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EMPLOYMENT AND PAY ROLLS

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Employment and Pay Rolls

SUMMARY OF REPORTS FOR DECEMBER 1938

Total Nonagricultural Employment

THERE was a further increase of 200,000 in employment in nonagricultural industries in December. The most significant features of the December gain were the continued increase in factory employment, which normally declines at this season, and an unusually large expansion in retail trade. Since July almost 1,200,000 workers have been reemployed in nonagricultural occupations. These figures do not include employees on projects of the Works Progress Administration and other Federal emergency agencies or certain temporary workers who are hired only during peaks of activity in some industries.

In addition to the gain of approximately 55,000 workers in manufacturing industries, approximately 440,000 additional persons were employed in retail stores between mid-November and mid-December to handle the holiday trade. Smaller increases were reported in metal and coal mining, wholesale trade, brokerage, and insurance. In quarries, dyeing and cleaning plants, and private building construction there were substantial seasonal recessions. In building, the decline was much less pronounced than is usual in December. Class I railroads laid off nearly 18,000 workers. The seasonal reductions in employment in crude-petroleum producing, utilities, hotels, and laundries were not large.

In December employment gains were reported on P. W. A. projects, on low-cost housing projects of the United States Housing Authority, on Federal projects under The Works Program, and on work projects of the National Youth Administration. Decreases in the number working occurred on all other programs. In the regular services of the Federal Government increases occurred in the executive, judicial, and military services; a decrease occurred in the legislative service.

Industrial and Business Employment

Increases in employment were reported by 49 of the 87 manufacturing industries surveyed by the Bureau and 7 of the 16 nonmanufacturing industries covered. Pay-roll increases were reported by 63 of the manufacturing and 8 of the nonmanufacturing industries.

The rise of 0.8 percent (55,000 workers) in factory employment continued the succession of increases which began in July 1938, although in December employment normally declines by about 1 percent. The Bureau of Labor Statistics index of factory employment (91.2 percent of the 1923-25 average) is above that for any month during the past year. It shows a reduction of 3.5 percent from December 1937. The gain of 3.0 percent in factory pay rolls was much more pronounced than the usual seasonal increase of 0.4 percent and represented an addition of \$4,800,000 in weekly disbursements to factory wage earners. The Bureau index of factory pay rolls for December (86.6 percent of the 1923-25 average) reached the highest level since November 1937 and was 2.9 percent above the December 1937 level.

The employment increases in the separate manufacturing industries were in most instances either more pronounced than seasonal or contraseasonal, while most of the declines were smaller than usual. The most pronounced gains were in the durable-goods industries, in which employment rose 1.2 percent as compared with 0.4 percent in the nondurable goods group. The manufacturing industries in which the most substantial numbers of workers were returned to employment between November and December were as follows: Automobiles, (20,100), woolen goods (12,200), foundries and machine shops (11,200), shoes (9,100), steel (5,700), cotton goods (4,400), agricultural implements (3,700), and book and job printing (3,000). Among the manufacturing industries showing comparatively large seasonal declines were canning (15,100), sawmills (6,700), beet sugar (3,500), and men's clothing (1,800).

In retail trade the employment gain of 12.8 percent (440,000 workers) reflected the expansion necessary to handle holiday volume and was the most pronounced employment increase in this month during the last 10 years. In the general merchandising group (department, variety, and general merchandise stores and mail-order houses) the gain of 37.9 percent in employment brought the index for December to 144.1 percent of the 1929 average, the highest level shown during the past decade with the exception of December 1937, and represented a substantially larger gain than the usual December increase of 26 percent. Pronounced gains were also reported in the following lines of retail trade: Jewelry (21.4 percent); apparel (13.3 percent); furniture (5.2 percent); hardware (4.3 percent); drugs (3.4 percent); coal, wood, and ice (2.8 percent); cigars (2.5 percent); automotive (1.3 percent); and food (1.2 percent).

Wholesale trade showed a contraseasonal employment gain of 0.3 percent, or 3,200 persons. This increase brought the employment level for this industry to the highest point since February 1938. Among the important wholesale groups which shared in the increase were: Farm products (1.7 percent), paper and paper products (3.7

percent), automotive (0.8 percent), electrical (0.5 percent), furniture (0.7 percent), and groceries (0.1 percent). Among the wholesale lines reporting employment declines were food products, dry goods and apparel, and lumber and building materials.

The employment gain of 0.6 percent or 400 workers in metal mines continued the upward movement of the last 4 months and brought the employment level above that of any month since March 1938. Bituminous-coal mines took on 3,200 additional workers, while quarries and oil wells curtailed employment slightly less than seasonally, by approximately 4,000 workers. Anthracite mines showed an employment gain of 0.6 percent coupled with a pay-roll increase of 17.3 percent. Laundries and dyeing and cleaning plants reduced their forces seasonally by 0.3 percent and 4.5 percent, respectively. Telephone and telegraph companies curtailed their forces by 0.2 percent, electric light and power companies by 0.5 percent, and electric railroads by 0.3 percent. Year-round hotels reduced their staffs by 0.6 percent, which is less than usual for December.

Private building construction firms reported a decline of 6.7 percent in employment according to reports received from 15,137 contractors employing 121,428 workers. This was the smallest curtailment reported for December in the last 6 years with the exception of 1935. Corresponding pay rolls decreased 6.6 percent. Decreases in building construction employment were reported in each geographic division. The reports on which these figures are based do not cover construction projects financed by the Public Works Administration, the Works Progress Administration, and the Reconstruction Finance Corporation, or by regular appropriations of the Federal, State, and local Governments.

Average employment and pay rolls for the year 1938 were below those for 1937 for most of the major industrial groups surveyed monthly by the Bureau. In employment the outstanding decreases from 1937 to 1938 were 26 percent for the durable-goods group of manufacturing industries (nondurable goods showed a decline of 11 percent and manufacturing as a whole showed a drop of 18 percent), 26 percent for private building construction, 23 percent for metal mining, 18 percent for quarrying, 15 percent for brokerage, and 13 percent for coal mining. The pay-roll declines for these industries were equal to or more pronounced than the employment decreases. With the exception of the insurance industry which showed an employment gain of 2 percent and the telephone and telegraph industry, which showed a pay-roll gain of 3 percent, all of the remaining industries covered showed decreases. The declines ranged from 2 percent to 6 percent for employment and from less than 1 percent to 4 percent for pay rolls.

A preliminary report of the Interstate Commerce Commission indicated a decrease between November and December of 1.8 percent, or 17,620 in the number of employees on class I railroads. The total number reported in December was 943,082. Corresponding pay-roll figures for December were not available when this report was prepared. For November they amounted to \$149,011, 526 as against \$155,270,047 for October, a decrease of 4.0 percent.

§ *Hours and earnings.*—The average hours worked per week by wage earners in manufacturing industries were 37.1 in December, an increase of 2.0 percent since November. The corresponding average hourly earnings were 64.8 cents, an increase of 0.5 percent as compared with the preceding month. Average weekly earnings increased 2.3 percent to \$24.24.

¶ Of the 14 nonmanufacturing industries for which man-hour data are available, 8 showed increases in average hours worked per week and 4 showed gains in average hourly earnings. Average weekly earnings were higher for 10 of the 16 nonmanufacturing industries surveyed.

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

Public Employment

Employment on projects of the Public Works Administration showed an increase of 21,000 for the month ending December 15. The gains in the number working on projects financed from funds provided by the Public Works Administration Appropriation Act of 1938 were sufficiently great to offset declines in employment on P. W. A. projects financed from other funds. Of the 195,000 at work in December, 12,000 were working on Federal and non-Federal projects financed from National Industrial Recovery Act funds, 46,000 on non-Federal projects financed from funds provided by the Emergency Relief Appropriation Acts of 1935, 1936, and 1937, and 137,000 on Federal and non-Federal projects financed with funds provided by the Public Works Administration Appropriation Act of 1938. Pay-roll disbursements for the period amounted to \$16,170,000.

During the month ending December 15 more than 2,000 men were working on new construction and demolition projects of the United States Housing Authority; pay rolls amounted to \$293,000. These figures pertain only to new projects under the United States Housing Authority and not to those formerly under the Public Works Administration.

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

Industry	Employment			Pay roll			Average weekly earnings		
	Index, December 1938	Percentage change from—		Index, December 1938	Percentage change from—		Average in December 1938	Percentage change from—	
		November 1938	December 1937		November 1938	December 1937		November 1938	December 1937
All manufacturing industries combined ¹	(1923-25 = 100) 91.2	+0.8	-3.5	(1923-25 = 100) 86.6	+3.0	+2.9	\$ 24.24	+2.0	+6.6
Class I steam railroads ²	52.8	-1.8	-6.3	(³)	(³)	(³)	(³)	(³)	(³)
Coal mining:	(1929 = 100)			(1929 = 100)					
Anthracite ⁴	51.3	+6	-16.4	42.5	+17.3	-17.1	26.99	+16.6	-.8
Bituminous ⁴	89.3	+8	-10.2	80.9	-6	-14.9	24.05	-1.4	-5.3
Metalliferous mining.....	62.3	+6	-11.6	54.1	+3.5	-16.9	27.16	+2.8	-6.0
Quarrying and nonmetallic mining.....	41.4	-6.7	-5.6	33.7	-9.6	+9	20.42	-3.2	+6.9
Crude-petroleum producing.....	67.7	-9	-11.4	62.5	-1.3	-10.4	33.41	-.5	+1.2
Public utilities:									
Telephone and telegraph.....	74.2	-2	-4.8	92.7	-3	-2.1	\$ 30.71	-.1	+2.9
Electric light and power and manufactured gas.....	91.4	-5	-4.8	98.2	-.5	-4.1	\$ 33.72	+1	+7
Electric-railroad and motor-bus operation and maintenance.....	69.4	-3	-4.8	69.5	+1.0	-3.3	\$ 32.59	+1.3	+1.5
Trade:									
Wholesale.....	90.0	+3	-3.5	75.6	+4	-2.7	\$ 29.10	+1	+8
Retail.....	98.1	+12.8	-2.3	79.4	+11.1	-1.5	\$ 20.13	-1.6	+7
General merchandising.....	144.1	+37.9	-1.2	122.9	+33.9	-.3	16.95	-2.9	+9
Other than general merchandising.....	86.0	+4.5	-2.9	70.3	+4.5	-2.0	\$ 24.12	0	+9
Hotels (year-round) ⁵	91.9	-.0	-3.1	81.1	-.2	-1.8	\$ 15.02	+5	+1.3
Laundries ⁶	93.4	-3	-3.7	80.0	+9	-1.3	17.43	+1.2	+2.5
Dyeing and cleaning ⁶	97.9	-4.5	-1.2	68.3	-7.5	-.4	19.23	-3.1	+9
Brokerage.....	(⁷)	+2	-9.9	(⁷)	+9	-12.7	\$ 36.59	+7	-3.1
Insurance.....	(⁷)	+1	+2.2	(⁷)	+1.2	-.5	\$ 35.79	+1.1	-2.6
Building construction.....	(⁷)	-6.7	-15.5	(⁷)	-6.6	-11.8	28.97	+2	+3.9

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

² Does not include railroad repair shops.

³ Preliminary. Source: Interstate Commerce Commission.

⁴ Not available.

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

⁶ Average weekly earnings not strictly comparable with figures published in issues of this pamphlet dated earlier than January 1938, as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

⁷ Cash payments only; the additional value of board, room, and tips cannot be computed.

The seasonal decline in construction work, usual at this time of the year, was reflected in the drop of 25,000 in the number of men working on construction projects financed by regular Federal appropriations. Decreases in employment were reported for all types of projects with the following exceptions: Building construction, dredging, dikes, revetments, etc., ship construction, streets and roads, and miscellaneous projects. During the month ending December 15, 215,000 men were at work; pay rolls for the period amounted to \$20,191,000.

Nearly 3,000 men were working on construction projects financed by the Reconstruction Finance Corporation during the month ending December 15. Monthly pay rolls for this period amounted to \$308,000.

In December there was a drop from November of 226,000 in employment on projects operated by the Works Progress Administration. However, the number at work, 2,987,000, was more than 1,316,000 above the employment level of a year ago. Pay rolls for December 1938 amounted to \$167,160,000, a decrease of \$5,214,000 when compared with the preceding month but a gain of \$82,447,000 over the pay rolls for December 1937. There was a small increase in the number working on Federal projects under The Works Program during the month ending December 15. A gain of 12,000 in employment was reported on work projects of the National Youth Administration. Data on employment and pay rolls for Student Aid in December will not be available until next month.

In the regular services of the Federal Government increases in employment were reported in the number working in the executive, judicial, and military services; a decrease was shown for the legislative service. Of the 917,000 employees in the executive service in December, 120,000 were working in the District of Columbia and 797,000 outside the District. Force-account employees (employees who are on the Federal pay roll and are engaged on construction projects) were 10 percent of the total number of employees in the executive service. Increases in employment occurred in the Post Office Department, the Navy Department, and the administrative offices of the Public Works Administration. The following reported declines in employment: War, Interior, Agriculture, and the Tennessee Valley Authority.

As usual at the end of an enlistment period there was a decrease in employment in the Civilian Conservation Corps. In December 15,000 were dropped from the rolls, reducing the total number in camps to 321,000. Of this total 284,000 were enrollees, 5,000 Reserve officers, 300 nurses, 1,600 educational advisers, and 30,000 supervisory and technical employees. For all groups of workers monthly pay-roll disbursements totaled \$14,450,000.

As a result of seasonal influences, employment on State-financed road projects declined during the month ending December 15. Of the 184,000 at work, 21,000 were employed on new road construction and 163,000 were engaged in maintenance work. Pay rolls for both types of road work were \$11,439,000.

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

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

(Preliminary figures)

Class	Employment		Per-centage change	Pay rolls		Per-centage change
	December	November		December	November	
Federal services:						
Executive ²	917,303	* 869,256	+5.5	\$141,924,984	* \$131,568,899	+7.9
Judicial.....	2,271	2,264	+3	554,388	544,630	+1.8
Legislative.....	5,145	5,163	-3	1,197,211	1,205,224	-7
Military.....	340,891	339,938	+3	26,935,537	26,795,878	+5
Construction projects:						
Financed by P. W. A. ⁴	194,677	173,310	+12.3	16,169,889	14,861,489	+8.8
U. S. H. A. low-cost housing.....	2,301	1,199	+91.9	292,683	149,530	+95.7
Financed by R. F. C. ⁵	2,892	3,243	-10.8	308,347	390,238	-21.0
Financed by regular Federal appropriations.....	214,844	239,511	-10.3	20,190,980	23,014,693	-12.3
Federal projects under The Works Program.....	124,074	123,119	+8	5,914,821	5,925,239	-2
Projects operated by W. P. A.....	2,986,931	3,213,115	-7.0	167,159,709	172,373,413	-3.0
National Youth Administration:						
Work projects.....	237,399	225,088	+5.5	4,328,281	4,110,810	+5.3
Student Aid.....	(⁶)	361,067	-----	(⁶)	2,400,437	-----
Civilian Conservation Corps.....	320,975	335,479	-4.3	14,449,956	14,718,482	-1.8

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 125,033 employees and pay-roll disbursements of \$14,681,831 for December and 125,546 employees and pay-roll disbursements of \$14,814,599 for November.³ Revised.⁴ Data covering P. W. A. projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds and Public Works Administration Appropriation Act of 1938 funds are included. These data are not shown under The Works Program. Includes 46,049 wage earners and \$4,106,952 pay roll for December; 57,000 wage earners and \$5,191,123 for November, covering Public Works Administration projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 136,966 wage earners and \$10,747,455 pay roll for December; 101,590 wage earners and \$8,085,341 pay roll for November, covering Public Works Administration projects financed from funds provided by the Public Works Administration Appropriation Act of 1938.⁵ Includes 241 employees and pay-roll disbursements of \$19,499 for December; 347 employees and pay-roll disbursements of \$35,177 for November on projects financed by the RFC Mortgage Co.⁶ December data not available.

The value of material orders placed on projects financed from regular Federal appropriations during the fourth quarter of 1938 amounted to \$95,778,000. Approximately 243,000 man-months of labor were involved in the final fabrication of these materials. On P. W. A. projects orders were placed for \$91,329,000 worth of materials, for which it is estimated 267,000 man-months of labor were required in final fabrication processes.

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

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

[Subject to revision]

Program	Value of material orders placed			Man-months of labor created in final fabrication		
	Fourth quarter of 1938	Third Quarter of 1938	Fourth quarter of 1937	Fourth quarter of 1938	Third quarter of 1938	Fourth quarter of 1937
Public Works Administration ¹	\$91, 329, 283	\$51, 993, 271	\$55, 163, 148	267, 023	147, 972	146, 730
U. S. H. A. low-cost housing.....	689, 020	94, 219	.....	2, 037	286	.....
Reconstruction Finance Corporation ²	1, 392, 913	1, 568, 564	6, 607, 683	3, 494	5, 494	15, 121
Regular Federal appropriations.....	95, 778, 000	113, 673, 966	72, 156, 428	243, 474	286, 537	184, 584
Federal projects under The Works Program:						
Construction.....	3, 748, 806	8, 133, 096	19, 823, 395	10, 322	21, 743	51, 417
Professional, technical, and clerical.....	41, 914	69, 009	165, 440	140	231	513
Projects operated by W. F. A.	(3)	84, 852, 609	61, 096, 814	(3)	248, 208	182, 246
Rentals and services on projects operated by W. F. A.	(3)	56, 254, 967	44, 151, 434	(3)	(3)	(3)
National Youth Administration:						
Work projects.....	(3)	1, 687, 675	883, 739	(3)	4, 938	3, 010
Rentals and services on work projects.....	(3)	493, 026	683, 127	(3)	(2)	(2)

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

² Includes RFC Mortgage Co.

³ Data not available.



DETAILED TABLES FOR DECEMBER 1938

Industrial and Business Employment

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

EMPLOYMENT, PAY ROLLS, HOURS, AND EARNINGS

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

The indexes for the manufacturing industries have been adjusted to the 1935 Census of Manufactures and are not comparable to those published in the July 1938 and earlier issues of this pamphlet. Comparable indexes for earlier months and years are available on request. Electric- and steam-railroad repair shops have been excluded from the

new series in keeping with the reclassification for the 1937 Census of Manufactures.

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

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

MANUFACTURING

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

Industry	Employment			Pay rolls			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Index, December 1938	Percentage change from—		Index, December 1938	Percentage change from—		December 1938	Percentage change from—		December 1938	Percentage change from—		December 1938	Percentage change from—	
		November 1938	December 1937		November 1938	December 1937		November 1938	December 1937		November 1938	December 1937		November 1938	December 1937
All manufacturing.....	91.2	+0.8	-3.5	86.6	+3.0	+2.9	\$24.24	+2.3	+6.6	37.1	+2.0	(?)	Cents 64.8	+0.5	(?)
Durable goods.....	83.1	+1.2	-9.4	80.4	+2.7	-7	27.25	+1.5	+9.6	36.8	+1.1	(?)	72.6	+4	(?)
Nondurable goods.....	98.8	+4	+1.6	93.5	+3.2	+6.7	21.52	+2.7	+4.9	37.4	+2.6	(?)	58.4	+4	(?)
Durable goods															
Iron and steel and their products, not including machinery.....	87.4	+1.0	-9.2	80.8	+2.1	+8.3	26.90	+1.1	+19.2	35.6	+1.5	(?)	75.7	0	(?)
Blast furnaces, steel works, and rolling mills.....	91.1	+1.5	-12.4	83.2	+1.5	+11.8	28.49	+(?)	+27.7	33.8	+5	+23.9	84.2	+(?)	+2.5
Bolts, nuts, washers, and rivets.....	91.6	+1.8	-5.2	94.4	+4.2	+22.2	26.41	+2.4	+28.8	38.0	+2.5	+28.3	69.7	-2	+5
Cast-iron pipe.....	66.1	+7	-8	55.7	+2.2	+1.1	20.01	+1.5	+2.1	34.0	+4	+1.1	58.4	+7	+5
Cutlery (not including silver and plated cutlery) and edge tools.....	82.9	+3	-7.4	78.6	+4.2	-6	23.93	+3.8	+7.3	39.8	+1.9	+6.5	60.7	+1.2	-1.0
Forgings, iron and steel.....	49.6	+3.3	-17.0	49.4	+11.2	-2.0	29.25	+7.6	+18.2	38.4	+5.8	+13.6	76.2	+1.7	+3.5
Hardware.....	86.3	+2.3	-3.3	90.1	-3.4	+13.2	25.31	-5.5	+16.9	38.0	-2.5	+17.1	66.7	-3.2	-2
Plumbers' supplies.....	72.6	-5	+1.1	60.4	+10.0	+8.9	23.55	+10.6	+7.8	35.7	+11.5	+10.1	66.1	-7	-2.3
Stamped and enameled ware.....	134.3	+5	-5.9	136.0	+1.8	+8	24.33	+1.3	+7.1	38.5	+1.1	+11.4	62.9	+(?)	-3.3
Steam and hot-water heating apparatus and steam fittings.....	67.9	-1.7	-3.7	56.4	+5.8	+4.4	25.05	+7.6	+8.4	35.9	+6.0	+8.3	69.9	+1.3	+2
Stoves.....	74.7	-5.3	+1.1	61.4	-2.1	+15.4	24.30	+3.3	+14.2	36.9	+4.1	+10.8	67.2	+6	+2.7
Structural and ornamental metalwork.....	61.9	+1.9	-14.1	53.2	+6.3	-15.7	27.18	+4.3	-1.9	37.4	+4.3	-2.9	72.7	+(?)	+9
Tin cans and other tinware.....	84.1	-6	-9.4	87.9	+5	-7.8	22.76	+1.1	+1.3	37.7	+1.2	+7	60.8	+1	+1.6
Tools (not including edge tools, machine tools, files, and saws).....	83.9	+3.7	-4.0	82.0	+8.1	+6.5	24.19	+4.3	+11.0	39.6	+4.3	+12.8	61.2	-(?)	-2.0
Wirework.....	171.6	+4.2	-4.6	185.9	+3.1	+17.4	26.16	-1.0	+21.6	38.6	-4	+24.6	67.8	-6	-1.1

Machinery, not including transportation equipment.	91.8	+2.6	-18.7	89.2	+6.3	-18.8	26.93	+3.7	-1	37.4	+3.3	(?)	72.1	+3	(?)
Agricultural implements (including tractors)	105.0	+8.7	-37.4	113.5	+19.4	-36.7	29.76	+9.9	+1.1	37.3	+8.9	+9	80.2	+1.1	+1
Cash registers, adding machines, and calculating machines	134.6	-6	-7.9	118.8	-8	-18.0	28.51	-2	-11.0	35.1	+3	-11.2	82.1	-3	+5
Electrical machinery, apparatus, and supplies	83.7	+6	-20.1	82.4	+2.5	-19.1	27.08	+2.0	+1.2	37.0	+1.0	+2.0	73.2	+8	-6
Engines, turbines, water wheels, and windmills	85.3	+2.1	-11.4	98.0	+7.0	-13.1	29.73	+4.8	-2.1	37.7	+3.8	-3.7	79.3	+8	+1.7
Foundry and machine-shop products	81.7	+3.6	-18.5	75.9	+7.6	-18.2	26.48	+3.8	-1.0	37.2	+3.7	+6	71.2	+2	+3
Machine tools	119.9	+2.0	-23.9	120.0	+8.3	-30.0	28.44	+6.2	-7.9	38.4	+5.8	-8.5	74.0	+4	+4
Radios and phonographs	118.0	-7	+7.5	107.6	+6	+14.2	22.62	+1.3	+6.3	38.8	+1.2	+15.4	58.2	+3	-7.3
Textile machinery and parts	67.0	+4.3	-6.2	66.9	+9.0	+4.2	26.08	+4.6	+11.0	41.0	+11.8	+15.2	63.5	-6.4	-3.6
Typewriters and parts	127.9	-8	-2.1	130.3	-5	+10.6	24.46	+3	+6.4	38.1	+7	+13.0	64.1	-4	-1
Transportation equipment	96.1	+4.9	-7.1	98.7	+8.9	-8.5	32.64	-1.9	+18.7	36.4	-1.5	(?)	89.8	-5	(?)
Aircraft	845.1	+3.7	-4.9	879.6	+10.1	+7.7	31.72	+6.2	+13.3	42.0	+4.6	+4.5	76.5	+1.7	+10.0
Automobiles	106.9	+4.9	-3.2	107.4	-2	+17.4	33.15	-4.0	+24.2	36.0	-3.4	+20.8	92.1	-7	+1.3
Cars, electric- and steam-railroad	29.8	+13.1	-39.8	28.2	+22.1	-43.7	25.93	+8.0	-6.5	35.6	+9.4	-2.9	72.8	-1.3	-3.7
Locomotives	17.4	+2.9	-64.3	13.7	+7.3	-74.3	25.34	+4.3	-28.0	32.9	+3.7	-24.3	77.0	+6	-4.7
Shipbuilding	100.5	+4.1	-9.3	107.3	+13.9	-11.8	31.87	+9.4	-1.3	37.5	+8.5	-1.7	84.7	+1.1	+2
Nonferrous metals and their products	94.8	-6	-4.0	90.1	-1	-3.7	25.76	+5	+8.0	38.6	-3	(?)	66.7	+1.1	(?)
Aluminum manufactures	140.4	-2.0	-7.4	144.0	-2.7	+1.0	26.33	-7	+9.1	38.5	-4.4	+10.4	68.3	+3.8	-1.1
Brass, bronze, and copper products	100.2	-3	-1.1	98.9	-9	+14.1	26.92	-6	+15.6	38.2	-2	+19.7	70.8	-3	-3.5
Clocks and watches and time-recording devices	82.9	-1.5	-17.3	83.2	-4.5	-16.4	21.23	-3.0	+5	36.9	-3.3	+3.3	57.6	+3	-2.2
Jewelry	96.9	-4.1	+5.3	84.9	+2.6	+6.9	24.11	+7.0	+1.4	40.8	+4.3	+7.5	59.2	+4.1	-4.8
Lighting equipment	94.2	+2.9	+1.3	84.7	+1.6	+15.3	24.41	-1.7	+14.1	36.3	-2.7	+11.2	69.1	+1.0	+1.7
Silverware and plated ware	66.9	+6	+1.8	68.3	+3.2	+17.6	28.07	+2.6	+15.6	43.3	+2.0	+13.8	65.0	+3	+1.7
Smelting and refining—copper, lead, and zinc	72.5	+2.1	-9.9	68.2	+3.7	-14.1	26.58	+1.6	-4.8	38.4	+1.4	-5.2	69.2	+3	+4
Lumber and allied products	64.1	-1.7	-1.2	56.1	-2	+9.6	20.14	+1.5	+10.9	38.0	+1.1	(?)	53.2	+2	(?)
Furniture	79.8	+4	-2.3	67.8	+4.4	+7.0	20.60	+4.0	+9.0	39.4	+3.9	+8.8	52.7	+5	-2.8
Lumber:															
Millwork	54.0	-1.7	+2.9	44.6	+2	+9.8	21.71	+1.9	+7.0	40.2	+1.1	+8.8	54.1	+7	-1.7
Sawmills	50.9	-2.6	-1.2	44.9	-3.3	+11.2	19.27	-8	+12.6	36.7	-6	+1.5	53.3	-7	+10.6
Stone, clay, and glass products	70.5	-1.5	-2.8	63.5	-5	+6.0	24.03	+1.1	+9.1	36.5	+5	(?)	65.1	+7	(?)
Brick, tile, and terra cotta	51.3	-2.1	+2.7	39.4	+1.0	+15.4	26.06	+3.1	+12.4	37.2	+1.9	+10.1	53.7	+1.5	+8
Cement	62.6	-7.6	-4.3	57.2	-10.2	-4	25.50	-2.8	+3.3	37.1	-2.7	+2.5	68.8	-2	+1.6
Glass	93.0	-9	-6.9	99.4	+8	+3.0	25.76	-1	+11.6	35.7	-3	+9.2	72.3	-1	+1.5
Marble, granite, slate, and other products	42.3	+1.2	-4.8	31.4	+2.3	-3.3	25.08	+3.6	+3.1	35.4	+2.7	(?)	71.0	+1.6	+1.0
Pottery	79.9	-1	+9	75.5	+1.5	+12.0	23.56	+1.6	+11.0	37.3	+1.5	+5.9	63.1	+9	+1.3
Nondurable goods															
Textiles and their products	98.6	+1.8	+5.9	83.3	+6.3	+17.3	16.99	+4.4	+10.7	35.7	+3.4	(?)	48.2	+8	(?)
Fabrics	91.8	+2.6	+7.6	81.1	+4.9	+18.9	16.80	+2.2	+10.4	37.1	+2.3	(?)	46.1	+1	(?)
Carpets and rugs	81.5	+2.5	+5.1	71.1	+6.3	+47.2	23.03	+3.6	+35.9	36.8	+3.8	+44.2	62.6	-1	-2.5
Cotton goods	87.1	+1.1	+2.6	75.7	-2.8	+11.7	14.13	+1.7	+8.3	36.8	+1.6	+19.0	38.4	+3	-8.5
Cotton small wares	84.5	+1.9	+10.0	82.2	+6.3	+26.4	18.46	+4.4	+14.9	39.1	+3.6	+15.8	47.7	+4	-2.4
Dyeing and finishing textiles	112.1	+2.6	+6.3	97.2	+4.8	+12.2	20.87	+2.2	+5.5	39.0	+2.1	+13.8	53.2	+5	-7.6
Hats, fur-felt	82.4	-5	-10.6	75.3	+7.6	-1.9	23.84	+8.0	+9.5	34.0	+8.4	+10.5	70.5	-1	-1.7
Knit goods	115.1	+8	+7.0	119.5	+8	+20.2	18.15	-1	+19.0	36.8	+1	+15.5	50.4	-4	-1.9

See footnotes at end of table.

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

MANUFACTURING—Continued

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

Industry	Employment			Pay rolls			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Index, December 1938	Percentage change from—		Index, December 1938	Percentage change from—		December 1938	Percentage change from—		December 1938	Percentage change from—		December 1938	Percentage change from—	
		No- vember 1938	De- cember 1937		No- vember 1938	De- cember 1937		No- vember 1938	De- cember 1937		No- vember 1938	De- cember 1937		No- vember 1938	De- cember 1937
<i>Nondurable goods—Continued</i>															
Textiles and their products—Continued.															
Fabrics—Continued.															
Knit goods—Continued.															
Hosiery.....	145.7	+0.7	+6.3	164.1	-0.6	+19.9	19.51	-1.3	+12.6	36.9	-0.7	+14.2	53.3	-1.1	-1.3
Knitted outerwear.....	79.0	+1.0	+14.1	73.3	+6.7	+20.0	17.87	+5.6	+5.1	38.0	+3.6	+3.9	46.7	+1.5	+1.7
Knitted underwear.....	71.2	+5	+4.1	62.4	+1.5	+21.3	14.75	+1.0	+16.7	35.0	+9	+11.7	42.2	+1.3	-4.4
Knitted cloth.....	160.2	+2.9	+7.1	126.8	+6.0	+23.5	17.93	+3.1	+15.8	38.1	+2.2	+22.4	46.9	+1.4	+2
Silk and rayon goods.....	63.2	+2.5	(-)	51.8	+6.6	+8.5	15.79	+3.9	+8.7	37.2	+4.7	+14.6	42.3	0	-5.6
Woolen and worsted goods.....	85.3	+8.8	+33.4	72.8	+14.4	+40.8	19.80	+5.2	+5.6	37.8	+5.8	+18.4	52.4	-5	-11.1
Wearing apparel.....	112.2	+2	+2.7	84.7	+8.6	+14.2	17.61	+8.5	+11.2	33.1	+5.4	(-)	52.1	+2.0	(?)
Clothing, men's.....	97.1	-1.1	+6.6	68.3	+8.2	+23.0	18.39	+0.4	+15.4	31.5	+8.8	+21.0	58.7	+1.9	-5.3
Clothing, women's.....	160.6	+1.4	-1.7	114.8	+12.8	+7.4	18.88	+11.3	+9.3	33.5	+7.4	+10.9	51.8	+3.2	-2.7
Corsets and allied garments.....	99.6	+1.1	+2	102.8	+3.0	+14.8	17.38	+1.9	+14.8	37.3	+1.4	+16.8	46.3	+3	-7
Men's furnishings.....	149.0	-5	+14.0	143.3	-4.9	+30.1	15.08	-4.4	+15.8	35.6	-6.0	+24.1	37.9	-1.5	+1.4
Millinery.....	57.8	+4.9	-6.5	43.2	+7.1	-5	19.12	+2.1	+6.5	28.7	+7	+6.6	63.9	-3.5	+2.2
Shirts and collars.....	116.4	-1.1	+5.1	105.3	+1.1	+18.0	14.00	+2.2	+12.9	35.4	-1	+13.7	59.6	+2.0	-3.5
Leather and its manufactures.....	88.6	+4.5	+3.6	70.0	+12.2	+14.8	18.62	+7.3	+10.8	38.2	+10.3	(?)	32.6	-1.0	(?)
Boots and shoes.....	87.6	+5.1	+2.0	63.3	+16.4	+11.9	17.11	+10.8	+9.3	35.5	+13.2	+18.0	50.0	-1.2	-3.6
Leather.....	85.3	+1.5	+10.9	87.6	+3.5	+22.8	24.77	+2.0	+10.6	39.2	+1.6	+11.3	63.1	+3	-8
Food and kindred products.....	120.1	-2.7	+4	120.9	-1.2	+3	94.72	+1.5	-1	40.4	+8	(?)	61.9	+9	(?)
Baking.....	143.5	-8	(-)	138.2	-1.1	-3	25.26	-4	-3	41.3	-5	-9	61.6	+2	+7
Beverages.....	223.3	-2.6	+2	257.2	-2.9	+1.5	32.02	-3	+1.3	37.4	-8	-1.1	80.4	+5	+2.3
Butter.....	95.1	-1.8	-4.0	80.4	-2.4	-5	22.10	-3	+1.7	45.4	-4	+1.9	48.8	-2	+1.1
Canning and preserving.....	85.3	-17.4	-7.0	77.4	-10.0	-4.9	16.55	+9.0	+2.1	35.4	+5.0	+3.3	48.1	+2.6	-1.3
Confectionery.....	91.3	+8	+1.4	91.5	+7.8	+4.3	18.65	+7.0	+2.7	40.3	+7.1	+2.0	46.6	-5	+1
Flour.....	78.1	-(?)	+7	73.0	-1.1	-3.0	24.42	-1.1	-3.6	40.8	-2.4	-5.4	59.7	+8	+2.0

Ice cream.....	68.7	-2.4	-2.0	60.0	-1.0	-4	29.21	+1.4	+1.6	45.2	+1.0	-1.3	63.8	+5	+2.8
Slaughtering and meat packing.....	102.4	+1.7	+2.2	112.5	+2.3	-1.9	27.68	+6	-4.0	40.8	+7	-3.7	08.2	-4	-1
Sugar, beet.....	230.7	-16.1	+38.5	221.9	-19.4	+56.6	24.75	-4.0	+13.8	47.0	-8.3	+15.8	53.0	+4.6	-3.9
Sugar refining, cane.....	84.4	-2.6	-5.6	72.9	-3.3	-11.4	23.29	-7	-5.5	38.2	+1.2	-13.5	61.0	-2.0	+7.2
Tobacco manufactures.....	85.2	-2.5	0	59.6	-3	-7	16.92	+2.2	-7	35.9	+6	(2)	46.9	+1.7	(2)
Chewing and smoking tobacco and snuff.....	62.1	+3	-5	73.0	+5.6	+4.1	18.40	+5.3	+4.8	36.3	+6.1	+2.8	50.9	-8	+1.7
Cigars and cigarettes.....	65.6	-2.9	-1	57.9	-1.1	-1.4	16.56	+1.8	-1.4	35.9	+3	-3.8	46.4	+2.0	+2.3
Paper and printing.....	103.0	+9	-1.3	107.3	+3.9	+1.3	28.61	+8.0	+2.7	38.6	+2.3	(2)	77.1	+4	(2)
Boxes, paper.....	103.9	-1.2	+3.0	109.4	-6	+11.9	21.49	+7	+8.7	40.3	+3	+8.1	53.8	+5	+5
Paper and pulp.....	106.3	+4	-4	103.4	+5	+6.3	23.85	+2	+6.7	39.0	+3	+9.6	61.3	-1	-2.6
Printing and publishing:															
Book and job.....	103.7	+2.3	-3.7	96.9	+8.7	-3.4	31.10	+6.3	+3	39.3	+6.0	-1.6	79.8	-3	+1.3
Newspapers and periodicals.....	108.0	+8	-1.2	113.2	+3.3	-3	38.56	+2.5	+1.0	36.7	+1.4	-1.5	101.1	+8	+2.1
Chemicals and allied products, and petroleum refining.....	112.7	-3	-4.7	120.1	+8	-1.9	28.52	+1.1	+3.0	38.2	+1.1	(2)	74.3	-1	(2)
Petroleum refining.....	118.1	-6	-4.5	134.1	+3	-3.6	35.30	+1.0	+1.0	36.4	+1.3	+3	97.4	-5	+3
Other than petroleum refining.....	111.4	-2	-4.8	115.8	+1.0	-1.2	25.66	+1.2	+3.7	38.9	+1.0	(2)	65.8	+1	(2)
Chemicals.....	116.9	-3	-6.4	129.8	+1.3	-1.2	30.72	+1.7	+5.6	39.4	+1.1	+5.0	78.1	+6	+5
Cottonseed—oil, cake, and meal.....	113.9	-2.1	-13.3	95.5	-4.6	-17.8	12.76	-2.5	-5.1	43.4	-2.5	-20.0	29.0	+3	+17.6
Druggists' preparations.....	109.2	-4	-4.6	120.2	+5	-2.8	24.80	+1.0	+3.0	39.6	+2.5	+2	59.3	-1	+2.3
Explosives.....	82.7	-1	-7.4	95.1	+3.7	-2.6	31.64	+3.8	+6.0	39.5	+4.0	+4.6	89.1	-1	+7
Fertilizers.....	82.3	+4.8	-9.2	70.0	+7.4	-13.8	15.75	+2.5	-4.8	35.5	+4.6	-6.3	44.4	-2.0	+2.1
Paints and varnishes.....	112.4	+3	-4.1	115.4	+1.5	+1.7	27.80	+1.5	+6.1	39.9	+1.2	+5.4	69.9	+3	+7
Rayon and allied products.....	311.3	-5	-1.0	302.4	-1	+2.9	23.80	+3	+3.9	37.1	+3	+5.3	64.1	+1	-1.3
Soap.....	88.6	-3	+1.2	89.7	+1.5	+6	28.80	+1.8	-6	35.8	+1.9	(3)	74.5	-1	-8
Rubber products.....	83.6	+1.5	-2.3	89.0	+4.5	+15.1	23.40	+3.0	+17.9	37.4	+2.0	(2)	76.4	+1.0	(2)
Rubber boots and shoes.....	65.1	+2.7	-5.1	65.9	+8.8	+9.3	23.17	+5.9	+15.3	35.8	+6.0	+16.5	50.7	-1	-1.2
Rubber tires and inner tubes.....	67.2	+1.7	-8.9	79.0	+4.9	+14.1	33.80	+3.1	+25.4	35.2	+2.0	+25.7	96.3	+1.1	+3
Rubber goods other.....	134.7	+9	+7.7	133.7	+2.3	+19.6	23.44	+1.4	+11.0	39.4	+7	+15.4	60.1	+1.0	-2.7

See footnotes at end of table.

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

NONMANUFACTURING

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

Industry	Employment			Pay rolls			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Index, December 1938	Percentage change from—		Index, December 1938	Percentage change from—		December 1938	Percentage change from—		December 1938	Percentage change from—		December 1938	Percentage change from—	
		November 1938	December 1937		November 1938	December 1937		November 1938	December 1937		November 1938	December 1937		November 1938	December 1937
Coal mining:													<i>Cents</i>		
Anthracite ¹	51.3	+6	-16.4	42.5	+17.3	-17.1	26.99	+16.6	-8	29.3	+17.7	-(²)	91.7	-(²)	+1
Bituminous ¹	89.3	+8	-10.2	80.9	-6	-14.9	24.05	-1.4	-5.3	27.5	-1.4	-5.7	88.1	+4	+1.3
Metalliferous mining.....	62.3	+6	-11.6	54.3	+3.5	-16.9	27.16	+2.8	-6.0	39.8	+2.4	-6.2	68.5	+5	+3
Quarrying and nonmetallic mining.....	41.4	-6.7	-5.6	33.7	-9.6	+9	20.42	-3.2	+6.9	37.2	-2.1	+6.6	55.1	-2	+8
Crude-petroleum producing.....	67.7	-9	-11.4	62.5	-1.3	-10.4	33.41	-5	+1.2	39.0	-2	-3.0	86.3	-1	+3.7
Public utilities:															
Telephone and telegraph ¹	74.2	-2	-4.8	92.7	-3	-2.1	30.71	-1	+2.9	39.3	+2	+2	81.2	-9	+1.5
Electric light and power and manufactured gas ¹	91.4	-5	-4.8	98.2	-5	-4.1	33.72	+1	+7	39.9	+3	-1.2	84.5	-4	+2.1
Electric-railroad and motorbus operation and maintenance ¹	69.4	-3	-4.8	69.5	+1.0	-3.3	32.59	+1.3	+1.5	45.6	+1.5	-7	70.4	-3	+2.2
Trade:															
Wholesale ¹	90.0	+3	-3.5	75.6	+4	-2.7	29.10	+1	+8	41.8	+3	-1.0	69.6	-1	+1.1
Retail ¹	98.1	+12.8	-2.3	79.4	+11.1	-1.5	20.13	-1.6	+7	42.7	+1.0	-9	52.6	-3.2	+1.9
General merchandising ¹	144.1	+37.9	-1.2	122.9	+33.9	-3	16.95	-2.9	+9	41.0	+5.2	+4	44.4	-7.7	+8
Other than general merchandising ¹	86.0	+4.5	-2.9	70.3	+4.5	-2.0	24.12	0	+9	43.5	+2	-1.4	56.5	-7	+2.6
Hotels (year-round) ^{1, 2, 3}	91.0	-6	-3.1	81.1	-2	-1.8	15.02	+5	+1.3	46.3	-6	-9	32.3	+7	+2.1
Laundries ¹	93.4	-3	-3.7	80.0	+9	-1.3	17.43	+1.2	+2.5	42.2	+1.2	-1	41.4	-5	+2.6
Dyeing and cleaning ¹	97.9	-4.5	-1.2	68.3	-7.5	-4	19.23	-3.1	+0	40.7	-1.2	+1.0	48.7	-1.8	+1.5
Brokerage ¹	(⁴)	+2	-9.9	(⁴)	+9	-12.7	36.59	+7	-3.1	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Insurance ¹	(⁴)	+1	+2.2	(⁴)	+1.2	-5	35.79	+1.1	-2.6	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Building construction.....	(⁴)	-6.7	-15.5	(⁴)	-6.6	-11.8	28.97	+2	+3.9	31.7	-1.1	+6	91.4	+1.3	+3.0

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

² Not yet computed.

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

⁴ Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of this pamphlet.

⁵ Average weekly earnings, hourly earnings, and hours not strictly comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

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

⁷ Not available.

The indexes and averages for the iron and steel group and the non-ferrous metal products group have been affected by the transfer of the stamped and enameled ware industry from the latter group to the former. The indexes, hours, and hourly earnings for the knit-goods industry are now weighted on the basis of four subdivisions (hosiery, knitted outerwear, knitted underwear, and knitted cloth) for which separate figures are now given. Tractor manufacturing establishments have been transferred from the engine, turbine, water wheel, and windmill industry to the agricultural implement industry, thereby affecting the figures for both industries.

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

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

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

MANUFACTURING

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

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	December 1938	November 1938	October 1938	December 1938	November 1938	October 1938	December 1938	November 1938	October 1938	December 1938	November 1938	October 1938	December 1938	November 1938	October 1938
All manufacturing.....	91.2	90.5	89.5	86.6	84.1	83.8	24.24	23.82	23.95	37.1	36.5	37.4	Cents 64.8	Cents 64.5	Cents 63.7
Durable goods.....	83.1	82.1	79.0	80.4	78.3	75.2	27.25	27.11	26.95	36.8	36.5	37.4	72.6	72.4	71.0
Nondurable goods.....	98.8	98.4	99.4	93.5	90.6	93.4	21.52	20.85	21.35	37.4	36.4	37.4	58.4	58.0	57.9
<i>Durable goods</i>															
Iron and steel and their products, not including machinery.....	87.4	86.5	83.9	80.8	79.1	74.9	26.90	26.64	25.94	35.6	35.1	34.9	75.7	75.7	75.3
Blast furnaces, steel works, and rolling mills.....	91.1	89.8	86.1	83.2	81.9	73.9	28.49	28.48	26.79	33.8	33.8	31.9	84.2	84.1	83.9
Bolts, nuts, washers, and rivets.....	91.6	90.0	84.9	94.4	90.6	81.0	26.41	25.69	24.42	33.0	37.1	35.0	69.7	69.5	69.9
Cast-iron pipe.....	66.1	65.7	65.4	55.7	54.5	53.8	20.01	19.71	19.54	34.0	33.9	34.1	58.4	58.0	56.9
Cutlery (not including silver and plated cutlery) and edge tools.....	82.9	82.6	80.2	78.6	75.5	73.6	23.93	23.11	23.22	39.8	39.0	39.3	60.7	60.2	59.7
Forgings, iron and steel.....	49.6	48.0	45.6	49.4	44.4	41.9	29.25	27.18	26.94	33.4	36.0	36.3	76.2	74.6	74.3
Hardware.....	86.3	84.4	79.5	90.1	93.2	86.3	25.31	26.79	26.32	38.0	39.0	38.8	66.7	68.9	68.0
Plumbers' supplies.....	72.6	73.0	73.1	60.4	54.9	62.0	23.55	21.34	24.14	35.7	32.0	36.1	66.1	66.6	66.7
Stamped and enameled ware.....	134.3	133.6	128.7	136.0	133.5	133.3	24.33	24.03	24.88	38.5	38.1	39.7	62.9	63.2	62.1
Steam and hot-water heating apparatus and steam fittings.....	67.9	69.1	71.3	56.4	53.3	50.0	25.05	23.27	24.98	35.9	33.9	36.3	69.9	68.9	69.0
Stoves.....	74.7	78.9	83.1	61.4	62.7	75.7	24.30	23.55	26.98	36.9	35.5	41.0	67.2	66.7	66.2
Structural and ornamental metal work.....	61.9	60.7	61.1	53.2	50.1	50.5	27.18	26.07	26.12	37.4	36.0	36.3	72.7	72.5	72.0
Tin cans and other tinware.....	84.1	84.0	86.2	87.9	87.5	89.2	22.76	22.50	22.50	37.7	37.3	37.3	60.8	60.7	60.6
Tools (not including edge tools, machine tools, files, and saws).....	83.9	80.9	77.0	82.0	75.8	71.9	24.19	23.24	23.11	39.6	38.0	38.2	61.2	61.2	60.8
Wirework.....	171.6	164.6	146.5	185.9	180.2	156.1	26.16	26.39	25.65	38.6	38.8	37.9	67.8	68.1	68.0
Machinery, not including transportation equipment.....	91.8	89.5	87.2	89.2	83.9	81.9	26.93	26.04	26.07	37.4	36.2	36.3	72.1	72.0	71.7
Agricultural implements (including tractors).....	105.0	96.6	93.7	113.5	95.0	92.4	29.76	27.08	27.11	37.3	34.3	35.2	80.2	79.4	77.7
Cash registers, adding machines, and calculating machines.....	134.6	135.4	136.1	118.8	119.7	119.7	28.51	28.57	28.43	35.1	35.0	34.9	82.1	82.3	82.2
Electrical machinery, apparatus, and supplies.....	83.7	83.2	80.7	82.4	80.4	78.0	27.08	26.69	26.71	37.0	36.7	36.5	73.2	73.0	73.2
Engines, turbines, water wheels, and windmills.....	85.3	83.5	83.4	98.0	91.6	90.4	29.73	28.35	28.01	37.7	36.2	35.8	79.3	78.6	78.5
Foundry and machine-shop products.....	81.7	78.9	77.5	75.9	70.6	69.4	26.48	25.51	25.54	37.2	35.8	36.0	71.2	71.3	70.9

Machine tools.....	119.9	117.6	115.8	120.0	110.8	110.5	28.44	26.78	27.12	38.4	36.3	36.8	74.0	73.8	73.8
Radios and phonographs.....	118.0	118.8	108.0	107.6	106.9	97.9	22.02	22.40	22.53	38.8	38.5	39.1	58.2	58.2	57.7
Textile machinery and parts.....	67.0	64.2	61.3	66.9	61.3	56.5	26.08	24.83	24.09	41.0	36.6	36.6	63.5	67.0	66.0
Typewriters and parts.....	127.9	128.9	125.3	130.3	130.9	128.1	24.46	24.39	24.55	38.1	37.9	38.0	64.1	64.4	64.6
Transportation equipment.....	96.1	91.6	79.4	98.7	95.9	83.8	32.64	33.64	33.88	36.4	37.1	38.6	89.8	90.6	87.8
Aircraft.....	845.1	814.9	785.8	879.6	799.0	780.8	31.72	29.81	30.79	42.0	40.2	40.4	76.5	75.1	75.5
Automobiles.....	106.9	101.9	86.3	107.4	107.6	91.3	33.15	34.89	34.98	36.0	37.5	38.7	92.4	93.2	90.6
Cars, electric- and steam-railroad.....	29.8	26.3	25.3	28.2	23.1	23.5	25.93	24.21	25.62	35.6	32.7	34.7	72.8	74.0	73.9
Locomotives.....	17.4	16.9	16.1	13.7	12.8	11.1	25.34	24.30	22.14	32.9	31.7	29.2	77.0	76.5	75.9
Shipbuilding.....	100.5	96.6	92.1	107.3	94.2	95.1	31.87	20.05	30.75	37.5	34.5	36.9	84.7	83.8	83.2
Nonferrous metals and their products.....	94.8	95.4	92.2	90.1	90.2	88.5	25.76	25.70	26.06	38.6	38.7	39.7	66.7	66.2	65.9
Aluminum manufactures.....	140.4	143.2	142.4	144.0	148.0	148.4	26.33	26.44	26.66	38.5	40.4	40.1	68.3	65.5	66.5
Brass, bronze, and copper products.....	100.2	100.5	96.4	98.9	99.8	96.2	26.92	27.14	27.28	38.2	38.3	38.5	70.8	71.0	70.9
Clocks and watches and time-recording devices.....	82.9	84.1	83.6	83.2	87.1	85.6	21.23	21.88	21.66	36.9	38.1	37.7	57.6	57.9	57.5
Jewelry.....	96.9	101.0	100.3	84.9	82.7	91.8	24.11	22.81	25.89	40.8	39.2	45.2	50.2	57.6	56.3
Lighting equipment.....	94.2	91.6	85.4	84.7	83.4	78.1	24.41	25.43	25.53	36.6	37.6	38.7	69.1	67.7	65.9
Silverware and plated ware.....	66.9	66.5	64.0	68.3	66.2	62.4	28.07	27.39	26.77	43.3	42.4	41.5	65.0	64.9	64.5
Smelting and refining—Copper, lead, and zinc.....	72.5	71.1	66.4	68.2	65.8	62.2	26.58	26.03	26.34	38.4	37.9	38.2	69.2	68.8	68.9
Lumber and allied products.....	64.1	65.2	65.7	56.1	56.2	60.0	30.14	19.91	21.09	38.0	37.6	41.0	53.2	53.3	52.0
Furniture.....	79.8	79.5	79.7	67.8	64.9	68.4	20.60	19.75	20.77	39.4	37.9	40.5	52.7	52.4	51.8
Lumber:															
Millwork.....	54.0	54.9	54.0	44.6	44.5	46.0	21.71	21.40	22.40	40.2	39.7	42.4	54.1	54.0	52.8
Sawmills.....	50.9	52.3	53.1	44.9	46.4	50.4	19.27	19.57	20.04	36.7	37.0	40.9	53.3	53.7	52.0
Stone, clay, and glass products.....	70.5	71.6	70.1	63.5	63.8	63.0	24.03	23.82	23.96	36.5	36.3	37.1	65.1	64.5	64.0
Brick, tile, and terra cotta.....	51.3	52.4	52.0	39.4	39.0	40.6	20.06	19.46	20.37	37.2	36.5	38.8	53.7	53.1	52.6
Cement.....	62.6	67.8	70.1	57.2	63.7	65.4	25.50	26.15	26.02	37.1	34.0	37.8	68.8	68.8	69.2
Glass.....	93.0	92.1	87.5	99.4	98.6	92.9	25.76	25.63	25.47	35.7	35.7	35.6	72.3	72.2	71.6
Marble, granite, slate, and other products.....	42.3	42.9	42.3	31.4	30.7	30.1	25.08	24.12	23.87	35.4	34.9	35.2	71.0	68.8	66.8
Pottery.....	79.9	80.0	77.7	75.5	74.5	73.2	23.56	23.12	23.41	37.3	36.8	37.2	63.1	62.4	62.6
<i>Nondurable goods</i>															
Textiles and their products.....	98.6	96.9	97.5	83.3	78.4	83.1	16.99	16.35	17.00	35.7	34.6	35.5	46.2	47.8	48.6
Fabrics.....	91.8	89.5	87.2	81.1	77.3	76.5	16.80	16.35	16.65	37.1	36.3	37.0	46.1	46.0	45.9
Carpets and rugs.....	81.5	79.5	76.7	71.1	66.9	66.0	23.03	22.29	22.78	36.8	35.5	36.0	62.6	62.7	63.2
Cotton goods.....	87.1	86.1	83.7	75.7	73.6	72.4	14.13	13.89	14.04	36.8	36.2	36.8	38.4	38.4	38.2
Cotton small wares.....	84.5	83.0	79.9	82.2	77.3	77.4	18.46	17.81	18.56	39.1	38.0	39.9	47.7	47.4	46.0
Dyeing and finishing textiles.....	112.1	109.3	105.8	97.2	92.7	92.0	20.87	20.47	20.99	39.0	38.2	39.2	53.2	53.0	53.0
Hats, fur-felt.....	82.4	82.8	89.1	75.3	70.1	78.0	23.84	21.77	22.13	34.7	31.5	31.2	70.5	69.7	67.2
Knit goods.....	115.1	114.2	114.5	110.5	118.5	122.1	18.15	18.18	18.68	36.8	36.8	37.7	50.4	50.5	50.8
Hosiery.....	145.7	144.8	143.9	164.1	165.0	167.0	19.51	19.74	20.13	36.9	37.2	37.5	53.3	53.8	54.4
Knitted outerwear.....	79.0	78.2	83.3	73.3	68.6	77.0	17.87	16.81	17.91	38.0	36.6	39.2	46.7	45.9	45.4
Knitted underwear.....	71.2	70.9	70.2	62.4	61.4	62.7	14.75	14.58	15.06	35.0	35.0	36.1	42.2	41.5	41.5
Knitted cloth.....	160.2	155.8	156.3	126.8	119.6	131.0	17.93	17.45	18.99	38.1	37.2	40.8	46.9	46.9	46.0
Silk and rayon goods.....	63.2	61.7	61.2	51.8	48.6	50.2	15.79	15.15	15.83	37.2	35.6	37.2	42.3	42.1	42.2
Woolen and worsted goods.....	85.3	78.4	71.9	72.8	63.7	68.1	19.80	18.78	18.75	37.8	35.8	35.6	52.4	52.6	52.7

See footnotes at end of table.

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

MANUFACTURING—Continued

Industry	Employment index			Pay-roll index			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	December 1933	November 1933	October 1933	December 1933	November 1933	October 1933	December 1933	November 1933	October 1933	December 1933	November 1933	October 1933	December 1933	November 1933	October 1933
<i>Nondurable goods—Continued</i>															
Textiles and their products—Continued.													<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Wearing apparel.....	112.2	112.0	119.6	84.7	78.0	93.0	\$17.61	\$16.35	\$18.01	33.1	31.4	33.1	52.1	51.0	53.1
Clothing, men's.....	97.1	98.1	104.5	68.3	63.1	74.9	18.39	10.73	18.68	31.5	28.9	31.4	58.7	57.2	59.1
Clothing, women's.....	160.6	158.5	171.4	114.8	101.7	128.8	18.88	17.10	19.94	33.5	31.1	33.0	51.8	50.5	54.8
Corsets and allied garments.....	99.6	98.5	98.9	102.8	99.8	104.8	17.38	16.90	17.75	37.3	36.8	38.8	46.3	46.0	45.8
Men's furnishings.....	149.0	149.7	149.2	143.3	150.7	140.1	15.08	15.91	14.85	35.6	38.3	36.7	37.9	38.0	36.4
Millinery.....	57.8	55.1	74.2	43.2	40.4	62.7	19.12	18.99	21.92	28.7	28.6	33.9	63.9	60.3	62.3
Shirts and collars.....	116.4	117.7	119.2	105.3	104.1	99.3	14.00	13.70	12.84	35.4	35.3	34.7	39.6	38.9	37.0
Leather and its manufactures.....	88.6	84.8	89.6	70.0	62.4	69.6	18.62	17.22	18.32	38.2	32.8	35.3	52.6	53.3	53.0
Boots and shoes.....	87.6	83.3	89.9	63.3	54.4	64.5	17.11	15.41	16.97	35.5	31.3	34.6	50.0	50.8	50.6
Leather.....	85.3	84.0	81.2	87.6	84.7	81.7	24.77	24.30	24.23	39.2	38.6	38.5	63.1	62.9	63.0
Food and kindred products.....	120.1	123.4	128.8	120.9	122.4	127.0	24.72	24.22	24.11	40.4	40.1	41.0	61.9	61.2	59.8
Baking.....	143.5	144.6	144.3	138.2	139.7	130.5	25.26	25.21	25.30	41.3	41.6	42.0	61.6	61.1	60.9
Beverages.....	223.3	229.2	233.6	257.2	264.7	272.6	32.02	32.11	32.50	37.4	37.8	38.5	86.4	85.7	85.5
Butter.....	95.1	96.8	99.4	80.4	82.4	85.6	22.10	22.27	22.52	45.4	45.8	46.6	48.8	48.7	48.3
Canning and preserving.....	85.3	103.3	147.3	77.4	86.0	130.3	16.55	15.14	10.07	35.4	33.5	37.3	48.1	47.0	44.9
Confectionery.....	91.3	90.6	93.0	91.5	84.9	91.6	18.65	17.40	18.23	40.3	37.8	40.2	46.6	46.7	45.9
Flour.....	78.1	78.2	77.5	73.0	73.8	79.7	24.42	24.67	20.88	40.8	41.6	45.2	59.7	59.5	58.7
Ice cream.....	68.7	70.4	73.7	60.0	60.7	63.6	29.21	28.89	20.06	45.2	44.9	45.1	63.8	63.5	63.4
Slaughtering and meat packing.....	102.4	100.7	97.4	112.5	110.0	110.0	27.68	27.54	28.51	40.8	40.5	41.8	68.2	68.5	68.5
Sugar, beet.....	230.7	274.8	270.3	221.9	275.3	228.4	24.75	25.77	21.74	47.0	51.2	42.5	53.0	50.6	51.4
Sugar refining, cane.....	84.4	86.6	89.0	72.9	75.4	79.3	23.29	23.46	23.90	38.2	37.7	38.5	61.0	62.2	62.3
Tobacco manufactures.....	65.2	68.9	66.3	59.6	59.8	60.7	16.92	16.55	16.84	35.9	35.8	37.1	46.9	46.2	45.6
Chewing and smoking tobacco and snuff.....	62.1	61.9	57.7	73.0	69.1	63.3	18.40	17.47	17.17	36.3	34.2	35.0	50.9	51.3	49.3
Cigars and cigarettes.....	65.6	67.5	67.4	57.9	58.5	60.3	16.56	16.33	10.77	35.9	35.9	37.4	46.4	45.6	45.2
Paper and printing.....	108.0	107.0	105.5	107.3	103.3	103.7	28.61	27.58	28.14	38.6	37.9	38.6	77.1	76.2	76.4
Boxes, paper.....	103.9	105.2	102.8	109.4	110.0	112.7	21.49	21.34	22.20	40.3	40.4	42.2	53.8	53.3	53.2
Paper and pulp.....	106.3	105.9	104.8	103.4	102.9	106.5	23.85	23.78	24.85	39.0	38.9	40.6	61.3	61.3	61.3

Printing and publishing:																				
Book and job.....	103.7	101.4	99.6	96.9	89.1	87.9	31.10	29.22	29.35	39.3	37.1	37.3	79.8	79.9						
Newspapers and periodicals.....	108.0	107.1	106.0	113.2	109.6	108.7	38.56	37.11	37.25	36.7	36.4	36.5	101.1	98.5	99.1					
Chemicals and allied products, and petroleum refining.....	112.7	113.0	113.4	120.1	119.1	120.1	28.52	28.26	28.41	38.2	37.8	38.7	74.3	74.4	73.6					
Petroleum refining.....	118.1	118.9	119.5	134.1	133.6	132.8	35.30	34.86	34.45	36.4	35.8	35.5	97.4	97.9	97.6					
Other than petroleum refining.....	111.4	111.6	111.9	115.8	114.6	116.2	25.66	25.41	25.79	38.9	38.6	39.9	65.8	65.7	64.8					
Chemicals.....	116.9	117.2	114.8	129.8	128.1	128.1	30.72	30.22	30.88	39.1	38.9	39.8	78.1	77.6	77.5					
Cottonseed—oil, cake, and meal.....	113.9	116.3	122.1	95.5	100.1	104.0	12.76	13.11	13.04	43.4	44.7	51.3	29.0	28.8	25.2					
Druggists' preparations.....	109.2	109.7	110.3	120.2	119.6	123.9	24.80	24.54	25.31	39.6	38.7	40.3	59.3	58.9	58.9					
Explosives.....	82.7	82.8	84.1	95.1	91.7	96.5	31.64	30.45	31.62	39.5	38.0	39.4	80.1	80.2	80.3					
Fertilizers.....	82.3	78.5	79.5	70.0	65.2	70.1	15.75	15.38	16.41	35.5	33.9	36.7	44.4	45.4	44.8					
Paints and varnishes.....	112.4	112.4	112.9	115.4	113.8	116.3	27.80	27.34	27.83	39.9	39.4	40.1	69.9	69.5	69.4					
Rayon and allied products.....	311.3	312.8	314.4	302.4	302.7	302.6	23.80	23.74	23.63	37.1	37.0	37.0	64.1	64.1	63.9					
Soap.....	88.6	88.9	93.2	89.7	88.3	94.8	28.80	28.29	28.96	38.8	38.0	39.4	74.5	74.6	73.7					
Rubber products.....	83.6	82.4	77.7	89.0	85.2	79.7	28.40	27.58	27.27	37.4	36.7	36.6	78.4	75.6	75.6					
Rubber boots and shoes.....	65.1	63.4	60.1	65.9	60.6	61.6	23.17	21.88	23.48	38.8	36.6	38.7	59.7	59.7	60.7					
Rubber tires and inner tubes.....	67.2	66.1	63.5	79.0	75.3	69.1	33.80	32.77	31.25	35.2	34.5	33.1	96.3	95.2	94.4					
Rubber goods, other.....	134.7	133.6	123.3	133.7	130.7	122.6	23.44	23.09	23.43	39.4	39.2	40.0	60.1	59.5	59.2					

NONMANUFACTURING

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

Coal mining:																				
Anthracite.....	51.3	51.0	52.4	42.5	36.2	43.4	\$26.99	\$23.14	\$26.99	29.3	24.9	28.8	Cents	Cents	Cents					
Bituminous.....	89.3	88.6	87.2	80.9	81.4	78.3	24.05	24.31	23.84	27.5	27.7	26.8	91.7	87.8	87.5					
Metalliferous mining.....	62.3	61.9	57.9	54.3	52.3	49.2	27.16	26.36	26.52	39.8	38.7	39.5	68.5	68.4	67.5					
Quarrying and nonmetallic mining.....	41.4	44.4	44.4	33.7	37.2	39.2	20.42	21.03	22.37	37.2	38.1	40.9	55.1	55.4	54.4					
Crude petroleum producing.....	67.7	68.3	69.5	62.5	63.3	63.7	33.41	34.22	33.81	39.0	39.0	39.7	86.3	86.1	83.9					
Public utilities:																				
Telephone and telegraph.....	74.2	74.4	74.7	92.7	93.0	95.3	30.71	30.96	31.57	39.3	39.2	39.8	81.2	82.4	82.7					
Electric light and power and manufactured gas.....	91.4	91.9	92.5	98.2	98.6	99.9	33.72	33.61	33.72	39.9	39.8	39.8	84.5	84.7	84.5					
Electric-railroad and motorbus operation and maintenance.....	69.4	69.5	69.9	69.5	68.8	68.9	32.59	32.35	32.23	45.6	44.9	44.7	70.4	71.1	71.2					
Trade:																				
Wholesale.....	90.0	89.8	89.1	75.6	75.4	75.1	29.10	29.35	29.70	41.8	41.8	42.3	69.6	70.1	70.6					
Retail.....	98.1	86.9	85.9	79.4	71.5	70.8	20.13	20.76	21.04	42.7	42.3	42.4	52.6	54.0	53.8					
General merchandising.....	146.0	104.5	99.4	122.9	91.8	88.3	16.95	17.43	17.62	41.0	39.1	39.0	44.4	47.9	48.1					
Other than general merchandising.....	86.0	82.3	82.3	70.3	67.3	67.2	24.12	23.91	24.04	43.5	43.4	43.5	56.5	56.1	55.7					

See footnotes at end of table.

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

NONMANUFACTURING—Continued

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

Industry	Employment index			Pay-roll index			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938
Hotels (year-round) ^{2 3 4}	91.9	92.5	92.9	81.1	81.3	80.8	\$15.02	\$15.07	\$15.01	46.3	47.2	46.7	<i>Cents</i> 32.3	<i>Cents</i> 31.8	<i>Cents</i> 31.9
Laundries ²	93.4	93.7	94.4	80.0	79.3	79.5	17.43	17.30	17.24	42.2	41.8	41.4	41.4	41.6	41.8
Dyeing and cleaning ³	97.9	102.5	106.8	68.3	73.9	78.0	19.23	19.66	19.91	40.7	41.4	42.1	48.7	48.5	47.9
Brokerage ^{3 5}	+2	+7	-9	+9	+1.5	+1.2	36.59	36.22	35.76	(6)	(6)	(6)	(6)	(6)	(6)
Insurance ^{3 5}	+1	-2	-5	+1.2	+1.3	+2	35.79	36.00	35.56	(6)	(6)	(6)	(6)	(6)	(6)
Building construction ⁵	-6.7	-4.2	+3.3	-6.6	-8.4	+5.2	28.97	28.95	30.11	31.7	31.9	33.8	91.4	90.7	89.2

¹ Average weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments, as all reporting firms do not furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample. Hours and earnings for all manufacturing industries now relate to 87 industries instead of 89 which were covered in the July and prior issues of the pamphlet. The 2 industries excluded are electric- and steam-railroad repair shops. The averages for the durable goods group have also been affected by this exclusion. See text in section headed, "Employment, pay rolls, hours, and earnings."

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

³ Average weekly earnings, hourly earnings, and hours not strictly comparable with

figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

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

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

⁶ Not available.

⁷ Percentage change in employment from August to September 1938 revised from +0.6 to -0.3.

⁸ September 1938 indexes for retail trade revised as follows: Total, employment 84.7 pay roll 69.4; general merchandising group, employment 97.0, pay roll 85.3.

INDEXES OF EMPLOYMENT AND PAY ROLLS

Indexes of employment and pay rolls are given in table 6 for all manufacturing industries combined, for specified groups and subgroups of manufacturing industries, for each of 87 manufacturing industries, and for each of 13 nonmanufacturing industries, including 2 subgroups under retail trade, by years where available from 1923 to 1938, inclusive, and by months, from January 1938 to December 1938, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to December 1938.

The indexes of factory employment and pay rolls are based on the 3-year average 1923-25 as 100. They relate to wage earners only and are computed from reports supplied by representative manufacturing establishments in 87 manufacturing industries. These reports cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 87 industries included in the monthly survey of the Bureau of Labor Statistics.

The indexes for the nonmanufacturing industries are based on the 12-month average for 1929 as 100. Figures for mining, laundries, and dyeing and cleaning cover wage earners only, but the figures for public utilities, trade, and hotels relate to all employees, except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum producing they cover wage earners and clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from 25 percent for wholesale trade to 90 percent for quarrying and nonmetallic mining.

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.

EMPLOYMENT & PAY ROLLS ALL MANUFACTURING INDUSTRIES

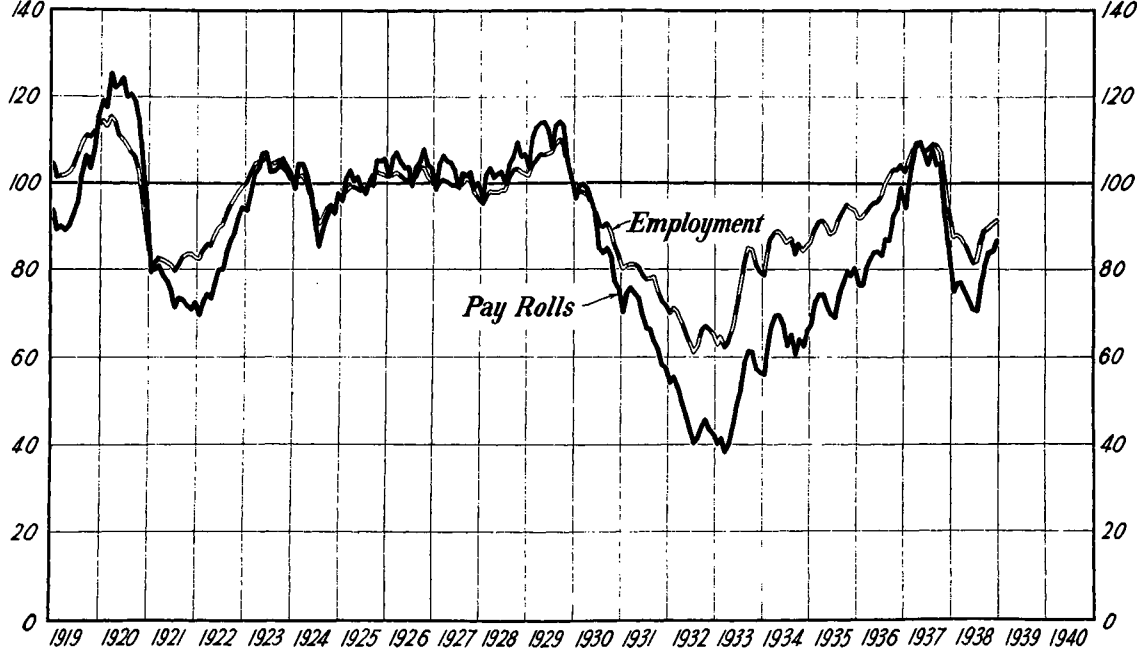
1923-25=100

Index Numbers

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Index Numbers

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UNITED STATES BUREAU OF LABOR STATISTICS

TABLE 6.—*Employment and Pay-Roll Indexes*

MANUFACTURING INDUSTRIES

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

Year and month	All industries		Durable-goods group ¹		Nondurable-goods group ²		Iron and steel and their products, not including machinery					
							Iron and steel group		Blast furnaces, steel w rks, and rolling mills		Bolts, nuts, washers, and rivets	
	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	103.8	102.9	104.1	103.2	103.6	102.5	104.1	103.5	104.5	101.5	112.5	111.5
1924	96.4	96.0	96.4	95.9	96.4	96.1	97.0	96.5	97.1	96.5	89.5	89.5
1925	99.8	101.1	99.5	100.9	100.0	101.4	98.9	100.0	98.4	99.0	98.0	99.0
1926	101.7	104.2	102.5	104.8	100.9	103.6	102.3	104.8	101.0	103.0		
1927	99.5	102.4	96.5	98.9	102.3	106.3	97.1	98.5	95.7	98.7	96.0	95.6
1928	99.7	103.5	97.7	102.3	101.6	104.9	97.0	100.6	96.2	100.6		
1929	106.0	110.4	106.2	111.2	105.9	109.6	103.3	108.3	103.2	109.6	114.0	122.0
1930	92.4	89.4	87.6	83.8	96.9	95.6	89.9	86.3	90.3	87.7		
1931	78.1	67.8	67.7	55.6	87.9	81.4	70.3	55.7	68.4	53.6	74.2	56.2
1932	66.3	46.7	52.8	33.4	79.2	61.6	57.4	31.3	57.8	27.4	55.2	32.5
1933	73.4	50.1	57.5	36.8	88.5	65.0	65.8	39.9	71.0	40.5	59.8	39.5
1934	85.7	64.5	73.0	52.5	97.8	78.0	80.2	53.9	86.2	55.0	76.0	57.2
1935	91.3	74.1	81.3	65.0	100.7	81.2	87.1	66.5	92.1	68.7	88.1	73.8
1936	97.8	85.6	91.5	81.7	103.8	89.9	99.0	86.6	105.4	92.2	99.5	93.3
1937	105.8	102.0	104.0	103.5	107.6	100.4	111.4	109.8	120.0	120.5	113.6	114.6
1938	86.8	77.5	77.3	68.2	96.0	88.0	82.7	66.6	87.7	66.9	82.4	69.2
1938												
January	87.8	75.0	81.7	67.1	93.7	84.0	86.4	60.9	94.5	60.7	83.1	57.4
February	88.2	76.9	80.1	67.2	95.9	87.8	85.3	63.2	92.7	63.7	83.2	61.9
March	87.7	77.1	79.3	67.4	95.8	87.9	84.4	64.3	90.9	64.5	81.1	61.6
April	85.7	74.6	77.0	65.6	94.0	84.7	82.3	63.3	88.2	64.3	80.0	59.9
May	83.4	72.9	75.0	64.2	91.5	82.6	80.7	62.7	85.8	62.9	80.7	65.0
June	81.6	70.8	72.4	61.7	90.3	80.9	77.8	59.1	82.3	58.1	77.3	61.1
July	81.9	70.6	70.3	58.6	92.9	84.1	76.7	57.4	82.2	56.8	77.2	58.5
August	85.7	76.9	71.7	63.7	99.0	91.7	79.4	65.3	83.8	65.3	78.1	66.3
September	88.8	81.0	75.3	68.7	101.7	94.9	81.7	66.6	84.7	67.6	81.9	73.1
October	89.5	83.8	79.0	75.2	99.4	93.4	83.9	74.9	86.1	73.9	84.9	81.0
November	90.5	84.1	82.1	78.3	98.4	90.6	86.5	79.1	89.8	81.9	90.0	90.6
December	91.2	86.6	83.1	80.4	98.8	93.5	87.4	80.8	91.1	83.2	91.6	94.4
iron and steel and their products, not including machinery—Continued												
Year and month	Cast-iron pipe		Cutlery (not including silver and plated cutlery) and edge tools		Forgings—iron and steel		Hardware		Plumbers' supplies		Stamped and enameled ware	
	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	96.0	94.6	99.6	97.9	116.5	113.9	101.6	100.1	89.9	89.5	110.1	111.2
1924	101.6	101.7	102.4	101.8	97.4	97.4	96.6	96.3	100.1	100.0	95.7	92.8
1925	102.4	103.7	98.0	100.3	86.1	88.7	101.8	103.6	110.0	110.5	94.2	96.0
1926	110.1	110.5					100.8	106.3			96.9	98.3
1927	101.8	98.2	94.6	93.7	65.5	66.7	93.0	96.1	96.7	94.6	93.0	95.7
1928	92.4	85.3					92.8	96.0			104.1	108.0
1929	87.8	85.2	89.5	87.5	87.8	97.8	101.7	106.9	92.5	87.2	120.5	125.6
1930	80.4	75.3					88.6	81.6			106.3	104.9
1931	71.5	55.1	74.2	60.4	41.9	32.5	70.3	58.9	65.1	48.0	85.4	76.8
1932	46.3	25.1	67.4	47.2	32.1	17.9	58.9	38.4	48.3	27.3	79.5	56.5
1933	42.1	22.1	64.5	43.8	33.4	20.9	63.4	42.6	52.6	30.3	97.2	66.7
1934	57.5	34.0	80.0	59.0	46.3	34.4	76.5	56.5	46.3	29.4	131.9	102.3
1935	60.3	39.2	81.9	67.0	51.5	42.9	80.8	67.0	66.6	50.0	150.5	128.2
1936	69.9	54.4	84.6	74.1	58.6	52.8	85.5	80.7	75.9	60.4	160.2	147.4
1937	73.7	65.2	93.7	87.9	69.4	68.4	99.0	100.8	82.6	72.0	171.6	169.1
1938	63.3	51.0	78.3	66.3	44.9	36.6	70.1	64.2	72.1	56.5	122.7	115.1
1938												
January	61.4	44.7	82.7	66.6	51.6	37.4	75.2	55.5	70.6	53.3	122.5	104.2
February	60.0	43.8	82.8	67.2	47.8	35.3	71.8	59.3	71.3	51.0	122.8	109.3
March	61.5	48.5	83.4	66.9	45.8	35.4	70.5	56.4	70.6	52.5	128.1	118.8
April	63.3	50.5	83.0	63.6	43.6	32.7	64.9	51.8	70.9	54.2	126.0	115.6
May	63.3	50.6	76.6	61.7	42.8	31.0	63.5	53.2	71.8	58.9	122.6	109.1
June	63.5	51.1	75.4	61.5	40.2	29.3	61.3	52.4	72.5	57.6	112.5	99.7
July	61.7	51.9	63.9	52.1	38.5	28.9	56.5	48.3	72.5	55.3	105.1	92.0
August	63.0	53.0	74.5	60.9	41.5	31.5	60.6	57.6	73.1	57.3	114.1	109.9
September	64.6	53.8	77.7	67.5	43.5	37.7	66.9	65.7	73.2	59.0	121.6	119.9
October	65.4	53.8	80.2	73.6	45.6	41.9	79.5	86.3	73.1	62.6	128.7	133.3
November	65.7	54.5	82.6	75.5	48.0	44.4	84.4	93.2	73.0	54.8	133.6	133.5
December	66.1	55.7	82.9	78.6	49.6	49.4	86.3	90.1	72.6	60.4	134.3	136.0

See footnotes at end of table.

TABLE 6.—*Employment and Pay-Roll Indexes—Continued*

MANUFACTURING INDUSTRIES—Continued

Year and month	Iron and steel and their products, not including machinery—Continued											
	Steam and hot-water heating apparatus and steam fittings		Stoves		Structural and ornamental		Tin cans and other tinware		Tools, not including edge tools, machine tools, file, and saws		Wirework	
	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.....	102.2	101.7	106.0	103.5	101.4	104.0	101.0	97.7	105.7	103.1	93.1	89.6
1924.....	97.7	98.0	95.0	96.0	97.7	96.6	100.0	100.0	102.2	101.8	100.0	100.0
1925.....	100.1	100.3	99.0	100.5	97.9	99.4	99.0	102.3	92.1	95.1	106.9	110.4
1926.....	102.6	105.5	104.2	105.8	107.5	109.9						
1927.....	99.3	101.6	96.2	97.5	106.1	108.8	98.4	104.2	91.7	95.6	120.4	122.5
1928.....	92.4	94.4	94.0	93.5	106.5	111.0						
1929.....	91.6	92.4	99.3	98.8	111.2	112.8	104.3	113.6	107.6	117.8	124.2	129.3
1930.....	78.3	69.0	83.1	71.3	98.9	94.2						
1931.....	67.1	46.3	69.4	53.4	76.0	61.5	83.7	83.3	60.4	51.1	95.6	80.6
1932.....	47.4	26.8	55.0	33.4	49.7	29.9	73.3	65.8	48.8	33.2	87.6	56.8
1933.....	51.6	30.6	64.3	40.8	43.3	23.9	77.3	67.6	53.5	37.2	97.9	65.6
1934.....	58.9	39.6	78.4	52.6	54.3	34.7	88.6	78.7	64.6	50.6	124.1	93.4
1935.....	62.7	45.1	88.9	66.9	55.2	36.2	91.0	82.9	70.4	60.6	139.7	117.8
1936.....	75.6	60.9	98.2	81.4	69.1	53.2	99.5	94.5	83.2	78.4	164.2	151.4
1937.....	86.1	77.7	102.0	86.1	79.2	70.8	105.4	109.5	93.4	98.0	194.8	194.7
1938.....	66.7	51.2	73.6	58.8	61.2	50.4	89.3	93.1	76.9	68.2	135.3	128.9
<i>1938</i>												
January.....	64.6	47.8	61.1	41.7	66.2	54.2	87.9	89.6	81.3	70.8	148.1	125.4
February.....	63.7	46.6	70.8	53.8	63.7	52.0	86.9	89.6	79.3	68.0	138.1	118.1
March.....	64.7	47.0	73.3	57.4	62.0	50.6	88.3	92.9	79.2	71.2	134.7	122.7
April.....	63.6	45.9	72.1	56.3	61.2	49.4	88.7	91.2	76.6	65.3	131.0	118.7
May.....	65.1	47.5	73.4	58.4	59.7	48.8	87.5	91.8	74.8	64.0	129.4	114.4
June.....	61.9	51.0	71.4	55.4	58.3	46.7	88.9	92.6	73.0	60.9	115.5	99.8
July.....	67.1	51.5	68.2	52.0	59.1	48.8	91.4	94.1	69.7	57.6	109.6	91.6
August.....	69.0	55.5	76.0	61.5	59.8	51.2	99.5	107.0	71.9	63.0	106.2	99.8
September.....	69.8	53.3	79.7	69.2	60.5	49.7	97.6	103.0	71.8	67.1	127.9	134.2
October.....	71.3	59.0	83.1	75.7	61.1	50.5	86.2	89.2	77.0	71.9	146.5	156.1
November.....	69.1	53.3	78.9	62.7	60.7	50.1	84.6	87.5	80.9	75.8	164.6	180.2
December.....	67.9	56.4	74.7	61.4	61.9	53.2	84.1	87.9	83.9	82.0	171.6	185.9
<i>Machinery, not including transportation equipment</i>												
Year and month	Machinery group		Agricultural implements (including tractors)		Cash registers, adding machines, and calculating machines		Electrical machinery, apparatus, and supplies		Engines, turbines, water wheels and windmills			
	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.....	105.8	104.1	110.2	110.1	107.4	105.1	103.0	100.1	99.0	99.0	101.6	101.6
1924.....	94.9	94.9	86.8	85.6	97.2	97.3	97.9	98.2	90.0	90.0	88.6	88.6
1925.....	99.3	101.0	103.0	104.3	95.4	97.6	99.1	100.7	111.0	111.0	109.8	109.8
1926.....	107.4	111.1	117.8	124.1					121.9	121.9	134.6	134.6
1927.....	102.4	106.2	116.1	121.7	103.1	100.4			117.3	117.3	131.4	131.4
1928.....	104.9	111.3	132.0	140.7					118.3	118.3	140.1	140.1
1929.....	125.9	134.3	145.5	154.4	120.8	137.3	127.3	134.4	129.0	129.0	150.9	150.9
1930.....	104.9	102.7	115.2	107.9			107.1	109.3	98.4	98.4	102.7	102.7
1931.....	78.3	64.2	65.8	52.1	87.3	69.1	80.9	68.7	70.3	70.3	59.4	59.4
1932.....	57.0	37.3	36.5	25.5	74.9	52.5	60.6	39.7	44.8	44.8	27.1	27.1
1933.....	80.8	40.5	43.3	30.0	78.2	60.1	58.8	38.9	48.3	48.3	33.8	33.8
1934.....	74.7	59.6	72.2	54.2	108.0	88.5	73.0	54.7	62.0	62.0	52.1	52.1
1935.....	89.1	73.5	118.9	103.9	116.0	95.4	80.7	66.6	69.2	69.2	61.1	61.1
1936.....	103.3	94.1	139.4	130.2	130.3	115.0	91.5	82.3	81.4	81.4	81.2	81.2
1937.....	123.9	126.9	167.4	185.2	150.6	149.6	114.9	115.9	103.6	103.6	118.5	118.5
1938.....	90.9	83.1	121.2	124.0	138.6	123.4	81.6	74.9	86.7	86.7	94.4	94.4
<i>1938</i>												
January.....	104.0	95.1	158.7	169.1	143.0	134.2	96.0	87.3	92.0	92.0	98.8	98.8
February.....	99.7	91.1	152.8	161.8	143.7	120.4	89.9	80.9	91.4	91.4	99.2	99.2
March.....	98.9	88.0	150.3	160.7	142.4	130.0	86.5	77.4	89.4	89.4	100.8	100.8
April.....	93.2	83.6	147.8	152.9	141.9	120.6	81.6	72.0	92.4	92.4	101.7	101.7
May.....	89.7	80.6	133.8	137.2	140.1	122.0	78.1	63.4	90.1	90.1	97.1	97.1
June.....	86.1	76.4	125.2	124.1	137.3	121.4	75.3	66.6	85.5	85.5	89.4	89.4
July.....	82.9	72.7	100.6	98.6	137.5	123.1	73.0	64.1	82.1	82.1	85.9	85.9
August.....	84.1	76.1	99.8	95.6	135.0	120.5	74.0	67.7	82.6	82.6	89.9	89.9
September.....	85.5	78.6	90.3	87.1	136.4	120.8	77.4	73.0	83.1	83.1	90.0	90.0
October.....	87.2	81.9	93.7	92.4	136.1	119.7	80.7	73.0	83.4	83.4	90.4	90.4
November.....	89.5	83.9	96.6	95.0	135.4	119.7	83.2	80.4	83.5	83.5	91.6	91.6
December.....	91.8	89.2	105.0	113.5	134.6	118.8	83.7	82.4	85.3	85.3	98.0	98.0

See footnotes at end of table.

TABLE 6.—*Employment and Pay-Roll Indexes—Continued*
MANUFACTURING INDUSTRIES—Continued

Year and month	Machinery, not including transportation equipment—Continued											
	Foundry and machine-shop products		Machine tools		Radios and phonographs		Textile machinery and parts		Typewriters and parts			
	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.....	108.4	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	80.8	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	-----	-----	90.1	95.7	-----	-----		
1927.....	97.7	99.9	114.3	116.3	-----	-----	85.3	93.2	111.5	113.0		
1928.....	98.8	102.6	127.9	139.8	-----	-----	78.5	84.2	-----	-----		
1929.....	111.3	117.9	167.2	187.6	204.5	202.9	88.1	96.7	121.1	130.1		
1930.....	91.2	89.0	126.0	121.9	141.0	139.8	71.2	66.0	-----	-----		
1931.....	69.7	55.4	74.7	61.5	124.4	96.5	61.3	54.3	77.8	60.0		
1932.....	51.1	21.9	42.1	28.6	80.4	60.5	48.4	35.1	61.6	35.8		
1933.....	51.6	34.9	44.9	30.9	112.1	81.4	60.5	47.9	68.5	44.1		
1934.....	71.0	52.2	75.8	60.7	158.6	110.0	67.6	55.6	102.5	87.6		
1935.....	78.5	62.6	99.5	91.4	152.7	117.8	62.1	54.3	110.0	97.0		
1936.....	92.4	83.0	125.2	125.5	168.1	136.8	69.3	66.4	119.5	115.4		
1937.....	110.5	110.6	158.7	179.3	154.3	134.4	80.6	86.3	152.3	152.8		
1938.....	81.6	71.2	123.4	115.5	90.9	78.9	60.5	53.3	119.4	104.7		
1938												
January.....	92.4	79.8	148.1	151.2	86.0	72.7	66.5	54.9	119.5	88.0		
February.....	89.1	77.5	142.3	138.4	84.4	68.3	63.9	52.8	116.8	102.4		
March.....	87.1	75.2	135.8	129.1	76.1	57.9	61.5	51.3	115.4	94.1		
April.....	83.5	71.4	129.9	116.5	77.9	65.8	58.3	49.4	114.1	91.5		
May.....	81.0	70.0	123.8	111.3	76.3	66.8	58.0	49.3	115.6	92.4		
June.....	77.4	65.7	115.8	99.0	81.6	71.6	54.2	47.2	115.0	93.7		
July.....	75.8	63.7	110.6	94.2	81.6	72.4	53.9	45.3	115.5	91.5		
August.....	77.1	67.2	107.1	97.4	88.9	75.5	57.7	50.2	117.7	97.9		
September.....	77.7	68.1	114.2	107.8	93.5	83.5	59.9	54.1	121.6	115.7		
October.....	77.5	69.4	115.8	110.5	108.0	97.9	61.3	56.5	125.3	128.1		
November.....	78.9	70.6	117.6	110.8	118.8	106.9	64.2	61.3	128.9	130.9		
December.....	81.7	75.9	119.9	120.0	118.0	107.6	67.0	66.9	127.9	130.3		
Transportation equipment												
Year and month	Transportation group		Aircraft		Automobiles		Cars, electric- and steam-railroad		Locomotives		Shipbuilding	
	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.....	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	-----	-----	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.....	98.2	101.6	-----	-----	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	-----	-----	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.....	83.4	61.4	358.5	283.9	94.5	68.2	36.6	27.3	23.9	13.9	74.6	58.9
1935.....	95.3	78.1	407.2	341.3	110.4	89.5	33.9	25.6	19.5	12.8	82.4	68.8
1936.....	102.9	93.4	655.6	551.7	113.9	102.8	46.4	39.4	27.6	21.9	103.9	95.5
1937.....	117.7	115.7	908.9	818.0	128.3	124.1	60.0	61.4	47.9	47.5	111.0	113.2
1938.....	73.3	68.7	828.2	784.9	75.9	69.3	29.5	27.6	25.5	21.0	96.8	100.7
1938												
January.....	82.6	67.6	877.6	786.8	84.7	64.4	39.4	37.7	42.9	37.6	104.8	109.8
February.....	79.9	65.9	882.9	814.7	82.1	62.7	37.3	36.9	39.4	36.9	100.6	105.2
March.....	77.4	65.1	887.9	816.4	79.3	62.3	34.4	33.5	35.9	32.0	100.0	105.1
April.....	71.9	64.9	871.6	803.6	72.9	63.3	32.9	30.5	30.8	25.6	95.7	101.9
May.....	68.2	59.5	847.5	797.0	68.6	56.8	28.4	26.5	27.1	22.3	98.4	102.6
June.....	62.4	57.4	813.6	764.3	61.5	54.4	25.3	24.0	25.1	19.6	98.2	104.7
July.....	55.5	51.0	794.6	736.5	53.1	47.4	22.8	20.2	20.2	15.5	98.8	99.9
August.....	51.0	49.9	758.7	712.8	48.0	47.0	24.3	22.3	18.0	13.1	89.1	90.0
September.....	63.7	64.7	755.5	727.2	64.9	66.3	27.4	25.3	16.1	11.1	89.9	92.3
October.....	79.4	83.8	785.8	780.8	86.3	91.3	25.3	23.5	16.1	11.1	92.1	95.1
November.....	91.6	95.9	814.9	799.0	101.9	107.6	26.3	23.1	16.9	12.8	96.6	94.2
December.....	96.1	98.7	845.1	879.6	106.9	107.4	29.8	28.2	17.4	13.7	100.5	107.3

See footnotes at end of table.

TABLE 6.—*Employment and Pay-Roll Indexes—Continued*
MANUFACTURING INDUSTRIES—Continued

Year and month	Nonferrous metals and their products											
	Nonferrous group		Aluminum manufactures		Brass, bronze, and copper products		Clocks, watches, and time-recording devices		Jewelry		Lighting equipment	
	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.....	104.8	102.8	106.3	100.2	103.4	101.3	97.6	95.7	105.1	105.9	101.3	96.7
1924.....	96.8	96.3	100.0	100.0	96.6	95.6	100.0	100.0	99.8	91.8	100.0	100.0
1925.....	98.4	100.9	93.7	99.8	100.0	103.1	102.4	104.3	95.1	102.3	98.7	103.3
1926.....	.....	.....	.....	.....	102.7	107.4	.....	.....	.....	.....	.....	.....
1927.....	97.0	101.1	96.6	105.5	101.2	104.7	102.9	108.1	96.2	106.9	92.9	97.3
1928.....	.....	.....	.....	.....	107.3	115.6	.....	.....	.....	.....	.....	.....
1929.....	110.2	115.3	138.4	150.0	121.5	128.3	98.2	102.2	111.4	113.3	104.2	110.6
1930.....	.....	.....	.....	.....	96.6	88.7	.....	.....	.....	.....	.....	.....
1931.....	72.4	61.4	90.2	81.3	74.9	60.3	74.3	62.2	74.1	65.6	65.3	60.4
1932.....	58.0	38.6	73.0	46.7	62.5	39.1	58.1	38.0	50.5	42.8	47.0	35.3
1933.....	62.6	41.1	80.1	60.1	73.4	48.0	58.9	39.7	59.3	37.7	46.5	31.6
1934.....	76.3	55.3	106.0	77.6	86.6	62.8	74.1	50.5	73.0	53.3	58.3	42.5
1935.....	86.3	68.3	125.9	102.8	96.7	70.0	82.6	72.5	78.7	60.0	73.6	57.3
1936.....	96.2	82.7	144.4	127.0	108.5	96.0	94.8	90.9	83.4	65.5	87.3	74.2
1937.....	106.8	105.1	164.0	164.6	122.4	123.4	106.4	113.1	94.1	79.9	101.6	94.2
1938.....	86.8	76.6	133.0	128.7	91.8	83.2	81.3	74.8	87.5	71.1	74.9	61.8
<i>1938</i>												
January.....	88.8	74.9	138.0	124.9	93.1	77.1	84.5	82.0	84.1	68.0	73.9	53.7
February.....	88.0	74.4	134.9	125.2	91.2	75.8	88.1	84.3	86.1	69.1	73.8	56.2
March.....	86.9	74.3	133.5	129.5	90.5	77.5	85.9	79.1	86.8	67.9	71.6	55.6
April.....	84.2	69.0	129.0	119.3	88.8	74.5	81.7	64.7	80.0	58.8	70.6	51.8
May.....	81.8	69.0	126.1	119.0	87.3	76.0	78.9	64.4	75.3	56.9	67.9	51.7
June.....	79.8	66.3	121.5	109.4	85.7	72.5	75.2	59.6	77.6	60.4	63.7	50.6
July.....	79.1	67.0	122.0	111.5	86.1	77.9	73.6	59.6	79.2	61.2	62.8	49.6
August.....	83.0	74.1	128.5	125.8	89.0	83.4	77.7	70.3	86.7	70.1	68.4	58.2
September.....	87.9	81.4	136.3	138.8	92.7	89.1	79.9	78.1	96.0	81.4	76.2	69.2
October.....	92.2	88.5	142.4	148.4	96.4	96.2	83.6	85.6	100.3	91.8	85.4	78.1
November.....	95.4	90.2	143.2	148.0	100.5	99.8	84.1	87.1	101.0	82.7	91.6	83.4
December.....	94.8	90.1	140.4	144.0	100.2	98.9	82.9	83.2	96.9	84.9	94.2	84.7
<i>1938</i>												
January.....	59.7	46.3	76.5	73.3	60.0	45.1	75.1	52.0	48.4	34.7	47.9	37.5
February.....	61.3	48.9	72.5	68.5	60.6	48.0	74.8	50.3	50.5	38.0	48.3	39.3
March.....	61.6	51.1	70.9	65.5	62.3	51.8	74.6	56.8	50.7	39.5	51.0	44.5
April.....	60.7	46.5	69.0	64.1	61.6	50.1	71.8	51.9	49.9	38.6	51.0	44.4
May.....	59.3	46.3	67.0	63.4	61.0	50.5	70.0	50.4	48.7	39.5	51.1	45.4
June.....	58.4	44.6	64.5	60.4	60.7	51.2	70.8	52.4	49.7	40.3	50.1	45.4
July.....	50.8	38.1	63.5	56.8	60.7	48.7	71.2	51.3	50.9	41.6	49.8	41.6
August.....	57.5	48.5	63.1	57.9	64.0	58.1	78.0	62.5	52.8	45.6	52.4	50.2
September.....	50.8	55.6	65.4	60.3	55.8	60.0	79.0	68.1	51.0	45.5	53.5	50.6
October.....	64.0	62.4	66.4	62.2	65.7	60.0	79.7	68.4	54.0	46.0	53.1	50.4
November.....	66.5	66.1	71.1	68.8	65.2	58.2	79.5	64.9	54.9	44.5	52.3	46.4
December.....	66.9	68.3	72.5	68.2	64.1	56.1	79.8	67.8	54.0	44.6	50.9	44.9

See footnotes at end of table.

TABLE 6.—*Employment and Pay-Roll Indexes—Continued*

MANUFACTURING INDUSTRIES—Continued

Year and month	Stone, clay, and glass products											
	Stone, clay, and glass group		Brick, tile, and terra cotta		Cement		Glass		Marble, granite, slate, and other products		Pottery	
	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.....	100.4	98.3	100.6	98.1	95.0	94.6	105.1	103.4	104.5	101.7	98.5	97.8
1924.....	98.9	100.5	98.7	101.1	101.0	102.9	95.5	96.9	100.0	100.0	103.8	104.3
1925.....	100.7	101.2	100.7	100.8	104.0	102.5	99.4	99.7	95.5	98.3	97.7	97.9
1926.....	103.8	104.2	102.9	101.8	102.1	100.9	103.8	103.9	-----	-----	99.7	99.8
1927.....	99.9	100.5	99.0	96.7	98.3	101.1	94.3	93.6	105.6	113.0	98.0	94.5
1928.....	95.7	96.2	92.3	87.5	92.0	96.9	92.6	94.5	-----	-----	98.8	93.9
1929.....	93.8	93.7	91.5	84.7	90.3	92.9	96.7	100.9	98.7	104.0	94.7	91.4
1930.....	80.2	76.9	72.2	62.2	84.6	83.4	83.8	82.9	-----	-----	82.9	74.1
1931.....	63.7	53.9	50.2	35.2	65.8	56.0	71.5	66.5	72.2	68.8	72.3	56.4
1932.....	46.7	30.6	31.8	15.5	45.8	29.8	59.6	45.5	47.9	35.3	58.6	35.9
1933.....	49.4	30.8	31.3	15.0	42.8	20.4	71.3	52.0	43.1	27.7	63.2	37.4
1934.....	61.6	41.7	38.0	21.2	55.4	38.7	91.5	70.9	43.3	28.3	74.5	49.5
1935.....	66.6	49.0	43.7	27.4	56.0	39.8	96.1	82.2	39.7	26.8	77.1	58.7
1936.....	73.9	60.2	55.2	40.2	62.0	51.0	98.4	91.8	46.8	35.0	78.6	65.5
1937.....	80.6	72.5	60.5	48.2	71.1	65.9	107.4	112.5	49.1	37.8	83.0	70.7
1938.....	66.5	56.6	48.2	34.8	64.5	59.0	83.9	82.9	42.1	31.5	75.0	65.0
<i>1938</i>												
January.....	63.1	47.9	42.8	26.9	54.3	43.9	87.6	77.7	36.7	24.9	74.4	57.6
February.....	63.0	51.3	42.9	28.2	53.3	44.2	85.4	80.7	40.2	30.3	75.1	66.2
March.....	63.7	53.0	43.8	28.8	57.7	49.7	83.5	81.4	41.2	31.6	75.5	67.5
April.....	65.4	54.3	47.0	32.3	64.6	58.0	81.6	77.6	41.8	33.1	74.4	63.8
May.....	66.0	57.7	48.4	35.7	66.7	65.7	80.7	79.1	43.4	35.5	73.3	65.5
June.....	65.8	56.4	48.3	36.0	68.1	65.1	79.3	77.6	43.7	33.8	73.0	61.0
July.....	64.6	53.1	48.8	35.4	70.3	66.0	74.7	69.1	44.0	33.5	69.5	53.1
August.....	66.3	56.5	49.9	37.2	69.9	65.4	78.7	78.6	43.3	32.0	72.3	58.7
September.....	67.8	58.3	51.2	38.6	68.0	63.4	82.1	82.6	43.0	31.3	74.8	63.9
October.....	70.1	63.0	52.0	40.6	70.1	65.4	87.5	92.9	42.3	30.1	77.7	73.2
November.....	71.6	63.8	52.4	39.0	67.8	63.7	92.1	98.6	42.9	30.7	80.0	74.5
December.....	70.5	63.5	51.3	39.4	62.6	57.2	93.0	99.4	42.3	31.4	79.9	75.5
Textiles and their products												
Year and month	Textiles group		Fabric (subgroup)		Carpets and rugs		Cotton goods		Cotton small wares		Dyeing and finishing textiles	
	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.....	105.2	105.8	105.4	106.0	103.8	109.2	106.7	110.1	104.4	105.5	97.4	96.1
1924.....	94.9	93.8	94.2	93.4	96.2	93.3	92.5	91.6	92.6	91.8	93.9	92.7
1925.....	99.9	100.4	100.4	100.6	100.0	97.5	100.8	98.3	103.0	102.7	108.7	111.2
1926.....	99.9	100.2	99.2	99.4	97.8	93.8	101.9	98.5	-----	-----	110.8	114.2
1927.....	104.0	106.8	101.3	103.8	96.9	94.5	105.8	105.7	95.3	101.3	113.5	121.5
1928.....	101.3	101.7	96.2	95.8	92.8	85.7	95.5	88.4	-----	-----	114.9	121.8
1929.....	104.8	105.2	99.2	99.4	96.2	90.1	96.1	90.1	97.4	102.1	121.8	124.8
1930.....	92.9	85.6	86.0	79.4	74.2	59.7	80.7	69.4	-----	-----	112.0	108.7
1931.....	87.2	75.2	80.3	70.2	67.5	54.3	74.5	61.0	81.7	76.8	103.3	101.2
1932.....	77.9	53.6	71.9	50.4	52.9	31.4	67.1	43.0	72.2	56.2	92.8	73.8
1933.....	90.5	61.8	86.4	61.4	62.8	41.0	85.9	60.2	84.3	66.5	101.8	77.5
1934.....	96.7	73.4	90.4	69.8	68.7	45.0	89.3	68.2	86.0	71.1	113.6	88.5
1935.....	103.5	83.2	95.0	77.9	81.5	62.5	83.5	65.8	85.8	73.4	118.2	94.5
1936.....	106.7	86.8	96.3	80.6	85.4	66.6	88.8	74.0	87.0	77.8	115.8	97.3
1937.....	108.5	92.4	99.0	88.1	95.7	77.5	95.5	86.9	89.8	82.6	114.8	100.5
1938.....	93.0	75.0	83.6	69.7	69.1	52.3	81.6	66.8	74.2	67.3	104.0	87.2
<i>1938</i>												
January.....	89.7	68.0	82.1	64.4	66.2	40.5	82.6	64.3	71.4	59.0	103.8	84.1
February.....	94.7	77.9	83.1	69.0	71.8	48.5	81.8	65.1	73.0	65.8	105.1	89.7
March.....	95.0	78.0	82.2	67.6	71.8	50.7	82.4	66.5	72.7	67.2	105.2	89.1
April.....	91.8	71.8	79.5	63.3	67.8	46.0	79.3	62.1	70.7	61.3	103.6	86.1
May.....	87.4	68.3	78.0	62.0	63.1	41.5	77.1	60.3	70.4	62.0	101.9	83.2
June.....	84.6	62.4	77.2	61.2	48.0	35.5	76.0	58.5	68.3	59.9	98.0	76.8
July.....	86.6	68.8	80.4	65.7	62.8	44.7	78.2	63.7	67.7	58.8	97.0	78.3
August.....	95.1	80.0	85.1	73.4	67.6	55.4	81.3	68.4	72.1	65.3	101.9	87.4
September.....	97.9	84.0	86.6	74.7	72.7	60.8	83.2	71.0	76.4	71.1	104.1	89.5
October.....	97.5	83.1	87.2	76.5	76.7	66.0	83.7	72.4	79.9	77.4	105.8	92.0
November.....	96.9	78.4	89.5	77.3	79.5	66.9	86.1	73.6	83.0	77.3	109.3	92.7
December.....	98.6	83.3	91.8	81.1	81.5	71.1	87.1	75.7	84.5	82.2	112.1	97.2

See footnotes at end of table.

TABLE 6.—*Employment and Pay-Roll Indexes—Continued*

MANUFACTURING INDUSTRIES—Continued

Year and month	Textiles and their products—Continued									
	Hats, fur-felt		Knit goods ^a		Silk and rayon goods		Woolen and worsted goods		Wearing apparel (subgroup)	
	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.....	106.4	107.4	105.1	103.9	99.7	97.4	109.3	109.1	105.4	105.6
1924.....	97.1	90.5	93.9	92.0	94.8	93.0	97.9	97.6	96.1	94.9
1925.....	96.5	102.1	101.0	104.1	105.5	109.6	92.8	93.3	98.5	99.5
1926.....	.....	.....	101.4	108.6	102.9	107.8	84.1	84.0	99.8	99.6
1927.....	101.2	114.1	103.0	116.1	101.5	107.6	86.7	84.7	105.8	107.6
1928.....	.....	.....	104.8	117.4	101.0	107.5	83.1	79.2	108.3	107.5
1929.....	105.3	112.3	112.9	130.1	103.8	105.6	82.6	80.1	113.3	111.0
1930.....	.....	.....	103.2	109.7	95.1	87.2	67.2	60.5	105.0	93.6
1931.....	89.6	82.5	96.3	92.3	86.9	74.8	67.1	57.3	99.7	80.6
1932.....	72.6	54.5	94.2	77.2	74.0	48.4	56.0	38.9	89.1	57.2
1933.....	79.8	59.5	102.7	81.5	87.8	56.9	71.4	49.7	97.7	60.0
1934.....	86.4	71.0	110.5	100.2	88.4	66.0	67.5	49.1	108.7	77.3
1935.....	93.3	82.0	119.0	113.9	86.5	68.8	90.4	71.5	121.0	90.7
1936.....	96.3	88.7	121.8	118.0	77.8	61.5	86.5	68.1	128.9	95.9
1937.....	95.2	89.3	122.3	123.1	78.0	64.6	83.4	72.2	128.2	97.6
1938.....	84.4	74.4	108.7	108.9	59.6	46.5	66.2	53.0	112.9	82.8
<i>1938</i>										
January.....	91.3	77.5	103.4	94.2	57.8	40.1	61.9	51.0	105.3	72.6
February.....	92.4	86.2	107.9	108.4	59.4	45.3	62.6	52.5	119.8	92.8
March.....	92.3	79.9	108.6	110.7	59.8	46.6	54.4	41.1	122.7	95.8
April.....	89.1	63.4	107.8	106.5	59.7	45.4	48.8	35.4	118.5	85.6
May.....	74.4	56.4	103.3	101.6	59.2	46.1	54.1	38.9	107.2	72.5
June.....	61.3	48.5	103.9	99.9	53.5	40.8	61.0	47.4	99.7	62.6
July.....	79.8	74.9	104.6	98.2	55.0	42.2	68.4	55.5	98.9	66.0
August.....	88.1	87.2	109.2	111.7	61.3	50.2	75.1	62.1	116.3	90.4
September.....	90.0	95.0	111.8	116.0	63.2	50.6	72.7	57.5	122.1	99.5
October.....	89.1	78.0	114.5	122.1	61.2	50.2	71.9	58.1	119.6	93.0
November.....	82.8	70.1	114.2	118.5	61.7	48.6	78.4	63.7	112.0	78.0
December.....	82.4	75.3	115.1	119.5	63.2	51.8	85.3	72.8	112.2	84.7

Year and month	Textiles and their products—Continued											
	Clothing, men's		Clothing, women's		Corsets and allied garments		Men's furnishings		Millinery		Shirts and collars	
	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.....	107.0	109.3	104.3	103.2	105.2	103.4	94.6	93.6	103.2	100.8	107.9	109.7
1924.....	97.3	96.1	95.6	94.3	100.0	100.0	100.1	96.1	94.8	94.5	93.0	91.9
1925.....	95.7	94.6	99.1	102.5	94.8	96.6	105.3	110.3	102.0	104.7	99.1	98.4
1926.....	97.4	94.8	104.2	104.7	.....	.....	.....	.....	98.0	103.6	101.7	101.9
1927.....	102.5	99.5	121.0	123.6	90.0	96.7	125.7	139.5	104.8	113.9	105.1	109.9
1928.....	101.3	95.5	133.7	132.5	.....	.....	.....	.....	105.7	112.3	106.3	107.1
1929.....	103.2	95.8	146.8	142.6	89.2	97.0	132.7	145.5	101.3	104.0	109.1	109.2
1930.....	91.4	74.7	142.2	127.9	.....	.....	.....	.....	91.3	88.6	102.7	90.3
1931.....	84.9	62.8	135.8	110.5	91.3	89.6	120.1	109.5	83.7	79.2	104.0	82.7
1932.....	79.4	44.8	116.9	70.4	89.3	74.8	103.8	75.2	73.9	60.9	91.0	58.0
1933.....	90.5	52.8	125.1	74.5	91.6	73.2	110.7	79.1	71.0	49.4	103.1	68.3
1934.....	99.3	65.3	150.3	103.0	97.8	86.9	117.8	102.8	72.9	56.5	107.1	85.7
1935.....	111.3	79.7	172.7	120.8	102.2	93.8	125.1	113.3	71.6	58.3	113.9	96.6
1936.....	115.7	81.6	189.0	129.9	99.6	95.0	141.4	122.4	75.6	66.7	120.1	102.1
1937.....	115.4	85.3	184.2	129.2	101.7	97.4	148.1	127.7	73.6	64.6	124.2	106.5
1938.....	96.7	65.2	165.2	116.1	97.5	94.0	131.6	114.1	69.5	59.4	113.0	90.8
<i>1938</i>												
January.....	90.5	58.4	160.0	102.9	96.0	83.7	107.5	81.6	70.2	54.6	92.8	72.2
February.....	103.9	74.1	179.6	134.5	98.3	94.3	126.8	108.4	78.1	69.1	109.6	87.1
March.....	105.7	75.7	182.1	136.1	99.0	99.6	133.3	115.1	82.8	80.6	117.1	94.1
April.....	95.2	61.5	178.7	123.1	90.0	97.0	128.1	102.9	85.1	74.0	115.0	88.7
May.....	82.6	49.0	165.6	109.7	98.3	95.1	126.0	97.7	73.0	55.5	112.0	86.6
June.....	78.2	43.2	148.0	89.5	97.1	85.9	123.8	100.8	60.0	44.5	113.4	83.1
July.....	89.8	57.4	134.6	86.0	93.2	82.5	120.5	94.0	49.9	36.4	107.5	77.8
August.....	104.3	74.4	165.9	128.1	94.7	85.8	127.2	109.5	68.2	59.6	117.3	93.4
September.....	107.5	80.1	177.1	137.6	97.3	96.1	138.1	124.9	79.3	91.6	117.9	97.4
October.....	104.5	74.9	171.4	128.8	98.0	104.8	149.2	140.1	74.2	62.7	119.2	99.3
November.....	98.1	63.1	158.5	101.7	98.5	99.8	149.7	150.7	55.1	40.4	117.7	104.1
December.....	97.1	68.3	160.6	114.8	99.6	102.8	149.0	143.3	57.8	43.2	116.4	105.3

See footnotes at end of table.

TABLE 6.—*Employment and Pay-Roll Indexes—Continued*

MANUFACTURING INDUSTRIES—Continued

Year and month	Leather and its manufactures						Food and kindred products					
	Leather group		Boots and shoes		Leather		Food group		Baking		Beverages	
	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls
1923.....	106.6	106.9	106.0	107.6	109.1	107.9	101.4	99.8	100.1	98.0	104.9	104.4
1924.....	96.3	95.3	96.7	95.3	95.4	95.8	98.3	99.3	101.1	101.7	97.0	95.8
1925.....	97.1	97.8	97.3	97.1	95.5	96.3	100.3	100.9	98.8	100.3	98.1	99.8
1926.....	96.6	98.9	95.6	96.1	96.7	99.9	99.7	102.0	101.4	104.1	-----	-----
1927.....	97.7	100.3	95.6	96.8	96.6	99.3	100.2	103.0	105.9	107.8	96.6	100.0
1928.....	95.6	95.8	92.7	91.3	94.3	95.5	103.8	106.3	112.2	113.3	-----	-----
1929.....	98.5	99.0	96.7	95.6	91.1	92.8	111.1	112.9	123.6	125.3	101.3	106.1
1930.....	91.2	82.3	90.2	78.3	84.6	83.0	107.8	108.0	121.5	123.7	-----	-----
1931.....	84.3	72.1	85.3	70.2	76.9	72.5	95.6	92.0	112.6	109.0	85.5	83.1
1932.....	81.2	57.6	84.5	58.3	68.8	54.0	88.6	75.0	106.8	92.3	79.1	71.2
1933.....	87.2	61.2	89.8	61.1	80.7	63.0	100.3	78.7	112.2	89.9	138.2	131.9
1934.....	94.0	73.2	95.0	72.9	89.8	73.3	119.2	98.1	130.3	107.6	188.9	191.5
1935.....	96.1	76.9	95.1	74.1	92.9	81.4	120.1	101.4	134.4	113.6	200.6	215.7
1936.....	95.8	75.9	94.3	71.3	93.7	85.6	123.8	109.8	139.9	124.2	223.9	254.4
1937.....	97.7	81.7	97.2	77.0	91.5	91.4	128.7	125.4	146.7	140.5	243.7	287.9
1938.....	89.5	69.5	90.9	66.3	76.9	75.1	122.3	122.0	143.4	139.5	238.5	282.9
<i>1938</i>												
January.....	89.6	69.0	91.5	67.2	74.9	69.9	114.7	116.6	141.8	136.3	221.5	250.6
February.....	93.5	77.0	96.0	76.5	75.9	72.9	113.3	114.2	141.9	137.3	225.2	261.1
March.....	94.2	76.6	97.2	76.5	74.7	71.1	112.0	113.3	141.7	137.7	230.5	271.2
April.....	92.1	70.6	95.0	69.9	72.9	67.6	112.6	114.1	141.8	137.5	234.9	278.3
May.....	86.0	60.9	87.6	57.6	72.3	67.9	113.6	117.3	141.8	139.5	242.0	290.9
June.....	81.8	57.5	82.5	52.8	72.2	69.2	119.4	121.7	144.2	141.9	251.9	305.7
July.....	89.3	69.4	91.4	67.0	73.9	72.1	128.6	128.5	145.0	142.8	259.6	322.8
August.....	92.7	77.0	94.6	75.1	77.3	77.9	138.3	131.1	144.5	139.8	260.0	322.0
September.....	92.3	74.0	93.8	70.9	78.6	78.0	142.7	136.7	145.6	143.5	250.3	297.6
October.....	89.6	69.6	89.9	64.5	81.2	81.7	128.8	127.0	144.3	139.5	233.6	272.6
November.....	84.8	62.4	83.3	53.4	84.0	84.7	123.4	123.4	144.6	139.7	229.2	264.7
December.....	88.6	70.0	87.6	63.3	85.3	87.6	120.1	120.9	143.5	138.2	223.3	257.2
<i>Food and kindred products—Continued</i>												
Year and month	Butter		Canning and preserving		Confectionery		Flour		Ice cream		Slaughtering and meat packing	
	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls
1923.....	106.7	105.7	97.7	97.8	101.7	100.9	104.9	101.9	99.2	98.7	104.7	102.6
1924.....	100.0	100.0	86.9	86.9	96.5	97.7	99.7	101.0	102.0	99.7	100.3	99.9
1925.....	93.3	94.3	115.4	115.3	101.8	101.4	95.4	97.1	98.8	101.6	95.0	97.5
1926.....	-----	-----	-----	-----	105.8	106.8	91.8	94.4	96.3	103.2	93.2	97.8
1927.....	105.6	108.2	112.0	108.7	101.1	104.7	89.4	91.8	94.0	100.6	94.0	98.9
1928.....	-----	-----	-----	-----	98.9	101.0	85.5	89.7	95.5	103.2	94.8	100.1
1929.....	100.3	102.5	134.6	129.4	101.7	103.7	80.6	85.7	96.0	102.7	96.7	101.5
1930.....	-----	-----	138.8	126.7	92.1	93.3	73.9	78.7	89.0	93.0	92.1	96.3
1931.....	82.0	79.1	106.1	91.5	82.0	77.5	68.1	66.7	76.0	76.9	84.1	82.2
1932.....	80.6	68.3	86.1	65.0	74.8	60.6	65.7	56.4	64.6	56.7	80.6	65.7
1933.....	86.7	63.8	112.7	76.8	81.0	60.7	69.2	55.2	61.6	49.1	89.3	68.7
1934.....	98.2	71.8	143.7	99.9	82.6	70.1	79.0	64.5	71.9	56.8	108.8	93.9
1935.....	96.9	74.2	155.0	118.8	83.4	72.2	79.0	66.2	74.3	58.1	92.0	83.5
1936.....	100.9	79.9	151.8	116.0	80.6	71.0	77.1	69.5	77.1	61.1	97.8	92.6
1937.....	105.7	87.5	159.4	144.8	82.2	79.1	78.0	76.2	81.5	68.0	99.2	107.2
1938.....	102.6	87.5	130.4	114.0	79.1	76.1	76.5	75.7	78.9	67.6	96.2	107.3
<i>1938</i>												
January.....	97.7	82.4	84.6	74.9	79.0	74.7	76.2	74.5	68.0	58.4	102.3	118.7
February.....	97.9	83.2	81.8	73.3	78.4	75.0	76.1	74.3	68.3	58.4	97.0	105.0
March.....	99.5	83.2	78.0	70.0	77.1	73.5	75.7	73.5	69.9	60.7	93.0	100.7
April.....	103.8	86.0	82.9	75.6	74.0	66.8	74.2	72.1	77.0	66.5	91.5	100.8
May.....	106.7	92.5	85.4	80.3	69.1	64.2	73.9	72.5	87.4	73.8	91.9	103.6
June.....	110.1	94.5	113.9	100.7	69.7	67.9	75.3	75.6	91.6	77.5	93.5	104.7
July.....	110.9	95.9	178.6	157.2	67.5	63.1	77.9	79.4	94.7	80.6	94.7	107.9
August.....	110.1	94.4	251.2	203.8	71.6	69.3	77.9	78.7	93.1	80.3	94.2	104.8
September.....	103.7	90.0	272.0	238.1	87.9	90.9	77.2	81.2	83.4	70.1	95.5	108.7
October.....	99.4	85.6	147.3	130.3	93.0	91.6	77.5	79.7	73.7	63.6	97.4	110.0
November.....	96.8	82.4	103.3	86.0	90.6	84.9	78.2	73.8	70.4	60.7	100.7	110.0
December.....	95.1	80.4	85.3	77.4	91.3	91.5	78.1	73.0	68.7	60.0	102.4	112.5

See footnotes at end of table.

TABLE 6.—*Employment and Pay-Roll Indexes—Continued*

MANUFACTURING INDUSTRIES—Continued

Year and month	Food and kindred products—Con.				Tobacco manufactures					
	Sugar, beet		Sugar refining, cane		Tobacco group		Chewing and smoking tobacco and snuff		Cigars and cigarettes	
	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.....	92.1	91.1	103.4	102.6	105.7	104.1	102.7	101.4	106.2	104.5
1924.....	100.0	100.0	98.2	100.4	88.8	89.4	102.7	101.6	98.2	99.2
1925.....	107.9	108.9	98.4	97.0	95.5	96.5	94.6	97.0	95.6	96.3
1926.....			94.8	91.5	90.9	92.1	93.1	94.0	90.4	91.8
1927.....	90.0	87.5	94.9	90.6	93.4	91.0	82.6	84.8	94.9	91.8
1928.....			89.4	87.5	90.7	86.1	75.6	77.4	92.8	87.2
1929.....	91.2	90.3	94.3	91.4	83.9	81.8	68.0	71.3	86.0	83.1
1930.....			92.3	89.7	78.3	72.7	69.8	71.3	79.4	72.9
1931.....	75.8	68.1	80.3	79.6	72.1	60.1	71.9	69.0	72.1	58.9
1932.....	90.4	68.5	73.9	66.5	65.6	48.2	71.0	62.4	64.9	46.4
1933.....	130.0	98.2	77.9	62.7	63.1	44.1	64.2	56.0	62.9	42.6
1934.....	101.3	69.7	90.7	66.8	68.1	50.6	67.1	61.0	68.2	49.3
1935.....	112.1	84.3	93.7	71.3	65.4	51.5	63.3	60.7	65.6	50.3
1936.....	105.7	87.5	91.9	71.1	65.5	54.0	61.9	61.8	65.9	53.0
1937.....	103.6	96.0	88.4	79.2	65.3	59.0	62.1	68.8	65.7	57.7
1938.....	104.2	101.7	86.4	76.7	63.8	56.8	61.4	68.6	64.1	55.3
<i>1938</i>										
January.....	37.9	41.9	78.1	67.0	55.7	48.0	62.8	68.7	54.8	45.4
February.....	35.2	42.9	84.9	72.9	63.2	52.6	64.4	70.3	63.0	50.3
March.....	38.8	44.2	81.5	68.4	63.8	54.7	62.0	67.4	64.0	53.0
April.....	44.1	47.6	79.7	73.9	63.4	53.2	61.8	68.3	63.6	51.3
May.....	43.5	48.3	91.0	82.5	63.8	56.6	61.0	65.8	64.2	55.4
June.....	47.4	51.5	90.5	81.4	64.8	59.4	60.6	70.4	65.3	58.0
July.....	53.2	53.1	88.1	81.3	61.5	57.1	59.8	68.8	61.7	55.6
August.....	74.7	67.7	90.1	80.1	64.3	59.0	60.4	66.1	64.8	58.0
September.....	100.2	97.3	92.7	84.8	66.3	61.0	62.6	71.8	66.8	59.6
October.....	270.3	228.4	89.0	79.3	66.3	60.7	57.7	63.3	67.4	60.3
November.....	274.8	275.3	86.6	75.4	66.9	59.8	61.9	69.1	67.5	58.5
December.....	230.7	221.9	84.4	72.9	65.2	58.6	62.1	73.0	65.6	57.9
<i>Paper and printing</i>										
Year and month	Paper and printing group		Boxes, paper		Paper and pulp		Printing and publishing, book and job		Printing and publishing, newspapers and periodicals	
	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.....	99.2	96.2	100.0	97.3	100.0	98.4	98.3	95.5	98.9	94.7
1924.....	99.7	99.5	99.5	99.7	97.3	97.5	100.7	100.0	101.0	100.6
1925.....	101.1	104.3	100.5	103.0	102.7	104.1	101.0	104.5	100.1	104.7
1926.....	104.1	110.8	102.1	106.9	105.6	109.1	104.9	112.5	101.7	110.3
1927.....	104.1	111.0	99.2	104.0	102.2	105.3	106.9	114.1	102.2	111.1
1928.....	175.0	112.3	96.3	102.0	100.8	105.3	107.4	113.6	104.5	113.6
1929.....	111.3	118.5	97.9	102.9	106.1	112.5	113.1	118.7	111.0	121.8
1930.....	108.0	114.6	90.7	91.6	102.5	104.6	110.9	115.6	109.9	119.4
1931.....	96.3	97.3	81.8	79.0	89.5	82.1	100.7	99.1	101.8	108.0
1932.....	85.5	74.8	73.5	62.4	81.9	61.4	85.3	72.4	92.9	88.6
1933.....	86.7	68.3	83.0	67.7	89.0	64.4	78.5	60.6	93.4	78.6
1934.....	87.4	80.4	93.2	83.0	102.9	78.1	88.6	71.6	99.5	87.8
1935.....	102.0	88.4	97.2	91.0	105.3	86.7	95.0	79.3	101.6	92.7
1936.....	105.8	96.3	100.2	97.5	106.8	95.6	100.0	85.5	105.5	101.4
1937.....	111.7	107.9	106.6	104.6	114.3	113.9	107.0	96.8	107.9	107.9
1938.....	104.7	100.5	96.4	93.1	104.3	100.3	100.8	89.5	105.4	106.1
<i>1938</i>										
January.....	106.1	100.3	93.0	87.5	105.5	96.3	105.4	95.3	105.5	105.3
February.....	106.1	101.2	93.5	92.3	106.0	101.4	104.7	93.2	105.6	105.1
March.....	105.3	101.3	94.5	94.2	105.4	101.8	102.0	91.7	105.9	106.4
April.....	104.6	99.4	93.5	91.8	104.3	98.4	100.8	88.8	106.3	106.5
May.....	103.4	98.5	92.7	92.2	102.9	97.2	99.2	87.6	105.6	106.0
June.....	101.9	96.0	92.2	90.9	101.9	94.9	96.3	84.0	104.7	104.3
July.....	101.5	95.9	92.4	93.0	101.6	96.9	97.7	85.0	102.1	101.1
August.....	102.7	98.0	94.8	97.3	102.8	101.9	99.0	86.2	102.5	101.1
September.....	104.3	101.1	95.8	105.4	104.0	101.5	98.9	88.2	105.1	106.4
October.....	105.5	103.7	102.8	112.7	104.8	106.5	99.6	87.9	106.0	108.7
November.....	107.0	103.3	105.2	110.0	105.9	102.9	101.4	89.1	107.1	109.6
December.....	198.0	107.3	103.9	109.4	106.3	103.4	103.7	96.9	108.0	113.2

See footnotes at end of table.

TABLE 6.—*Employment and Pay-Roll Indexes—Continued*

MANUFACTURING INDUSTRIES—Continued

Year and month	Chemicals and allied products									
	Chemicals group		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.....	102.9	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	-----	-----	-----	-----	103.3	113.4
1927.....	104.2	107.8	102.8	103.8	-----	-----	127.0	151.3	110.4	119.2
1928.....	103.0	108.0	102.5	108.0	-----	-----	-----	-----	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	-----	-----	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.....	95.6	71.7	82.4	66.9	76.0	64.6	95.2	70.5	92.3	85.3
1933.....	97.1	78.2	94.8	72.5	93.3	75.2	98.1	57.1	94.7	86.7
1934.....	110.8	90.9	108.6	87.5	115.6	96.3	94.7	61.9	105.4	96.4
1935.....	112.5	87.4	110.8	94.2	115.5	102.2	91.1	62.8	109.5	101.4
1936.....	115.4	106.1	114.0	103.4	123.4	116.1	83.4	60.0	106.4	105.2
1937.....	125.3	130.2	124.8	127.7	136.5	146.7	96.2	79.0	114.7	120.8
1938.....	111.4	116.6	109.1	110.7	113.4	121.9	96.6	81.3	108.8	116.8
<i>1938</i>										
January.....	114.6	115.7	112.6	109.5	120.2	125.3	124.9	107.4	109.8	118.0
February.....	115.1	117.3	113.4	110.8	117.3	123.6	119.9	100.0	109.9	115.6
March.....	115.1	117.3	113.6	111.3	113.4	118.5	104.6	87.2	103.6	114.8
April.....	112.4	114.3	110.2	108.0	111.4	117.4	89.5	72.1	108.1	114.3
May.....	108.8	115.7	105.9	108.3	109.6	116.8	69.0	57.4	107.8	114.1
June.....	105.2	112.8	101.4	105.1	109.7	118.1	57.8	48.0	107.6	114.4
July.....	105.0	111.1	101.0	103.7	107.8	114.5	59.3	51.2	107.1	111.3
August.....	108.1	116.9	104.8	110.4	110.3	121.0	68.4	57.0	108.2	117.2
September.....	113.0	118.9	111.1	114.1	112.5	121.4	113.5	95.1	109.6	118.6
October.....	113.4	120.1	111.9	116.2	114.8	128.1	122.1	104.0	110.3	123.9
November.....	113.0	119.1	111.6	114.6	117.2	128.1	116.3	100.1	109.7	119.6
December.....	112.7	120.1	111.4	115.8	116.9	129.8	113.9	95.5	109.2	120.2

Year and month	Chemicals and allied products—Continued									
	Explosives		Fertilizers		Paints and varnishes		Rayon and allied products		Soap	
	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
1924.....	94.8	97.6	93.1	93.6	97.6	99.8	93.1	95.5	100.0	100.0
1925.....	96.7	92.9	106.4	107.3	106.8	108.6	119.6	113.2	95.1	94.3
1926.....	98.7	92.2	112.8	118.4	-----	-----	-----	-----	-----	-----
1927.....	98.5	97.6	100.8	103.9	117.5	123.3	164.8	141.2	82.9	100.3
1928.....	95.4	92.2	107.6	109.1	-----	-----	-----	-----	-----	-----
1929.....	95.3	102.0	113.4	108.3	122.3	129.6	244.4	220.2	88.6	96.7
1930.....	79.7	74.7	111.0	101.2	-----	-----	242.2	214.1	-----	-----
1931.....	80.4	66.9	78.8	73.4	94.4	90.3	241.9	188.4	87.4	90.2
1932.....	63.6	43.9	56.5	43.7	87.3	71.1	214.3	146.2	82.7	74.4
1933.....	70.8	49.6	70.7	44.0	95.9	73.0	276.7	190.3	88.3	71.9
1934.....	84.8	65.5	93.8	63.8	110.4	88.1	292.3	219.8	91.0	77.2
1935.....	77.6	67.7	94.6	66.3	116.0	98.8	315.7	219.8	85.9	78.0
1936.....	79.9	80.5	90.4	69.8	120.5	110.8	325.6	271.4	85.2	79.0
1937.....	88.2	99.1	103.1	92.6	128.2	129.2	356.0	314.4	95.3	93.7
1938.....	82.4	89.2	90.5	80.3	112.7	112.9	297.0	275.4	88.7	89.3
<i>1938</i>										
January.....	85.0	80.1	92.1	78.7	112.5	104.0	294.3	258.3	87.1	87.5
February.....	82.4	90.0	104.2	87.0	112.2	108.1	307.3	265.8	89.2	89.2
March.....	82.5	88.1	129.5	109.2	113.5	110.8	312.1	281.7	89.0	89.7
April.....	81.4	83.8	136.3	118.8	114.2	114.1	285.0	244.2	86.9	87.0
May.....	80.3	83.2	100.1	93.9	114.9	119.5	238.8	257.9	85.0	86.0
June.....	80.2	86.4	89.0	65.0	113.0	115.6	205.4	242.1	85.0	85.9
July.....	80.5	89.4	64.0	63.1	110.8	111.0	270.5	249.5	87.6	87.1
August.....	81.9	93.1	68.9	65.4	110.6	111.2	293.9	259.0	90.7	91.2
September.....	84.9	93.1	82.1	77.4	112.5	114.5	315.2	308.2	92.6	94.6
October.....	84.1	96.5	79.5	70.1	112.9	116.3	314.4	302.6	93.2	94.8
November.....	82.8	91.7	78.5	65.2	112.4	113.8	312.8	302.7	88.9	88.3
December.....	82.7	95.1	82.3	70.0	112.4	115.4	311.3	302.4	88.6	89.7

See footnotes at end of table.

TABLE 6.—*Employment and Pay-Roll Indexes—Continued*

MANUFACTURING INDUSTRIES—Continued

Year and month	Chemicals and allied products—Cont.		Rubber products							
	Petroleum refining		Rubber group		Rubber boots and shoes		Rubber goods, other than boots, shoes, tires, and inner tubes		Rubber tires and their inner tubes	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	103.0	102.3	102.6	101.0	117.0	118.7	103.1	100.1	97.7	96.8
1924.....	96.1	94.6	91.8	82.9	83.6	82.3	91.6	92.7	94.5	95.7
1925.....	100.9	103.1	105.6	106.1	99.4	99.0	105.3	107.2	107.8	107.5
1926.....	110.8	112.7	105.1	107.0	103.0	101.7	103.0	107.2	105.4	107.2
1927.....	109.9	111.9	105.7	110.0	106.8	113.2	110.3	115.5	103.3	107.0
1928.....	104.7	108.3	111.1	117.5	105.0	107.1	107.1	107.1	109.9	116.8
1929.....	124.4	129.2	111.0	115.1	102.1	105.6	120.3	126.4	110.0	113.2
1930.....	124.9	130.4	85.9	84.7	82.0	77.4	102.3	89.9	79.0	79.3
1931.....	106.2	105.8	73.9	62.5	63.2	48.6	102.3	89.9	64.9	56.2
1932.....	98.7	87.5	67.6	47.4	59.6	42.4	91.3	68.1	59.8	41.2
1933.....	106.5	88.4	79.1	55.0	72.0	51.0	105.3	75.3	69.9	48.8
1934.....	119.8	101.8	88.8	69.3	77.5	53.3	116.7	89.1	80.2	65.1
1935.....	119.4	107.9	85.4	74.2	68.6	56.9	120.6	99.0	75.4	69.8
1936.....	121.3	115.0	90.4	87.5	75.2	66.1	129.0	115.2	78.5	83.1
1937.....	127.2	134.1	96.8	96.9	75.1	74.1	142.5	138.3	84.0	87.9
1938.....	120.9	136.0	75.0	69.9	56.2	53.1	116.5	107.4	63.0	61.6
<i>1938</i>										
January.....	122.8	135.9	77.9	66.1	59.6	48.9	112.2	95.5	68.8	60.0
February.....	121.7	138.2	74.1	58.9	54.2	43.8	112.6	97.8	63.1	49.0
March.....	121.2	136.5	72.9	60.9	55.1	44.4	111.6	99.0	61.7	51.5
April.....	121.3	134.9	72.7	61.9	54.3	42.0	112.6	99.3	61.2	53.7
May.....	120.9	139.6	71.4	63.3	52.8	43.8	110.3	97.5	60.4	56.1
June.....	121.1	137.8	70.6	63.5	53.9	45.2	106.3	93.4	60.4	57.5
July.....	121.8	135.3	68.7	64.1	42.3	36.7	106.6	95.0	60.7	60.0
August.....	121.9	138.1	72.5	69.5	54.1	50.9	113.2	107.7	60.6	60.6
September.....	121.0	134.6	75.9	76.7	58.0	57.7	121.0	116.6	61.9	67.3
October.....	119.5	132.8	77.7	79.7	60.1	61.6	123.3	122.6	63.5	69.1
November.....	118.9	133.6	82.4	85.2	63.4	60.6	133.6	130.7	66.1	75.3
December.....	118.1	134.1	83.6	89.0	65.1	65.9	134.7	133.7	67.2	79.0

NONMANUFACTURING

[1929 = 100]

Month and year	Anthracite mining		Bituminous-coal mining		Metalliferous mining		Quarrying and nonmetallic mining		Crude-petroleum producing	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1929.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930.....	95.2	96.0	96.1	83.0	83.2	78.0	84.3	79.3	87.4	85.9
1931.....	84.3	76.9	88.9	61.2	59.1	44.8	67.4	53.4	65.7	61.7
1932.....	68.2	56.0	76.3	41.3	36.5	21.6	49.0	29.1	55.3	44.1
1933.....	59.5	49.0	79.9	45.4	34.6	20.6	44.9	24.7	62.2	44.1
1934.....	69.4	59.9	92.3	64.0	41.6	26.7	48.9	29.6	77.7	56.9
1935.....	64.7	52.2	94.9	70.1	47.3	33.9	46.0	30.7	74.9	57.9
1936.....	62.5	49.6	97.5	82.7	60.3	48.4	49.5	38.9	72.9	58.6
1937.....	60.2	46.9	99.3	88.5	76.8	74.0	51.4	45.4	76.5	68.2
1938.....	52.3	38.2	86.7	67.9	59.0	50.5	42.3	35.1	72.1	66.5
<i>1938</i>										
January.....	59.6	46.5	96.9	70.4	67.4	59.1	38.2	27.7	75.3	68.2
February.....	60.0	46.1	95.5	74.0	63.6	55.8	37.8	28.6	74.2	69.0
March.....	59.3	47.3	93.2	68.4	62.3	56.3	38.9	30.2	73.0	68.0
April.....	57.0	39.0	85.8	56.3	61.6	53.3	41.7	33.9	73.8	68.0
May.....	62.8	38.3	82.2	55.3	58.8	51.2	43.7	38.3	73.2	66.7
June.....	56.0	49.7	80.2	57.0	56.0	46.1	43.6	37.3	72.8	67.6
July.....	44.6	20.2	78.5	56.8	49.7	38.0	44.1	37.0	72.3	66.7
August.....	37.6	20.0	80.1	64.2	51.4	43.7	44.6	39.2	72.4	66.8
September.....	46.4	29.4	83.4	71.9	55.2	46.1	44.6	38.4	71.5	66.5
October.....	52.4	43.4	87.2	78.3	57.9	49.2	44.4	39.2	69.5	63.7
November.....	51.0	36.2	88.6	81.4	61.9	52.3	44.4	37.2	68.3	63.3
December.....	51.3	42.5	89.3	80.9	62.3	54.1	41.4	33.7	67.7	62.5

See footnotes at end of table.

TABLE 6.—*Employment and Pay-Roll Indexes—Continued*

NONMANUFACTURING INDUSTRIES—Continued

Month and year	Telephone and telegraph		Electric light and power, and manufactured gas		Electric-railroad and motorbus operation and maintenance		Wholesale trade	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1929.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930.....	97.9	102.9	103.0	104.3	93.4	93.5	95.7	95.3
1931.....	86.6	93.7	95.6	96.7	84.7	83.4	85.8	81.9
1932.....	79.1	81.1	83.0	79.8	75.5	68.0	70.8	64.2
1933.....	70.4	68.2	78.8	72.0	70.0	58.9	76.1	56.8
1934.....	70.3	71.5	83.8	77.9	72.1	62.2	82.8	63.0
1935.....	70.1	74.5	84.8	81.4	71.2	63.7	84.0	65.6
1936.....	72.2	78.9	90.5	88.8	72.0	67.2	86.7	69.4
1937.....	77.8	89.6	95.6	99.6	73.1	70.6	92.0	76.6
1938.....	75.1	92.2	92.3	98.5	70.3	69.6	88.8	74.7
<i>1938</i>								
January.....	77.8	93.7	93.8	98.9	72.3	70.6	91.0	75.4
February.....	75.7	89.9	92.6	98.5	71.2	70.2	90.4	75.3
March.....	74.9	92.6	92.0	98.6	70.8	69.9	89.1	74.7
April.....	74.8	91.6	91.8	97.6	71.1	70.0	88.5	74.6
May.....	75.0	91.3	91.7	97.4	70.6	71.2	87.3	75.1
June.....	74.8	90.9	92.2	98.6	70.4	69.7	87.2	73.8
July.....	74.9	90.9	92.3	98.3	70.1	69.0	86.8	73.6
August.....	74.8	91.3	92.7	98.9	69.5	69.5	87.6	73.7
September.....	74.9	92.6	92.5	98.4	69.3	68.4	88.5	74.3
October.....	74.7	95.3	92.5	99.9	69.9	68.9	89.1	75.1
November.....	74.4	93.0	91.9	98.6	69.5	68.8	89.8	75.4
December.....	74.2	92.7	91.4	98.2	69.4	69.5	90.0	75.6

Month and year	Retail trade						Year-round hotels		Laundries		Dyeing and cleaning	
	Total retail trade		General merchandising		Other than general merchandising							
	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
1929.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930.....	96.8	95.3	94.1	93.3	97.5	95.7	96.5	96.5				
1931.....	87.7	83.1	92.2	87.4	86.7	82.2	86.3	81.4	93.1	88.3	85.6	76.1
1932.....	76.8	63.2	82.6	69.5	75.2	61.9	74.1	60.9	85.4	70.5	79.8	59.3
1933.....	76.1	55.2	84.2	65.4	74.0	53.1	70.1	51.0	83.1	60.3	84.4	53.7
1934.....	82.1	60.9	92.8	75.1	79.2	58.0	83.2	63.8	87.9	66.0	92.7	62.6
1935.....	82.3	62.1	94.2	78.0	79.1	58.8	87.4	68.2	90.1	68.4	97.7	66.3
1936.....	85.7	66.3	99.1	83.5	82.2	62.7	90.9	72.7	95.6	75.6	104.4	71.9
1937.....	89.8	73.1	104.3	92.5	85.9	69.1	94.9	80.6	100.6	83.0	107.5	77.6
1938.....	85.2	70.4	98.0	87.8	81.8	66.8	92.7	80.3	95.7	80.6	104.3	75.3
1938												
January.....	84.1	70.1	91.5	84.6	82.1	67.1	94.3	81.6	96.8	80.1	96.8	65.5
February.....	82.4	68.4	88.8	81.5	80.7	65.7	94.5	83.6	95.7	79.1	95.6	65.2
March.....	83.0	68.6	90.5	82.2	81.0	65.8	93.4	80.9	94.8	78.6	98.5	68.2
April.....	88.2	72.2	101.0	89.4	84.9	68.6	93.5	80.5	95.4	80.6	111.8	87.2
May.....	83.8	70.0	92.4	84.4	81.5	67.0	93.7	80.5	96.2	80.9	106.9	80.7
June.....	83.6	69.5	91.9	84.3	81.4	66.4	92.2	79.6	96.6	81.8	110.8	83.3
July.....	81.1	68.1	87.9	80.4	79.3	65.6	90.7	77.4	97.8	83.0	108.6	77.5
August.....	80.0	66.8	86.4	78.8	78.3	64.3	90.4	77.4	97.5	83.1	105.0	74.3
September.....	84.7	69.4	97.0	85.3	81.5	66.1	91.8	78.9	96.5	81.4	107.8	81.7
October.....	85.9	70.8	99.4	88.3	82.3	67.2	92.9	80.8	94.4	79.5	106.8	78.0
November.....	86.9	71.5	104.5	91.8	82.3	67.3	92.5	81.3	93.7	79.3	102.5	73.9
December.....	98.1	79.4	144.1	122.9	86.0	70.3	91.9	81.1	93.4	80.0	97.9	68.3

¹ Includes: Iron and steel, machinery, transportation equipment, railroad repair shops, nonferrous metals, lumber and allied products, and stone, clay, and glass products.

² Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.

³ Indexes for subdivisions under knit goods, namely: hosiery, knitted outerwear, knitted underwear, and knitted cloth, back to January 1923, available on request.

TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES

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

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

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

TABLE 7.—*Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1938 by Geographic Divisions and by States*

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

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll December 1938	Percentage change from November 1938	Amount of pay roll (1 week) December 1938	Percentage change from November 1938	Number of establishments	Number on pay roll December 1938	Percentage change from November 1938	Amount of pay roll (1 week) December 1938	Percentage change from November 1938
				<i>Dollars</i>					<i>Dollars</i>	
New England.....	13,317	873,943	+3.2	19,852,860	+5.1	3,590	595,898	+2.2	13,135,187	+6.0
Maine.....	756	51,622	+4.6	1,014,878	+11.3	280	42,884	+4.8	825,673	+13.3
New Hampshire.....	625	39,459	+4.0	795,973	+11.9	211	33,939	+3.5	685,125	+13.1
Vermont.....	461	16,095	+3.6	337,461	+5.4	152	10,135	+5.6	207,850	+7.8
Massachusetts.....	17,908	474,019	+3.1	11,003,593	+4.1	1,732	269,938	+1.6	5,984,085	+4.8
Rhode Island.....	1,177	96,745	+4.6	1,992,137	+8.8	434	78,854	+4.3	1,588,927	+10.1
Connecticut.....	2,390	196,003	+2.1	4,708,818	+3.5	731	160,153	+1.0	3,843,567	+3.5
Middle Atlantic.....	31,867	2,084,849	+3.2	54,174,168	+4.4	6,459	1,178,250	+1.0	29,918,283	+3.6
New York.....	19,773	942,711	+4.5	25,431,794	+4.6	2,566	429,572	+1.1	11,553,969	+4.1
New Jersey.....	4,376	351,578	+1.9	9,121,101	+3.6	1,007	270,316	+0.7	7,032,278	+3.9
Pennsylvania.....	7,718	787,560	+2.2	19,621,273	+4.5	2,886	470,362	+0.9	11,332,036	+2.7
East North Central.....	24,988	2,126,521	+3.7	57,135,406	+3.5	8,512	1,545,427	+2.1	43,587,502	+3.1
Ohio.....	7,068	548,158	+4.7	14,423,925	+5.3	2,415	388,078	+1.7	10,655,932	+3.7
Indiana.....	2,947	252,751	+3.9	6,366,760	+4.9	1,073	194,720	+1.3	5,115,329	+4.2
Illinois.....	4,650	598,614	+2.9	15,618,672	+4.1	2,449	377,148	+1.0	9,900,993	+3.7
Michigan.....	3,770	493,478	+4.2	14,954,014	+1.1	1,062	428,673	+4.2	13,903,073	+1.9
Wisconsin.....	4,453	233,520	+2.7	5,822,035	+2.6	1,513	166,808	+1.0	4,012,175	+2.7

See footnotes at end of table.

TABLE 7.—Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1938 by Geographic Divisions and by States—Continued

[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 1938	Percentage change from November 1938	Amount of pay roll (1 week) December 1938	Percentage change from November 1938	Number of establishments	Number on pay roll December 1938	Percentage change from November 1938	Amount of pay roll (1 week) December 1938	Percentage change from November 1938
				<i>Dollars</i>					<i>Dollars</i>	
West North Central	11,842	443,533	+2.9	10,681,489	+3.4	2,493	209,918	+2.1	5,101,310	+4.1
Minnesota	<i>72,710</i>	<i>129,131</i>	<i>+1.5</i>	<i>3,291,001</i>	<i>+1.2</i>	<i>644</i>	<i>49,131</i>	<i>—3</i>	<i>1,300,686</i>	<i>+3</i>
Iowa	1,980	59,863	+2.9	1,378,028	+4.3	379	32,932	+2.8	790,322	+6.6
Missouri	2,735	101,716	+4.5	3,795,976	+7.4	813	91,544	+4.1	2,080,258	+6.6
North Dakota	530	4,894	+6	113,281	—2	29	2,447	—2.4	11,826	+3.4
South Dakota	456	8,132	+6	211,640	+2.3	34	2,471	—8	65,502	+2.3
Nebraska	1,076	29,472	+3.8	647,054	+2.1	138	10,279	—1	259,616	+2.3
Kansas	<i>2,349</i>	<i>53,326</i>	<i>+1.6</i>	<i>1,224,609</i>	<i>+1.2</i>	<i>446</i>	<i>23,114</i>	<i>—5</i>	<i>592,100</i>	<i>+1.1</i>
South Atlantic	10,764	874,403	+2.8	16,646,350	+4.0	2,940	593,598	+1.2	10,444,108	+3.5
Delaware	249	15,146	+4.7	353,381	+8.1	83	10,308	+2.6	839,255	+6.5
Maryland	<i>1,639</i>	<i>154,677</i>	<i>+4.6</i>	<i>3,192,798</i>	<i>+5.6</i>	<i>631</i>	<i>83,621</i>	<i>+1.2</i>	<i>2,111,603</i>	<i>+3.3</i>
District of Columbia	1,008	38,801	+11.6	965,913	+9.0	40	3,435	+1	118,193	+3.9
Virginia	2,011	113,431	+1.8	2,074,933	+3.9	451	77,797	+7	1,404,156	+4.0
West Virginia	1,190	137,061	+5	3,377,003	— ⁽¹⁰⁾	217	50,585	+5	1,257,104	+2.6
North Carolina	1,509	175,728	+9	2,666,250	+2.5	674	101,558	+6	2,419,297	+2.6
South Carolina	782	91,611	+1.1	1,305,787	+2.2	252	83,788	+8	1,165,803	+2.2
Georgia	1,441	121,112	+2.9	1,910,528	+5.1	393	93,990	+1.8	1,363,674	+5.0
Florida	985	46,936	+11.2	799,757	+13.5	199	23,616	+7.0	305,063	+9.5
East South Central	4,619	297,855	+2.2	5,453,798	+2.1	1,040	182,591	+4	3,188,704	+2.1
Kentucky	1,311	83,885	+2.4	1,735,527	+1.0	288	34,812	—2	740,272	+4.5
Tennessee	1,243	100,051	+1.8	1,750,028	+2.3	307	72,319	—1	1,252,831	+1.6
Alabama	1,454	96,620	+2.9	1,722,202	+3.4	298	63,978	+1.9	1,041,989	+1.7
Mississippi	511	17,299	—4	245,981	+3	87	11,482	—3.2	153,612	—1.9
West South Central	5,899	227,006	+2.1	4,919,942	+1.6	1,343	105,386	—8	2,240,595	+8
Arkansas	<i>11,133</i>	<i>36,810</i>	<i>+3.0</i>	<i>615,958</i>	<i>+1.4</i>	<i>315</i>	<i>22,289</i>	<i>—3</i>	<i>375,015</i>	<i>+1.0</i>
Louisiana	1,005	53,710	—1	1,061,879	+2.0	238	30,142	—2.4	571,539	+9
Oklahoma	1,394	39,793	+1.3	965,470	+ ⁽¹⁰⁾	140	9,410	—2.5	219,345	—1.0
Texas	<i>2,392</i>	<i>96,703</i>	<i>+5.3</i>	<i>2,276,656</i>	<i>+2.1</i>	<i>650</i>	<i>45,646</i>	<i>+5</i>	<i>1,074,701</i>	<i>+1.1</i>
Mountain	4,181	129,932	+1.6	3,300,328	+1.3	559	38,391	—4.0	948,001	—3.7
Montana	658	19,624	+3.3	547,602	+5.8	76	5,403	+2.7	140,843	+7.5
Idaho	512	11,757	—1.6	282,602	—2.9	65	4,328	—7.4	103,171	—9.1
Wyoming	320	8,624	—2.2	255,143	—3.0	38	1,676	—12.3	53,135	—7.7
Colorado	1,255	43,775	+1.1	1,080,084	—5	199	15,684	—4.7	391,233	—5.6
New Mexico	303	6,470	—9	137,742	—1.4	30	915	—5.4	15,058	—8
Arizona	405	15,412	+3.4	400,188	+4.0	40	2,734	—9	61,889	—4.2
Utah	554	21,620	+4.1	515,967	+4.5	97	7,380	—4.3	174,973	—3.4
Nevada	174	2,650	—1.3	81,000	—8	14	271	+7	7,099	+4.6
Pacific	10,199	448,575	+1.7	12,669,379	+1.9	2,619	218,917	—3.6	6,092,023	—9
Washington	2,645	85,131	—1.0	2,213,512	—1.3	554	46,944	—4.6	1,219,135	—3.5
Oregon	1,292	44,869	—7	1,155,418	—7	307	25,257	—4.4	642,636	—2.4
California	<i>12,626</i>	<i>318,575</i>	<i>+2.7</i>	<i>9,300,449</i>	<i>+3.0</i>	<i>1,768</i>	<i>146,716</i>	<i>—3.1</i>	<i>4,230,252</i>	<i>+3</i>

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

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

³ Weighted percentage change.

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

⁵ Includes construction but not public works.

⁶ Does not include logging.

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

⁸ Includes financial institutions, miscellaneous services, and restaurants.

⁹ Weighted percentage change including hired farm labor.

¹⁰ Less than 1/10 of 1 percent.

¹¹ Includes automobile dealers and garages; and sand, gravel, and building stone.

¹² Includes banks, insurance, and office employment.

INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

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

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

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

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

Metropolitan area	Number of establishments	Number on pay roll December	Percentage change from November	Amount of pay roll (1 week) December	Percentage change from November
New York, N. Y. ¹	14,306	635,495	+5.1	\$16,844,971	+6.4
Chicago, Ill. ²	4,456	429,575	+3.4	11,724,705	+5.1
Philadelphia, Pa. ³	2,098	202,090	+4.2	5,429,342	+5.3
Detroit, Mich. ⁴	1,572	311,583	+5.2	10,190,947	+3.1
Los Angeles, Calif. ⁴	2,979	159,821	+4.6	4,652,867	+5.2
Cleveland, Ohio.....	1,649	125,716	+7.1	3,326,435	+6.0
St. Louis, Mo.....	1,441	121,753	+4.4	2,955,804	+7.1
Baltimore, Md.....	1,126	100,441	+4.8	2,389,265	+5.8
Boston, Mass. ⁵	1,452	102,312	+3.1	2,604,382	+4.0
Pittsburgh, Pa.....	1,104	164,806	+2.0	4,312,780	+1.6
San Francisco, Calif. ⁶	1,670	84,053	+3.3	2,511,414	+3.9
Buffalo, N. Y.....	860	69,413	+3.7	1,816,826	+2.5
Milwaukee, Wis.....	1,112	98,433	+6.0	2,626,350	+3.8

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

² Does not include Gary, Ind.

³ Does not include Camden, N. J.

⁴ Does not include Long Beach, Calif.

⁵ Figures relate to city of Boston only.

⁶ Does not include Oakland, Calif.

Public Employment

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

EXECUTIVE SERVICE OF THE FEDERAL GOVERNMENT

Statistics of employment and pay rolls for the Executive service of the Federal Government in November and December 1938 are given in table 9.

TABLE 9.—Employment and Pay Rolls for the Executive Service of the United States Government, November and December 1938 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.....	917,303	869,256	+5.5	\$141,924,984	\$131,568,809	+7.9
Regular appropriation.....	762,580	714,178	+6.8	123,753,620	113,311,050	+9.2
Emergency appropriation.....	61,605	61,862	— .4	7,787,325	7,718,612	+ .9
Force-account (regular and emer-gency).....	93,118	93,216	— .1	10,384,039	10,539,237	—1.5
Inside the District of Columbia:						
Total.....	120,589	118,985	+1.3	21,523,822	21,164,921	+1.7
Regular appropriation.....	105,509	104,208	+1.3	19,210,981	18,906,874	+1.6
Emergency appropriation.....	9,956	9,887	+ .7	1,546,348	1,515,065	+2.1
Force-account (regular and emer-gency).....	5,064	4,890	+3.6	706,493	742,982	+3.2
Outside the District of Columbia:						
Total.....	796,714	750,271	+6.2	120,401,162	110,403,978	+9.1
Regular appropriation.....	657,011	609,970	+7.7	104,542,639	94,404,176	+10.7
Emergency appropriation.....	51,649	51,975	— .6	6,240,977	6,203,547	+ .6
Force-account (regular and emer-gency).....	88,054	88,326	— .3	9,617,546	9,796,255	—1.8

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

² Revised.

CONSTRUCTION PROJECTS FINANCED BY THE PUBLIC WORKS ADMINISTRATION

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

TABLE 10.—Employment and Pay Rolls on Projects Financed From Public Works Administration Funds, December 1938 ¹

[Subject to revision]

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed ²	Weekly average				
Federal projects financed from National Industrial Recovery Act funds						
All projects.....	³ 4,725	4,548	\$411,518	578,700	\$0.711	\$311,379
Building construction.....	230	184	20,562	15,905	1.293	81,043
Naval vessels.....	408	400	64,768	66,883	.968	7,964
Public Roads ⁴	(⁵)	2,890	217,264	353,855	.614	140,000
Reclamation.....	697	650	82,600	100,875	.819	35,183
River, harbor, and flood control.....	422	352	17,827	33,953	.525	37,529
Streets and roads.....	10	8	596	481	1.239	649
Water and sewerage.....	67	63	7,751	6,508	1.191	9,011
Miscellaneous.....	1	1	150	240	.625	0
Federal projects financed from Public Works Administration Appropriation Act 1938 funds						
All projects.....	30,464	32,051	\$4,010,880	4,464,794	\$0.898	\$5,730,629
Building construction.....	19,703	16,528	1,692,422	1,937,458	.874	3,733,763
Electrification.....	592	566	57,646	81,554	.707	85,445
Reclamation.....	12,072	11,491	1,954,863	2,019,928	.968	1,443,185
River, harbor, and flood control.....	296	268	40,759	43,602	.935	95,256
Ship construction.....	443	373	21,758	29,910	.727	110,481
Streets and roads.....	244	207	13,305	19,550	.681	42,081
Water and sewerage.....	524	456	28,717	42,041	.683	75,061
Miscellaneous.....	1,529	1,380	94,728	147,058	.644	134,434
Professional, technical, and clerical.....	1,061	782	106,691	143,693	.742	10,923
Non-Federal projects financed from National Industrial Recovery Act funds						
All projects ⁶	6,937	5,967	\$903,964	620,658	\$1.456	\$733,791
Building construction ⁶	3,867	3,505	633,550	349,103	1.815	383,533
Railroad construction.....	14	14	20	42	.476	0
Streets and roads.....	534	393	12,167	21,837	.557	59,456
Water and sewerage.....	1,378	1,163	156,861	119,907	1.308	202,526
Miscellaneous.....	1,144	892	101,366	120,769	.781	88,276
Projects financed from Emergency Relief Appropriation Act 1935, 1936, and 1937 funds ⁷						
All projects ⁸	46,049	38,660	\$4,106,952	4,719,139	\$0.870	\$7,906,390
Building construction ⁸	29,374	24,439	2,658,771	2,806,882	.947	4,571,561
Electrification.....	1,468	1,236	111,686	159,905	.698	612,788
Heavy engineering.....	4,335	3,720	447,907	528,148	.848	1,542,946
Reclamation.....	1,165	1,063	101,525	153,774	.660	79,888
River, harbor, and flood control.....	243	202	14,245	23,547	.605	19,243
Streets and roads.....	2,822	2,294	165,361	284,342	.582	197,149
Water and sewerage.....	6,600	5,667	603,305	756,331	.798	793,792
Miscellaneous.....	42	39	4,152	6,210	.609	89,023

See footnotes at end of table.

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

[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				
Non-Federal projects financed from Public Works Administration Appropriation Act 1938 funds						
All projects.....	100, 502	79, 549	\$6, 736, 566	8, 472, 024	\$0. 795	\$21, 490, 129
Building construction.....	64, 256	50, 986	4, 371, 571	5, 161, 132	. 847	10, 409, 702
Electrification.....	651	508	39, 100	57, 631	. 678	395, 591
Heavy engineering.....	1, 584	1, 316	148, 219	141, 498	1. 047	419, 589
Reclamation.....	344	254	22, 000	27, 446	. 802	46, 619
River, harbor, and flood control.....	436	354	37, 133	41, 270	. 900	250, 931
Streets and roads.....	15, 316	11, 814	893, 875	1, 304, 849	. 685	1, 659, 632
Water and sewerage.....	17, 193	13, 695	1, 177, 629	1, 672, 249	. 704	8, 157, 390
Miscellaneous.....	722	592	47, 039	65, 940	. 713	150, 675

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

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

³ Includes weekly average for public roads.

⁴ Under the jurisdiction of the Bureau of Public Roads.

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

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

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

⁸ Includes a maximum of 207 and an average of 180 employees working on low-cost housing projects financed from E. R. A. A. 1935 funds who were paid \$9,230 for 16,392 man-hours of labor. Material orders in the amount of \$225,914 were placed for these projects. These data are also included in separate tables covering projects financed from The Works Program.

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

Federal construction projects for which data are included in table 10 are financed by allotments made by the Public Works Administration to the various agencies and departments of the Federal Government from funds provided under the National Industrial Recovery Act. The major portion of the low-cost housing program now under way, however, is financed by funds provided under the Emergency Relief Appropriation Act of 1935. Federal construction projects are

also financed by allotments from funds provided under the Public Works Administration Appropriation Act of 1938. The work is performed either by commercial firms which have been awarded contracts, or by day labor hired directly by the Federal agencies.

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

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

THE WORKS PROGRAM

By authority of Public Resolution No. 11, Seventy-fourth Congress, approved April 8, 1935, the President, in a series of Executive orders,

inaugurated a broad program of work to be carried out by 61 units of the Federal Government. The Works Program was continued by title II of the First Deficiency Appropriation Act of 1936, cited as the Emergency Relief Appropriation Act of 1936, and was further continued by the Emergency Relief Appropriation Act of 1937. The Emergency Relief Appropriation Act of 1938 extended this program to June 30, 1939. Employment created by this program includes employment on Federal projects and employment on projects operated by the Works Progress Administration. Federal projects are those conducted by Federal agencies which have received allotments from The Works Program fund. Projects operated by the Works Progress Administration are those projects conducted under the supervision of the Works Progress Administration with the cooperation of States, cities, or counties.

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

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

[Subject to revision]

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed	Weekly average				
	Federal projects					
All projects.....	\$ 124, 074	114, 941	\$5, 014, 821	13, 001, 853	\$0. 455	\$1, 104, 658
Building construction.....	47, 800	43, 643	2, 247, 548	4, 390, 891	. 512	322, 755
Electrification.....	311	267	14, 698	35, 974	. 409	3, 371
Forestry ¹	10, 217	9, 319	440, 592	1, 020, 056	. 432	46, 251
Grade-crossing elimination ²	1, 935	1, 588	91, 970	166, 756	. 552	66, 554
Hydroelectric power plants ³	1, 834	1, 792	58, 329	258, 651	. 226	21, 256
Plant, crop, and livestock conservation ⁴	11, 352	10, 312	519, 474	1, 436, 618	. 362	63, 756
Professional, technical, and clerical.....	3, 979	3, 833	206, 044	446, 233	. 663	18, 066
Public roads ⁵	1, 408	1, 205	88, 340	151, 114	. 685	119, 801
Reclamation.....	28, 742	27, 919	1 434, 751	3, 363, 953	. 427	330, 085
River, harbor, and flood control.....	1, 462	1, 220	87, 324	155, 045	. 563	31, 304
Streets and roads.....	2, 935	2, 726	93, 145	321, 980	. 289	10, 819
Water and sewerage.....	920	834	31, 712	92, 219	. 344	11, 038
Miscellaneous.....	11, 179	10, 283	310, 894	1, 162, 363	. 267	59, 602

See footnotes at end of table.

TABLE 11.—Employment and Pay Rolls on Projects Financed by The Works Program, December 1938—Continued

[Subject to revision]

Type of project	Wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed	Weekly average				
	P. W. A. projects financed from Emergency Relief Appropriation Act funds of 1935, 1936, and 1937 ¹					
All projects.....	46,049	38,660	\$4,106,952	4,719,139	\$0.870	\$7,906,390
Building construction.....	29,374	24,439	2,658,771	2,806,882	.947	4,571,561
Electrification.....	1,468	1,236	111,686	159,905	.698	612,788
Heavy engineering.....	4,335	3,720	447,907	528,148	.848	1,542,946
Reclamation.....	1,165	1,063	101,525	153,774	.660	79,888
River, harbor, and flood control.....	243	202	14,245	23,547	.605	19,243
Streets and roads.....	2,822	2,294	165,361	284,342	.582	197,149
Water and sewerage.....	6,000	5,667	603,305	756,331	.798	793,792
Miscellaneous.....	42	39	4,152	6,210	.669	89,023
	Projects operated by Works Progress Administration ²					
All projects.....	2,986,931	-----	\$167,159,709	336,799,305	\$0.496	(³)

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

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

³ The data for the Bureau of Entomology and Plant Quarantine, under plant, crop, and livestock conservation, and the Bureau of Forest Service, under forestry, are for 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 45,842 employees working on non-Federal projects and 207 employees working on low-cost housing projects. These data are included in separate tables covering projects under the jurisdiction of the Public Works Administration.

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

⁸ Represents number of names on pay roll for week ending Dec. 31, 1938.

⁹ Data on a monthly basis are not available.

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

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

[Subject to revision]

Year and month	Number of persons employed	Pay-roll disbursements	Number of man-hours worked	Average earnings per hour	Value of material orders placed
Work projects					
January 1936 to December 1938, inclusive.....		\$102,571,431	279,440,543	\$0.367	² \$11,198,371
January to December 1936.....		28,883,589	75,827,799	.381	
January to December 1937.....		32,601,360	87,092,351	.374	
January 1938.....	144,797	2,549,914	6,896,668	.370	
February 1938.....	151,406	2,667,226	7,288,377	.366	
March 1938.....	154,567	2,751,797	7,610,360	.362	
April 1938.....	158,082	2,790,533	7,673,809	.360	
May 1938.....	172,134	2,967,134	8,286,913	.358	
June 1938.....	202,184	3,437,299	9,619,163	.361	
July 1938.....	213,972	3,685,148	10,332,962	.357	
August 1938.....	221,307	3,888,640	11,125,311	.350	
September 1938.....	220,756	3,927,491	11,421,877	.344	
October 1938.....	220,066	4,012,209	11,628,976	.345	
November 1938.....	225,088	4,110,810	12,028,462	.342	
December 1938.....	237,399	4,328,281	12,707,615	.341	
Student Aid					
September 1935 to November 1938, inclusive.....		\$73,566,226	247,844,948	\$0.297	(³)
September to December 1935.....		6,363,503	19,612,976	.324	
January to December 1936.....		26,888,559	85,424,616	.303	
January to December 1937.....		24,188,039	83,028,847	.291	
January 1938.....	307,544	2,001,786	6,980,595	.287	
February 1938.....	319,707	2,162,506	7,584,382	.285	
March 1938.....	328,037	2,217,742	7,781,022	.285	
April 1938.....	333,902	2,256,566	7,920,942	.285	
May 1938.....	326,644	2,393,532	8,355,521	.286	
June 1938.....	217,447	1,538,947	5,123,792	.300	
July 1938 ⁴					
August 1938.....	1,780	5,696	31,871	.179	
September 1938.....	44,865	196,999	817,901	.241	
October 1938.....	316,536	1,951,914	6,832,838	.286	
November 1938.....	361,067	2,400,437	8,349,645	.287	

¹ Data are for a calendar month.

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

³ No expenditures for materials on this type of project.

⁴ Student Aid program was not active.

CIVILIAN CONSERVATION CORPS

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

Employment and pay-roll data for the Civilian Conservation Corps are collected by the Bureau of Labor Statistics from the War Department, the Department of Agriculture, the Department of Commerce, and the Department of the Interior. The monthly pay of the enrolled personnel is \$30 per month. Assistant leaders, not to exceed 10 percent of the total number of enrollees, may receive up to \$36 per

month, and leaders, not to exceed 6 percent, may receive up to \$45 per month.

Employment and pay rolls in the Civilian Conservation Corps in November and December 1938 are presented in table 13.

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

[Subject to revision]

Group	Number of employees		Amount of pay rolls	
	December	November	December	November
All groups.....	320, 975	335, 479	\$14, 449, 956	\$14, 718, 482
Enrolled personnel ²	284, 125	298, 065	8, 866, 055	9, 303, 256
Reserve officers.....	4, 935	5, 084	1, 286, 109	1, 139, 864
Nurses ³	282	287	30, 008	29, 026
Educational advisers ³	1, 583	1, 576	264, 322	263, 249
Supervisory and technical ³	30, 050	30, 467	4, 003, 462	3, 982, 187

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

² December data include 3,763 enrollees and pay roll of \$90,213 outside continental United States; in November the corresponding figures were 3,760 enrollees and pay roll of \$87,680.

³ Included in executive service, table 9.

CONSTRUCTION PROJECTS FINANCED BY RECONSTRUCTION FINANCE CORPORATION

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

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

[Subject to revision]

Type of project	Maximum number of wage earners ²	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
All projects.....	2, 892	\$308, 347	387, 787	\$0. 795	\$305, 723
Building construction ³	1, 325	99, 896	156, 886	. 637	90, 737
Water and sewerage.....	1, 565	208, 392	230, 843	. 903	214, 325
Miscellaneous.....	2	59	58	1. 017	661

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

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

³ Includes 241 employees; pay-roll disbursements of \$19,499; 20,422 man-hours worked; and material orders placed of \$29,578 on projects financed by RFC Mortgage Co.

CONSTRUCTION PROJECTS FINANCED FROM REGULAR FEDERAL APPROPRIATIONS

When a construction contract is awarded or force-account work is started by a department or agency of the Federal Government, the

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

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

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

[Subject to revision]

Type of project	Number of wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed	Weekly average				
All projects.....	² 214, 844	200, 393	\$20, 190, 980	28, 150, 308	\$0. 717	\$31, 104, 087
Building construction.....	16, 490	13, 488	1, 507, 990	1, 576, 917	. 956	2, 771, 199
Electrification:						
Rural Electrification Administration projects ⁴	6, 477	5, 383	375, 930	709, 797	. 530	2, 021, 273
Other than R. E. A. projects.....	135	91	4, 062	6, 071	. 669	1, 984
Forestry.....	90	78	4, 584	8, 242	. 556	3, 913
Heavy engineering.....	111	77	7, 580	9, 453	. 802	2, 176
Public roads ⁵	(⁶)	70, 101	5, 165, 288	8, 683, 727	. 595	8, 608, 813
Reclamation.....	14, 895	14, 028	1, 717, 056	2, 150, 418	. 708	1, 844, 729
River, harbor, and flood control:						
Dredging, dikes, revetments, etc.....	43, 735	37, 156	3, 681, 541	5, 848, 542	. 629	2, 918, 775
Locks and dams.....	8, 791	8, 031	1, 051, 014	1, 360, 099	. 773	4, 061, 101
Ship construction:						
Naval vessels.....	43, 060	42, 165	5, 860, 785	6, 617, 416	. 886	6, 526, 414
Other than naval vessels.....	5, 695	5, 106	494, 521	597, 474	. 828	1, 567, 692
Streets and roads.....	4, 030	3, 661	241, 465	469, 148	. 515	482, 011
Water and sewerage.....	298	234	19, 529	29, 701	. 658	74, 700
Miscellaneous.....	936	794	59, 626	83, 303	. 716	219, 307

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-road projects.

⁴ Financed by Rural Electrification Administration loans.

⁵ Under the jurisdiction of the Bureau of Public Roads.

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

STATE-ROADS PROJECTS

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

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

[Subject to revision]

Item	Number of employees ²			Pay-roll disbursements		
	December 1938	November 1938	December 1937	December 1938	November 1938	December 1937
Total.....	184,361	231,759	170,165	\$11,438,613	\$14,959,749	\$10,377,340
New roads.....	21,223	28,439	23,825	1,398,990	1,899,410	1,533,040
Maintenance.....	163,138	203,320	146,340	10,039,623	13,060,339	8,844,300

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

² A average number working during month.

PURCHASES FROM PUBLIC FUND¹

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

In the fourth quarter of 1938 on the Public Works Administration program, orders were placed for materials valued at approximately \$91,329,000. Of this amount \$26,659,000 was expended for iron and steel products, \$13,554,000 for cement and concrete products, \$9,099,000 for machinery, and \$8,638,000 for forest products.

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

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

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

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

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

TABLE 17.—Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Fourth Quarter of 1938¹

[Subject to revision]

Type of material	Public Works Administration ²	U. S. H. A. low-cost housing	Reconstruction Finance Corporation ³	Regular Federal appropriations	Federal construction under The Works Program
All materials.....	\$91,329,283	\$689,920	\$1,392,913	\$95,778,006	\$3,748,806
Textiles and their products.....	135,794	1,049	500	70,433	5,404
Awnings, tents, canvas, etc.....	20,884	28	500	7,832	2,066
Carpets and rugs.....	17,394			69	
Cordage and twine.....	9,237	1,021		26,136	1,072
Cotton goods.....	3,626			803	311
Felt goods.....	5,023			171	973
Jute goods.....	6,028			793	283
Linoleum.....	70,844			27,343	35
Sacks and bags.....	647			3,084	292
Waste.....	2,111			4,202	369
Forest products.....	8,637,659	60,041	52,016	3,800,759	400,607
Cork products.....	44,852		410	12,847	90
Lumber and timber products, n. e. c.....	6,189,807	57,825	38,847	3,423,118	343,572
Planing mill products.....	2,393,152	2,216	12,759	353,110	56,828
Window and door screens and weather-strip.....	9,848			11,684	117
Chemicals and allied products.....	767,762	2,667	32,555	811,208	97,815
Ammunition and related products.....	1,309			44	
Chemicals, miscellaneous.....	26,910			25,880	17,292
Compressed and liquefied gases.....	19,641	193	4,591	16,673	2,951
Explosives.....	233,446	1,408	23,928	547,230	47,702
Paints and varnishes.....	486,456	1,066	4,036	221,381	20,870
Stone, clay, and glass products.....	27,215,255	156,869	189,908	25,947,771	1,168,792
Asbestos products, n. e. c.....	122,407			4,736	5,057
Brick, hollow tile and other clay products.....	4,893,463	18,575	15,017	435,529	53,685
Cement.....	5,493,585	9,479	81,214	11,467,895	673,586
Concrete products.....	8,660,008	116,305	28,325	1,254,970	84,968
Crushed stone.....	937,656		18,052	4,404,650	103,682
Glass.....	590,941	16	5,071	83,450	7,765
Lime.....	41,280	1,610	82	2,689	1,007
Marble, granite, slate, and other stone products.....	2,185,080	3,780	1,108	1,038,759	42,644
Minerals and earths, ground or otherwise treated.....	1,955			1,068	
Sand and gravel.....	3,251,187	7,078	38,104	6,906,209	169,963
Tiling, floor and wall, and terrazzo.....	790,580		639	90,833	27,247
Wall plaster, wallboard, and insulation board.....	847,113	26	2,296	196,983	9,188
Iron and steel and their products, not including machinery.....	26,658,983	311,032	527,362	14,161,877	690,109
Bolts, nuts, washers, etc.....	356,933		1,467	243,305	13,956
Cast-iron pipe and fittings.....	3,342,224	51,700	0,187	462,800	88,419
Doors, shutters, and window sash and frames, molding, and trim (metal).....	1,808,695	31,843	1,261	609,299	35,033
Forgings, iron and steel.....	186,929		1,362	590,055	8,297
Hardware miscellaneous.....	1,214,394	39,208	18,402	527,327	80,936
Heating, and ventilating equipment.....	4,372,550	27,600	35,554	671,757	23,676
Nails and spikes.....	198,681		788	66,868	19,488
Rail fastenings, excluding spikes.....	64,918			8,218	
Rails, steel.....	302,872		75	76,262	7,761
Springs, steel.....	250				
Steel works and rolling-mill products, n. e. c.....	3,886,901	106,286	385,536	2,690,667	59,040

See footnotes at end of table.

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

[Subject to revision]

Type of material	Public Works Administration	U. S. H. A. low-cost housing	Reconstruction Finance Corporation	Regular Federal appropriations	Federal construction under The Works Program
Iron and steel and their products, not including machinery—Continued.					
Stoves and ranges, other than electric	\$3, 190	\$3, 200		\$172	\$124
Structural and reinforcing steel	9, 494, 534	30, 120	\$35, 805	6, 913, 652	275, 059
Switches, railway	331			8, 000	
Tools, other than machine tools	32, 700	1, 586	1, 013	20, 940	45, 950
Wire products, n. e. c.	862, 653	148	284	694, 300	26, 623
Wrought pipe	530, 228	10, 341	30, 568	518, 265	5, 738
Nonferrous metals and their products	480, 478	6, 585	8, 191	416, 842	57, 962
Aluminum manufactures	36, 097		148	96, 166	
Copper products	102, 595		668	5, 755	3, 006
Lead products	53, 165		41	1, 670	377
Nonferrous-metal alloys and products, n. e. c.	62, 187	6, 513	28	165, 346	1, 514
Sheet-metal products	233, 744	72	7, 306	147, 799	52, 889
Zinc products	1, 690			106	196
Machinery, not including transportation equipment	9, 098, 887	7, 042	361, 808	31, 724, 739	357, 009
Electrical machinery, apparatus, and supplies	2, 454, 900	85	23, 088	8, 558, 540	63, 422
Elevators and elevator equipment	405, 115	521	89	434, 614	799
Engines, turbines, tractors, and water-wheels	1, 527, 329			8, 148, 020	57, 068
Foundry and machine shop products, n. e. c.	3, 741, 832	6, 053	338, 281	12, 950, 151	194, 639
Machine tools	180, 250			251, 221	11, 169
Meters (gas, water, etc.) and gas generators	140, 110			3, 278	105
Pumps and pumping equipment	628, 101	383	350	1, 302, 424	28, 741
Refrigerators and refrigerating and ice-making apparatus	21, 241			10, 491	166
Transportation equipment, air, land, and water	337, 911	411		501, 089	20, 556
Boats, steel and wooden (small)	198, 195			329, 878	194
Carriages and wagons	1, 372			1, 253	175
Motor vehicles, passenger	4, 900	411		15, 938	449
Motor vehicles, trucks	133, 444			154, 920	19, 738
Miscellaneous	17, 987, 554	144, 224	220, 573	18, 342, 388	950, 552
Belting, miscellaneous	1, 422		290	3, 513	227
Coal	21, 881	989	32	154, 845	3, 441
Cresote	943			500	1, 015
Electric wiring and fixtures	4, 627, 680	15, 828	6, 249	4, 250, 243	58, 819
Furniture, including store and office fixtures	780, 058		19, 367	112, 766	11, 221
Instruments, professional and scientific	87, 825		47	50, 324	2, 718
Mattresses and bedsprings	7, 694			694	
Models and patterns	1, 368			140	
Paper products	19, 047			13, 197	1, 283
Paving materials and mixtures, n. e. c.	972, 603			1, 933, 621	81, 484
Petroleum products	1, 222, 168	26, 795	38, 886	4, 757, 794	240, 150
Photographic apparatus and materials	4, 269			10, 245	430
Plumbing supplies, n. e. c.	2, 768, 917	8, 505	30, 524	634, 444	70, 908
Radio apparatus and supplies	5, 124			7, 651	
Roofing materials, n. e. c.	733, 988	35	2, 392	134, 585	25, 163
Rubber goods	77, 645	353	6, 729	57, 438	7, 609
Steam and other packing, pipe and boiler covering, and gaskets	141, 322		514	57, 127	2, 164
Theatrical scenery and stage equipment	24, 359				
Window shades and fixtures	47, 512	3		315	357
Other materials	6, 441, 729	91, 716	115, 543	6, 156, 856	431, 563

¹ This table includes certain items which are not actually construction materials, i. e., fuel, transportation equipment, tools, furniture, etc. Data for projects operated by W. P. A. are not available.

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

³ Includes projects financed by RFC Mortgage Co.

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

TABLE 18.—*Value of Material Orders¹ Placed on Construction Projects Financed by Federal Funds for the Third Quarter of 1938¹*

[Subject to revision]

Type of material	Total	Projects					
		Public Works Administration ²	U. S. H. A. low-cost housing	Reconstruction Finance Corporation ³	Regular Federal	Federal construction under The Works Program	Operated by W. P. A.
All materials.....	\$262,003,490	\$51,693,271	\$94,219	\$1,568,564	\$113,673,966	\$3,133,096	\$36,540,374
Textiles and their products.....	2,903,352	104,447	518	—	65,028	14,238	2,719,071
Forest products.....	16,818,213	3,772,567	14,957	44,191	4,175,201	745,918	8,065,379
Chemicals and allied products.....	4,469,771	527,946	667	42,348	893,936	169,651	2,835,223
Paints and varnishes.....	2,055,569	371,680	—	326	200,744	111,961	1,370,858
Other chemicals.....	2,414,202	156,266	667	42,022	693,192	57,690	1,464,365
Stone, clay, and glass products.....	83,824,351	13,341,357	34,386	231,838	34,191,340	2,583,123	33,442,307
Brick, hollow tile, and other clay products.....	7,094,207	2,809,798	—	18,083	458,441	130,209	3,677,676
Cement.....	29,697,143	2,898,408	1,884	158,822	15,876,353	1,402,040	9,359,336
Concrete products.....	7,851,391	1,974,492	31,752	885	678,841	171,239	4,994,182
Crushed stone.....	13,791,230	795,036	—	406	6,065,888	167,118	6,762,780
Sand and gravel.....	18,040,564	1,696,108	750	38,814	9,366,142	535,468	6,403,282
Other stone, clay, and glass products.....	7,349,816	3,167,215	—	14,826	1,745,675	177,049	2,245,051
Iron and steel and their products, not including machinery.....	53,337,834	15,896,987	14,338	469,684	19,385,842	1,800,664	15,770,339
Cast-iron pipe and fittings.....	5,672,651	1,096,852	—	1,669	383,322	68,812	4,121,996
Heating and ventilating equipment.....	4,870,913	3,442,630	—	15,730	752,274	41,470	618,809
Structural and reinforcing steel.....	19,846,208	5,867,100	5,522	42,414	9,591,946	703,274	3,635,952
Tools, other than machine tools.....	1,806,553	29,553	—	—	38,010	95,062	1,643,928
Other products of iron and steel.....	21,141,509	5,460,852	8,816	409,851	8,620,290	892,046	5,749,654
Nonferrous metals and their products.....	1,788,779	724,110	1,898	9,128	538,995	77,974	438,674
Machinery, not including transportation equipment.....	47,409,685	7,754,124	—	649,355	34,386,966	860,753	3,758,487
Electrical machinery, apparatus, and supplies.....	13,092,514	2,843,656	—	108,217	8,483,677	145,826	1,511,138
Foundry and machine-shop products, n. e. c.....	22,117,911	2,766,733	—	529,980	16,929,291	519,895	1,372,012
Other machinery.....	12,199,260	2,143,735	—	11,158	8,973,998	195,032	875,337
Transportation equipment, air, land, and water.....	708,759	37,455	—	39	80,200	59,868	531,197
Motor vehicles, trucks.....	606,765	32,309	—	39	46,618	56,602	531,197
Other transportation equipment.....	41,994	5,146	—	—	33,582	3,266	—
Miscellaneous.....	50,742,746	8,894,278	27,455	122,001	19,956,438	1,820,857	18,981,697
Coal.....	276,551	13,772	1,289	—	158,504	2,216	100,770
Furniture, including store and office fixtures.....	1,942,739	1,199,821	—	—	16,515	14,920	711,483
Paving materials and mixtures.....	11,790,188	597,691	—	—	2,263,511	282,927	8,646,059
Petroleum products.....	8,929,091	686,796	1,956	24,122	5,443,645	447,502	2,325,070
Plumbing supplies, n. e. c.....	4,337,893	2,059,095	—	21,658	515,019	145,007	1,597,114
Rubber goods.....	411,919	32,296	—	12,319	23,350	21,613	322,341
Other materials.....	23,054,365	5,244,807	24,210	63,902	11,535,914	906,672	5,278,860

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

³ Includes projects financed by RFC Mortgage Co.

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 1938, the third quarter of 1938, and the fourth quarter of 1937 is shown in table 19.

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

[Subject to revision]

Type of material	Fourth quarter of 1938	Third quarter of 1938	Fourth quarter of 1937
All materials.....	\$41,914	\$69,009	\$165,449
Computing machines.....	3	2,303	1,813
Furniture.....	2,155	1,268	7,749
Office supplies.....	5,083	9,848	20,858
Stationery.....	356	966	6,683
Typewriters.....	293	1,249	412
Other office machines.....	92	1,503	3,952
Other materials.....	29,790	45,650	78,091
Rental of machinery and equipment.....	4,142	6,222	45,891

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

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

[Subject to revision]

Type of rental and service	Third quarter of 1938 ¹	Second quarter of 1938 ²	Third quarter of 1937 ³
All rentals and services.....	\$56,254,967	\$48,342,335	\$41,632,998
Motor vehicles.....	26,148,930	21,969,993	20,343,989
Teams and wagons.....	850,600	680,229	1,005,987
Paving, road building, and construction equipment.....	19,704,116	17,932,573	13,820,540
Other equipment (including office equipment).....	1,340,827	1,111,723	895,192
Space rentals and services.....	3,822,545	2,921,491	2,074,500
Other services (including utilities).....	4,387,949	3,726,326	3,692,790

¹ Quarterly period ending Sept. 30, 1938.

² Quarterly period ending June 30, 1938.

³ Quarterly period ending Sept. 30, 1937.

Table 21 shows rentals and services on work projects of the National Youth Administration for the third quarter of 1938, the second quarter of 1938, and the third quarter of 1937.

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

[Subject to revision]

Type of rental and service	Third quarter of 1938 ¹	Second quarter of 1938 ²	Third quarter of 1937 ³
All rentals and services.....	\$493, 026	\$604, 725	\$383, 447
Motor vehicles.....	108, 701	109, 528	82, 555
Teams and wagons.....	3, 979	7, 541	4, 172
Paving, road building, and construction equipment.....	40, 984	41, 577	26, 972
Other equipment (including office equipment).....	110, 245	85, 985	39, 974
Space rentals and services.....	148, 700	262, 340	174, 049
Other services (including utilities).....	80, 417	97, 754	55, 725

¹ Quarterly period ending Sept. 30, 1938.² Quarterly period ending June 30, 1938.³ Quarterly period ending Sept. 30, 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.

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

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

TABLE 22.—*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		
	Fourth quarter 1938 ¹	Third quarter 1938 ²	Fourth quarter 1937 ³
All materials.....	\$56, 743, 853	\$116, 855, 438	\$75, 306, 282
Food and kindred products.....	1, 562, 696	2, 041, 490	2, 516, 131
Canned fruits and vegetables.....	379, 518	798, 361	281, 467
Canned sea foods.....	68, 378	37, 426	78, 883
Cereal preparations.....	.....	.....	24, 797
Coffee and tea.....	157, 307	238, 207	712, 664
Condensed and evaporated milk.....	37, 083	89, 939	84, 119
Feeds, prepared, for animals and fowls.....	103, 335	217, 682	255, 165
Flour and other grain mill products.....	82, 737	116, 356	123, 945
Meat-packing products.....	392, 238	.....	364, 831
Shortening and vegetable cooking oil.....	.....	.....	58, 998
Sugar.....	160, 378	333, 561	218, 442
Miscellaneous subsistence stores and supplies.....	181, 722	209, 958	312, 820
Textiles and their products.....	3, 875, 430	6, 254, 255	12, 213, 250
Canvas bags and covers.....	.....	102, 963	205, 612
Clothing (overcoats, suits, trousers, etc.).....	21, 500	391, 756	57, 043
Clothing, manufacture only ⁴	85, 220	617, 498	547, 684
Cordage and twine, including thread.....	10, 518	19, 290	84, 434
Cotton gloves.....	.....	.....	111, 170
Cotton goods (drills, prints, sheeting, etc.).....	1, 313, 535	1, 776, 012	2, 850, 789
Cotton shirts.....	.....	11, 660	.....

See footnotes at end of table.

TABLE 22.—Value of Supply Contracts Awarded by the Federal Government, Which Contain Agreements To Comply With the Public Contracts Act, by Type of Material—Con.

Type of materials	Value of contracts awarded		
	Fourth quarter 1938	Third quarter 1938	Fourth quarter 1937
Textiles and their products—Continued.			
Furnishing goods, men's, n. e. c.	\$76, 110	\$825, 448	\$210, 097
Housefurnishing goods (pillow cases, sheets, etc.)	102, 655	333, 239	523, 296
Knit goods (hosiery, underwear, etc.)	49, 600	611, 346	532, 755
Linoleum	75, 258		87, 935
Woolen goods (flannels, suiting, etc.)	1, 715, 367	775, 618	5, 980, 195
Work clothing	148, 311	55, 215	356, 419
Miscellaneous textile products	277, 356	834, 310	665, 921
Forest products	488, 904	1, 475, 102	2, 799, 035
Furniture	254, 384	902, 195	1, 648, 505
Lumber and timber products, n. e. c.	144, 749	33, 410	590, 931
Planing-mill products	25, 307	12, 769	40, 505
Treated lumber and timber	64, 404	133, 396	249, 753
Miscellaneous forest products		393, 332	269, 341
Chemicals and allied products	2, 186, 222	7, 511, 550	2, 627, 178
Ammunition and related products	10, 856	2, 760, 348	433, 622
Explosives	1, 251, 790	3, 429, 515	1, 887, 803
Linseed oil	51, 423	130, 611	
Paints and varnishes	54, 823	179, 348	182, 529
Soap and soap chips	65, 307	51, 014	79, 034
Miscellaneous chemicals	752, 023	960, 714	44, 190
Products of asphalt, coal, and petroleum	3, 408, 427	8, 518, 726	14, 086, 526
Asphalt, oil, tar, and mixtures	379, 397	860, 586	697, 221
Coal and coke	148, 194	466, 568	410, 817
Fuel oil	1, 333, 705	2, 637, 285	7, 556, 568
Gasoline	1, 277, 223	4, 320, 696	4, 940, 037
Lubricating oils and greases	102, 122		99, 058
Miscellaneous coal and petroleum products	167, 786	233, 591	382, 825
Leather and its manufactures	667, 622	331, 033	243, 103
Boots and shoes	571, 704	280, 554	63, 522
Gloves		20, 375	47, 269
Miscellaneous leather goods	95, 918	30, 104	132, 312
Stone, clay, and glass products	1, 878, 282	8, 886, 217	2, 750, 897
Brick	109, 809	89, 612	22, 539
Cement	755, 561	6, 036, 048	1, 668, 916
Concrete pipe	133, 175	234, 502	29, 346
Concrete, ready mixed	217, 592	391, 784	199, 504
Crushed stone	67, 725	245, 536	42, 377
Glass			93, 768
Granite and marble	45, 377	48, 817	
Riprap stone	19, 035	169, 340	75, 700
Sand and gravel	299, 964	1, 095, 504	88, 376
Soil, black earth	31, 176	149, 750	208, 718
Terra cotta	11, 490		
Tile, clay, including drain	20, 247	22, 828	36, 227
Vitrified-clay and terra-cotta pipe	11, 050	15, 467	
Miscellaneous stone, clay, and glass products	156, 081	387, 029	225, 426
Iron and steel and their products, not including machinery	3, 212, 239	11, 967, 928	5, 828, 894
Bolts, nuts, rivets, washers, etc.	26, 992	35, 301	25, 964
Cast-iron pipe and fittings	62, 703	212, 031	116, 676
Fencing materials			37, 690
Forgings, iron and steel	595, 062	5, 862, 748	475, 081
Hardware, miscellaneous		37, 265	
Metal doors, sash, and frames	17, 978	215, 226	13, 364
Metal furniture	8, 098	270, 781	79, 774
Metal shingles and roofing	19, 178		
Pipe and fittings, n. e. c.	28, 571	34, 857	193, 736
Plumbing fixtures and supplies		16, 055	45, 182
Rails, steel	14, 614	45, 589	17, 248
Railway tie plates	15, 990		
Reinforcing steel	87, 313	534, 380	499, 742
Steel pipe and fittings	22, 402	96, 515	349, 890
Steel sheets, plates, shapes, and strips	670, 418	335, 143	1, 720, 900

See footnotes at end of table.

TABLE 22.—Value of Supply Contracts Awarded by the Federal Government, Which Contain Agreements To Comply With the Public Contracts Act, by Type of Material—Con.

Type of materials	Value of contracts awarded		
	Fourth quarter 1933	Third quarter 1933	Fourth quarter 1937
Iron and steel and their products, not including machinery—Con.			
Stoves and ranges, other than electric.....	\$43,031	\$29,410	.....
Structural steel, fabricated, and sheet-steel piling.....	612,407	933,171	\$568,917
Tools, other than machine tools.....	24,430	.....	56,731
Wire rope.....	61,473	79,774	128,808
Miscellaneous iron and steel products.....	901,579	3,229,712	1,499,191
Nonferrous metals and their alloys.....	2,788,796	2,534,521	1,735,533
Aluminum manufactures.....	251,356	268,302	93,899
Brass products.....	351,559	312,728	230,257
Bronze products.....	39,250	118,722	162,250
Copper products.....	.....	148,915	240,835
Fixtures, gas, and electric.....	1,782,963	84,773	116,859
Lead products.....	.....	15,255	63,993
Magnesium.....	15,385	22,176	59,050
Nickel.....	131,200	52,213	117,615
Plated ware.....	.....	65,683	14,745
Sheet-metal work.....	11,456	12,609	27,673
Tin.....	92,877	595,300	289,170
Zinc.....	11,350	23,217	.....
Miscellaneous nonferrous metals and alloys.....	101,400	814,628	319,187
Machinery, not including transportation equipment and electrical equipment.....	6,553,971	15,296,110	3,204,397
Air-conditioning equipment.....	.....	43,186	.....
Elevators and elevator equipment.....	.....	.....	35,518
Engines, turbines, tractors, and parts.....	1,020,030	9,347,787	691,478
Filter and purification equipment.....	41,720	10,424	134,346
Laundry machinery and equipment.....	41,665	54,125	13,500
Machine tools.....	809,276	1,913,003	533,504
Office equipment.....	42,648	91,961	.....
Phonographs and accessories.....	17,000	34,500	.....
Power shovels and draglines.....	88,340	115,975	112,326
Printing and publishing machinery.....	122,390	11,168	30,514
Pumps and pumping equipment.....	979,060	198,429	50,968
Refrigerators and refrigerating and ice-making machinery.....	62,684	71,530	12,810
Road machinery.....	103,121	217,171	10,400
Windlasses, winches, and capstans.....	25,450	22,815	84,950
Miscellaneous machinery and parts.....	3,200,587	3,164,036	1,489,083
Electrical machinery, apparatus, and supplies.....	2,331,192	5,492,028	5,213,593
Batteries.....	104,140	407,118	145,329
Circuit breakers and switches.....	323,078	254,338	223,814
Electric cable, wire, and other conductors.....	143,631	722,736	489,793
Generators and spare parts.....	539,926	2,438,501	1,026,311
Heaters and ranges.....	83,000	6,719	35,856
Lamps, incandescent, and X-ray tubes.....	.....	10,500	.....
Motors.....	14,431	.....	.....
Radio equipment and supplies.....	752,104	76,924	1,808,538
Spark plugs.....	.....	81,464	47,503
Switchboards, relay and control equipment.....	185,002	101,406	57,188
Telephone and telegraph apparatus.....	10,796	546,632	235,652
Transformers.....	72,327	299,984	109,303
Welding equipment.....	28,290	.....	.....
Miscellaneous electrical machinery, apparatus, and supplies.....	124,467	545,766	1,034,806
Transportation equipment.....	26,013,329	38,561,704	12,760,004
Aircraft.....	912,448	303,132	9,838,353
Aircraft parts and equipment.....	1,029,286	3,719,851	1,497,447
Boats and boat equipment.....	.....	15,085	.....
Motor vehicles, passenger.....	54,813	32,160	275,621
Motor vehicles, trucks.....	768,531	1,084,074	753,498
Naval vessels.....	23,196,000	33,177,000	.....
Miscellaneous transportation equipment.....	52,251	230,402	395,085

See footnotes at end of table.

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

Type of materials	Value of contracts awarded		
	Fourth quarter 1938	Third quarter 1938	Fourth quarter 1937
Miscellaneous.....	\$1, 776, 743	\$7, 984, 774	\$9, 327, 741
Brooms, brushes, bristles, etc.....	34, 282	53, 652	187, 797
Dental goods and equipment.....	22, 273	-----	65, 014
Instruments, professional and scientific.....	471, 133	4, 366, 665	1, 294, 263
Paper and allied products.....	398, 408	219, 417	2, 805, 783
Photographic apparatus and materials.....	12, 220	350, 651	743, 670
Printing, publishing, and subscriptions.....	20, 815	205, 411	131, 331
Rubber products.....	173, 685	95, 574	247, 234
Slag.....	-----	-----	56, 800
Steam and other packing, pipe, and boiler covering.....	-----	-----	13, 628
Surgical and orthopedic supplies and appliances.....	195, 868	239, 009	85, 742
Tobacco manufactures.....	16, 544	43, 115	89, 413
Other materials.....	230, 428	856, 129	2, 982, 161
Rentals, services, etc. ¹	201, 087	1, 555, 151	624, 907

¹ For period ending Dec. 31, 1938.

² For period ending Sept. 30, 1938. Revised.

³ For period ending Dec. 31, 1937. Revised.

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

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

The value of public contracts awarded for materials by Federal agencies totaled \$56,744,000 during the fourth quarter of 1938. Of the contracts awarded in the fourth quarter of 1938, \$26,013,000 was for transportation equipment; \$3,875,000 for textiles and textile products; \$3,408,000 for asphalt, coal, and petroleum; and \$3,212,000 for iron and steel products.

