.7	64.2	16.50	13.77	17.07	25.6	21.2	26.4	64.4	64.9	64.6
Cotton goods.....	89.0	91.1	93.9	74.1	76.8	85.1	13.13	13.25	14.30	30.9	31.5	33.7	42.3	42.1	42.4
Cotton small wares.....	84.9	91.2	98.4	74.9	79.0	96.8	16.47	16.10	18.35	33.5	33.1	37.1	50.0	50.0	50.3
Dyeing and finishing textiles.....	105.3	108.8	112.2	86.5	89.0	94.6	19.81	19.87	20.49	34.0	34.4	35.3	58.0	57.6	57.5
Hats, fur-felt.....	83.5	83.0	83.0	64.9	61.0	62.0	21.13	19.96	20.20	30.8	28.2	26.7	70.6	71.0	72.4
Knit goods.....	103.3	111.9	116.3	95.1	112.3	122.8	16.00	17.40	18.33	31.7	33.7	35.6	51.3	52.4	52.3
Silk and rayon goods.....	63.2	67.6	75.4	48.1	50.8	62.4	14.75	14.64	16.02	32.0	31.7	34.2	46.0	46.2	46.9
Woolen and worsted goods.....	61.1	59.8	68.4	49.6	42.8	52.8	18.69	16.43	17.73	31.7	27.7	30.3	59.2	59.4	58.6

See footnotes at end of table.

TABLE 5.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December, November, and October 1937—Continued*

MANUFACTURING—Continued

Industry	Employment index			Pay-roll index			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	December 1937	November 1937	October 1937	December 1937	November 1937	October 1937	December 1937	November 1937	October 1937	December 1937	November 1937	October 1937	December 1937	November 1937	October 1937
<i>Nondurable goods—Continued</i>															
Textile and their products—Continued.													<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Wearing apparel.....	95.6	101.0	112.1	65.2	68.6	87.0	\$15.60	\$15.74	\$17.99	28.2	28.9	31.3	55.3	54.3	57.4
Clothing, men's.....	84.0	90.7	103.5	55.5	61.1	80.2	15.61	15.82	18.14	25.2	26.1	29.5	62.4	61.1	62.1
Clothing, women's.....	131.0	134.9	150.4	86.0	84.2	110.1	17.85	17.25	20.29	29.4	29.2	31.2	56.8	55.5	61.7
Corsets and allied garments.....	87.6	88.1	89.7	79.7	82.1	87.3	14.85	15.52	16.17	32.0	33.6	33.3	46.7	46.0	47.8
Men's furnishings.....	118.8	130.4	135.9	89.8	103.8	111.8	13.16	14.36	14.79	31.5	32.8	35.6	36.6	37.3	37.6
Millinery.....	44.1	43.8	52.0	27.4	26.7	35.5	18.00	17.40	20.30	—	—	—	—	—	—
Shirts and collars.....	106.3	114.6	120.7	87.3	102.6	112.5	12.11	13.14	13.97	30.2	33.1	34.7	41.0	40.4	40.8
Leather and its manufactures.	81.8	80.3	89.5	58.4	53.8	68.3	16.61	15.48	17.14	31.1	28.6	31.8	53.6	54.5	54.2
Boots and shoes.....	83.8	80.8	90.7	53.2	46.0	58.7	15.25	13.72	15.50	30.1	26.9	30.4	51.1	52.3	51.9
Leather.....	78.6	82.9	89.6	78.5	82.7	95.0	22.23	22.13	23.60	35.2	35.2	37.5	63.8	62.8	63.3
Food and kindred products.	107.3	114.6	125.0	110.4	115.9	125.0	24.93	24.48	23.77	40.5	40.3	40.9	61.2	60.2	58.8
Baking.....	131.6	135.2	138.4	127.4	130.3	137.3	25.22	25.10	25.84	41.4	41.4	43.0	61.3	61.1	60.6
Beverages.....	187.4	194.3	202.7	202.0	212.7	222.4	31.65	32.22	32.36	37.9	38.8	39.2	84.4	84.2	83.5
Butter.....	81.6	83.7	86.4	65.8	67.2	70.3	22.27	22.42	22.71	—	—	—	—	—	—
Canning and preserving.....	89.1	118.7	185.9	86.6	111.4	187.7	16.22	15.74	16.24	33.6	33.8	36.3	49.6	47.8	46.5
Confectionery.....	87.2	91.8	95.5	86.8	89.8	98.4	18.11	17.63	18.62	39.7	38.7	41.3	45.6	45.6	45.5
Flour.....	75.1	76.0	76.9	74.0	76.7	80.9	25.52	26.10	27.30	42.7	43.7	45.6	58.9	58.8	59.0
Ice cream.....	63.7	65.1	68.8	60.4	61.5	63.9	29.25	29.16	28.54	46.6	46.5	46.1	61.7	61.3	61.3
Slaughtering and meat packing.....	90.9	90.5	89.4	104.7	102.3	100.1	28.89	28.31	28.01	42.2	41.1	40.8	68.0	68.1	68.8
Sugar, beet.....	146.1	252.1	253.0	135.8	267.4	224.3	21.98	25.09	20.97	40.4	49.6	41.6	55.6	50.8	52.4
Sugar refining, cane.....	75.0	70.4	68.8	72.4	66.8	64.2	26.87	26.41	25.97	43.0	40.9	38.5	60.8	62.8	66.8
Tobacco manufactures.	60.8	62.9	62.6	55.7	57.2	57.9	16.88	16.72	17.03	37.1	37.4	37.6	45.5	44.9	45.1
Chewing and smoking tobacco and snuff.....	56.9	56.7	56.2	67.9	63.8	68.2	18.11	17.06	18.20	35.8	33.5	35.8	51.1	51.1	51.3
Cigars and cigarettes.....	61.2	63.6	63.3	54.2	56.4	56.6	16.62	16.66	16.80	37.3	37.9	37.9	44.9	44.2	44.4
Paper and printing.	104.1	106.4	107.9	100.8	101.5	103.1	27.62	27.48	29.26	37.6	37.7	38.7	76.5	75.7	75.6
Boxes, paper.....	96.9	103.3	104.8	92.8	102.0	108.9	19.78	20.42	21.35	37.3	39.0	40.8	63.4	52.8	52.7
Paper and pulp.....	109.4	113.6	117.3	98.8	105.4	116.7	22.47	23.26	24.90	35.6	36.9	39.5	63.1	63.2	63.1
Printing and publishing:															
Book and job.....	98.0	98.3	98.8	95.9	93.1	92.6	30.75	29.96	29.71	39.7	38.7	38.3	78.3	78.5	78.5
Newspapers and periodicals.....	106.6	107.0	107.5	108.4	106.1	107.3	38.45	37.42	37.59	37.7	37.1	37.1	99.1	97.1	97.4
Chemicals and allied products, and petroleum refining.	116.3	122.7	126.5	124.4	132.1	137.5	27.93	28.07	28.32	38.0	38.5	39.2	74.3	73.8	73.4
Other than petroleum refining.....	115.4	122.4	126.7	120.3	129.6	136.1	25.06	25.59	25.99	38.5	39.5	40.3	66.2	65.8	65.4

Chemicals.....	122.6	129.8	135.2	130.4	141.7	150.6	29.51	30.25	30.84	37.4	38.7	39.6	78.9	78.2	77.9
Cottonseed—oil, cake, and meal.....	109.9	121.0	127.1	104.8	113.0	118.9	13.48	13.18	13.14	55.0	53.5	54.1	24.7	24.8	24.5
Druggists' preparations.....	110.5	112.5	114.8	124.0	125.8	128.9	24.40	24.33	24.47	39.8	39.2	39.6	57.7	58.3	58.4
Explosives.....	94.7	95.4	97.3	100.3	106.6	110.5	29.48	31.64	32.18	37.8	39.7	40.5	78.0	79.8	79.5
Fertilizers.....	81.6	75.3	80.5	82.3	77.4	83.2	16.74	17.02	17.16	38.2	38.6	38.8	43.9	44.1	44.2
Paints and varnishes.....	121.1	128.0	131.6	116.1	124.8	134.1	26.40	26.95	28.17	37.8	38.8	40.5	69.9	69.6	69.7
Rayon and allied products.....	336.8	374.0	387.5	313.5	360.3	374.9	22.98	23.79	23.89	35.3	37.0	37.4	65.1	64.4	63.8
Soap.....	94.6	100.4	102.8	111.2	116.9	121.1	28.58	28.23	28.55	38.7	39.2	40.0	74.3	72.4	71.9
Petroleum refining.....	120.2	123.9	125.7	137.9	140.4	142.3	34.88	34.42	34.43	36.3	35.8	35.9	97.1	97.0	96.9
Rubber products.....	86.0	90.9	97.7	77.1	82.0	94.3	23.90	24.11	25.83	31.1	31.6	33.8	78.9	79.0	79.0
Rubber boots and shoes.....	68.0	71.9	77.5	54.6	62.1	70.4	20.08	21.70	22.83	33.6	35.9	37.5	59.8	60.4	60.9
Rubber goods, other than boots, shoes, tires, and inner tubes.....	120.9	128.2	137.3	110.9	121.7	139.5	21.15	21.93	23.61	34.5	36.0	38.8	61.3	60.9	61.4
Rubber tires and inner tubes.....	76.6	80.8	87.0	70.8	72.9	84.3	26.91	26.26	28.24	28.0	27.2	29.3	96.7	97.2	96.6

NONMANUFACTURING

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

Coal mining:															
Anthracite.....	50.9	50.5	51.0	47.2	45.1	51.0	27.02	26.00	29.14	28.9	28.3	31.4	92.0	90.7	91.2
Bituminous.....	80.5	82.1	82.9	81.3	77.8	86.0	25.49	24.00	26.25	29.1	26.9	29.6	86.6	87.8	88.7
Metalliferous mining.....	70.4	75.4	82.9	65.1	71.6	81.7	29.43	30.05	31.26	43.1	43.1	44.2	68.6	69.9	70.8
Quarrying and nonmetallic mining.....	43.9	49.9	53.3	33.4	41.7	49.3	19.32	21.48	23.70	34.7	38.9	42.6	55.8	55.0	55.4
Crude-petroleum producing.....	76.5	77.2	77.5	69.8	70.2	69.9	34.11	34.12	33.64	40.1	30.9	39.9	83.8	84.3	83.3
Public utilities:															
Telephone and telegraph.....	78.0	² 78.9	² 79.6	94.7	² 91.4	² 94.9	31.44	² 30.12	² 31.01	39.2	² 37.8	² 39.5	85.1	² 84.4	² 83.2
Electric light and power and manufactured gas.....	96.1	97.3	98.5	102.4	103.8	105.3	34.38	34.44	34.23	40.2	40.4	40.4	85.7	85.8	85.1
Electric-railroad and motorbus operation and maintenance.....	72.8	73.2	73.4	71.9	71.8	71.4	32.26	32.17	31.93	45.7	45.9	45.9	69.7	69.4	68.7
Trade:															
Wholesale.....	93.3	93.5	94.0	77.8	78.3	79.3	30.00	30.27	30.45	42.5	42.7	42.9	69.9	70.6	70.6
Retail.....	100.1	91.7	92.1	80.6	75.3	75.9	21.55	21.65	21.96	43.2	42.7	43.0	54.8	55.9	56.5
General merchandising.....	144.7	109.8	108.1	123.5	97.1	96.2	18.59	18.37	18.55	40.4	39.2	39.4	50.1	51.2	51.5
Other than general merchandising.....	88.4	86.9	87.0	71.7	70.8	71.7	24.57	24.55	24.80	44.4	43.9	44.2	56.9	57.5	58.1
Hotels (year-round) ³	87.3	88.0	89.2	76.3	77.0	77.7	15.25	15.25	15.11	47.4	47.2	47.1	32.2	32.2	31.7
Laundries.....	87.3	88.0	89.9	79.2	79.2	81.5	17.03	16.90	16.96	42.0	41.6	42.1	40.5	40.7	40.3
Dyeing and cleaning.....	77.1	80.5	85.9	58.9	63.3	71.8	19.09	19.53	20.89	40.2	40.8	42.5	49.1	49.1	50.5
Brokerage ⁴	-1.6	+1.8	-2.9	-2.6	+1.1	-3.2	38.36	38.60	38.52	(5)	(5)	(5)	(5)	(5)	(5)
Insurance ⁴	+1.2	-1.1	-1.1	-1.8	+1.8	+1.3	38.91	39.15	38.45	(5)	(5)	(5)	(5)	(5)	(5)
Building construction ³	-17.2	-6.4	-3.3	-22.7	-8.1	-3.0	28.53	30.52	31.22	30.9	33.1	34.3	91.9	91.6	90.8

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 small 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.

² Revised.

³ Cash payments only; the additional value of board, room, and tips cannot be computed.

⁴ Indexes of employment and pay rolls not available; percentage changes from preceding month substituted.

⁵ Not available.

INDEXES OF EMPLOYMENT AND PAY ROLLS

Indexes of employment and pay rolls are given in tables 6 and 7 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 January 1936 to December 1937, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to December 1937.

The indexes of factory employment and pay rolls are computed from returns supplied by representative establishments in 89 manufacturing industries and cover wage earners only. The base used in computing these indexes is the 3-year average, 1923-25, as 100. In December 1937 reports were received from 25,041 manufacturing establishments employing 4,327,180 workers, whose weekly earnings were \$99,195,710. 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 89 industries included in the monthly survey of the Bureau of Labor Statistics.

TABLE 6.—*Indexes of Employment and Pay Rolls in All Manufacturing Industries Combined and in the Durable- and Nondurable-Goods Groups*¹

[Adjusted to 1933 Census of Manufactures—3-year average 1923-25=100]

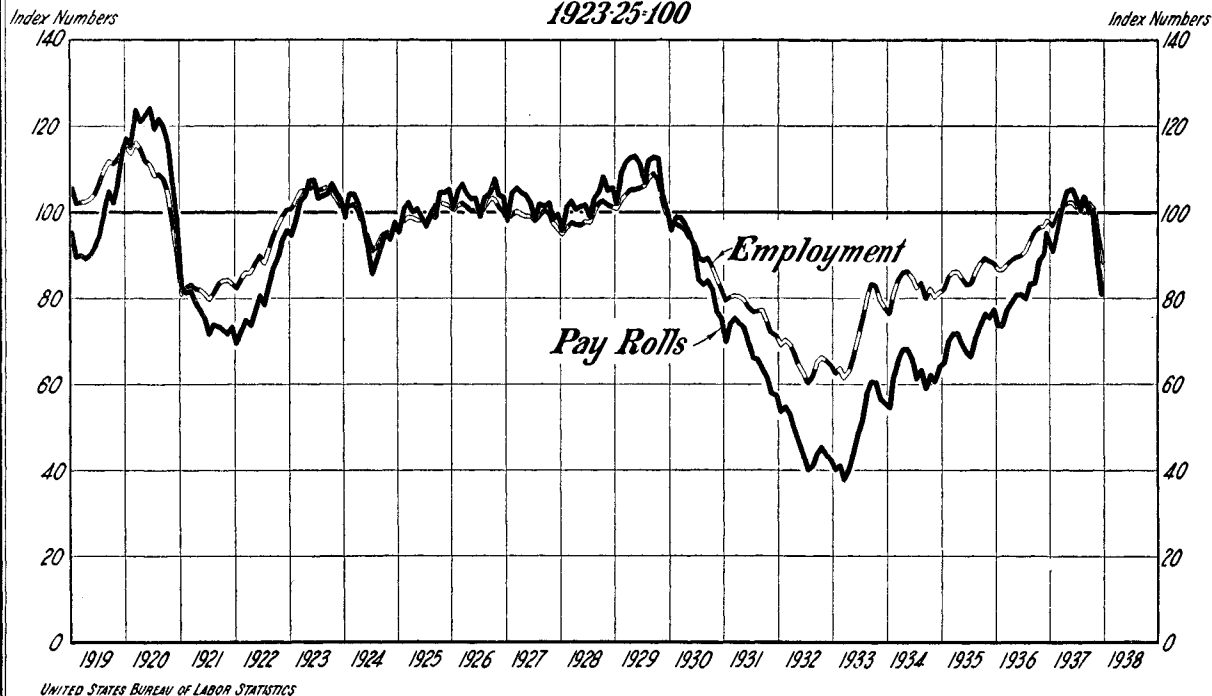
Month	Manufacturing											
	Total				Durable goods ²				Nondurable goods ²			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January.....	86.8	96.5	73.8	90.7	78.7	90.4	66.9	86.6	95.4	103.0	82.5	96.0
February.....	86.9	99.0	73.7	95.8	78.6	93.2	66.6	92.5	95.8	105.2	82.7	99.9
March.....	87.9	101.1	77.6	101.1	80.2	96.4	71.8	100.0	96.1	106.1	84.9	102.6
April.....	89.1	102.1	79.3	104.9	82.3	98.6	76.0	106.4	96.3	105.9	83.5	102.9
May.....	89.8	102.3	80.8	105.2	84.0	99.9	78.5	107.5	96.0	104.8	83.8	102.3
June.....	90.1	101.1	81.1	102.9	84.7	98.8	79.0	104.6	95.9	103.5	83.9	100.8
July.....	91.2	101.4	80.2	100.4	84.6	98.9	75.9	100.7	98.2	104.1	85.6	100.0
August.....	93.5	102.3	83.5	103.8	84.7	98.1	77.0	104.0	102.8	106.9	91.8	103.5
September.....	95.5	102.1	83.6	100.1	85.7	97.3	77.2	99.4	105.9	107.3	91.6	100.9
October.....	96.7	100.5	89.0	100.1	89.2	97.6	85.3	101.7	104.7	103.6	93.7	98.2
November.....	96.9	94.7	90.7	89.5	91.0	92.4	88.9	89.9	103.3	97.3	92.9	89.0
December.....	98.1	88.6	95.2	80.9	92.7	84.3	93.4	77.0	104.0	93.3	97.5	85.8
Average.....	91.9	99.3	82.4	98.0	84.7	95.5	78.0	97.5	99.5	103.4	87.9	98.5

¹ Comparable indexes for earlier years will be found in the February 1937 issue of this report, or in the April 1937 issue of the Monthly Labor Review.

² Includes the following groups of manufacturing industries: Iron and steel; machinery; transportation equipment; railroad repair shops; nonferrous metals; lumber and allied products; and stone, clay, and glass products.

³ Includes the following groups of manufacturing industries: 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.

EMPLOYMENT & PAY ROLLS ALL MANUFACTURING INDUSTRIES 1923=25=100



The indexes for 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, including executives. 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 7.—*Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1936 to December 1937*¹

[12-month average 1929=100]

Month	Anthracite mining				Bituminous-coal mining				Metalliferous mining				Quarrying and non-metallic mining			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January.....	59.1	54.1	54.4	42.7	79.8	84.6	70.6	79.9	54.2	66.8	41.7	58.4	39.4	45.7	25.5	34.6
February.....	61.2	52.7	76.7	41.0	80.2	84.8	78.4	82.4	55.5	69.6	42.8	63.4	36.9	46.7	23.9	37.8
March.....	52.5	48.9	42.6	37.8	80.4	85.9	70.2	88.4	55.9	73.1	45.1	70.6	42.2	49.1	30.9	41.3
April.....	49.8	54.0	28.6	63.9	77.5	72.6	62.6	54.4	57.5	76.2	45.5	76.9	48.4	53.1	36.1	48.1
May.....	54.9	51.0	56.3	44.4	76.2	77.8	62.2	67.8	60.8	78.5	47.7	79.8	52.0	54.9	42.1	51.4
June.....	51.2	51.1	42.0	50.9	75.7	77.9	61.5	71.2	61.9	79.5	48.2	77.7	53.5	55.4	44.0	52.6
July.....	48.4	45.0	37.2	35.2	75.5	75.8	62.6	66.4	61.3	82.0	46.1	77.8	54.4	55.5	43.9	50.8
August.....	41.1	41.2	31.4	27.2	76.9	78.8	65.4	73.8	61.6	83.4	48.2	83.0	55.3	54.9	46.2	53.2
September.....	47.6	48.2	34.9	31.5	78.2	80.5	71.0	77.7	63.1	84.1	50.0	82.2	54.9	54.7	44.8	50.1
October.....	49.9	51.0	48.5	51.0	81.1	82.9	79.2	86.0	64.2	82.9	53.7	81.7	54.6	53.3	46.2	49.3
November.....	51.5	50.5	40.3	45.1	82.3	82.1	80.7	77.8	62.9	75.4	54.6	71.6	52.6	49.9	43.5	41.7
December.....	54.8	50.9	45.4	47.2	83.9	80.5	85.0	81.3	64.4	70.4	57.7	65.1	49.4	43.9	39.4	33.4
Average..	51.8	49.9	45.7	43.2	79.0	80.4	70.8	75.6	60.3	76.8	48.4	74.0	49.5	51.4	38.9	45.4

Month	Crude-petroleum producing				Telephone and telegraph				Electric light and power, and manufactured gas				Electric-railroad and motorbus operation and maintenance ²			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January.....	71.1	72.7	55.7	61.2	70.1	74.4	75.0	83.6	86.1	92.1	84.8	92.3	70.7	72.5	65.0	68.0
February.....	70.8	73.5	55.7	64.1	69.9	74.8	76.2	82.2	86.1	92.2	84.7	93.6	71.7	72.6	68.3	68.7
March.....	70.9	74.2	56.0	63.9	70.2	75.4	77.2	87.2	86.8	92.4	85.9	94.8	71.2	72.6	67.8	69.2
April.....	71.3	75.8	57.1	67.7	70.8	76.6	76.0	86.3	88.0	93.1	86.2	95.5	71.3	72.9	65.9	69.4
May.....	72.7	76.7	58.0	68.2	71.6	77.7	78.5	89.5	89.0	94.6	87.0	97.9	71.5	73.3	66.1	70.1
June.....	73.7	78.5	58.9	70.4	72.1	78.5	77.4	88.6	90.4	96.3	88.1	100.4	71.7	73.3	66.8	71.1
July.....	75.4	78.5	60.4	70.5	73.1	79.7	79.9	92.1	91.7	97.5	89.8	102.2	72.4	73.4	66.5	70.8
August.....	75.0	79.3	59.7	70.8	73.5	79.8	81.2	92.1	91.3	98.3	89.8	102.6	72.4	73.4	66.5	73.1
September.....	74.5	78.2	60.4	71.2	73.7	79.8	78.8	92.3	93.5	98.6	91.4	104.0	72.8	73.7	66.4	71.6
October.....	73.6	77.5	59.6	69.9	73.8	79.6	83.1	94.9	94.0	98.5	92.7	105.3	73.1	73.4	67.7	71.4
November.....	73.2	77.2	60.1	70.2	73.7	78.9	81.6	91.4	93.5	97.3	91.8	103.8	73.0	73.2	69.7	71.8
December.....	72.4	76.0	61.3	69.8	73.6	78.0	82.4	94.7	93.2	96.1	93.8	102.4	72.5	72.8	69.3	71.9
Average..	72.9	76.5	58.6	68.2	72.2	77.8	78.9	89.6	90.5	95.6	88.8	99.6	72.0	73.1	67.2	70.6

¹ Comparable indexes for earlier years for all of these industries, except year-round hotels, will be found in the November 1934 and subsequent issues of this pamphlet, or the February 1935 and subsequent issues of the Monthly Labor Review. Comparable indexes for year-round hotels will be found in the June 1935 issue of this pamphlet, or the September 1935 issue of the Monthly Labor Review.

² Not including electric-railroad car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 3.

³ Revised.

TABLE 7.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1936 to December 1937—Continued

Month	Wholesale trade				Total retail trade				Retail trade—general merchandising				Retail trade—other than general merchandising			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January.....	85.6	90.7	66.6	72.6	80.4	85.4	62.1	68.0	88.2	95.1	76.4	83.8	78.4	82.9	59.1	64.7
February.....	85.0	92.0	66.6	74.1	79.7	85.2	61.6	67.9	85.1	93.9	73.9	82.9	78.3	82.9	59.1	64.8
March.....	85.6	92.1	69.0	75.0	81.9	88.5	63.5	70.5	90.9	100.3	77.3	87.6	79.5	85.4	60.7	67.0
April.....	85.7	91.9	67.9	75.4	85.2	88.8	65.3	71.9	97.4	99.6	81.0	89.1	82.0	86.0	62.1	68.3
May.....	84.6	90.8	68.2	76.1	85.0	89.9	65.8	73.5	95.5	102.1	80.8	91.5	82.3	86.7	62.7	69.8
June.....	84.6	90.3	68.4	76.3	85.5	90.5	66.4	74.4	96.4	102.9	81.3	92.5	82.6	87.2	63.3	70.6
July.....	85.4	90.6	69.0	76.9	83.2	87.6	65.1	72.8	90.7	95.9	77.3	87.3	81.2	85.4	62.6	69.8
August.....	86.3	91.8	69.7	79.0	82.4	86.2	64.4	72.3	89.4	93.8	76.4	85.7	80.5	84.2	61.9	69.5
September.....	88.0	93.0	70.5	78.3	86.6	90.7	66.6	74.4	98.5	103.7	82.8	92.4	83.5	87.3	63.3	70.7
October.....	89.0	94.0	71.5	79.3	88.7	92.1	68.3	75.9	103.9	108.1	87.2	96.2	84.7	87.9	64.4	71.7
November.....	89.7	93.5	73.1	78.3	90.1	91.7	70.1	75.3	109.3	109.8	91.4	97.1	85.1	86.9	65.7	70.8
December.....	91.0	93.3	72.8	77.8	99.6	100.1	75.9	80.6	143.4	144.7	116.2	123.5	88.1	88.4	67.6	71.7
Average.....	86.7	92.0	69.4	76.6	85.7	89.7	66.3	73.1	99.1	104.2	83.5	92.5	82.2	85.9	62.7	69.1

Month	Year-round hotels				Laundries				Dyeing and cleaning			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January.....	81.9	85.5	64.9	70.4	81.5	88.5	68.3	76.4	71.5	76.8	51.6	55.6
February.....	82.8	86.4	66.5	72.5	81.2	88.6	67.8	76.3	70.3	76.2	49.0	54.6
March.....	82.8	86.9	66.0	72.7	82.1	88.7	69.9	77.5	74.7	81.1	56.4	61.7
April.....	83.2	88.4	66.3	74.5	83.2	88.5	70.9	78.5	81.8	84.9	64.1	68.8
May.....	84.1	87.7	67.0	73.6	85.5	90.3	75.6	81.4	87.3	88.6	72.2	73.9
June.....	83.9	86.9	66.6	74.0	87.2	93.5	75.8	85.5	87.5	92.1	69.2	79.2
July.....	83.3	86.1	66.0	73.3	80.5	95.2	79.0	86.9	85.5	86.3	64.8	68.3
August.....	83.2	86.8	66.1	74.4	89.6	94.2	76.7	86.0	83.5	85.8	63.2	69.8
September.....	84.2	88.1	67.5	76.1	89.6	93.7	76.6	84.4	86.7	87.7	66.1	73.6
October.....	85.4	89.2	69.6	77.7	87.6	89.9	75.3	81.5	86.5	85.9	66.7	71.8
November.....	84.6	88.9	69.6	77.9	87.0	88.0	74.5	79.2	81.3	80.5	60.2	63.3
December.....	84.0	87.3	69.8	76.3	87.6	87.3	76.1	79.2	77.7	77.1	57.3	58.9
Average.....	83.6	87.4	67.2	74.5	86.1	90.5	73.9	81.1	81.2	83.6	61.7	66.6

* Revised.

In table 8 are presented general indexes of factory employment and pay rolls by yearly averages, 1923 to 1937, inclusive, and by months January to December 1937, inclusive. Indexes for the same periods, where available, are also presented for each of the 89 manufacturing industries surveyed, for the durable- and nondurable-goods groups, and for the 14 smaller groups and 2 subgroups into which they are classified.

The indexes have been adjusted to conform with the annual averages and totals shown in published reports of the Census of Manufactures through 1933, and are subject to further revision when adjustments are made to bring them into conformity with later census data.

TABLE 8.—*Employment and Pay-Roll Indexes, Manufacturing Industries*

[3-year average, 1923-25=100]

Month and year	General index		Durable-goods group		Nondurable-goods group		Iron and steel and their products, not including machinery					
							Group index		Blast furnaces, steel works, and rolling mills		Bolts, nuts, washers, and rivets	
	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls
1923.....	104.1	103.3	104.6	104.1	103.5	102.4	103.9	103.2	104.5	104.5	112.5	111.5
1924.....	96.4	96.0	96.4	95.7	96.4	96.2	97.0	96.7	97.1	96.5	89.5	89.5
1925.....	99.5	100.7	99.0	100.2	100.1	101.4	99.1	100.1	98.4	99.0	98.0	99.0
1926.....	101.3	103.7	101.7	103.8	100.9	103.6	102.5	105.0	101.0	103.0	(1)	(1)
1927.....	98.9	101.7	95.6	97.9	102.4	106.4	97.2	98.6	95.7	96.7	96.0	95.6
1928.....	98.7	102.4	96.1	100.4	101.6	104.9	96.6	100.4	96.2	100.6	(1)	(1)
1929.....	104.7	109.1	103.7	108.8	105.8	109.4	102.6	107.8	103.2	109.6	114.0	122.0
1930.....	91.3	88.5	86.1	83.0	96.9	95.5	89.2	85.7	90.3	87.7	(1)	(1)
1931.....	77.3	67.4	67.3	56.3	87.9	81.5	69.7	55.0	68.4	53.6	74.2	56.2
1932.....	65.5	46.4	52.8	34.4	79.2	61.7	56.5	30.4	57.8	27.4	55.2	32.5
1933.....	72.0	49.4	56.7	37.2	88.4	64.9	64.6	39.0	71.0	40.5	59.8	39.5
1934.....	82.5	62.9	69.7	51.7	96.2	77.1	76.2	52.3	83.6	55.4	66.4	51.4
1935.....	86.0	71.3	75.5	62.6	97.3	82.5	81.1	64.4	88.4	69.8	67.6	61.4
1936.....	91.9	82.4	84.7	78.0	99.5	87.9	92.3	84.2	100.9	93.6	75.6	78.5
1937.....	99.3	98.0	95.5	97.5	103.4	98.5	104.1	107.3	114.9	122.3	86.3	97.3
<i>1937</i>												
January.....	96.5	90.7	90.4	86.6	103.0	96.0	100.0	99.8	111.5	115.9	86.9	97.8
February.....	99.0	95.8	93.2	92.5	105.2	99.9	103.4	103.9	113.6	118.5	88.7	105.8
March.....	101.1	101.1	96.4	100.0	106.1	102.6	106.8	112.6	117.1	127.2	90.2	108.2
April.....	102.1	104.9	98.6	106.4	105.9	102.9	108.9	124.5	120.2	145.6	93.2	116.0
May.....	102.3	105.2	99.9	107.5	104.8	102.3	110.1	124.7	122.0	145.6	93.8	113.4
June.....	101.1	102.9	98.8	104.6	103.5	100.8	101.4	110.4	106.2	123.4	81.9	93.3
July.....	101.4	100.4	98.9	100.7	104.1	100.0	107.6	113.5	119.9	132.4	87.8	93.6
August.....	102.3	103.8	98.1	104.0	106.9	103.5	108.7	120.4	121.4	142.3	86.7	100.7
September.....	102.1	100.1	97.3	99.4	107.3	100.9	108.8	112.8	121.4	129.7	87.5	96.9
October.....	100.5	100.1	97.0	101.7	103.6	98.2	105.8	106.8	117.5	118.9	84.8	96.9
November.....	94.7	89.5	92.4	89.9	97.3	89.0	98.1	85.7	108.6	92.9	80.5	78.7
December.....	88.6	80.9	84.3	77.0	93.3	85.8	90.0	71.9	99.6	75.5	73.5	66.1
Iron and steel and their products, not including machinery—Continued												
Month and year	Cast-iron pipe		Cutlery (except silver and plated cutlery) and edge tools		Forgings—iron and steel		Hardware		Plumbers' supplies		Steam and hot-water heating apparatus and steam fittings	
	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls
1923.....	96.0	94.6	99.6	97.9	116.5	113.9	101.6	100.1	89.9	89.5	102.2	101.7
1924.....	101.6	101.7	102.4	101.8	97.4	97.4	96.6	96.3	100.1	100.0	97.7	98.0
1925.....	102.4	103.7	98.0	100.3	86.1	88.7	101.8	103.6	110.0	110.5	100.1	100.3
1926.....	110.1	110.5	(1)	(1)	(1)	(1)	100.8	106.3	(1)	(1)	102.6	105.5
1927.....	101.8	98.2	94.6	93.7	65.5	66.7	93.0	96.1	96.7	94.6	99.3	101.6
1928.....	92.4	85.3	(1)	(1)	(1)	(1)	92.8	96.0	(1)	(1)	92.4	94.4
1929.....	87.8	85.2	89.5	87.5	87.8	97.8	101.7	106.9	92.5	87.2	91.6	92.4
1930.....	80.4	75.3	(1)	(1)	(1)	(1)	88.6	81.6	(1)	(1)	78.3	69.0
1931.....	71.5	55.1	74.2	60.4	41.9	32.5	70.3	58.9	65.1	48.0	67.1	46.3
1932.....	46.3	25.1	67.4	47.2	32.1	17.9	58.9	38.4	48.3	27.3	47.4	26.8
1933.....	42.1	22.1	64.5	43.8	33.4	20.9	63.4	42.6	52.6	30.3	51.6	30.6
1934.....	54.5	30.5	77.0	56.5	46.4	34.7	77.8	59.6	52.2	31.6	49.6	34.3
1935.....	53.6	31.1	77.3	62.1	51.9	42.0	75.8	68.6	75.4	51.1	54.8	41.4
1936.....	63.1	44.3	79.3	69.9	59.5	50.5	80.4	81.7	85.0	61.3	66.5	55.8
1937.....	66.6	52.6	87.9	82.9	70.6	66.6	93.2	102.0	92.1	72.1	75.5	70.8
<i>1937</i>												
January.....	67.8	50.7	87.1	80.3	69.2	65.1	80.2	81.6	90.7	68.7	73.7	69.1
February.....	67.1	51.6	88.2	80.6	71.1	68.2	97.0	90.0	91.3	68.4	77.2	74.8
March.....	69.1	55.5	89.4	84.1	72.7	72.1	100.1	116.6	95.7	80.4	79.7	78.6
April.....	70.9	61.5	89.7	86.1	74.0	75.5	99.8	114.1	94.6	77.5	81.7	84.5
May.....	71.5	62.4	89.0	86.9	74.0	74.1	98.5	117.4	95.9	77.1	81.7	82.5
June.....	70.6	59.7	86.2	86.2	71.5	66.7	96.5	93.2	76.3	79.8	76.4	76.4
July.....	69.2	57.7	84.0	78.0	72.3	63.6	93.3	107.8	92.6	71.9	77.0	70.9
August.....	67.6	53.5	89.1	85.1	71.8	67.1	89.8	103.8	93.6	76.6	76.4	71.7
September.....	64.9	48.9	89.9	86.7	73.0	69.6	92.6	101.4	94.5	72.7	77.4	72.2
October.....	62.1	46.3	89.8	85.9	71.6	67.6	94.4	114.5	93.6	76.2	73.5	66.6
November.....	57.9	42.6	88.3	80.5	64.7	55.8	91.5	99.9	89.6	63.5	66.3	53.1
December.....	60.2	44.3	83.9	74.6	60.6	49.0	84.0	80.6	79.8	55.3	61.8	49.1

* Not available.

TABLE 8.—*Employment and Pay-Roll Indexes, Manufacturing Industries—Continued*

Month and year	Iron and steel and their products, not including machinery—Continued									
	Stoves		Structural and ornamental metalwork		Tin cans and other tinware		Tools, not including edge tools, machine tools, files, and saws		Wirework	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	106.0	103.5	104.4	104.0	101.0	97.7	105.7	103.1	93.1	89.6
1924.....	95.0	96.0	97.7	96.6	100.0	100.0	102.2	101.8	100.0	100.0
1925.....	99.0	100.5	97.9	99.4	99.0	102.3	92.1	95.1	106.9	110.4
1926.....	104.2	105.8	107.5	109.9	(1)	(1)	(1)	(1)	(1)	(1)
1927.....	96.2	97.5	106.1	108.8	98.4	104.2	91.7	95.6	120.4	122.5
1928.....	94.0	93.5	106.5	111.0	(1)	(1)	(1)	(1)	(1)	(1)
1929.....	99.3	98.8	111.2	112.8	104.3	113.6	107.6	117.8	124.2	129.3
1930.....	83.1	74.3	98.9	94.2	(1)	(1)	(1)	(1)	(1)	(1)
1931.....	69.4	53.4	76.0	61.5	83.7	83.3	60.4	51.1	95.6	80.6
1932.....	55.0	33.4	49.7	29.9	73.3	65.8	48.8	33.2	87.6	56.8
1933.....	64.3	40.8	43.3	23.9	77.3	67.6	53.5	37.2	97.9	65.6
1934.....	82.0	56.0	53.6	36.0	89.2	81.1	64.7	52.9	118.4	89.4
1935.....	92.7	70.9	53.4	39.0	92.5	87.9	70.6	65.4	127.1	105.8
1936.....	102.5	85.8	66.6	57.5	98.3	95.6	83.4	83.9	154.0	136.7
1937.....	106.3	90.6	76.3	76.5	103.9	109.1	98.6	104.9	178.1	171.6
<i>1937</i>										
January.....	96.7	76.8	70.8	63.3	95.8	94.4	97.5	102.8	178.8	161.0
February.....	108.1	96.8	71.8	67.5	98.4	99.4	99.8	109.3	176.1	156.0
March.....	113.0	102.4	74.2	72.2	100.2	104.2	102.0	110.9	186.5	180.3
April.....	115.2	106.4	75.7	78.5	102.2	108.2	102.2	115.5	186.0	184.2
May.....	116.9	106.7	76.9	78.5	104.9	111.7	103.3	113.9	182.8	189.1
June.....	119.0	106.2	78.7	82.4	109.2	116.6	101.6	114.9	181.2	188.5
July.....	104.6	82.2	80.6	82.3	114.8	122.0	102.0	107.6	175.9	171.6
August.....	112.6	96.9	81.4	84.7	117.9	128.5	100.4	106.7	171.3	160.7
September.....	113.4	97.8	82.3	83.9	114.0	122.6	98.4	103.6	170.3	166.8
October.....	108.3	94.2	79.1	81.6	100.8	107.5	97.0	100.7	187.2	202.3
November.....	91.1	65.0	75.0	74.5	96.8	99.8	91.7	90.3	179.5	162.3
December.....	77.2	56.0	69.5	68.2	91.3	94.4	87.6	82.4	161.2	136.1
<i>Machinery, not including transportation equipment</i>										
Month and year	Group index		Agricultural implements		Cash registers, adding machines, and calculating machines		Electrical machinery, apparatus, and supplies		Engines, turbines, tractors, and water wheels	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	105.8	104.1	110.0	109.9	107.4	105.1	103.0	100.1	99.1	99.5
1924.....	94.9	94.9	88.1	88.7	97.2	97.3	97.9	99.2	96.0	96.7
1925.....	99.3	101.0	101.9	101.4	95.4	97.6	99.1	100.7	104.9	103.8
1926.....	107.4	111.1	115.3	119.1	(1)	(1)	(1)	(1)	115.4	119.2
1927.....	102.4	106.2	118.5	125.9	103.1	100.4	(1)	(1)	111.3	119.3
1928.....	104.9	111.3	137.9	152.4	(1)	(1)	(1)	(1)	113.2	125.5
1929.....	125.9	134.3	147.9	160.0	120.8	137.3	127.3	134.4	125.3	138.9
1930.....	104.9	102.7	110.7	106.9	(1)	(1)	107.1	109.3	106.1	107.2
1931.....	78.3	64.2	62.3	51.9	87.3	69.1	80.9	68.7	68.1	54.0
1932.....	57.0	37.3	36.8	26.9	74.9	52.5	60.6	39.7	43.5	27.4
1933.....	60.8	40.6	39.6	26.7	78.2	60.1	58.8	38.9	47.0	32.5
1934.....	80.0	60.4	68.8	62.8	100.5	83.6	72.5	54.4	72.4	54.5
1935.....	89.7	74.4	100.2	103.0	103.0	90.6	80.6	67.2	101.2	84.3
1936.....	103.7	94.8	113.1	121.2	115.0	108.4	91.4	83.1	119.4	104.6
1937.....	124.0	127.6	136.6	173.9	132.4	141.3	114.8	117.0	145.1	148.6
<i>1937</i>										
January.....	114.9	111.0	111.3	131.6	123.3	120.8	104.0	97.0	125.3	120.3
February.....	118.6	118.2	119.0	139.6	127.2	130.2	109.3	107.3	134.9	131.1
March.....	121.2	125.5	131.5	162.1	130.5	140.3	111.2	112.1	139.8	139.2
April.....	124.3	133.9	137.5	180.0	131.3	148.0	114.6	121.0	144.3	152.2
May.....	126.1	134.9	139.7	183.9	133.5	149.0	117.8	123.5	148.8	156.5
June.....	129.2	137.2	140.6	182.7	135.9	146.7	119.9	126.1	149.9	156.4
July.....	129.9	138.6	138.6	172.5	137.1	146.7	121.0	124.1	151.6	155.0
August.....	130.2	137.1	141.0	184.2	135.0	140.0	121.0	126.8	151.1	155.5
September.....	130.7	134.3	147.2	189.2	136.5	146.5	121.3	124.1	153.6	158.8
October.....	128.9	134.2	150.5	203.5	136.3	148.4	119.3	124.8	152.5	159.4
November.....	121.4	121.2	143.0	184.5	133.6	141.2	113.1	114.3	147.8	155.0
December.....	113.1	110.6	139.6	173.5	129.0	137.9	104.7	102.9	141.2	143.6

¹ Not available.

TABLE 8.—*Employment and Pay-Roll Indexes, Manufacturing Industries—Continued*

Month and year	Machinery, not including transportation equipment—Continued									
	Foundry and machine-shop products		Machine tools		Radios and phonographs		Textile machinery and parts		Typewriters and parts	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	108.4	106.7	108.1	105.3	89.5	88.1	116.4	117.5	100.0	98.4
1924.....	93.9	93.6	92.0	90.8	105.9	107.5	92.7	86.8	100.0	100.0
1925.....	97.7	99.7	99.9	103.9	104.6	104.4	90.9	95.7	100.0	101.6
1926.....	103.3	107.4	119.3	125.3	(1)	(1)	90.1	95.7	(1)	(1)
1927.....	97.7	99.9	114.3	116.3	(1)	(1)	85.3	93.2	111.5	113.0
1928.....	98.8	102.6	127.9	139.8	(1)	(1)	78.5	84.2	(1)	(1)
1929.....	111.3	117.9	167.2	187.6	204.5	202.9	88.1	96.7	121.1	130.1
1930.....	94.2	89.0	126.0	121.9	141.0	139.8	71.2	66.0	(1)	(1)
1931.....	69.7	55.4	74.7	61.5	124.4	96.5	61.3	54.3	77.8	60.0
1932.....	51.1	31.9	42.1	28.6	80.4	60.5	48.4	35.1	61.6	35.8
1933.....	54.6	34.9	44.9	30.9	112.1	81.4	60.5	47.9	68.5	44.1
1934.....	70.4	52.3	73.0	56.1	167.6	114.0	68.5	55.3	101.1	83.2
1935.....	76.9	62.7	93.2	80.1	173.6	124.4	64.0	53.8	107.0	87.5
1936.....	90.4	83.1	117.6	111.0	189.9	143.5	71.6	65.6	116.2	104.3
1937.....	108.1	110.7	149.1	156.6	174.3	141.0	83.3	85.2	148.0	138.2
1937										
January.....	101.3	98.7	134.9	136.9	187.1	146.0	79.6	83.1	146.2	131.2
February.....	104.4	105.0	138.3	142.3	170.6	124.2	82.5	87.5	146.6	137.7
March.....	106.8	111.6	142.8	152.7	163.0	127.1	84.9	89.6	152.8	153.2
April.....	109.7	118.5	146.7	159.1	158.4	126.8	87.0	95.8	154.3	156.7
May.....	111.7	119.4	149.6	161.6	139.9	108.5	87.5	95.3	153.7	155.2
June.....	112.7	119.5	152.7	164.6	182.3	156.2	87.3	93.6	153.8	151.1
July.....	112.5	114.8	152.7	159.3	196.8	166.1	86.2	89.5	152.3	145.6
August.....	112.5	118.9	154.6	160.2	203.5	175.8	85.8	88.2	152.0	143.8
September.....	111.9	114.2	157.6	165.5	208.3	173.9	84.0	85.2	151.2	142.8
October.....	110.4	113.5	157.7	170.3	200.5	165.5	82.8	80.9	147.9	128.4
November.....	104.8	101.8	153.9	157.9	156.7	123.0	77.7	70.2	138.4	106.0
December.....	98.1	93.0	148.1	149.0	124.0	98.7	73.7	63.4	127.0	106.6

Month and year	Transportation equipment											
	Group index		Aircraft		Automobiles		Cars, electric and steam railroad		Locomotives		Shipbuilding	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	107.6	107.7	103.6	103.4	100.6	100.6	126.9	128.7	157.7	168.1	114.5	112.8
1924.....	93.1	90.8	100.0	100.0	93.6	90.6	93.8	94.3	76.4	72.9	93.2	94.9
1925.....	99.3	101.5	96.4	96.6	105.8	108.8	79.3	77.0	65.9	59.0	92.3	92.3
1926.....	99.1	99.5	(1)	(1)	104.8	104.8	75.0	70.9	86.2	80.6	97.4	100.9
1927.....	87.9	89.8	157.9	156.8	91.9	93.3	59.9	60.4	66.7	57.2	101.3	108.3
1928.....	96.2	101.6	(1)	(1)	108.1	113.9	48.4	48.2	45.4	39.6	79.5	85.0
1929.....	103.5	105.4	525.2	501.5	111.3	111.6	63.1	63.1	56.8	58.3	101.3	109.7
1930.....	80.2	70.2	(1)	(1)	80.3	65.7	54.7	53.2	52.3	51.5	107.3	113.5
1931.....	66.3	52.3	353.1	354.8	71.0	53.4	29.6	25.4	28.0	18.1	83.0	76.8
1932.....	55.5	37.8	244.2	234.3	60.5	38.8	24.9	20.5	17.7	9.0	66.7	54.1
1933.....	54.5	35.6	279.6	236.2	60.6	38.3	22.5	14.6	12.2	6.0	56.8	42.1
1934.....	83.5	61.8	338.0	265.0	94.5	68.2	39.1	31.3	25.7	14.0	71.7	58.6
1935.....	95.7	79.2	363.5	301.0	110.4	89.5	39.3	34.1	23.9	13.2	76.5	68.5
1936.....	103.4	94.2	578.6	482.4	114.1	102.0	53.8	51.3	33.7	21.9	96.2	95.3
1937.....	118.2	117.0	789.4	703.7	128.3	123.1	68.4	79.5	58.4	47.7	103.8	115.7
1937												
January.....	112.7	100.7	725.4	606.3	125.2	108.2	55.7	58.8	44.9	31.1	94.5	96.8
February.....	116.0	112.3	756.3	652.4	127.4	121.8	62.9	66.7	50.4	37.2	98.7	97.9
March.....	121.0	123.6	790.8	703.4	131.6	132.2	70.2	79.1	54.2	40.8	106.8	116.0
April.....	125.4	126.6	813.7	738.7	136.2	136.0	75.1	89.1	57.4	45.1	109.0	122.7
May.....	128.3	134.1	823.2	739.4	140.0	143.8	77.7	89.9	58.8	47.3	106.7	118.7
June.....	126.4	127.8	834.0	751.3	137.8	135.2	76.5	91.4	59.5	51.4	103.3	114.5
July.....	119.9	117.5	790.7	682.7	130.4	123.6	71.6	83.4	62.5	50.5	100.2	111.7
August.....	111.8	112.8	812.1	750.8	118.7	115.3	72.7	87.4	63.3	52.6	102.4	118.8
September.....	107.0	104.4	766.8	670.4	112.5	105.6	68.5	79.7	64.4	55.0	106.2	119.0
October.....	122.7	128.9	784.0	723.0	133.9	138.3	67.9	82.5	64.1	56.0	106.8	124.4
November.....	121.8	120.0	795.0	725.3	133.2	125.8	65.8	81.1	61.6	51.4	105.9	121.4
December.....	105.5	92.4	781.0	700.7	112.9	90.8	55.8	65.0	59.5	53.7	104.8	126.5

* Not available.

TABLE 8.—*Employment and Pay-Roll Indexes, Manufacturing Industries—Continued*

Month and year	Railroad repair shops						Nonferrous metals and their products					
	Group index		Electric railroad		Steam railroad		Group index		Aluminum manufactures		Brass, bronze, and copper products	
	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls
1923.....	108.6	109.6	104.0	101.5	108.9	110.2	105.4	103.7	106.3	100.2	103.4	101.3
1924.....	96.4	95.6	99.1	98.8	96.3	95.5	98.7	95.9	100.0	100.0	96.6	95.6
1925.....	95.0	94.8	96.9	96.7	94.8	94.3	97.9	100.4	93.7	99.8	100.0	103.1
1926.....	95.5	96.1	96.5	100.4	95.4	95.7	(1)	(1)	(1)	(1)	102.7	107.4
1927.....	89.0	92.0	94.1	99.8	88.6	91.4	98.5	100.5	96.6	105.5	101.2	104.7
1928.....	83.8	87.2	89.6	97.9	83.3	86.3	(1)	(1)	(1)	(1)	107.3	115.6
1929.....	82.6	90.4	87.8	97.2	82.2	89.8	111.4	116.4	138.4	150.0	121.5	128.3
1930.....	73.4	76.1	85.8	93.0	72.4	74.8	(1)	(1)	(1)	(1)	96.6	88.7
1931.....	64.1	61.7	79.3	80.2	62.9	60.4	74.0	63.1	90.2	81.3	74.9	60.3
1932.....	52.5	42.0	70.0	64.3	51.1	40.4	60.4	40.3	73.0	46.7	62.5	39.1
1933.....	50.2	40.3	62.9	55.1	49.2	39.3	68.7	43.8	89.1	60.1	73.4	48.0
1934.....	53.5	46.5	62.4	58.0	52.8	45.8	81.1	58.8	91.8	66.3	84.9	61.7
1935.....	51.7	48.8	61.8	58.7	51.0	48.2	90.2	70.9	95.8	79.6	93.0	73.9
1936.....	58.3	59.4	62.5	62.9	58.0	59.3	99.6	85.2	108.7	98.6	103.8	89.7
1937.....	60.9	64.3	63.4	67.3	60.8	64.2	111.4	106.1	123.5	127.8	117.2	114.3
<i>1937</i>												
January.....	61.2	61.2	63.4	64.5	61.0	61.1	108.9	97.1	118.9	114.7	118.5	113.1
February.....	61.6	63.4	63.3	64.8	61.5	63.4	111.5	108.5	122.2	121.7	121.7	120.2
March.....	62.2	65.8	64.0	67.1	62.1	65.0	114.6	111.8	124.2	130.4	124.1	127.8
April.....	63.3	67.4	63.8	67.6	63.3	67.6	115.5	114.2	124.4	130.7	127.6	132.7
May.....	63.6	67.1	63.4	66.4	63.6	67.4	115.5	113.1	125.8	134.8	125.7	126.5
June.....	64.0	68.7	62.7	67.1	64.1	69.0	113.9	111.5	129.5	135.6	122.3	125.3
July.....	63.8	63.5	63.3	67.0	63.8	63.3	111.5	105.3	131.5	134.5	119.0	116.7
August.....	62.1	67.3	63.0	68.7	62.0	67.4	112.8	109.9	132.6	141.2	116.9	113.6
September.....	60.4	63.1	63.4	67.7	60.2	62.9	114.1	110.1	131.0	135.7	114.8	116.2
October.....	59.0	64.9	63.3	68.0	58.7	64.9	112.7	109.9	104.7	115.9	113.1	106.7
November.....	57.4	63.3	63.1	68.2	57.0	63.0	108.4	99.9	123.5	127.8	105.5	92.1
December.....	62.7	55.7	63.5	70.1	61.9	64.7	98.9	86.5	114.1	110.7	97.0	80.3

Month and year	Nonferrous metals and their products—Continued											
	Clocks, watches, and time-recording devices		Jewelry		Lighting equipment		Silverware and plated ware		Smelting and refining—copper, lead, and zinc		Stamped and enameled ware	
	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls
1923.....	97.6	95.7	105.1	105.9	101.3	96.7	100.6	98.1	102.8	103.2	110.1	111.2
1924.....	100.0	100.0	99.8	91.8	100.0	100.0	100.0	100.0	100.0	100.0	95.7	92.8
1925.....	102.4	104.3	95.1	102.3	98.7	103.3	99.4	101.9	97.2	96.8	94.2	96.0
1926.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	96.9	98.3
1927.....	102.9	108.1	96.2	106.9	92.9	97.3	98.4	102.3	89.9	90.4	93.0	95.7
1928.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	104.1	108.0
1929.....	98.2	102.2	111.4	113.3	104.2	110.6	92.6	96.5	91.3	99.4	120.5	125.6
1930.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	106.3	104.9
1931.....	74.3	62.2	74.1	65.6	65.3	60.4	65.3	54.3	54.4	45.9	85.4	76.8
1932.....	58.1	38.0	59.5	42.8	47.0	35.3	53.7	36.8	41.4	26.6	79.5	55.5
1933.....	58.9	39.7	59.3	37.7	46.5	31.6	54.1	35.1	42.9	27.4	97.2	66.7
1934.....	79.2	62.4	72.1	50.0	59.0	44.2	67.2	49.0	59.1	39.8	119.4	90.3
1935.....	94.6	80.1	78.4	54.9	68.2	55.9	68.7	53.0	70.2	50.8	132.2	110.3
1936.....	108.9	98.7	82.9	60.4	80.9	73.3	65.8	53.6	78.1	63.5	142.5	130.1
1937.....	121.8	118.5	92.6	72.3	94.4	93.1	75.3	69.8	87.0	82.3	153.5	152.0
1937												
January.....	118.4	109.1	84.4	62.3	73.3	69.4	69.3	57.6	80.4	68.5	154.8	148.4
February.....	120.1	111.0	88.5	66.1	96.8	89.8	71.8	62.8	78.9	68.9	159.1	154.9
March.....	122.1	120.2	88.6	69.2	103.8	109.3	73.8	67.9	81.1	75.2	165.3	163.2
April.....	123.0	122.1	87.5	68.0	101.4	107.1	74.4	68.5	84.6	81.9	162.4	164.1
May.....	123.4	122.3	88.6	69.1	99.7	101.6	74.4	69.7	87.5	84.8	162.8	166.0
June.....	121.6	118.5	89.1	70.3	96.1	95.3	74.4	69.1	88.8	85.2	159.2	162.4
July.....	114.8	108.4	90.8	67.8	91.5	88.8	73.8	66.9	91.8	87.2	151.0	146.2
August.....	123.7	121.9	95.9	74.1	90.7	86.8	76.3	72.5	92.1	92.4	153.4	157.0
September.....	127.0	128.0	101.1	81.7	97.2	98.5	79.5	81.4	93.0	88.6	153.2	149.2
October.....	127.5	132.7	106.4	89.4	100.1	104.3	80.8	80.7	92.1	90.9	154.0	156.4
November.....	125.0	122.3	100.3	78.8	95.6	94.4	79.3	72.6	88.0	83.8	144.0	141.5
December.....	115.3	105.3	89.9	70.6	87.1	72.1	76.1	67.7	85.3	80.2	122.6	114.7

1 Not available.

TABLE 8.—*Employment and Pay-Roll Indexes, Manufacturing Industries—Continued*

Month and year	Lumber and allied products								Stone, clay, and glass products	
	Group index		Furniture		Lumber, mill-work		Lumber, saw-mills		Group index	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	101.5	100.0	98.1	96.9	96.7	95.6	103.6	102.5	100.4	98.3
1924.....	98.3	98.5	96.2	96.4	98.8	99.3	98.8	99.2	98.9	100.5
1925.....	100.2	101.6	105.7	106.7	104.5	105.1	97.6	98.3	100.7	101.2
1926.....	100.3	102.4	110.3	113.4	102.7	103.3	95.5	96.6	103.8	104.2
1927.....	93.9	96.6	108.8	111.8	90.7	90.5	86.6	89.0	99.9	100.5
1928.....	92.1	94.1	106.7	107.5	86.7	86.1	84.4	87.2	95.7	96.2
1929.....	95.2	97.3	111.9	114.0	84.6	83.5	87.7	90.7	93.8	93.7
1930.....	75.8	72.5	89.0	80.7	64.4	61.1	67.6	67.6	80.2	76.9
1931.....	56.0	46.2	73.7	59.2	51.1	42.0	41.1	33.6	63.7	53.9
1932.....	43.6	28.6	57.4	34.6	35.0	21.4	31.7	18.4	46.7	30.6
1933.....	49.9	30.3	61.0	35.9	33.2	18.7	39.6	24.4	49.4	30.8
1934.....	54.5	36.9	62.4	41.5	35.4	22.3	45.0	30.9	57.6	39.5
1935.....	58.7	44.6	70.2	52.0	41.8	31.6	46.4	34.9	58.6	44.2
1936.....	64.7	56.3	78.2	63.6	49.3	43.2	50.2	42.6	64.2	54.2
1937.....	68.7	63.6	85.8	74.3	55.1	51.9	51.7	47.7	70.0	65.6
1937										
January.....	65.0	54.9	85.9	71.4	53.8	47.1	46.8	37.2	62.5	52.7
February.....	65.8	58.2	86.1	75.0	55.0	50.4	47.6	39.7	67.2	60.8
March.....	69.8	64.6	87.5	76.9	56.7	52.6	52.3	48.0	70.3	66.1
April.....	70.6	68.3	86.9	78.5	57.7	55.6	53.4	52.0	73.0	71.1
May.....	71.6	68.2	87.4	76.7	57.3	54.9	54.7	52.9	74.4	72.0
June.....	72.9	72.3	89.1	78.7	57.5	57.5	55.7	57.4	74.0	71.4
July.....	72.9	67.3	87.9	73.9	57.3	54.8	56.3	52.8	71.7	66.1
August.....	73.0	71.4	89.2	79.2	57.1	56.1	56.0	56.3	71.9	70.5
September.....	71.8	68.2	89.1	78.2	55.6	53.2	54.7	52.6	72.7	69.9
October.....	69.5	65.3	86.8	76.8	54.3	51.7	52.7	49.4	71.4	69.6
November.....	63.5	55.1	79.5	65.8	51.2	46.3	47.6	40.4	68.2	63.6
December.....	58.1	48.4	74.5	60.0	47.6	42.8	42.8	33.9	63.2	54.5
Stone, clay, and glass products—Continued										
Month and year	Brick, tile, and terra cotta		Cement		Glass		Marble, granite, slate, and other products		Pottery	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	100.6	98.1	95.0	94.6	105.1	103.4	104.5	101.7	98.5	97.8
1924.....	98.7	101.1	101.0	102.9	95.5	96.9	100.0	100.0	103.8	104.3
1925.....	100.7	100.8	104.0	102.5	99.4	99.7	95.5	98.3	97.7	97.9
1926.....	102.9	101.8	102.1	100.9	103.8	103.9	(1)	(1)	99.7	99.3
1927.....	99.0	96.7	98.3	101.1	94.3	93.6	105.6	113.0	98.0	94.5
1928.....	92.3	87.5	92.6	96.9	82.6	94.5	(1)	(1)	98.8	93.9
1929.....	91.5	84.7	90.3	92.9	96.7	100.9	98.7	104.0	94.7	91.4
1930.....	72.2	62.2	84.6	83.4	83.8	82.9	(1)	(1)	82.9	74.1
1931.....	53.1	35.2	65.8	56.9	71.5	66.5	72.2	68.8	72.3	56.4
1932.....	31.8	15.5	45.8	29.8	59.6	45.5	47.9	35.3	55.6	35.9
1933.....	31.3	15.0	42.8	26.4	71.3	52.0	43.1	27.7	63.2	37.4
1934.....	34.8	20.0	51.7	37.7	91.6	70.7	39.6	26.5	72.2	46.4
1935.....	36.3	24.2	52.0	39.7	96.3	81.6	34.2	24.5	72.6	52.1
1936.....	45.6	35.7	57.4	51.6	98.6	91.1	39.7	32.6	73.6	58.0
1937.....	49.9	42.9	65.8	66.6	107.6	111.7	42.0	35.9	77.7	67.9
1937										
January.....	45.6	36.4	57.1	49.9	92.8	84.6	36.3	28.5	74.8	63.2
February.....	46.6	37.9	58.2	52.6	107.6	107.2	37.5	29.9	77.6	67.6
March.....	49.3	42.6	63.5	62.5	110.1	115.1	40.4	33.5	81.1	73.9
April.....	53.3	49.2	66.9	68.5	110.9	120.2	43.1	38.8	82.1	72.2
May.....	55.0	49.1	68.5	71.4	112.3	118.9	44.9	41.3	81.7	75.0
June.....	54.5	49.1	69.7	75.0	112.4	119.4	44.1	37.6	80.0	70.3
July.....	53.8	46.2	69.7	72.4	107.9	108.6	44.4	38.4	72.8	59.0
August.....	52.0	46.2	69.9	77.1	109.6	120.3	44.5	39.7	75.8	64.7
September.....	52.3	46.4	69.9	72.8	111.1	118.7	44.9	39.8	77.0	66.8
October.....	50.0	44.2	69.2	72.2	109.9	119.2	43.4	37.8	78.6	72.9
November.....	45.5	36.4	66.1	67.3	106.7	111.9	42.1	34.6	76.9	70.0
December.....	41.1	30.8	60.5	58.0	100.0	95.8	38.0	30.8	74.1	59.7

¹ Not available.

TABLE 8.—*Employment and Pay-Roll Indexes, Manufacturing Industries—Continued*

Month and year	Textiles and their products									
	Group index		Fabric (subgroup)		Carpets and rugs		Cotton goods		Cotton small wares	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	105.2	105.8	105.4	106.0	103.8	109.2	106.7	110.1	104.4	105.5
1924.....	94.9	83.8	94.2	93.4	96.2	93.3	92.5	91.6	92.6	91.8
1925.....	89.9	100.4	100.4	100.6	100.0	97.5	100.8	98.3	103.0	102.7
1926.....	89.9	100.2	99.2	99.4	97.8	93.8	101.9	98.5	(1)	(1)
1927.....	104.0	106.8	101.3	103.8	96.9	94.5	105.8	105.7	95.3	101.3
1928.....	101.3	101.7	96.2	95.8	92.8	85.7	95.5	88.4	(1)	(1)
1929.....	104.8	105.2	99.2	99.4	96.2	90.1	96.1	90.1	97.4	102.1
1930.....	92.9	85.6	86.0	79.4	74.2	59.7	80.7	69.4	(1)	(1)
1931.....	87.2	75.2	80.3	70.2	67.5	54.3	74.5	61.0	81.7	76.8
1932.....	77.9	53.6	71.9	50.4	52.9	31.4	67.1	43.9	72.2	56.2
1933.....	90.5	61.8	86.4	61.4	62.8	41.0	85.9	60.2	84.3	66.5
1934.....	94.4	72.4	89.7	70.2	69.1	48.3	91.2	71.0	90.1	76.5
1935.....	98.4	81.0	93.2	78.2	82.2	69.7	87.8	72.0	94.4	85.0
1936.....	100.7	83.6	94.3	81.1	86.3	75.0	93.1	80.8	96.1	89.6
1937.....	102.7	89.6	97.4	89.1	96.7	87.2	100.1	95.0	99.2	95.2
1937										
January.....	107.1	94.6	102.3	96.0	98.1	95.9	102.7	100.1	106.7	104.3
February.....	110.2	100.1	103.6	97.6	100.0	98.3	104.3	100.4	107.0	105.0
March.....	111.2	103.2	103.8	97.5	102.3	102.8	105.1	101.4	108.6	109.3
April.....	109.9	100.2	103.7	100.3	102.9	101.5	105.7	107.6	107.9	108.3
May.....	107.3	96.2	102.2	98.0	102.2	100.7	105.6	106.5	98.2	95.7
June.....	103.4	91.3	99.7	93.8	101.6	100.2	103.0	101.2	97.4	91.6
July.....	100.0	85.5	98.0	89.6	99.8	97.0	102.0	96.7	96.0	90.4
August.....	102.8	92.1	97.3	90.0	100.8	97.6	100.9	97.0	96.4	90.8
September.....	101.6	87.1	94.9	85.3	99.4	84.5	98.4	92.5	97.8	95.9
October.....	98.8	84.2	91.9	81.0	88.7	64.2	93.9	85.1	98.4	96.8
November.....	92.0	71.5	87.2	71.5	85.7	49.7	91.1	76.8	91.2	79.0
December.....	88.2	68.7	84.0	68.9	78.3	54.4	89.0	74.1	84.9	74.9

Month and year	Textiles and their products—Continued									
	Dyeing and finishing textiles		Hats, fur-felt		Knit goods		Silk and rayon goods		Woolen and worsted goods	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	97.4	96.1	106.4	107.4	104.8	103.7	99.7	97.4	109.3	109.1
1924.....	93.9	92.7	97.1	90.5	94.5	92.3	94.8	93.0	97.9	97.6
1925.....	108.7	111.2	96.5	102.1	100.7	104.0	105.5	109.6	92.8	93.3
1926.....	110.8	114.2	(1)	(1)	101.3	109.1	102.9	107.8	84.1	84.0
1927.....	113.5	121.5	101.2	114.1	102.6	116.0	101.5	107.6	86.7	84.7
1928.....	114.9	121.8	(1)	(1)	102.6	115.4	101.0	107.5	83.1	79.2
1929.....	121.8	124.8	105.3	112.3	112.5	129.8	103.8	105.6	82.6	80.1
1930.....	112.0	108.7	(1)	(1)	102.9	108.6	95.1	87.2	67.2	60.5
1931.....	103.3	101.2	89.6	82.5	96.0	92.2	86.9	74.8	67.1	57.3
1932.....	92.8	73.8	72.6	54.5	94.1	75.5	74.0	48.4	56.0	38.9
1933.....	101.8	77.5	79.8	59.5	102.3	81.4	87.8	56.9	71.4	49.7
1934.....	113.6	88.5	82.8	66.8	107.7	98.6	88.4	66.0	65.7	47.7
1935.....	118.1	94.4	85.8	70.5	112.5	108.2	86.5	68.8	86.5	68.5
1936.....	115.6	97.2	86.5	74.5	116.0	112.9	77.8	61.5	82.6	65.3
1937.....	114.6	100.5	86.0	75.3	117.6	118.7	78.0	65.1	79.7	69.2
1937										
January.....	122.3	112.2	88.4	86.4	120.4	120.2	83.0	68.5	92.5	83.1
February.....	122.8	111.9	90.1	93.9	122.7	126.6	83.7	71.4	92.3	82.2
March.....	123.1	112.6	90.8	89.5	123.7	127.0	82.7	70.7	90.3	79.0
April.....	123.1	114.6	88.0	65.9	123.4	127.5	82.2	71.3	89.0	83.3
May.....	118.8	106.2	82.9	69.3	121.7	125.1	78.7	68.4	87.9	81.4
June.....	109.7	95.8	83.9	73.8	118.1	119.0	79.1	68.4	86.0	78.5
July.....	109.1	94.1	83.9	80.8	116.3	112.6	79.7	67.4	80.7	71.8
August.....	109.4	93.8	88.7	87.0	116.3	119.4	80.2	65.7	78.3	68.5
September.....	110.5	94.9	85.5	69.2	116.5	116.9	79.9	68.2	70.4	57.6
October.....	112.2	94.6	83.0	62.0	116.3	122.8	75.4	62.4	68.4	52.8
November.....	108.8	89.0	83.0	61.0	111.9	112.3	67.6	50.8	59.8	42.8
December.....	105.3	86.5	83.5	64.9	103.3	95.1	63.2	48.1	61.1	49.6

1 Not available.

TABLE 3.—*Employment and Pay-Roll Indexes, Manufacturing Industries—Continued*

Month and year	Textiles and their products—Continued									
	Wearing apparel (subgroup)		Clothing, men's		Clothing, women's		Corsets and allied garments		Men's furnishings	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	105.4	105.6	107.0	109.3	104.3	103.2	105.2	103.4	94.6	93.6
1924.....	96.1	94.9	97.3	96.1	96.6	94.3	100.0	100.0	100.1	96.1
1925.....	98.5	99.5	95.7	94.6	99.1	102.5	94.8	96.6	105.3	110.3
1926.....	99.8	99.6	97.4	94.8	104.2	104.7	(1)	(1)	(1)	(1)
1927.....	105.8	107.6	102.5	99.5	121.0	123.6	90.0	96.7	125.7	139.5
1928.....	108.3	107.5	101.3	95.5	133.7	132.5	(1)	(1)	(1)	(1)
1929.....	113.3	111.0	103.2	95.8	146.8	142.6	89.2	97.0	132.7	145.5
1930.....	105.0	93.6	91.4	74.7	142.2	127.9	(1)	(1)	(1)	(1)
1931.....	99.7	80.6	84.9	62.8	135.8	110.5	91.3	89.6	120.1	109.5
1932.....	89.1	57.2	79.4	44.8	116.9	76.4	89.3	74.8	103.8	75.2
1933.....	97.7	60.0	90.5	52.8	125.1	74.5	91.6	73.2	110.7	79.1
1934.....	102.9	74.0	95.8	65.4	136.0	94.8	93.1	84.3	113.1	92.5
1935.....	107.8	83.0	103.7	79.9	142.8	102.7	91.3	85.0	115.4	94.5
1936.....	112.8	85.2	106.8	81.7	152.0	105.5	87.8	85.5	127.4	100.1
1937.....	112.5	86.7	106.6	85.3	147.8	104.5	89.8	87.0	134.6	104.6
<i>1937</i>										
January.....	115.6	88.1	109.8	87.8	154.9	107.7	89.0	85.2	130.0	93.3
February.....	122.6	100.9	114.4	98.9	165.6	125.0	91.6	92.6	142.8	113.6
March.....	125.5	110.4	116.2	105.7	169.9	138.0	93.2	98.2	147.6	123.1
April.....	121.8	95.7	114.8	95.7	161.8	112.6	92.4	96.0	146.8	115.7
May.....	116.5	88.9	111.5	89.9	152.6	105.9	91.4	91.8	141.9	106.0
June.....	109.3	82.5	106.6	86.7	137.3	91.6	89.6	85.2	136.5	103.7
July.....	102.0	73.8	107.4	86.4	117.0	71.3	88.1	80.2	129.7	96.6
August.....	113.0	92.4	111.0	91.8	146.2	114.7	88.1	81.7	127.6	102.4
September.....	114.4	87.0	108.7	83.9	152.2	106.3	88.9	84.2	127.7	95.4
October.....	112.1	87.0	103.5	80.2	150.4	110.1	89.7	87.3	135.9	111.8
November.....	101.0	68.6	90.7	61.1	134.9	84.2	88.1	82.1	130.4	103.8
December.....	95.6	65.2	84.0	55.6	131.0	86.0	87.6	79.7	118.8	89.8
Month and year	Textiles and their products—Continued				Leather and its manufactures					
	Millinery		Shirts and collars		Group index		Boots and shoes		Leather	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	103.2	100.8	107.9	109.7	108.6	108.9	106.0	107.6	109.1	107.9
1924.....	94.8	94.5	93.0	91.9	96.3	95.3	96.7	95.3	95.4	95.8
1925.....	102.0	104.7	99.1	98.4	97.1	97.8	97.3	97.1	95.5	96.3
1926.....	98.0	103.6	101.7	101.9	96.6	98.9	95.6	96.1	96.7	99.5
1927.....	104.8	113.9	105.1	109.9	97.7	100.3	95.6	96.8	96.6	99.3
1928.....	105.7	112.3	106.3	107.1	95.6	95.8	92.7	91.3	94.3	95.5
1929.....	101.3	104.0	109.1	109.2	98.5	99.0	96.7	95.6	91.1	92.8
1930.....	91.3	88.6	102.7	90.3	91.2	82.3	90.2	78.3	84.6	83.0
1931.....	83.7	79.2	104.0	82.7	84.3	73.1	85.3	70.2	76.9	72.5
1932.....	73.9	60.9	91.0	58.0	81.2	57.6	84.5	58.3	68.8	54.0
1933.....	71.0	49.4	103.1	68.3	87.2	61.2	89.8	61.1	80.7	63.0
1934.....	64.9	49.0	104.4	85.2	92.4	71.7	94.1	71.2	90.5	76.1
1935.....	54.7	42.4	108.5	95.9	92.5	74.1	93.1	70.3	94.9	89.6
1936.....	54.9	41.7	114.0	100.7	91.9	72.8	92.1	67.3	95.8	94.2
1937.....	53.4	40.3	119.2	104.7	93.6	78.2	94.8	72.4	93.6	100.6
<i>1937</i>										
January.....	55.4	41.4	119.2	99.6	97.5	86.3	99.0	82.4	97.0	102.5
February.....	61.5	50.4	126.6	111.8	99.9	90.9	101.9	87.9	97.5	104.6
March.....	66.8	64.7	130.1	122.4	100.8	92.4	102.7	89.0	98.8	107.3
April.....	61.0	48.6	126.6	114.6	98.3	87.7	99.3	81.6	100.0	111.4
May.....	56.0	38.6	120.2	101.6	95.1	81.6	95.3	74.1	99.1	110.0
June.....	51.2	37.4	118.0	101.7	93.8	80.6	94.0	73.3	98.0	108.4
July.....	38.8	23.8	113.4	95.9	86.3	84.6	98.0	79.8	94.7	104.0
August.....	52.9	40.3	116.0	102.8	86.6	83.7	98.6	78.7	93.9	103.8
September.....	56.7	49.0	119.2	103.0	92.7	71.6	94.0	64.5	92.5	98.6
October.....	52.0	35.5	120.7	112.5	89.5	66.3	90.7	58.7	89.6	95.0
November.....	43.8	26.7	114.6	102.6	80.3	53.8	80.8	46.0	82.9	82.7
December.....	44.1	27.4	106.3	87.3	81.8	58.4	83.8	53.2	78.6	78.5

¹ Not available.

TABLE 8.—*Employment and Pay-Roll Indexes, Manufacturing Industries—Continued*

Month and year	Food and kindred products									
	Group index		Baking		Beverages		Butter		Canning and preserving	
	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls
1923.....	101.4	99.8	100.1	98.0	104.9	104.4	106.7	105.7	97.7	97.8
1924.....	98.3	99.3	101.1	101.7	97.0	95.8	100.0	100.0	86.9	86.9
1925.....	100.3	100.9	98.8	100.3	98.1	99.8	93.3	94.3	115.4	115.3
1926.....	99.7	102.0	101.4	104.1	(1)	(1)	(1)	(1)	(1)	(1)
1927.....	100.2	103.0	105.9	107.8	96.6	100.0	105.6	108.2	112.0	108.7
1928.....	103.8	106.3	112.2	113.3	(1)	(1)	(1)	(1)	(1)	(1)
1929.....	111.1	112.9	123.6	125.3	101.3	106.1	100.3	102.5	134.6	129.4
1930.....	107.8	108.0	121.5	123.7	(1)	(1)	(1)	(1)	138.8	126.7
1931.....	95.6	92.0	212.6	109.0	85.5	83.1	82.0	79.1	106.1	91.5
1932.....	88.6	75.0	106.8	92.3	79.1	71.2	80.6	68.3	86.1	65.0
1933.....	100.3	78.7	112.2	89.9	138.2	131.9	86.7	63.8	112.7	76.8
1934.....	114.5	95.1	125.5	103.6	175.8	173.7	91.4	65.8	140.8	101.9
1935.....	109.4	94.4	124.3	105.1	172.7	177.6	82.3	61.5	148.7	123.1
1936.....	111.1	101.3	128.5	114.3	188.2	202.8	83.8	64.9	141.3	123.3
1937.....	115.5	115.5	134.5	129.2	204.9	229.5	87.3	69.8	149.9	154.2
1937										
January.....	105.2	100.5	130.5	118.4	182.3	187.8	80.4	62.4	90.4	86.3
February.....	105.1	101.3	132.2	121.9	182.1	189.3	80.9	64.1	92.4	97.1
March.....	105.7	104.1	133.7	124.1	192.5	211.0	82.3	64.4	89.6	89.5
April.....	107.7	108.2	132.7	123.4	196.7	220.2	83.9	66.2	110.8	113.3
May.....	107.9	111.6	134.6	130.3	207.4	236.9	89.0	71.3	99.6	108.5
June.....	112.6	115.8	136.6	133.8	224.4	260.5	95.6	76.6	122.7	123.5
July.....	124.9	128.3	136.7	134.9	234.4	284.8	97.3	78.1	209.8	245.0
August.....	132.5	131.2	135.3	132.4	230.7	273.4	94.3	77.8	278.0	293.9
September.....	137.8	133.2	136.7	136.1	223.3	253.0	91.6	73.8	311.5	307.1
October.....	125.0	125.0	138.4	137.3	202.7	222.4	86.4	70.3	185.9	187.7
November.....	114.6	115.9	135.2	130.3	194.3	212.7	83.7	67.2	118.7	111.4
December.....	107.3	110.4	131.6	127.4	187.4	202.0	81.6	65.8	89.1	86.6

Month and year	Food and kindred products—Continued											
	Confection- ery		Flour		Ice cream		Slaughtering and meat packing		Sugar, beet		Sugar refin- ing, cane	
	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls
1923.....	101.7	100.9	104.9	101.9	99.2	98.7	104.7	102.6	92.1	91.1	103.4	102.6
1924.....	96.5	97.7	99.7	101.0	102.0	99.7	100.3	99.9	100.0	100.0	98.2	100.4
1925.....	101.8	101.4	95.4	97.1	98.8	101.6	95.0	97.5	107.9	108.9	98.4	97.0
1926.....	105.8	106.8	91.8	94.4	96.3	103.2	93.2	97.8	(1)	(1)	94.8	91.5
1927.....	101.1	104.7	89.4	91.8	94.0	100.6	94.0	98.9	90.0	87.5	94.9	90.6
1928.....	98.9	101.0	85.5	89.7	95.5	103.2	94.8	100.1	(1)	(1)	89.4	87.5
1929.....	101.7	103.7	80.6	85.7	96.0	102.7	96.7	101.5	91.2	90.3	94.3	91.4
1930.....	92.1	93.3	73.9	78.7	89.0	93.0	92.1	96.3	(1)	(1)	92.3	89.7
1931.....	82.0	77.5	68.1	66.7	76.0	76.9	84.1	82.2	75.8	68.1	80.3	79.6
1932.....	74.8	60.6	65.7	56.4	64.6	56.7	80.6	65.7	90.4	68.5	73.9	66.5
1933.....	81.0	60.7	69.2	55.2	61.6	49.1	89.3	68.7	130.0	98.2	77.9	62.7
1934.....	81.3	69.7	78.2	64.9	69.7	57.0	105.7	91.7	94.9	70.6	85.5	65.0
1935.....	80.8	71.4	76.9	67.4	69.3	58.5	84.3	77.1	100.8	89.3	80.8	65.8
1936.....	78.1	70.3	75.1	70.1	70.4	62.0	88.8	84.7	99.5	92.5	77.2	64.9
1937.....	79.6	78.3	75.5	75.4	74.3	68.6	89.9	97.9	93.4	95.5	74.1	70.3
1937												
January.....	79.9	76.2	74.5	71.4	61.1	55.8	96.4	95.8	38.1	41.9	61.6	50.9
February.....	79.4	75.5	74.7	70.8	61.8	56.5	91.3	88.4	37.3	43.6	75.3	66.2
March.....	78.8	76.2	74.2	70.4	64.6	59.4	90.7	91.5	38.9	44.8	76.2	80.7
April.....	74.2	70.5	74.4	72.3	69.2	64.4	88.4	98.7	44.0	50.3	83.7	80.5
May.....	71.2	69.2	73.8	73.4	82.0	75.8	89.3	99.0	46.7	51.1	78.3	71.6
June.....	68.9	68.0	73.6	74.2	90.6	81.5	88.9	99.2	49.3	55.2	74.9	68.4
July.....	69.2	64.3	77.9	79.6	93.2	85.6	89.9	99.9	52.9	56.0	81.0	80.9
August.....	73.3	75.2	77.5	80.2	89.8	84.2	86.8	96.6	71.3	74.6	76.9	81.2
September.....	85.4	89.0	76.8	80.7	82.2	74.0	86.8	98.0	91.6	100.7	67.2	60.1
October.....	95.5	98.4	76.9	80.9	68.8	63.9	89.4	100.1	253.0	224.3	68.8	64.2
November.....	91.8	89.8	76.0	76.7	65.1	61.5	90.5	102.3	252.1	267.4	70.4	66.8
December.....	87.2	86.8	75.1	74.0	63.7	60.4	90.9	104.7	146.1	135.8	75.0	72.4

¹ Not available.

TABLE 8.—*Employment and Pay-Roll Indexes, Manufacturing Industries—Continued*

Month and year	Tobacco manufactures						Paper and printing	
	Group index		Chewing and smoking tobacco and snuff		Cigars and cigarettes		Group index	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	105.7	104.1	102.7	101.4	106.2	104.5	99.2	96.2
1924.....	98.8	99.4	102.7	101.6	98.2	99.2	99.7	99.5
1925.....	95.5	96.5	94.6	97.0	95.6	96.3	101.1	104.3
1926.....	90.9	92.1	93.1	94.0	90.4	91.8	104.1	110.8
1927.....	93.4	91.0	82.6	84.8	94.9	91.8	104.1	111.0
1928.....	90.7	86.1	75.6	77.4	92.8	87.2	105.0	112.3
1929.....	83.9	81.8	68.0	71.3	86.0	83.1	111.3	119.5
1930.....	78.3	72.7	69.8	71.3	79.4	72.9	108.0	114.6
1931.....	72.1	60.1	71.9	69.0	72.1	58.9	96.3	97.3
1932.....	65.6	48.2	71.0	62.4	64.9	46.4	85.5	74.8
1933.....	65.1	44.1	64.2	56.0	62.9	42.6	86.7	68.3
1934.....	66.2	48.8	64.6	59.7	66.3	47.5	95.4	78.5
1935.....	61.3	47.7	57.9	58.7	61.6	46.4	97.6	84.2
1936.....	61.0	50.0	56.0	59.5	61.6	48.8	100.8	91.6
1937.....	60.8	54.5	56.5	66.7	61.2	53.0	106.4	102.9
<i>1937</i>								
January.....	57.1	47.1	57.2	63.7	57.0	45.1	104.3	98.7
February.....	60.5	52.6	58.9	67.3	60.6	50.8	105.7	100.5
March.....	60.8	52.4	57.0	65.5	61.2	50.8	107.1	104.1
April.....	60.2	52.3	56.0	65.7	60.6	50.7	107.2	104.8
May.....	59.9	53.6	55.9	66.4	60.3	52.0	107.7	105.9
June.....	60.1	55.7	56.4	69.4	60.5	54.0	106.9	104.9
July.....	60.6	55.8	55.4	66.0	61.2	54.5	106.0	101.6
August.....	61.8	57.2	55.7	66.3	62.5	56.1	106.3	102.6
September.....	62.1	56.5	55.8	70.0	62.8	54.9	107.7	103.7
October.....	62.6	57.9	56.2	68.2	63.3	56.6	107.9	105.1
November.....	62.9	57.2	56.7	63.8	63.6	56.4	106.4	101.5
December.....	60.8	55.7	56.9	67.9	61.2	54.2	104.1	100.8
<i>Paper and printing—Continued</i>								
Month and year	Boxes, paper		Paper and pulp		Printing and publishing, book and job		Printing and publishing, newspapers and periodicals	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	100.0	97.3	100.0	98.4	98.3	95.5	98.9	94.7
1924.....	99.5	99.7	97.3	97.5	100.7	100.0	101.0	100.6
1925.....	100.5	103.0	102.7	104.1	101.0	104.5	100.1	104.7
1926.....	102.1	106.9	105.8	109.1	104.9	112.5	101.7	110.3
1927.....	99.2	104.0	102.2	105.3	106.9	114.1	102.2	111.1
1928.....	96.3	102.0	100.8	105.3	107.4	113.6	104.5	113.6
1929.....	97.9	102.9	106.1	112.5	113.1	118.7	111.0	121.8
1930.....	90.7	91.6	102.5	104.6	110.9	115.6	109.9	119.4
1931.....	81.8	79.0	89.5	82.1	100.7	99.1	101.8	108.0
1932.....	73.5	62.4	81.9	61.4	85.3	72.4	92.9	88.6
1933.....	83.0	67.7	89.0	64.4	78.5	60.6	93.4	78.6
1934.....	91.5	81.1	103.8	78.6	84.7	70.0	98.6	85.9
1935.....	93.4	86.6	107.6	88.0	86.8	75.8	99.3	88.6
1936.....	96.2	92.5	109.4	97.0	91.0	81.7	102.9	96.8
1937.....	102.4	103.1	117.1	115.6	97.3	92.5	105.3	103.0
<i>1937</i>								
January.....	100.1	98.0	113.7	109.9	96.2	91.4	103.4	97.2
February.....	101.5	103.2	116.1	113.5	97.5	91.1	103.9	98.8
March.....	103.7	106.7	117.6	116.5	98.0	94.2	105.6	103.3
April.....	104.0	107.9	119.1	119.6	96.9	93.4	105.6	103.7
May.....	103.6	106.2	120.2	121.8	97.3	94.6	106.1	104.7
June.....	103.0	104.4	120.5	124.3	95.4	91.3	105.4	103.6
July.....	102.2	100.3	119.5	119.2	95.6	90.1	103.2	99.8
August.....	102.6	102.8	119.1	123.8	96.9	89.6	102.9	99.1
September.....	102.8	103.3	119.1	117.6	98.9	92.8	105.9	103.8
October.....	104.8	108.9	117.3	116.7	98.8	92.6	107.5	107.3
November.....	103.3	102.6	113.6	105.4	98.3	93.1	107.0	106.1
December.....	96.9	92.8	109.4	98.8	98.0	95.9	106.6	108.4

TABLE 8.—*Employment and Pay-Roll Indexes, Manufacturing Industries—Continued*

Month and year	Chemicals and allied products									
	Group index		Other than petroleum refining (sub-group)		Chemicals		Cottonseed—oil, cake, and meal		Druggists' preparations	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	120.9	102.2	102.9	102.1	105.7	101.8	87.8	83.9	97.7	91.8
1924.....	96.8	96.4	96.9	97.0	98.0	98.1	100.5	94.9	96.8	97.5
1925.....	100.3	101.4	100.2	100.9	96.3	100.1	111.7	121.2	105.5	110.7
1926.....	106.5	108.7	105.4	107.4	(1)	(1)	(1)	(1)	108.3	113.4
1927.....	104.2	107.8	102.8	106.8	(1)	(1)	127.0	151.3	110.4	119.2
1928.....	103.0	108.0	102.5	108.0	(1)	(1)	(1)	(1)	106.6	113.1
1929.....	115.7	120.9	113.6	118.4	109.2	120.0	109.0	118.9	116.4	124.4
1930.....	109.4	112.2	105.6	106.6	99.5	103.5	(1)	(1)	108.2	116.3
1931.....	95.4	92.0	92.7	87.7	85.1	84.2	84.5	88.5	103.2	105.3
1932.....	85.5	71.7	82.2	66.9	76.0	64.6	95.2	70.5	92.3	85.3
1933.....	97.5	76.2	95.4	72.5	93.3	75.2	98.1	57.1	94.7	86.7
1934.....	110.7	91.6	108.8	89.0	114.9	96.1	92.0	61.6	105.2	98.1
1935.....	111.9	98.9	110.7	96.9	113.7	101.7	78.0	57.8	102.9	102.0
1936.....	114.6	107.8	113.8	106.4	121.3	115.5	71.1	55.7	102.5	105.4
1937.....	123.8	132.7	123.8	131.4	134.1	145.6	80.6	72.1	110.6	121.1
<i>1937</i>										
January.....	120.2	119.4	120.4	119.4	130.8	131.8	91.1	76.2	106.5	113.1
February.....	121.9	123.6	122.4	123.9	131.4	135.2	82.1	67.3	110.0	119.3
March.....	124.9	128.1	126.0	128.8	134.0	140.2	68.7	58.6	112.2	121.2
April.....	126.6	136.4	127.7	136.2	135.6	150.6	58.7	50.3	111.5	119.8
May.....	124.5	136.7	124.6	136.2	137.5	152.5	47.8	42.3	108.3	118.0
June.....	123.9	137.4	123.4	135.7	138.5	153.5	43.9	38.6	108.8	121.3
July.....	124.3	136.8	123.5	134.9	139.5	153.9	41.8	35.3	106.2	112.0
August.....	124.9	140.7	124.1	137.7	137.2	156.1	54.3	47.9	111.8	123.0
September.....	128.6	139.0	128.9	137.7	137.4	150.9	120.7	112.4	114.1	127.3
October.....	126.5	137.5	126.7	136.1	135.2	150.6	127.1	118.9	114.8	128.9
November.....	132.7	132.1	122.4	129.6	129.8	141.7	121.0	113.0	112.5	125.8
December.....	116.3	124.4	115.4	120.3	122.6	130.4	109.9	104.8	110.5	124.0

Month and year	Chemicals and allied products—Continued											
	Explosives		Fertilizers		Paints and varnishes		Rayon and allied products		Soap		Petroleum refining	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	108.5	109.5	100.5	99.1	95.6	91.6	87.3	91.3	104.9	105.7	103.0	102.3
1924.....	94.8	97.6	93.1	93.6	97.6	99.8	93.1	95.5	100.0	100.0	96.1	94.6
1925.....	96.7	92.9	106.4	107.3	106.8	108.6	119.6	113.2	95.1	94.3	100.9	103.1
1926.....	98.7	92.2	112.8	118.4	(1)	(1)	(1)	(1)	(1)	(1)	110.8	112.7
1927.....	98.5	97.6	100.8	106.9	117.5	123.3	164.8	141.2	82.9	100.3	109.9	111.9
1928.....	95.4	92.2	107.6	109.1	(1)	(1)	(1)	(1)	(1)	(1)	104.7	108.3
1929.....	95.3	102.0	113.4	108.3	122.3	129.6	244.4	220.2	88.6	96.7	124.4	129.2
1930.....	79.7	74.7	111.0	104.2	(1)	(1)	242.2	214.1	(1)	(1)	124.9	130.4
1931.....	80.4	66.9	78.8	73.4	94.4	90.3	241.9	188.4	87.4	90.2	106.2	105.8
1932.....	63.6	43.9	56.5	43.7	87.3	71.1	214.3	146.2	82.7	74.4	98.7	87.5
1933.....	70.8	49.6	70.7	44.0	95.9	73.0	276.7	190.3	88.3	71.9	106.5	88.4
1934.....	87.6	68.2	92.4	64.8	112.2	89.5	302.3	227.3	98.6	85.5	118.3	100.3
1935.....	81.8	70.6	88.3	69.1	120.0	101.9	337.0	265.9	99.2	93.9	116.7	105.6
1936.....	86.3	85.0	82.1	72.2	125.1	114.5	348.7	289.4	98.5	97.0	118.3	112.4
1937.....	94.3	103.1	93.0	94.6	132.8	132.6	381.2	367.2	103.3	117.2	123.7	137.0
<i>1937</i>												
January.....	94.0	97.8	87.1	77.8	128.0	120.3	367.6	338.1	100.3	107.1	119.4	119.5
February.....	93.2	93.0	96.1	86.9	131.2	127.2	370.4	344.5	109.8	124.5	119.6	122.7
March.....	90.2	97.5	135.9	127.6	134.6	133.1	373.3	349.7	111.0	123.2	120.5	125.6
April.....	92.4	107.6	151.6	150.9	138.2	142.1	378.1	364.8	107.6	116.4	122.0	137.0
May.....	90.7	103.2	104.6	116.2	140.2	145.0	384.0	382.0	103.3	113.8	124.1	138.3
June.....	94.8	103.0	75.7	79.2	138.9	142.7	391.4	391.8	102.5	115.1	126.0	143.0
July.....	95.3	103.8	69.8	77.1	136.3	138.3	401.0	392.9	102.4	116.9	127.5	143.1
August.....	95.8	107.1	73.2	79.0	132.8	135.4	403.4	400.7	101.9	117.7	128.2	150.5
September.....	97.6	106.4	84.6	97.2	132.4	131.6	407.1	393.6	103.1	122.1	127.2	143.1
October.....	97.3	110.5	80.5	83.2	131.6	134.1	387.5	374.9	102.8	121.1	125.7	142.3
November.....	95.4	106.6	75.3	77.4	128.0	124.8	374.0	360.3	100.4	116.9	123.9	140.4
December.....	94.7	100.3	81.6	82.3	121.1	116.1	336.8	313.5	94.6	111.2	120.2	137.9

¹ Not available.

TABLE 8.—*Employment and Pay-Roll Indexes, Manufacturing Industries—Continued*

Month and year	Rubber products							
	Group index		Rubber boots and shoes		Rubber goods, other than boots, shoes, tires, and inner tubes		Rubber tires and inner tubes	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	102.6	101.0	117.0	118.7	103.1	100.1	97.7	96.8
1924.....	91.8	92.9	83.6	82.3	91.6	92.7	94.5	95.7
1925.....	105.6	106.1	99.4	99.0	105.3	107.2	107.8	107.5
1926.....	105.1	107.0	103.0	101.7	(1)	(1)	105.4	107.2
1927.....	105.7	110.0	106.8	113.2	110.3	115.5	103.3	107.0
1928.....	111.1	117.5	105.0	107.1	(1)	(1)	109.9	116.8
1929.....	111.0	115.1	102.1	105.6	120.3	126.4	110.0	113.2
1930.....	85.9	84.7	82.0	77.4	(1)	(1)	79.0	79.3
1931.....	73.9	62.5	63.2	48.6	102.3	89.9	64.9	56.2
1932.....	67.6	47.4	59.6	42.4	91.3	68.1	59.8	41.2
1933.....	79.1	55.0	72.0	51.0	105.3	75.3	69.9	48.8
1934.....	88.4	68.8	76.8	55.4	114.3	87.7	80.9	65.5
1935.....	85.6	74.2	67.5	51.2	116.6	98.3	77.9	71.4
1936.....	90.8	87.6	74.0	59.9	124.7	114.4	81.5	85.1
1937.....	97.3	96.8	74.2	67.1	137.8	137.3	87.2	89.9
<i>1937</i>								
January.....	101.3	99.4	77.3	66.8	138.7	136.3	92.7	94.6
February.....	101.6	104.4	73.3	64.9	141.5	141.2	93.4	101.3
March.....	96.7	99.8	80.2	72.2	144.2	146.0	81.2	90.4
April.....	96.7	100.3	76.0	68.2	147.1	150.8	81.4	90.5
May.....	103.6	109.2	76.3	72.7	146.6	153.5	93.7	102.7
June.....	101.2	103.8	72.5	69.7	142.1	144.9	92.7	97.9
July.....	98.2	96.8	61.8	54.7	136.7	135.8	89.7	93.6
August.....	97.9	97.0	77.1	73.2	135.1	134.1	88.4	89.8
September.....	98.0	97.4	78.7	75.9	134.7	132.6	88.3	90.4
October.....	97.7	94.3	77.5	70.4	137.3	139.5	87.0	84.3
November.....	90.9	82.0	71.9	62.1	128.2	121.7	80.8	72.9
December.....	86.0	77.1	68.0	54.6	120.9	110.9	76.6	70.8

¹ Not available.**TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES**

A comparison of employment and pay rolls, by States and geographic divisions, in November and December 1937, is shown in table 9 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 89 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.

TABLE 9.—Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1937 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 December 1937	Percentage change from November 1937	Amount of pay roll (1 week) December 1937	Percentage change from November 1937	Number of establishments	Number on pay roll December 1937	Percentage change from November 1937	Amount of pay roll (1 week) December 1937	Percentage change from November 1937
				<i>Dollars</i>					<i>Dollars</i>	
New England.....	13,403	843,727	-2.5	18,726,717	-2.8	3,552	557,297	-5.2	11,658,259	-5.1
Maine.....	810	51,159	+1.1	1,022,069	+5.3	291	39,658	+4	747,711	+0.1
New Hampshire.....	620	35,185	-2.9	668,520	-3	205	27,532	-3.5	455,759	-6
Vermont.....	476	15,526	-5.5	335,520	-2	144	9,012	-6.5	184,784	-2.6
Massachusetts.....	<i>18,304</i>	<i>461,933</i>	<i>-1.9</i>	<i>10,616,451</i>	<i>-2.9</i>	<i>1,753</i>	<i>256,257</i>	<i>-6.4</i>	<i>5,471,459</i>	<i>-6.0</i>
Rhode Island.....	1,257	84,554	-1.9	1,788,035	+5.6	417	64,267	-4.1	1,272,556	+6.7
Connecticut.....	1,937	195,370	-4.7	4,396,122	-7.5	742	160,571	-6.7	3,494,010	-10.1
Middle Atlantic.....	32,627	2,170,648	-1.9	55,919,627	-2.7	5,446	1,195,159	-5.3	29,091,741	-6.5
New York.....	20,666	965,425	+1.2	26,491,014	-3	<i>2,266</i>	<i>429,132</i>	<i>-4.1</i>	<i>11,312,224</i>	<i>-3.2</i>
New Jersey.....	4,251	345,682	-3.0	8,870,062	-3.2	<i>2,840</i>	<i>248,496</i>	<i>-4.6</i>	<i>6,220,787</i>	<i>-4.4</i>
Pennsylvania.....	7,680	859,541	-3.6	20,558,551	-5.3	<i>2,340</i>	<i>517,551</i>	<i>-6.0</i>	<i>11,558,790</i>	<i>-10.5</i>
East North Central.....	24,467	2,276,576	-4.7	57,542,749	-10.1	8,324	1,765,554	-8.1	45,697,763	-15.6
Ohio.....	7,975	620,449	-2.1	15,313,027	-7.0	2,532	435,333	-6.1	10,240,696	-11.7
Indiana.....	<i>2,664</i>	<i>262,229</i>	<i>-6.8</i>	<i>6,118,095</i>	<i>-11.6</i>	<i>926</i>	<i>203,326</i>	<i>-10.2</i>	<i>4,746,260</i>	<i>-15.4</i>
Illinois.....	<i>6,361</i>	<i>626,782</i>	<i>-2.5</i>	<i>16,262,266</i>	<i>-3.4</i>	<i>2,455</i>	<i>419,406</i>	<i>-5.3</i>	<i>10,710,531</i>	<i>-6.7</i>
Michigan.....	3,833	516,626	-9.5	13,699,356	-20.0	<i>971</i>	<i>533,152</i>	<i>-11.6</i>	<i>15,166,356</i>	<i>-24.4</i>
Wisconsin.....	<i>3,734</i>	<i>250,480</i>	<i>-3.5</i>	<i>6,150,005</i>	<i>-7.7</i>	<i>1,466</i>	<i>171,337</i>	<i>-4.3</i>	<i>4,233,920</i>	<i>-7.2</i>
West North Central.....	11,802	433,160	-7.10	37,878,848	-2.4	2,412	207,156	-3.7	4,882,340	-5.8
Minnesota.....	2,189	87,316	-2.6	2,284,911	-2.7	414	38,981	-8.2	1,037,488	-6.2
Iowa.....	1,744	64,327	-1.0	1,527,953	-2.0	403	36,304	-2.0	876,377	-4.2
Missouri.....	3,083	172,441	+5	3,975,163	-2.2	878	91,001	-1.9	1,919,530	-6.5
North Dakota.....	500	4,982	-4	126,241	-1.9	54	631	-9	18,204	-4.8
South Dakota.....	415	7,557	-2.8	201,005	-2.1	36	2,084	-9.3	56,577	-4.4
Nebraska.....	1,524	34,979	-5	820,470	-2.9	164	11,775	-6.9	290,726	-11.0
Kansas.....	<i>2,347</i>	<i>61,558</i>	<i>-7</i>	<i>1,444,100</i>	<i>-1.7</i>	<i>463</i>	<i>26,308</i>	<i>-3.3</i>	<i>633,158</i>	<i>-2.9</i>
South Atlantic.....	11,017	851,141	-1.0	16,454,768	-2.5	2,789	547,741	-3.6	9,412,765	-7.2
Delaware.....	214	15,092	-2	371,678	-1.3	55	10,953	-6.6	268,149	-4.1
Maryland.....	1,676	134,204	-2.4	9,057,795	-5.4	596	87,631	-6.9	1,927,376	-10.3
District of Columbia.....	1,167	45,459	+7.9	1,167,377	+7.6	35	3,010	+2	103,643	+1.6
Virginia.....	2,131	118,032	-1	2,263,983	+2	465	79,083	-1.3	1,464,599	-9
West Virginia.....	1,237	146,334	-4.0	3,605,271	-5.9	266	56,348	-6.8	1,270,789	-16.6
North Carolina.....	1,412	151,053	-2.8	2,233,391	-2.6	571	135,017	-3.4	1,959,282	-3.0
South Carolina.....	781	78,058	-2.4	1,080,432	-7.3	212	69,437	-2.7	918,129	-8.5
Georgia.....	1,497	111,974	-1.3	1,766,706	-2.0	369	68,341	-2.5	1,152,308	-4.5
Florida.....	1,062	50,935	+10.7	908,155	+8.4	156	21,866	+5.6	348,487	-1.1
East South Central.....	4,645	295,007	-1.7	5,309,623	-3.1	1,003	179,252	-4.3	2,950,215	-6.1
Kentucky.....	1,320	84,597	-1.4	1,762,018	-2.2	295	33,933	-6.7	662,289	-3.7
Tennessee.....	1,434	100,643	-2.9	1,735,059	-6.1	373	71,987	-5.3	1,168,531	-9.8
Alabama.....	1,270	89,323	+3	1,494,829	-6	239	60,757	-6	948,644	-2.7
Mississippi.....	621	20,444	-5.0	317,717	-2.8	96	12,575	-8.5	170,751	-6.9
West South Central.....	4,893	208,372	-1.9	4,741,868	-1.7	1,142	98,375	-5.3	2,082,877	-5.2
Arkansas.....	<i>10,788</i>	<i>28,915</i>	<i>-1.9</i>	<i>509,326</i>	<i>-2.4</i>	<i>248</i>	<i>18,060</i>	<i>-1.4</i>	<i>296,681</i>	<i>-2.1</i>
Louisiana.....	1,033	48,238	-2.9	936,690	-2.5	226	23,930	-8.4	396,394	-9.1
Oklahoma.....	1,392	44,893	-1.8	1,121,802	-8	142	11,851	-4.0	283,163	-3.7
Texas.....	<i>11,735</i>	<i>86,326</i>	<i>-1.4</i>	<i>2,174,050</i>	<i>-1.7</i>	<i>526</i>	<i>44,534</i>	<i>-5.1</i>	<i>1,106,639</i>	<i>-5.0</i>
Mountain.....	4,259	141,990	-4.4	3,739,975	-5.8	547	41,220	-12.6	1,010,269	-18.6
Montana.....	684	20,484	-8.2	602,514	-9.5	78	5,522	-6.5	141,027	-10.5
Idaho.....	463	11,659	-11.6	295,706	-14.1	51	3,552	-25.5	76,008	-36.4
Wyoming.....	324	10,263	-2.3	310,507	(12)	39	2,169	-10.6	66,964	-11.6
Colorado.....	1,229	48,359	-2.5	1,221,296	-3.6	183	17,564	-10.5	418,219	-16.1
New Mexico.....	314	7,012	-1.4	158,371	-5	31	728	-12.8	13,057	-10.7
Arizona.....	468	17,781	+2	467,322	-4.0	40	2,808	-4.8	72,216	-5.1
Utah.....	588	23,100	-5.9	583,702	-7.5	101	7,891	-17.3	196,017	-18.6
Nevada.....	189	3,302	-5.9	100,547	-5.5	24	886	-6.6	26,761	-6.8
Pacific.....	9,577	428,224	-2.6	11,918,824	-2.2	2,471	216,022	-8.5	5,807,598	-8.6
Washington.....	2,949	92,018	-5.6	2,370,514	-6.6	546	45,962	-12.4	1,099,827	-14.0
Oregon.....	1,375	47,636	-7.4	1,188,356	-8.4	303	25,058	-14.9	561,933	-16.8
California.....	<i>13,523</i>	<i>288,570</i>	<i>-7</i>	<i>8,360,954</i>	<i>-2.1</i>	<i>1,622</i>	<i>145,002</i>	<i>-7.6</i>	<i>4,145,836</i>	<i>-5.8</i>

¹ Includes banks and trust companies, construction, municipal, agricultural, and office employment, amusement and recreation, professional services, and trucking and handling. ² Includes laundries.

³ Includes laundering and cleaning, and water, light and power. ⁴ Weighted percentage change.

⁵ Includes automobiles, and miscellaneous services, restaurants, and building and contracting.

⁶ Includes construction, but not public works. ⁷ Does not include logging.

⁸ Includes financial institutions, miscellaneous services, and restaurants.

⁹ Weighted percentage change including hired farm labor.

¹⁰ Includes automobile dealers and garages, and sand, gravel, and building stone.

¹¹ Includes business and personal service. ¹² Less than $\frac{1}{10}$ of 1 percent.

¹³ Includes banks, insurance, and office employment. ¹⁴ Includes crude-petroleum producing.

INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in November and December 1937 is made in table 10 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 as data concerning them are tabulated separately and are available on request. Footnotes in 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.

TABLE 10.—Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1937 by Principal Metropolitan Areas

Metropolitan area	Number of establishments	Number on pay roll December 1937	Percentage change from November 1937	Amount of pay roll (1 week) December 1937	Percentage change from November 1937
New York ¹	14, 829	646, 945	+0.4	\$17, 184, 236	+0.8
Chicago ²	4, 428	474, 787	-2.3	12, 923, 278	-3.2
Philadelphia ³	2, 303	205, 758	-2.6	5, 507, 514	-2.6
Detroit.....	1, 658	328, 409	-10.6	9, 277, 753	-20.6
Los Angeles ⁴	2, 868	154, 386	-1.1	4, 297, 217	-1.6
Cleveland.....	1, 747	145, 381	+1.6	3, 667, 410	-4.3
St. Louis.....	1, 571	130, 380	-2.5	3, 052, 125	-6.0
Baltimore.....	1, 178	110, 522	-7.7	2, 623, 434	-4.4
Boston ⁵	1, 543	108, 728	-9.9	2, 925, 705	+2.2
Pittsburgh.....	1, 197	202, 217	-6.5	4, 867, 850	-10.0
San Francisco ⁶	1, 629	87, 008	+1.9	2, 616, 407	+1.6
Buffalo.....	832	61, 522	-6.5	1, 619, 797	-8.6
Milwaukee.....	1, 070	106, 036	-3.6	2, 776, 699	-7.4

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 only to city of Boston.

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.

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.

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. 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.

The Civilian Conservation Corps, created in April 1933, was further extended under the authority of the Emergency Relief Appropriation Act of 1935. During the fiscal year 1937 the Civilian Conservation Corps was continued from appropriations authorized by the First Deficiency Appropriation Act of 1936. Beginning with July 1, 1937, the Civilian Conservation Corps was continued for 3 years by an act of Congress.

EXECUTIVE SERVICE OF THE FEDERAL GOVERNMENT

Statistics of employment and pay rolls for the executive service of the Federal Government in November and December 1937 are given in table 11.

TABLE 11.—*Employment and Pay Rolls for the Executive Service of the United States Government, November and December 1937*¹

[Subject to revision]

Item	Employment		Per-centage change	Pay rolls		Per-centage change
	Decem-ber	Novem-ber ²		December	November ²	
Entire service:						
Total.....	889,550	821,271	+8.31	\$137,217,360	\$124,664,980	+10.07
Regular appropriation.....	757,529	685,022	+10.58	120,397,119	107,340,280	+12.16
Emergency appropriation.....	63,593	66,178	-3.91	8,605,128	8,935,035	-3.69
Force-account.....	68,428	70,071	-2.34	8,215,113	8,389,665	-2.08
Inside the District of Columbia:						
Total.....	114,120	112,176	+1.73	20,191,679	19,614,936	+2.94
Regular appropriation.....	93,885	92,507	+1.49	17,144,647	16,690,302	+2.72
Emergency appropriation.....	14,501	13,799	+5.09	2,157,301	2,046,553	+5.41
Force-account.....	5,734	5,870	-2.32	889,731	878,081	+1.33
Outside the District of Columbia:						
Total.....	775,430	709,095	+9.35	117,025,681	105,050,044	+11.40
Regular appropriation.....	663,644	592,515	+12.00	103,252,472	90,649,978	+13.90
Emergency appropriation.....	49,092	52,379	-6.28	6,447,827	6,888,482	-6.40
Force-account.....	62,694	64,201	-2.35	7,325,382	7,511,584	-2.48

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

² Revised.

The monthly record of employment in the executive service of the United States Government from December 1936 to December 1937, inclusive, is shown in table 12.

TABLE 12.—Employment in the Executive Service of the United States Government, by Months, December 1936 Through December 1937 ¹

[Subject to revision]

Month	District of Columbia	Outside District of Columbia	Total	Month	District of Columbia	Outside District of Columbia	Total
<i>1936</i>				<i>1937</i>			
December.....	116,345	712,962	829,307	June.....	111,981	758,756	870,737
<i>1937</i>				July ²	110,942	738,121	849,063
January.....	116,250	713,924	830,183	August ²	111,301	731,805	843,106
February.....	118,259	710,462	828,721	September ²	111,296	725,339	836,635
March.....	116,535	713,047	829,582	October ²	110,808	717,654	828,462
April.....	116,755	718,884	835,639	November ²	112,176	709,095	821,271
May.....	116,274	724,247	840,521	December.....	114,120	775,430	889,550

¹ From June 1937 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 December on construction projects financed by Public Works Administration funds are given in table 13, by type of project.

TABLE 13.—Employment and Pay Rolls on Projects Financed From Public Works Administration Funds, December 1937 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 ²	Weekly average				
Federal projects financed from N. I. R. A. funds						
All projects.....	\$ 18,587	17,150	\$1,904,304	2,364,456	\$0.805	\$1,439,209
Building construction.....	3,291	2,688	379,571	335,267	1.132	539,203
Naval vessels.....	4,893	4,782	634,030	727,098	.872	109,704
Public roads ³	(³)	5,491	341,638	639,867	.534	275,000
Reclamation.....	2,066	1,934	237,639	289,521	.821	420,388
River, harbor, and flood control.....	2,583	2,033	290,141	350,442	.828	88,215
Miscellaneous.....	263	222	21,285	22,261	.956	6,699
Non-Federal projects financed from N. I. R. A. funds						
All projects.....	15,903	13,083	\$1,400,323	1,389,384	\$1.008	\$2,475,905
Building construction.....	6,834	5,670	648,833	559,977	1.159	1,147,030
Railroad construction.....	64	64	224	445	.503	0
Streets and roads.....	1,240	998	59,608	80,635	.739	110,776
Water and sewerage.....	6,171	5,016	593,914	590,777	1.005	1,041,123
Miscellaneous.....	1,594	1,335	97,744	157,550	.620	176,976
Projects financed from E. R. A. A. 1935, 1936, and 1937 funds ⁴						
All projects ⁵	70,228	57,932	\$5,685,040	6,734,009	\$0.844	\$9,538,378
Building construction ⁷	35,411	29,013	3,046,998	3,162,275	.964	4,579,088
Electrification.....	604	501	39,900	53,212	.750	107,883
Heavy engineering.....	5,931	5,052	527,712	662,881	.796	915,765
Reclamation.....	698	641	79,235	95,427	.830	137,561
River, harbor, and flood control.....	129	93	2,737	6,128	.447	5,311
Streets and roads.....	14,090	11,410	839,807	1,371,055	.613	1,420,289
Water and sewerage.....	12,001	10,069	996,711	1,204,047	.828	2,161,093
Miscellaneous.....	1,364	1,153	151,940	178,984	.849	211,388

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 These data are also included in separate tables covering projects financed by The Works Program.⁷ Includes a maximum of 8,331 and an average of 6,748 employees working on low-cost housing projects financed from E. R. A. A. 1935 funds who were paid \$879,347 for 833,606 man-hours of labor. Material orders in the amount of \$725,399 were placed for these projects. These data are also included in separate tables covering projects financed from The Works Program.

Federal construction projects for which data are included in tables 13 and 14 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. 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, or the First Deficiency Appropriation Act of 1936. 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 or the First Deficiency Appropriation Act of 1936 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.

MONTHLY TREND

A summary of employment, pay rolls, and man-hours worked on projects financed from Public Works Administration funds from July 1933 to December 1937, inclusive, is given in table 14.

TABLE 14.—Employment and Pay Rolls, July 1933 to December 1937, Inclusive, on Projects Financed From Public Works Administration Funds ¹

[Subject to revision]

Year and month	Maximum number of wage earners ²	Pay-roll disbursements	Number of man-hours worked	Average earnings per hour	Value of material orders placed
July 1933 to December 1937 ³	-----	\$1,052,471,011	1,537,861,240	\$0.684	\$1,833,113,302
July to December 1933.....	-----	33,244,066	62,209,479	.534	75,587,773
January to December 1934.....	-----	308,393,662	523,484,012	.589	4 610,009,718
January to December 1935 ⁴	-----	270,548,829	392,127,344	.690	4 439,244,485
January to December 1936 ⁴	-----	271,331,937	353,259,435	.768	4 432,513,423
1937 ³					
January.....	202,175	15,439,981	18,768,676	.823	26,922,308
February.....	174,990	13,796,390	16,580,393	.832	19,390,733
March.....	173,574	13,353,904	16,341,250	.817	20,652,435
April.....	192,201	15,242,390	19,068,352	.799	26,135,173
May.....	206,019	15,850,554	19,984,975	.793	32,077,717
June.....	204,098	16,430,649	20,510,465	.801	26,151,770
July.....	198,483	16,250,846	20,057,290	.810	24,945,172
August.....	187,822	15,426,466	19,115,326	.807	25,714,152
September.....	166,958	14,309,249	17,382,805	.823	23,527,633
October.....	149,564	12,903,311	15,551,087	.830	20,924,319
November ⁴	121,102	10,959,110	12,932,502	.847	15,862,999
December ⁴	104,718	8,989,667	10,487,849	.857	13,453,492

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. Includes weekly average for public-roads projects.

³ Includes employees working on non-Federal projects financed from E. R. A. A. 1935 and 1936 funds and low-cost housing projects financed from E. R. A. A. 1935 funds. These data are also included in separate tables covering projects financed by The Works Program.

⁴ Includes orders placed by railroads for new equipment.

⁵ Includes employees working on non-Federal projects financed from E. R. A. A. 1937 funds. These data are also included in separate tables covering projects financed by The Works Program.

THE WORKS PROGRAM

A detailed record of employment, pay rolls, and man-hours worked on projects financed by The Works Program in December is shown in table 15, by type or project.

TABLE 15.—Employment and Pay Rolls on Projects Financed by The Works Program December 1937 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.....	2 186, 133	168, 176	\$10, 173, 186	19, 720, 376	\$0. 516	\$4, 845, 962
Building construction.....	52, 866	48, 295	3, 011, 317	5, 420, 321	. 556	831, 770
Electrification.....	779	650	51, 902	86, 042	. 603	207, 638
Forestry ²	14, 338	12, 078	596, 481	1, 445, 036	. 413	111, 949
Grade-crossing elimination ⁴	10, 100	8, 035	585, 561	938, 814	. 624	915, 087
Hydroelectric power plants ⁵	4, 264	3, 838	131, 789	590, 982	. 223,	31, 000
Plant, crop, and livestock conservation ³	13, 723	13, 026	648, 984	1, 716, 496	. 378	135, 444
Professional, technical, and clerical.....	7, 485	7, 133	510, 549	948, 307	. 538	38, 703
Public roads ⁴	10, 523	8, 340	548, 626	965, 952	. 568	933, 459
Reclamation.....	46, 146	43, 517	2, 781, 334	5, 303, 963	. 524,	1, 211, 901
River, harbor, and flood control.....	16, 852	15, 261	938, 182	1, 422, 206	. 660	258, 393
Streets and roads.....	5, 758	5, 007	241, 522	541, 390	. 446	85, 908
Water and sewerage.....	1, 137	1, 037	34, 526	127, 023	. 272	31, 741
Miscellaneous.....	2, 162	1, 959	92, 413	213, 844	. 432	52, 969

See footnotes at end of table.

TABLE 15.—*Employment and Pay Rolls on Projects Financed by The Works Program*
December 1937 ¹—Continued

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed	Weekly average				
	P. W. A. projects financed from E. R. A. A. 1935, 1936, and 1937 funds ⁴					
All projects.....	2 70, 228	57, 932	\$5, 685, 040	6, 734, 909	\$0. 844	\$9, 538, 378
Building construction.....	35, 411	29, 013	3, 046, 908	3, 162, 275	.964	4, 579, 088
Electrification.....	604	501	39, 900	53, 212	.750	107, 883
Heavy engineering.....	5, 931	5, 052	527, 712	662, 881	.796	915, 765
Reclamation.....	698	641	79, 235	95, 427	.830	137, 561
River, harbor, and flood control.....	129	93	2, 737	6, 128	.447	5, 311
Streets and roads.....	14, 090	11, 410	839, 807	1, 371, 055	.613	1, 420, 289
Water and sewerage.....	12, 001	10, 069	996, 711	1, 204, 047	.828	2, 161, 093
Miscellaneous.....	1, 364	1, 153	151, 940	178, 984	.849	211, 388
	Projects operated by Works Progress Administration ⁷					
All projects.....	1, 668, 085		\$84,570, 148	162, 858, 030	\$0. 519	(⁸)
Conservation.....	61, 719		3, 044, 525	6, 025, 747	.505	
Highway, road, and street.....	617, 191		27, 485, 300	58, 791, 749	.468	
Housing.....	1, 578		113, 324	162, 858	.606	
Professional, technical, and clerical.....	195, 166		13, 531, 223	20, 357, 254	.665	
Public buildings.....	166, 899		9, 358, 532	14, 168, 649	.661	
Publicly owned or operated utilities.....	155, 132		8, 203, 304	15, 308, 655	.536	
Recreational facilities ⁶	143, 455		7, 780, 454	13, 191, 500	.590	
Sanitation and health.....	51, 711		2, 283, 394	5, 211, 457	.438	
Sewing, canning, gardening, etc.....	185, 157		8, 118, 734	20, 357, 254	.399	
Transportation.....	30, 026		1, 691, 403	2, 768, 586	.611	
Not elsewhere classified.....	60, 051		2, 959, 955	6, 514, 321	.454	

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 date for the Bureau of Entomology and Plant Quarantine, under plant, crop, and livestock conservation and the Bureau of Forest Service, under forestry, are for the 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 61,897 employees working on non-Federal projects and 8,331 employees working on low-cost housing projects. These data are included in separate tables covering projects under the jurisdiction of P. W. A.

⁷ Data are for the calendar month.

⁸ Data on a monthly basis are not available.

⁹ Exclusive of buildings.

Statistics on employment, pay rolls, and man-hours worked on National Youth Administration work projects and Student Aid in December are shown in table 16, by type of project.

TABLE 16.—Employment and Pay Rolls on National Youth Administration Projects Financed by The Works Program, December 1937 ¹

[Subject to revision]

Type of program	Number of persons employed	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
Total.....	426, 060	\$4, 236, 665	13, 076, 042	\$0. 324	-----
Work projects.....	137, 929	2, 397, 423	6, 376, 430	. 376	(?)
Student Aid.....	288, 131	1, 839, 243	6, 699, 612	. 275	(?)

¹ These data are for the calendar month.

² Data are not available on a monthly basis.

³ No expenditures for materials on this type of project.

MONTHLY TREND

Employment, pay rolls, and man-hours worked on projects financed by The Works Program from the beginning of the program in July 1935 to December 1937, inclusive, are given in table 17.

TABLE 17.—Employment and Pay Rolls July 1935 to December 1937, Inclusive, on Projects Financed by The Works Program ¹

[Subject to revision]

Month and year	Maximum number employed ²	Pay-roll disbursements	Number of man-hours worked	Average earnings per hour	Value of material orders placed
Federal projects					
July 1935 to December 1937, inclusive ³	-----	\$421, 757, 458	888, 294, 764	\$0. 475	\$262, 841, 149
July to December 1935.....	-----	34, 813, 554	77, 558, 683	. 449	34, 358, 011
January to December 1936.....	-----	234, 065, 335	515, 733, 359	. 454	147, 745, 408
1937					
January.....	328, 867	15, 652, 964	32, 064, 351	. 488	7, 595, 246
February.....	267, 525	13, 024, 133	27, 260, 313	. 478	6, 874, 851
March.....	249, 690	12, 504, 895	25, 666, 281	. 487	7, 356, 372
April.....	254, 524	13, 432, 725	26, 680, 307	. 503	6, 901, 508
May.....	266, 686	14, 154, 856	27, 170, 573	. 521	7, 563, 201
June.....	284, 893	14, 794, 640	28, 754, 978	. 515	8, 608, 759
July.....	262, 487	12, 799, 774	24, 371, 372	. 525	7, 041, 736
August.....	207, 331	12, 004, 981	21, 623, 626	. 555	6, 929, 085
September.....	193, 114	11, 500, 978	20, 583, 498	. 559	5, 566, 224
October.....	192, 631	11, 452, 256	20, 335, 431	. 563	6, 261, 009
November.....	184, 654	10, 857, 382	19, 511, 587	. 556	5, 193, 777
December.....	186, 133	10, 173, 186	19, 720, 376	. 516	4, 845, 962

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

² Maximum number employed during any 1 week of the month on Federal and P. W. A. projects by each contractor and Government agency doing force-account work.

³ Since in November 1937, some reports were changed to a calendar-month basis, the total includes some data for the period October 16 through October 31, 1937, which are not shown in the monthly figures. These data consist of \$525,799 in pay-rolls and 1,260,029 man-hours.

TABLE 17.—Employment and Pay Rolls July 1935 to December 1937, Inclusive, on Projects Financed by The Works Program—Continued

Month and year	Maximum number employed ²	Pay-roll disbursements	Number of man-hours worked	Average earnings per hour	Value of material orders placed
P. W. A. projects financed from E. R. A. A. 1935, 1936, and 1937 funds ⁴					
July 1935 to December 1937, inclusive.....	-----	\$232, 533, 433	298, 388, 793	\$0. 779	\$425, 552, 509
July to December 1935.....	-----	1, 132, 784	1, 718, 758	. 659	2, 095, 506
January to December 1936.....	-----	123, 396, 077	163, 682, 866	. 754	229, 999, 173
<i>1937</i>					
January.....	131, 153	9, 346, 663	11, 390, 883	. 821	16, 361, 268
February.....	115, 214	8, 428, 606	10, 212, 726	. 825	13, 543, 480
March.....	113, 930	8, 254, 306	10, 147, 405	. 813	14, 486, 389
April.....	129, 887	9, 618, 255	12, 027, 623	. 800	18, 563, 586
May.....	139, 561	10, 339, 137	13, 049, 326	. 792	20, 996, 436
June.....	141, 708	10, 960, 950	13, 655, 399	. 803	18, 813, 454
July.....	139, 701	10, 811, 528	13, 339, 272	. 811	18, 542, 402
August.....	131, 547	10, 183, 970	12, 808, 735	. 795	19, 420, 304
September.....	114, 803	9, 309, 180	11, 411, 949	. 816	16, 065, 674
October.....	101, 864	8, 252, 933	10, 100, 289	. 817	15, 681, 287
November.....	80, 541	6, 814, 004	8, 109, 553	. 840	11, 445, 172
December.....	70, 228	5, 685, 040	6, 734, 009	. 844	9, 538, 378
Projects operated by Works Progress Administration ⁵					
July 1935 to December 1937, inclusive.....	-----	\$3, 018, 622, 122	6, 299, 811, 920	\$0. 479	\$948, 201, 876
July to December 1935.....	-----	238, 018, 075	570, 184, 607	. 417	-----
January to December 1936.....	-----	1, 592, 942, 964	3, 432, 621, 686	. 464	-----
<i>1937</i>					
January.....	2, 243, 545	115, 065, 444	223, 245, 896	. 515	-----
February.....	2, 255, 067	116, 256, 506	233, 853, 339	. 504	-----
March.....	2, 216, 499	117, 124, 860	230, 166, 494	. 509	-----
April.....	2, 201, 404	114, 004, 768	225, 291, 463	. 506	-----
May.....	2, 133, 472	112, 382, 869	217, 780, 857	. 516	-----
June.....	2, 020, 218	106, 975, 172	205, 215, 318	. 521	-----
July.....	1, 802, 659	92, 967, 642	177, 161, 345	. 525	-----
August.....	1, 601, 054	82, 861, 644	159, 050, 326	. 521	-----
September.....	1, 536, 029	81, 250, 907	153, 858, 375	. 528	-----
October.....	1, 527, 604	81, 486, 784	153, 731, 640	. 530	-----
November.....	1, 566, 697	82, 714, 339	157, 792, 544	. 524	-----
December.....	1, 668, 085	84, 570, 148	162, 858, 030	. 519	-----

⁴ These data are included in tables covering projects under the jurisdiction of the Public Works Administration. The data for December include 61,897 employees working on non-Federal projects and 8,331 employees working on low-cost housing projects.

⁵ These data are for a calendar month and exclude both work projects and Student Aid of the National Youth Administration, which appear in a separate table.

⁶ Data on a monthly basis are not available. Includes rentals and services and some sponsors' contributions.

Table 18 shows the employment, pay rolls, and man-hours worked on work projects of the National Youth Administration from January 1936 to December 1937, inclusive. Similar data for Student Aid are shown from September 1935 to December 1937, inclusive.

TABLE 18.—Employment and Pay Rolls From Beginning of Program Through December 1937 on National Youth Administration Projects Financed by The Works Program ¹

[Subject to revision]

Month and year	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 December 1937, inclusive.....		\$61,484,949	162,920,150	\$0.377	* \$5,549,074
January to December 1936.....		28,883,589	76,827,799	.381	
1937					
January.....	184,807	3,087,288	8,220,880	.376	
February.....	189,298	3,244,612	8,745,281	.371	
March.....	191,583	3,225,694	8,727,263	.370	
April.....	192,132	3,190,767	8,679,905	.368	
May.....	184,556	3,106,114	8,361,816	.371	
June.....	172,816	2,920,141	7,794,377	.375	
July.....	149,836	2,491,265	6,567,200	.379	
August.....	133,111	2,347,639	6,109,319	.384	
September.....	127,219	2,192,605	5,832,949	.376	
October.....	122,827	2,165,339	5,723,700	.378	
November ²	126,852	2,232,473	5,953,231	.375	
December.....	137,929	2,397,423	6,376,430	.376	
Student Aid					
September 1935 to December 1937, inclusive.....		\$50,240,623	187,793,604	\$0.299	(4)
September to December 1935.....		6,363,503	19,612,976	.324	
January to December 1936.....		25,888,559	85,424,616	.303	
1937					
January.....	417,064	2,967,461	10,214,889	.291	
February.....	427,396	3,227,243	11,136,339	.290	
March.....	440,382	3,315,595	11,452,356	.290	
April.....	440,823	3,339,376	11,574,122	.289	
May.....	424,117	3,641,529	12,453,598	.292	
June.....	249,175	1,992,288	6,441,372	.309	
July ³					
August.....	35	141	730	.193	
September.....	30,879	139,188	555,283	.251	
October.....	237,307	1,548,634	5,388,717	.288	
November ²	283,269	1,976,864	6,838,994	.289	
December.....	288,131	1,839,242	6,699,612	.275	

¹ Data are for a calendar month.

² These data are not available on a monthly basis. Includes rentals and services and some sponsors' contributions.

³ Revised.

⁴ No expenditures for materials on this type of project.

⁵ No students received aid during this period.

CIVILIAN CONSERVATION CORPS

Statistics concerning employment and pay rolls in the Civilian Conservation Corps in November and December 1937 are presented in table 19. The Civilian Conservation Corps is usually regarded as a part of The Works Program, although it is now financed by a separate appropriation.

TABLE 19.—Employment and Pay Rolls in the Civilian Conservation Corps, November and December 1937 ¹

[Subject to revision]

Group	Number of employees		Amount of pay rolls	
	December	November	December	November
All groups.....	338, 217	350, 714	\$16, 070, 030	\$16, 335, 123
Enrolled personnel ²	291, 656	302, 207	9, 183, 358	9, 495, 196
Reserve officers.....	5, 501	5, 751	1, 716, 426	1, 522, 980
Nurses ³	281	278	29, 365	28, 589
Educational advisers ³	1, 642	1, 660	278, 048	283, 454
Supervisory and technical ³	39, 137	40, 818	4, 862, 833	5, 004, 904

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

² December data include 4,221 enrollees and pay roll of \$100,631; November, 3,984 enrollees and pay roll of \$38,197 outside continental United States.

³ Included in executive service, tables 11 and 12.

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.

Monthly statistics of employment and pay rolls in the Civilian Conservation Corps from December 1936 to December 1937, inclusive, are given in table 20.

TABLE 20.—Employment and Pay Rolls in the Civilian Conservation Corps, by Months, December 1936 Through December 1937 ¹

[Subject to revision]

Month	Number of employees	Monthly pay-roll disbursements	Month	Number of employees	Monthly pay-roll disbursements
<i>1936</i>			<i>1937—Continued</i>		
December.....	374, 791	\$17, 738, 865	June.....	323, 626	\$16, 085, 832
<i>1937</i>			July.....	348, 779	16, 851, 511
January.....	407, 723	18, 650, 537	August.....	² 327, 360	16, 380, 024
February.....	394, 521	18, 314, 594	September.....	289, 167	14, 950, 554
March.....	² 307, 336	15, 770, 090	October.....	363, 256	15, 622, 911
April.....	369, 309	17, 502, 905	November.....	350, 714	16, 335, 299
May.....	348, 905	16, 719, 019	December.....	338, 217	16, 070, 030

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

² Revised.

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 December are presented in table 21, by type of project.

TABLE 21.—Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, by Type of Project, December 1937 ¹

[Subject to revision]

Type of project	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.....	4, 028	\$550, 135	634, 645	\$0. 867	\$483, 329
Building construction ³	339	25, 227	28, 190	. 895	58, 215
Water and sewerage.....	3, 586	516, 493	594, 432	. 869	423, 660
Miscellaneous.....	103	8, 415	12, 023	. 700	1, 454

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 116 employees; pay-roll disbursements of \$9,760; 8,268 man-hours worked, and material orders placed during the month of \$58,215 on projects financed by RFC Mortgage Co.

A monthly summary of employment, pay rolls, and man-hours worked on construction projects financed by the Reconstruction Finance Corporation from December 1936 to December 1937, inclusive, is given in table 22.

TABLE 22.—Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, December 1936 Through December 1937 ¹

[Subject to revision]

Month	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
<i>1936</i>					
December.....	10, 355	\$1, 237, 007	1, 697, 935	\$0. 729	\$1, 488, 306
<i>1937</i>					
January.....	9, 934	1, 117, 933	1, 521, 162	. 735	2, 538, 060
February.....	9, 194	1, 071, 267	1, 441, 322	. 743	1, 238, 932
March.....	8, 873	1, 060, 411	1, 371, 966	. 773	³ 1, 707, 821
April.....	8, 671	1, 106, 357	1, 385, 854	. 798	1, 071, 983
May.....	7, 346	950, 924	1, 174, 266	. 810	942, 696
June.....	5, 596	766, 705	898, 038	. 854	927, 929
July.....	4, 880	654, 167	759, 161	. 862	626, 968
August.....	4, 789	660, 987	769, 236	. 859	1, 673, 752
September.....	4, 056	541, 264	634, 777	. 853	789, 251
October.....	4, 261	558, 419	656, 890	. 850	910, 473
November.....	4, 421	602, 221	702, 485	. 857	3, 197, 856
December.....	4, 028	550, 135	634, 645	. 867	483, 329

¹ Includes projects financed by the RFC Mortgage Co. Data are for month ending on the 15th.

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

³ Revised.

CONSTRUCTION PROJECTS FINANCED FROM REGULAR FEDERAL APPROPRIATIONS

Whenever a construction contract is awarded or force-account work is started by a Department or agency of the Federal Government, the Bureau of Labor Statistics is immediately notified, on forms supplied by the Bureau, of the name and address of the contractor, the amount of the contract, and the type of work to be performed. Blanks are then mailed by the Bureau to the contractor or Government agency doing the work. These reports are returned to the Bureau and show the number of men on pay rolls, 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.

The following tables present data concerning construction projects for which contracts have been awarded since July 1, 1934. The Bureau does not have statistics covering projects financed from regular Federal appropriations for which contracts were awarded previous to that date.

Data concerning employment, pay rolls, and man-hours worked on construction projects financed from regular Federal appropriations during December are given in table 23, by type of project.

TABLE 23.—Employment on Construction Projects Financed From Regular Federal Appropriations, by Type of Project, December 1937¹
[Subject to revision]

Type of project	Number of wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed ²	Weekly average				
All projects.....	3 180,594	168,609	\$17,162,379	23,964,127	\$.716	\$23,897,187
Building construction:						
Nonresidential.....	20,570	16,767	1,785,744	1,902,146	.939	2,678,581
Residential.....	86	71	6,310	7,354	.858	16,846
Electrification:						
Rural Electrification Administration projects ⁴	6,888	5,813	444,469	807,467	.550	1,951,789
Other than R. E. A. projects.....	127	94	7,819	13,171	.594	7,663
Forestry.....	227	219	8,070	21,574	.374	2,764
Grade-crossing elimination:						
Underpass construction.....	13	10	1,049	1,060	.990	10,617
Heavy engineering.....	72	64	5,666	5,215	1.086	158,353
Public roads ⁵	(6)	53,216	3,927,048	6,737,329	.583	6,545,080
Reclamation.....	12,182	11,341	1,378,646	1,731,875	.796	2,855,373
River, harbor, and flood control:						
Dredging, dikes, revetments, etc.....	29,974	26,204	2,606,252	4,246,287	.614	2,425,071
Locks and dams.....	10,251	9,096	1,034,814	1,455,282	.711	2,069,064
Ship construction and repair:						
Naval vessels.....	40,779	40,152	5,580,085	6,414,814	.870	4,591,017
Other than naval vessels.....	53	42	7,262	6,352	1.143	0
Streets and roads.....	3,852	3,556	225,579	415,071	.543	253,225
Water and sewerage.....	270	216	20,683	23,031	.898	68,657
Miscellaneous.....	2,034	1,748	122,883	176,099	.698	263,087

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 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.

Employment, pay rolls, and man-hours worked on construction projects financed from regular Federal appropriations from December 1936 to December 1937, inclusive, are shown by months in table 24.

TABLE 24.—Employment on Construction Projects Financed From Regular Federal Appropriations, December 1936 Through December 1937 ¹

[Subject to revision]

Month	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
<i>1936</i>					
December.....	152,499	\$14,290,708	20,311,195	\$0.704	\$14,321,802
<i>1937</i>					
January.....	119,853	11,857,007	16,506,278	.718	11,729,532
February.....	112,770	10,904,648	14,735,028	.740	13,613,251
March.....	120,175	11,847,783	16,280,905	.728	12,820,438
April.....	132,639	13,855,633	19,545,518	.709	15,572,168
May.....	160,346	15,278,529	21,858,124	.699	18,508,273
June.....	177,265	16,980,060	24,532,459	.692	19,574,535
July.....	193,695	19,599,384	29,236,412	.670	24,485,499
August.....	204,174	19,571,849	28,396,014	.689	29,665,521
September.....	206,663	21,607,700	31,476,926	.688	31,993,137
October.....	218,347	20,911,266	29,940,767	.698	24,400,381
November.....	211,004	20,303,903	28,858,259	.704	23,858,866
December.....	180,594	17,162,379	23,964,127	.716	23,897,187

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. Includes weekly average for public roads.

STATE-ROADS PROJECTS

A record of employment and pay-roll disbursements in the construction and maintenance of State roads from December 1936 to December 1937, inclusive, is presented in table 25.

TABLE 25.—Employment on Construction and Maintenance of State Roads, December 1936 Through December 1937 ¹

[Subject to revision]

Month	Number of employees working on ² —			Total pay roll
	New roads	Maintenance	Total	
<i>1936</i>				
December.....	21,394	138,540	159,934	\$10,000,371
<i>1937</i>				
January.....	15,622	117,576	133,198	8,387,864
February.....	11,706	120,786	132,492	8,560,561
March.....	11,802	119,046	130,848	8,333,600
April.....	13,164	124,761	137,925	9,108,030
May.....	17,241	159,167	176,408	10,850,394
June.....	19,382	148,392	167,774	11,069,510
July.....	25,140	149,907	175,047	11,998,370
August.....	28,379	160,143	188,522	12,815,790
September.....	28,632	167,028	195,660	12,943,370
October.....	27,280	160,045	187,325	12,134,860
November.....	29,491	163,182	192,673	12,776,701
December.....	23,825	146,340	170,165	10,377,340

¹ Excluding employment furnished by projects financed from Public Works Administration and Works Progress Administration funds. Data are for the month ending on the 15th.

² Monthly average.

MATERIAL ORDERS PLACED ¹

The value of material orders placed on construction projects financed by Federal funds in the fourth quarter of 1937 is presented in table 26.

In the fourth quarter of 1937 on the Public Works Administration program, orders were placed for materials valued at approximately \$50,241,000. Of this amount \$14,393,000 was expended for iron and steel products, \$3,748,000 for cement, \$3,666,000 for forest products, and \$7,694,000 for machinery. On projects operated by the Works Progress Administration, material orders placed in the fourth quarter of 1937 amounted to \$61,981,000.

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.

It is estimated that in fabricating the materials used on the various programs (table 3) approximately 562,000 man-months of labor have been, or will be created. This includes 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 it 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 contractors the Bureau estimates the man-months of labor created. This estimate is based upon the findings of the Census of Manufacturers for 1935.

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

TABLE 26.—*Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Fourth Quarter, 1937*¹

[Subject to revision]

Type of material	Total	Projects				
		Public Works Administration ²	Reconstruction Finance Corporation ³	Regular Federal ⁴	Federal construction under The Works Program	Operated by W. P. A. ⁵
All materials.....	\$205,072,495	\$50,240,810	\$4,591,658	\$72,156,428	\$16,103,046	\$61,980,553
Textiles and their products.....	⁶ 4,311,584	225,283	1,942	63,732	12,207	⁶ 4,008,420
Awnings, tents, canvas, etc.....	29,116	13,840	-----	9,454	5,822	-----
Carpets and rugs.....	7,622	5,657	1,854	111	-----	-----
Cordage and twine.....	21,696	6,053	88	13,981	1,574	-----
Cotton goods.....	5,576	1,595	-----	3,783	198	-----
Felt goods.....	8,800	7,531	-----	843	426	-----
Jute goods.....	4,424	3,375	-----	384	665	-----
Linoleum.....	219,631	185,657	-----	32,783	1,191	-----
Sacks and bags.....	1,187	190	-----	543	454	-----
Upholstering materials, n. e. c.....	152	-----	-----	-----	152	-----
Waste.....	4,960	1,385	-----	1,850	1,725	-----
Forest products.....	⁶ 15,497,427	3,666,261	51,774	3,777,522	1,359,400	⁶ 6,642,470
Cork products.....	39,305	21,736	9	13,301	4,259	-----
Lumber and timber products, n. e. c.....	7,166,529	2,662,672	28,848	3,352,580	1,122,429	-----
Planing mill products.....	1,587,645	941,202	22,582	391,278	232,583	-----
Window and door screens and weatherstrip.....	61,478	40,651	335	20,363	129	-----
Chemicals and allied products.....	⁶ 3,377,870	592,547	34,089	489,789	282,849	⁶ 1,978,596
Ammunition and related products.....	7,668	7,668	-----	-----	-----	-----
Chemicals, miscellaneous.....	45,573	23,898	-----	9,078	12,597	-----
Compressed and liquefied gases.....	63,970	16,365	8,719	19,435	19,451	-----
Explosives.....	662,166	233,704	23,835	290,778	113,849	-----
Paints and varnishes.....	1,821,857	310,912	1,535	170,498	136,952	1,201,960
Stone, clay, and glass products.....	⁶ 57,826,280	13,481,683	415,822	18,372,937	4,349,805	⁶ 21,206,033
Asbestos products, n. e. c.....	22,917	15,613	-----	5,396	1,908	-----
Brick, hollow tile, and other clay products.....	5,372,898	2,234,246	11,574	512,548	229,387	2,385,143
Cement.....	19,001,879	3,748,123	300,707	7,951,544	1,753,011	5,248,494
Concrete products.....	6,859,219	2,811,823	2,459	474,827	723,822	2,846,288
Crushed stone.....	7,518,786	664,990	479	3,016,824	374,007	3,462,486
Glass.....	335,043	235,462	2,262	86,830	10,489	-----
Lime.....	19,970	14,614	8	4,390	958	-----
Marble, granite, slate, and other stone products.....	2,637,052	1,127,277	1,323	1,364,459	143,993	-----
Minerals and earth, ground or otherwise treated.....	6,065	804	-----	5,201	60	-----
Sand and gravel.....	11,964,795	1,753,057	92,673	4,681,006	1,026,930	4,411,129
Tiling, floor and wall, and terrazzo.....	613,004	426,480	1,389	148,474	36,661	-----
Wall plaster, wall board, and insulating board.....	622,159	449,194	2,948	121,438	48,579	-----
Iron and steel and their products, not including machinery.....	⁶ 44,709,708	14,392,606	2,824,398	12,148,680	4,658,498	⁶ 10,685,526
Bolts, nuts, washers, etc.....	411,163	136,113	2,523	194,287	78,240	-----
Cast iron pipe and fittings.....	5,145,776	1,775,659	1,204	306,066	136,192	2,926,655
Doors, shutters and window sash and frames, molding and trim (metal).....	1,849,343	1,132,783	1,213	688,652	26,695	-----
Firearms.....	-----	-----	-----	-----	-----	-----
Forgings, iron and steel.....	740,822	126,424	1,556	559,299	53,548	-----
Hardware, miscellaneous.....	1,459,746	761,635	71,689	388,803	237,619	-----
Heating and ventilating equipment.....	3,590,319	1,959,038	7,724	771,026	78,363	774,168
Nails and spikes.....	182,235	75,103	101	51,873	55,158	-----
Rail fastenings, excluding spikes.....	24,435	22,388	-----	1,487	560	-----
Rails, steel.....	198,668	157,550	-----	40,278	840	-----
Springs, steel.....	520	-----	-----	-----	520	-----

See footnotes at end of table.

TABLE 26.—*Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Fourth Quarter, 1937—Continued*

Type of material	Total	Projects				
		Public Works Administration	Reconstruction Finance Corporation	Regular Federal	Federal construction under The Works Program	Operated by W. P. A.
Iron and steel and their products, not including machinery—Con.						
Steel works and rolling mill products, n. e. c.	\$7,549,691	\$1,991,724	\$2,641,304	\$2,302,778	\$613,885	-----
Stoves and ranges, other than electric	6,914	6,447	-----	-----	467	-----
Structural and reinforcing steel	17,286,739	5,695,053	93,212	5,502,080	3,086,834	\$2,909,560
Switches, railway	4,548	4,548	-----	-----	-----	-----
Tools, other than machine tools	1,126,551	29,046	2,424	236,082	118,316	740,683
Wire products, n. e. c.	1,484,079	301,743	1,448	1,025,798	155,000	-----
Wrought pipe	313,699	217,352	-----	80,171	16,176	-----
Nonferrous metals and their products	\$1,382,595	699,099	5,447	269,602	97,956	\$310,491
Aluminum manufactures	82,932	58,343	-----	24,459	130	-----
Copper products	162,322	93,752	882	64,777	2,911	-----
Lead products	27,604	17,779	-----	9,454	371	-----
Nonferrous-metal alloys and their products, n. e. c.	284,797	182,347	3,370	97,881	1,199	-----
Sheet-metal work	513,513	346,733	1,184	72,499	93,097	-----
Zinc products	936	145	11	532	248	-----
Machinery, not including transportation equipment	\$37,163,555	7,694,449	1,022,917	23,830,360	1,692,108	\$2,923,721
Electrical machinery, apparatus, and supplies	13,715,723	2,821,945	233,745	8,598,270	551,005	1,510,758
Elevators and elevator equipment	1,237,661	459,348	-----	776,167	2,146	-----
Engines, turbines, tractors, and water wheels	4,696,982	403,073	2,960	3,968,893	322,056	-----
Foundry and machine shop products, n. e. c.	15,309,463	3,431,955	786,069	9,086,905	637,278	1,367,256
Machine tools	241,933	41,390	143	178,673	21,727	-----
Meters, (gas, water, etc.) and gas generators	31,376	28,220	-----	2,983	173	-----
Pumps and pumping equipment	1,740,693	422,665	-----	1,160,633	157,395	-----
Refrigerators and refrigerating and ice-making apparatus	144,017	85,853	-----	57,836	328	-----
Transportation equipment, air, land, and water	424,896	51,404	-----	73,864	51,356	248,272
Aircraft (new)	-----	-----	-----	-----	-----	-----
Airplane parts	-----	-----	-----	-----	-----	-----
Boats, steel and wooden (small)	28,749	-----	-----	28,680	69	-----
Carriages and wagons	2,800	1,100	-----	193	1,507	-----
Locomotives, other than steam	23,000	23,000	-----	-----	-----	-----
Locomotives, steam	-----	-----	-----	-----	-----	-----
Motorcycles and parts	-----	-----	-----	-----	-----	-----
Motor vehicles, passenger	21,546	-----	-----	9,317	12,229	-----
Motor vehicles, trucks	348,801	27,304	-----	35,674	37,551	248,272
Railway cars, freight	-----	-----	-----	-----	-----	-----
Railways cars, mail and express	-----	-----	-----	-----	-----	-----
Railway cars, passenger	-----	-----	-----	-----	-----	-----
Miscellaneous	40,419,759	9,437,478	235,269	13,129,942	3,640,046	13,977,024
Belting, miscellaneous	5,958	654	-----	-----	5,304	-----
Coal	421,817	30,562	51	124,146	11,036	256,022
Cresote	3,797	-----	-----	2,068	1,729	-----
Electric wiring and fixtures	6,343,422	2,232,416	23,291	3,728,832	358,883	-----
Furniture, including store and office fixtures	2,265,888	1,409,510	8,929	42,394	5,509	799,546
Instruments, professional and scientific	8,998	6,400	-----	2,124	474	-----
Mattresses and bed springs	2,157	2,157	-----	-----	-----	-----
Models and patterns	2,546	2,546	-----	-----	-----	-----
Paper products	23,025	18,804	77	3,425	719	-----

See footnotes at end of table.

TABLE 26.—Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Fourth Quarter, 1937—Continued

Type of material	Total	Projects				
		Public Works Administration	Reconstruction Finance Corporation	Regular Federal	Federal construction under The Works Program	Operated by W. P. A.
Miscellaneous—Continued.						
Paving materials and mixtures, n. e. c.....	\$8, 165, 154	\$799, 072	\$38	\$1, 273, 154	\$447, 144	\$5, 645, 746
Petroleum products.....	7, 856, 582	1, 179, 073	82, 449	3, 652, 496	1, 154, 215	1, 788, 349
Photographic apparatus and materials.....	18, 172	8, 595	1, 491	7, 545	541	-----
Plumbing supplies, n. e. c.....	2, 700, 776	1, 309, 099	11, 488	498, 039	173, 683	708, 467
Radio apparatus and supplies.....	6, 085	6, 067	-----	18	-----	-----
Roofing materials, n. e. c.....	648, 867	379, 812	4, 997	163, 676	100, 382	-----
Rubber goods.....	267, 168	58, 153	18, 509	26, 919	42, 640	120, 947
Steam and other packing, pipe and boiler covering, and gaskets.....	275, 271	204, 769	501	48, 790	21, 211	-----
Theatrical scenery and stage equipment.....	40, 696	40, 509	187	-----	-----	-----
Window shades and fixtures.....	46, 246	43, 541	-----	1, 519	1, 186	-----
Other materials.....	11, 317, 134	1, 705, 739	83, 261	3, 554, 797	1, 815, 390	4, 657, 947

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 Does not include material orders placed on projects for which contracts were awarded before Mar. 15, 1934. Includes projects financed by RFC Mortgage Co.

⁴ Does not include material orders placed on projects for which contracts were awarded before July 1, 1934.

⁵ Includes material orders placed to Dec. 31, 1937. Includes National Youth Administration projects.

⁶ Includes material orders placed for projects operated by W. P. A. which are not classified in detail.

The value of material orders placed on Federal professional, technical, and clerical projects financed by The Works Program, by type of material, for the fourth quarter of 1937, the third quarter of 1937, and the fourth quarter of 1936 is shown in table 27.

TABLE 27.—Value of Material Orders Placed on Federal Professional, Technical, and Clerical Projects Financed by The Works Program

[Subject to revision]

Type of material	Fourth quarter of 1937	Third quarter of 1937	Fourth quarter of 1936
All materials.....	\$156, 523	\$161, 265	\$347, 609
Computing machines.....	1, 310	352	5, 499
Furniture.....	7, 749	2, 825	13, 074
Office supplies.....	18, 297	35, 529	25, 632
Stationery.....	5, 519	6, 502	12, 139
Typewriters.....	307	270	1, 203
Other office machines.....	3, 916	866	948
Other materials.....	76, 698	72, 763	246, 178
Rental of machinery and equipment.....	42, 727	42, 158	42, 936

Rentals and services on projects operated by the Works Progress Administration for the first, second, third, and fourth quarters of 1937, are shown in table 28, by type of rental and service.

TABLE 28.—Rentals and Services on Projects Operated by the Works Progress Administration

[Subject to revision]

Type of rental and service	First quarter of 1937 ¹	Second quarter of 1937 ²	Third quarter of 1937 ³	Fourth quarter of 1937 ⁴
All rentals and services.....	\$46, 150, 914	\$39, 128, 795	\$41, 632, 998	\$44, 151, 434
Busses and autos.....	742, 342	565, 237	487, 329	580, 647
Teams and wagons.....	2, 202, 463	1, 313, 122	1, 005, 987	1, 149, 911
Trucks and vans.....	22, 734, 107	18, 160, 926	19, 856, 660	19, 419, 123
Paving, road-building, and construction equipment.....	13, 532, 815	11, 723, 627	13, 820, 540	15, 649, 200
Other equipment (including office equipment).....	685, 243	836, 416	695, 192	764, 806
Space rentals and services.....	2, 043, 446	2, 359, 897	2, 074, 500	2, 658, 342
Other services (including utilities).....	4, 210, 498	4, 169, 570	3, 692, 790	3, 929, 405

¹ Quarterly period ending Mar. 31, 1937.

² Quarterly period ending June 30, 1937.

³ Quarterly period ending Sept. 30, 1937.

⁴ Quarterly period ending Dec. 31, 1937.

Table 29 shows rentals and services on work projects of the National Youth Administration for the third and fourth quarters of 1937.

TABLE 29.—Rentals and Services on Work Projects of National Youth Administration

[Subject to revision]

Type of rental and service	Third quarter of 1937 ¹	Fourth quarter of 1937 ²
All rentals and services.....	\$383, 447	\$683, 127
Buses and autos.....	5, 564	3, 779
Teams and wagons.....	4, 172	5, 104
Trucks and vans.....	76, 991	80, 567
Paving, road-building, and construction equipment.....	26, 972	56, 201
Other equipment (including office equipment).....	39, 974	91, 934
Space rentals and services.....	174, 049	330, 510
Other services (including utilities).....	55, 725	115, 032

¹ Quarterly period ending Sept. 30, 1937.

² Quarterly period ending Dec. 31, 1937.

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.

Table 30 shows the value of public contracts awarded under the act for materials during the first, second, third, and fourth quarters of 1937.

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

TABLE 30.—*Value of Supply Contracts Awarded by the Federal Government, Which Contain Agreements to Comply with the Public Contracts Act, by Type of Material*

[Subject to revision]

Type of materials	Value of contracts awarded during 1937			
	First quarter ¹	Second quarter ²	Third quarter ³	Fourth quarter ⁴
All materials.....	\$78,905,478	\$97,057,708	\$57,920,986	\$45,530,806
Food and kindred products.....	4,066,107	3,187,996	2,621,496	2,284,309
Canned fruits and vegetables.....	265,654	425,974	1,266,861	281,467
Canned sea foods.....	88,251	78,883	12,741	78,883
Cereal preparations.....	26,326	11,682	185,984	24,797
Coffee.....	633,903	383,056	39,559	633,572
Condensed and evaporated milk.....	329,639	619,898	84,119	255,165
Feeds, prepared, for animals and fowls.....	392,322	219,420	218,793	90,184
Flour and other grain mill products.....	197,533	291,746	162,620	339,770
Meat-packing products.....	367,443	180,648	31,098	175,615
Shortening and vegetable cooking oil.....	98,855	385,122	208,205	288,739
Sugar.....	426,790	661,450	196,742	288,739
Miscellaneous subsistence stores and supplies.....	1,327,242	661,450	196,742	288,739
Textiles and their products.....	34,127,602	10,953,105	8,001,485	10,922,548
Canvas bags and covers.....	286,697	195,576	18,975	205,512
Clothing (overcoats, suits, trousers, etc.).....	32,099	304,547	332,138	60,340
Clothing, manufacture only ⁵	1,578,643	278,935	578,687	578,687
Cordage and twine, including thread.....	182,853	504,925	26,102	73,088
Cotton gloves.....	243,516	267,403	21,910	111,170
Cotton goods (drills, prints, sheeting, etc.).....	4,503,608	3,982,293	2,207,275	2,036,705
Cotton shirts.....	10,253	17,540	17,540	210,097
Furnishing goods, men's, n. e. c.....	367,584	404,297	1,125,423	405,013
Housefurnishing goods (pillow cases, sheets, etc.).....	1,031,418	250,822	66,633	532,755
Knit goods (hosiery, underwear, etc.).....	1,942,308	2,698,227	576,922	5,768,907
Woolen goods (flannels, suiting, etc.).....	21,208,221	756,302	3,094,815	282,699
Work clothing.....	1,960,082	733,165	137,830	648,575
Miscellaneous textile products.....	780,320	576,613	375,922	648,575
Forest products.....	822,271	2,526,955	477,191	853,957
Cork and cork products.....	47,378	30,658	52,559	88,489
Furniture.....	462,912	1,236,910	173,213	378,420
Lumber and timber products, n. e. c.....	165,638	701,962	26,282	20,394
Planing-mill products.....	130,297	161,226	251,419	142,445
Treated lumber and timber.....	16,046	153,638	215,209	215,209
Miscellaneous forest products.....	16,046	153,638	215,209	215,209
Chemicals and allied products.....	1,133,495	5,904,144	3,097,764	569,436
Ammunition and related products.....	37,044	4,177,458	1,034,660	60,031
Compressed and liquefied gases.....	32,080	234,503	1,410,936	361,053
Explosives.....	114,105	448,529	65,036	57,688
Linseed oil.....	50,557	62,577	171,520	79,034
Paints and varnishes.....	205,427	298,364	383,330	11,630
Soap and soap chips.....	327,215	60,441	171,520	79,034
Miscellaneous chemicals.....	358,067	622,272	383,330	11,630
Products of asphalt, coal, and petroleum.....	5,096,152	23,260,749	5,928,095	8,436,148
Asphalt, oil, tar, and mixtures.....	517,909	3,837,954	456,871	615,245
Coal.....	24,650	635,690	526,304	323,518
Coke.....	1,701,792	8,856,247	971,748	5,922,015
Fuel oil.....	2,816,825	7,773,695	3,604,984	1,366,716
Gasoline.....	13,967	1,735,211	60,425	99,058
Lubricating oils and greases.....	21,000	421,952	291,627	109,596
Miscellaneous coal and petroleum products.....	21,000	421,952	291,627	109,596
Leather and its manufactures.....	3,105,231	1,614,883	2,176,170	227,490
Boots and shoes.....	2,939,380	1,267,538	1,767,361	63,522
Boots and shoes, cut stock.....	15,077	185,798	102,479	47,269
Gloves.....	38,319	185,798	29,380	257,275
Shoe upper—leather.....	112,455	161,547	18,675	116,699
Miscellaneous leather goods.....	112,455	161,547	18,675	116,699
Stone, clay, and glass products.....	2,284,895	4,550,804	2,868,924	2,518,603
Brick.....	45,500	101,189	1,682,376	1,678,401
Cement.....	1,031,984	2,260,425	1,682,376	1,678,401

See footnotes at end of table.

TABLE 30.—Value of Supply Contracts Awarded by the Federal Government, Which Contain Agreements to Comply with the Public Contracts Act, by Type of Material—Con.

Type of materials	Value of contracts awarded during 1937			
	First quarter	Second quarter	Third quarter	Fourth quarter
Stone, clay, and glass products—Continued.				
Concrete pipe.....	\$231,921	\$169,384	\$14,360	-----
Concrete, ready mixed.....	240,093	324,530	64,695	\$181,584
Crushed stone.....	149,628	518,384	150,161	31,414
Glass.....	16,397	51,557	10,800	11,090
Granite and marble.....	15,119	164,640	-----	-----
Riprap stone.....	59,480	17,250	133,578	75,700
Sand and gravel.....	124,731	567,384	527,896	72,696
Soil, black earth.....	63,384	85,840	34,630	258,638
Terra cotta.....	-----	16,866	-----	-----
Tile, clay, including drain.....	78,906	10,801	-----	36,227
Vitrified clay and terra cotta pipe.....	85,366	22,778	45,622	-----
Miscellaneous stone, clay, and glass products.....	139,386	239,776	204,806	172,853
Iron and steel and their products, not including machinery.....	6,221,987	5,433,533	7,494,234	4,804,489
Bolts, nuts, rivets, washers, etc.....	15,995	47,168	75,345	25,964
Cast-iron pipe and fittings.....	220,453	65,720	200,701	116,676
Fencing materials.....	10,472	38,382	69,032	37,690
Forgings, iron and steel.....	809,125	69,740	3,567,341	393,142
Hardware, miscellaneous.....	72,769	-----	36,076	-----
Metal doors, sash, and frames.....	44,559	23,494	-----	13,364
Metal furniture.....	115,156	677,208	127,226	79,774
Metal shingles and roofing.....	-----	91,816	42,081	-----
Pipe and fittings.....	-----	76,639	97,635	-----
Plumbing fixtures and supplies.....	-----	77,748	10,338	45,182
Rails, steel.....	-----	-----	79,348	17,248
Railway tie plates.....	-----	10,320	-----	-----
Reinforcing steel.....	98,823	654,065	665,778	271,251
Safes.....	-----	66,124	-----	-----
Steel pipe and fittings.....	35,670	269,239	132,737	258,309
Steel sheets, plates, shapes, and strips.....	1,089,124	170,519	619,083	1,720,900
Stoves and ranges, other than electric.....	-----	14,925	26,791	-----
Structural steel, fabricated, and sheet-steel piling.....	761,455	593,413	829,563	433,567
Tools, other than machine tools.....	42,986	26,868	145,964	12,929
Wire rope.....	339,978	201,307	44,750	128,808
Miscellaneous iron and steel products.....	2,565,422	2,228,838	724,445	1,249,685
Nonferrous metals and their alloys.....	2,076,603	1,657,448	2,198,352	1,534,882
Aluminum manufactures.....	87,700	611,983	278,237	59,085
Brass products.....	191,887	240,062	659,351	163,669
Bronze products.....	15,270	72,747	43,750	122,250
Copper products.....	577,239	211,215	33,386	240,835
Fixtures, gas and electric.....	356,306	12,417	40,143	116,859
Lead products.....	12,874	-----	-----	63,993
Magnesium.....	23,892	-----	54,367	11,926
Nickel.....	-----	122,650	53,750	117,615
Plated ware.....	28,130	28,047	12,420	14,745
Sheet-metal work.....	54,978	119,151	23,738	15,348
Tin.....	311,558	94,204	482,947	289,170
Zinc.....	12,348	-----	72,573	-----
Miscellaneous nonferrous metals and alloys.....	404,421	144,972	443,690	319,187
Machinery, not including transportation equipment and electrical equipment.....	6,285,570	7,598,749	8,567,356	2,839,417
Air-conditioning equipment.....	57,500	-----	108,228	-----
Elevators and elevator equipment.....	-----	-----	-----	35,518
Engines, turbines, tractors, and parts.....	792,741	1,989,610	3,577,476	538,158
Filter and purification equipment.....	-----	23,492	-----	116,308
Laundry machinery and equipment.....	61,265	35,643	12,750	13,500
Machine tools.....	472,348	360,151	247,481	371,982
Office equipment.....	13,900	45,837	296,092	-----
Phonographs and accessories.....	16,000	-----	43,300	-----
Power shovels and draglines.....	489,545	362,760	46,596	99,386
Printing and publishing machinery.....	69,081	-----	78,025	16,354
Pumps and pumping equipment.....	849,662	304,847	606,959	50,968
Refrigerators and refrigerating and ice-making machinery.....	35,355	190,336	-----	12,810
Road machinery.....	57,324	197,927	-----	10,400
Windlasses, hawsers, etc.....	43,708	219,685	53,745	84,960
Miscellaneous machinery and parts.....	3,327,141	3,868,461	3,496,704	1,489,083

See footnotes at end of table.

TABLE 30.—Value of Supply Contracts Awarded by the Federal Government, Which Contain Agreements to Comply with the Public Contracts Act, by Type of Material—Con.

Type of materials	Value of contracts awarded during 1937			
	First quarter	Second quarter	Third quarter	Fourth quarter
Electrical machinery, apparatus, and supplies.....	\$5,121,273	\$6,051,051	\$7,314,981	\$5,020,162
Batteries.....	1,043,031	---	317,748	145,329
Circuit breakers and switches.....	274,590	199,084	822,067	223,814
Electric cable, wire, and other conductors.....	1,685,982	1,358,895	1,281,851	475,877
Generators and spare parts.....	299,684	304,024	518,266	1,026,311
Heaters and ranges.....	108,021	55,705	---	15,660
Lamps, incandescent, and X-ray tubes.....	---	57,820	30,914	---
Motors.....	11,604	57,813	10,628	---
Radio equipment and supplies.....	868,007	1,146,152	1,593,680	1,767,493
Spark plugs.....	99,336	165,630	---	47,503
Starters.....	---	56,289	---	---
Switchboards, relay and control equipment.....	99,240	187,907	422,263	57,188
Telephone and telegraph apparatus.....	---	78,080	129,235	211,253
Transformers.....	41,206	131,827	1,498,711	95,783
Welding equipment.....	---	35,594	---	---
Miscellaneous electrical machinery, apparatus and supplies.....	390,482	2,206,222	688,618	953,951
Transportation equipment.....	5,939,248	10,778,718	2,201,331	2,120,241
Aircraft.....	88,018	5,018,570	83,785	525,810
Aircraft parts and equipment.....	3,457,059	3,335,384	840,463	365,736
Boats and boat equipment.....	39,359	---	76,208	50,461
Motor vehicles, passenger.....	575,673	627,642	236,741	275,621
Motor vehicles, trucks.....	1,779,139	1,729,793	906,269	681,343
Miscellaneous transportation equipment.....	---	67,329	58,865	221,270
Miscellaneous.....	2,625,044	13,539,573	4,973,607	3,399,324
Brooms, brushes, bristles, etc.....	220,155	102,919	159,740	187,797
Dental goods and equipment.....	52,082	39,214	---	65,014
Instruments, professional and scientific.....	417,893	1,737,032	1,608,543	593,528
Linoleum.....	---	67,236	---	87,935
Oyster shell.....	---	24,165	---	---
Paper and allied products.....	415,955	5,705,514	557,681	204,083
Photographic apparatus and materials.....	195,967	368,520	314,899	26,050
Printing, publishing, and subscriptions.....	273,741	200,000	455,148	18,908
Rubber products.....	364,046	348,894	190,903	190,006
Slag.....	---	22,623	---	---
Steam and other packing, pipe and boiler covering.....	---	415,358	38,624	13,626
Surgical and orthopedic supplies and appliances.....	27,017	571,967	212,310	85,742
Tobacco manufactures.....	---	264,260	38,471	89,413
Other materials.....	455,287	1,301,977	1,063,113	1,235,787
Rentals, services, etc.*.....	202,871	2,369,894	304,175	601,435

¹ For period ending Mar. 31, 1937. Revised.

² For period ending June 30, 1937. Revised.

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

⁴ For period ending Dec. 31, 1937.

⁵ Labor only. Materials furnished by United States Government.

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

The value of public contracts awarded for materials by Federal agencies totaled \$45,531,000 during the fourth quarter of 1937. Of the contracts awarded in the fourth quarter of 1937, \$10,923,000 was for textiles and textile products; \$2,839,000, for machinery, not including transportation and electrical equipment; \$4,804,000, for iron and steel and their products, not including machinery; and \$5,020,000, for electrical machinery, apparatus, and supplies.

