

GENERAL SUMMARY

INTRODUCTION

The Census of Manufactures dates back to 1810, when, on the recommendation of the Secretary of the Treasury, Congress amended the census act to authorize a canvass of manufactures and to provide funds for it. The United States became thereby the first Nation to establish a census of industry. (See "Legal provision for biennial census," p. 1.) The census of 1810, taken by United States marshals without the use of formal schedules, covered imperfectly the industrial activities of the country at that time. The chief value of the statistics lies in the analysis of them by Tench Coxe, who was appointed by the Secretary of the Treasury to tabulate and interpret the returns.

The annual report of the Treasury Department for 1855 gives manufactures statistics or estimates for the four decennial census years from 1810 to 1840. According to this report, the value of products for 1810, based upon the incomplete census returns, Coxe's estimates, and Treasury revisions, was \$145,000,000.

Although the census of 1820 was so imperfectly taken that Congress refused to authorize the publication of the figures, the Treasury Department, in the document referred to above, reported \$53,000,000 as the value of products for that year, unquestionably a gross understatement of the actual value of industrial production.

The Census of Manufactures was omitted entirely in 1830, but on the basis of returns made from 10 States in compliance with a congressional resolution of 1832, the Treasury estimated the value of products for 1830 at \$113,000,000.

The report of the census of 1840, the most accurate and comprehensive canvass of industry up to that time, gave \$483,000,000 as the value of manufactured products. Although in prior years there had been a beginning of production by the factory method, particularly of textiles and iron, it was not until about this time that the factory method began to be extended rapidly to other products which entered into competition in the market with handmade goods.

Until about the middle of the nineteenth century, however, the bulk of general manufacturing was done in the neighborhood shop and in the household rather than in the factory. The census for 1849 is, therefore, the starting point for properly comparable statistics of manufactures, although not until the census for 1899 was there any satisfactory line of demarcation between the shop or household and the factory. Comparative statistics for the censuses for 1849 and subsequent years are given in Table 1, page

15. (See also "Comparableness with preceding years—Years covered," p. 2.)

The impetus given by the factory system to the improvement of mechanical equipment is indicated by the increase in the number of patents issued, from an average of 350 per annum during the period 1801-1850 to a yearly average of more than 5,000 for the period 1851-1870.

Not until the decade 1859-1869 did it become apparent that the complete supply of most staple commodities for the home market was within the capacity of domestic production. Manufacturing began about this time to be carried on in larger plants, and as a result the census for 1879 showed considerable increases both in wage earners and in value of output, but recorded a gain of less than 1 per cent in the number of industrial establishments.

By the close of the decade 1879-1889 the value of manufactures exceeded that of agricultural products. By this time, the full effect of machine manufacture was beginning to be felt, and capital and markets were expanding rapidly. The decade from 1889 to 1899, while showing a smaller percentage of increase in value of products than any prior decade for which comparable statistics were available, was important as marking the entrance of the United States into international trade in manufactures and the development of the corporate form of organization.

During the years between 1899 and 1919, with an upward secular tendency of commodity prices and with population increasing by 39 per cent, the value of manufactured products increased 444 per cent and the index of factory output, as measured in quantities of products rather than in dollars, rose from 100 to 214. The number of wage earners employed in manufacturing establishments almost doubled during the 20-year period. If, however, this is broken down into 5-year periods corresponding to the intervals between quinquennial censuses of manufactures, decidedly uneven rates of increases are noted. These irregularities reflect both general trends in business activity and particular cyclical conditions prevailing during the five census years covered by the returns. The increase in physical volume of output is estimated to have been 22 per cent between 1899 and 1904, 30 per cent between 1904 and 1909, 6 per cent between 1909 and 1914, and 26 per cent between 1914 and 1919. Since the last 5-year period began in a year of industrial depression, continued during the World War, and ended in a year of great industrial activity, the increase in production was not so great as might have

been expected—not so great, in fact, as during the 1904–1909 period of peace.

Manufacturing activity in 1929 reached a new high mark. The value of products manufactured increased 12.3 per cent over the value reported to the census for the previous record year, 1927, while the index of physical volume of output, based on the production of 1899 as 100, rose from 214 in 1919 and 272 in 1927 to 295 in 1929.

The horsepower capacity of prime movers (engines, turbines, and water wheels) in 1929 was only 2.3 per cent more than in 1927, and was practically the same as in 1919, but the horsepower capacity of motors driven by purchased electric energy increased 19 per cent from 1927 to 1929 and 145.3 per cent during the 10-year period.¹

The electrification of manufacturing industries is accomplished also by the use of motors connected with generators which in turn are driven by prime movers in the same plants. The capacity of such motors increased 77.6 per cent between 1919 and 1929, and in the latter year totaled 12,376,376 horsepower.

The increasing tempo of industrial production culminating in the record activity of 1929 occurred without a corresponding gain in the number of wage earners employed. Mechanization of industry and more efficient utilization of labor led to a drop of 1.8 per cent in factory employment in 1929 as compared with the abnormal postwar year 1919, but the number employed in 1929 showed an increase of 5.9 per cent over 1927. The wage budget of 1929, however, exceeded that of 1919 by 11.1 per cent and that of 1927 by 7.1 per cent.

¹ The rapid addition to power equipment of motors on purchased energy should be regarded with caution in any comparison between census years of either manufacturing activity or extent of plant mechanization, since the installation of motors for driving machines individually or in groups results in a greater power-equipment capacity for a given amount of production than is customarily required when the machines are driven by prime movers in the plant. (See "Power equipment," p. 8.)

The increase of 16.1 per cent in the total population of the United States during the past decade (1920–1930) and the decrease of 1.8 per cent in factory wage earners employed in 1929 as compared with 1919 reflect an employment condition which can not be fully accounted for in the statistics of the census of manufactures. While certain expanding industries, notably those referred to in the following paragraph, absorbed wage earners between 1919 and 1929 at a more rapid rate than that by which the population increased, the largest increase in the number of employment opportunities occurred not in the manufactures group taken as a whole, but in the distribution, service, and construction groups of industries, not covered by the census of manufactures.

Among the outstanding wage-earner gains in manufacturing industries between 1919 and 1929 were those which occurred in the following lines of production: Electrical machinery, apparatus, and supplies (including the manufacture of radio equipment), 54.8 per cent; bakery products, 41.8 per cent; furniture, 37.9 per cent; petroleum refining, 36.9 per cent; chemicals (including the manufacture of rayon and allied products), 36.1 per cent; and motor vehicles and parts, 30.4 per cent.

Twenty-two of the 48 States showed gains in factory wage-earner employment during the decade 1919–1929, the highest rates of increase recorded being those for five Southern States: South Carolina, 36.9 per cent; Tennessee, 34.9 per cent; North Carolina, 33.1 per cent; Georgia, 27.6 per cent; and Texas, 25.1 per cent. The major part of the gains in these States is accounted for by increases in the manufacture of cotton goods, knit goods, lumber, and furniture in the Carolinas; of cotton goods, knit goods, rayon, and motor-vehicle bodies and parts in Tennessee; of cotton goods, knit goods, and turpentine and rosin in Georgia; and of petroleum, foundry and machine-shop products, bakery products, and cotton goods in Texas.

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TABLE 1.—COMBINED SUMMARY FOR ALL MANUFACTURING INDUSTRIES, FOR THE UNITED STATES: 1849 TO 1929

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture ¹
FACTORIES AND HAND AND NEIGHBORHOOD INDUSTRIES						
1849 ²	123, 025	967, 059	\$236, 755, 464	\$555, 123, 882	\$1, 010, 106, 610	\$463, 932, 734
1859 ²	140, 433	1, 311, 246	378, 878, 966	1, 031, 605, 092	1, 885, 861, 676	854, 256, 584
Per cent of increase, 1849 to 1859.....	14.1	37.0	60.0	85.8	85.1	84.1
1869 ²	262, 148	2, 053, 996	620, 467, 474	1, 990, 741, 704	3, 388, 860, 354	1, 395, 118, 560
Per cent of increase, 1859 to 1869.....	79.6	56.6	63.8	93.0	79.5	63.3
1879 ²	253, 852	2, 732, 595	947, 953, 795	3, 396, 823, 549	5, 369, 579, 191	1, 972, 755, 642
Per cent of increase, 1869 to 1879.....	0.7	33.0	52.8	70.6	58.6	41.4
1889 ²	355, 405	4, 251, 535	1, 891, 219, 696	5, 162, 013, 878	9, 372, 373, 843	4, 210, 304, 955
Per cent of increase, 1879 to 1889.....	40.0	55.6	99.5	52.0	74.5	113.4
1899 ²	512, 191	5, 306, 143	2, 320, 038, 168	7, 343, 627, 875	13, 000, 149, 159	5, 656, 521, 284
Per cent of increase, 1889 to 1899.....	44.1	24.8	22.7	42.3	38.7	84.3
FACTORIES, EXCLUDING HAND AND NEIGHBORHOOD INDUSTRIES						
1899 ²	207, 514	4, 712, 763	2, 008, 361, 119	6, 575, 851, 491	11, 406, 926, 701	4, 831, 076, 210
1904 ²	216, 180	5, 468, 383	2, 610, 444, 953	8, 500, 207, 810	14, 793, 902, 503	6, 293, 694, 753
Per cent of increase, 1899 to 1904.....	4.2	16.0	30.0	29.3	29.7	30.3
1909 ²	208, 491	6, 615, 046	3, 427, 037, 884	12, 142, 790, 878	20, 672, 051, 870	8, 529, 260, 992
Per cent of increase, 1904 to 1909.....	24.2	21.0	31.3	42.9	39.7	55.5
Per cent of increase, 1899 to 1909.....	29.4	40.4	70.6	84.7	81.2	76.5
1914 ²	272, 518	7, 023, 685	4, 067, 718, 740	14, 358, 935, 014	24, 216, 514, 573	9, 857, 570, 559
Per cent of increase, 1909 to 1914.....	1.5	6.2	13.7	18.3	17.1	15.6
Per cent of increase, 1899 to 1914.....	20.1	28.4	55.8	68.9	63.7	56.6
1914 ²	177, 110	6, 896, 190	4, 067, 718, 740	14, 278, 333, 194	23, 987, 860, 617	9, 709, 527, 423
1919 ²	214, 333	9, 000, 059	10, 461, 786, 869	37, 232, 702, 300	62, 041, 795, 316	24, 809, 092, 926
Per cent of increase, 1914 to 1919.....	21.0	30.5	157.2	160.8	158.6	155.5
1921 ²	196, 267	6, 946, 570	8, 202, 324, 339	25, 321, 055, 346	43, 653, 282, 833	18, 332, 227, 457
Per cent of decrease (-), 1919 to 1921.....	-8.5	-22.8	-21.6	-32.0	-29.6	-26.1
1923 ²	196, 309	8, 778, 156	11, 000, 297, 726	34, 705, 697, 740	60, 555, 998, 200	25, 850, 300, 451
Per cent of increase, 1921 to 1923.....	(9)	20.4	34.2	37.1	33.7	41.0
1925 ²	187, 390	8, 384, 231	10, 729, 908, 927	35, 935, 647, 704	62, 713, 713, 730	20, 778, 066, 026
Per cent of increase or decrease (-), 1923 to 1925.....	-4.5	-4.5	-2.5	8.5	3.6	3.6
1927 ²	191, 866	8, 349, 755	10, 848, 802, 532	35, 133, 136, 889	62, 718, 347, 289	27, 585, 210, 400
Per cent of increase or decrease (-), 1925 to 1927.....	2.4	-0.4	1.1	-2.2	(4)	8.0
1929 ²	210, 959	8, 838, 743	11, 620, 973, 254	38, 549, 579, 732	70, 434, 863, 443	31, 885, 283, 711
Per cent of increase, 1927 to 1929.....	10.0	5.9	7.1	(9)	12.3	(9)

¹ Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
² For all establishments having products valued at \$500 or more. See GENERAL EXPLANATIONS—Establishments Covered—Size.
³ For all establishments having products valued at \$5,000 or more. See GENERAL EXPLANATIONS—Establishments Covered—Size.
⁴ Less than one-tenth of 1 per cent.
⁵ The cost-of-materials items for 1927 and earlier years, which include data on the cost of mill or shop supplies, are not strictly comparable with that for 1929, which does not include such data, and therefore no per cent of increase is shown. See GENERAL EXPLANATIONS—Comparableness with Preceding Years—Schedule Changes—Mill or Shop Supplies.
⁶ Because of a change in the cost-of-materials item (see footnote 5), the figure for 1927 is not comparable with that for 1929, and therefore no per cent of increase is given.

TABLE 2.—INDEXES AND RATIOS FOR POPULATION, WAGE EARNERS, PRODUCTION, AND POWER: 1899 TO 1929

[For explanation of methods used in computing the indexes in this table, see "Production as measured by physical volume," p. 8]

Census year	INDEXES					RATIOS	
	Popula- tion	Wage earners	Produc- tion (quan- tity)	Produc- tion per wage earner	Horse- power ¹	Horse- power per 100 wage earners ¹	Wage earners per 1,000 population
1899.....	100	100	100	100	100	211	63
1904.....	110	114	122	107	133	248	65
1909.....	121	137	159	116	185	287	71
1914.....	131	146	169	116	224	323	70
1919.....	140	191	214	112	294	326	80
1921.....	145	147	170	116	(3)	(3)	64
1923.....	149	189	261	140	352	377	73
1925.....	154	178	269	151	359	427	71
1927.....	153	177	272	154	390	465	71
1929.....	162	188	295	157	431	456	73

¹ Covers rated capacity of prime movers and of motors driven by purchased electric energy. For explanation of the inflation of data for capacity, see GENERAL EXPLANATIONS—Power Equipment, p. 8.
² No data.
³ Revised.

CENSUS OF MANUFACTURES: 1929

TABLE 3.—COMBINED GENERAL STATISTICS FOR ALL MANUFACTURING INDUSTRIES: 1899 TO 1929

[No data for establishments reporting products valued at \$500 or more but less than \$5,000 are included in this table for the census years from 1921 to 1929, inclusive. For the years from 1904 to 1919, inclusive, data for such establishments have been deducted from the following items: Number of establishments; wage earners; cost of materials, containers for products, fuel, and purchased electric energy; value of products; value added by manufacture. It is impossible, however, to assemble separate figures relating to establishments having products valued at less than \$5,000, for the remaining items, covering the years 1904 to 1919, or for any items for 1899. Each of the items for 1899, therefore, refers to all establishments reporting products valued at \$500 or more. This difference in the value-of-products limit, however, has little effect on the comparableness of the several items for different census years, with the exception of that for number of establishments. (See GENERAL EXPLANATIONS—Establishments Covered—Size.) The figures for the automobile-repairing industry have been deducted from the statistics for 1919 and 1924, the only census years for which this industry was canvassed. Data for the "Coffee and spice, roasting and grinding" industry are included for all years except 1925, for which year no statistics for this industry, for the United States as a whole, were compiled; and data for the "Poultry killing, dressing, and packing, wholesale" industry are included for all years except 1927, for which year this industry was not canvassed.]

YEAR OR PERIOD	Number of establishments	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES				HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		
		Total	Proprietors and firm members	Salariied officers and employees ¹	Wage earners (average for the year)	Total	Prime movers	Motors run by purchased energy
1929	210,959	10,330,728	133,210	1,358,775	8,838,743	42,031,061	20,155,307	22,775,664
1927	191,866	9,783,438	132,681	1,301,002	8,349,755	38,825,681	19,693,371	19,132,310
1925	187,390	9,773,061	133,054	1,255,736	8,384,261	35,772,628	19,903,800	15,868,828
1923	196,309	10,195,928	148,421	1,269,351	8,778,150	33,094,228	10,723,565	13,365,663
1921	196,267	8,265,821	172,871	1,146,380	6,946,670	(²)	(²)	(²)
1919	214,353	10,088,849	250,571	1,438,219	9,000,059	29,327,669	20,043,170	9,284,499
1914	177,110	8,117,895	259,172	962,533	6,896,190	22,290,890	18,406,175	3,884,724
1909	175,142	7,536,148	273,265	790,267	6,472,616	18,551,737	16,302,706	1,749,031
1904	145,033	6,107,259	225,673	519,556	5,362,030	13,295,394	12,854,805	441,589
1899	*207,514	(³)	(³)	364,120	4,712,793	9,060,980	9,778,418	182,562
PER CENT OF INCREASE OR DECREASE (—)								
1927-1929 ⁴	10.0	5.6	0.4	4.4	5.0	10.6	2.3	19.0
1925-1927 ⁴	2.4	0.1	-0.3	3.6	-0.4	8.5	-1.1	20.6
1923-1925 ⁴	-4.5	-4.1	-10.4	-1.1	-4.5	8.1	0.9	18.7
1921-1923	(⁵)	(¹)	-14.1	(¹)	26.4			
1919-1921	-8.5	-22.7	-31.0	-20.3	-22.8			
1919-1929	-1.6	(¹)	-46.3	(¹)	-1.8	46.4	0.6	145.3
1909-1919	22.4		-8.3		82.0	58.1	19.3	430.8
1899-1909		41.8			117.0	86.2	71.8	868.0

YEAR OR PERIOD	SALARIES AND WAGES ⁶			COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY ^{6,7}			Value of products ^{8,9}	Value added by manufacture ⁸
	Total	Salaries ¹	Wages	Total ²	Materials and containers ³	Fuel and purchased energy		
1929	\$15,216,037,315	\$3,596,064,061	\$11,620,973,254	\$38,549,579,732	\$36,683,414,013	\$1,866,165,719	\$70,434,863,443	\$31,885,283,711
1927	14,078,327,160	3,229,524,618	10,848,802,532	35,183,136,889	33,235,799,366	1,897,337,523	62,718,347,289	27,585,210,400
1925	13,651,784,805	2,921,815,878	10,729,968,927	35,935,647,704	(¹⁰)	(¹⁰)	62,713,713,730	20,778,066,026
1923	13,815,703,737	2,806,406,011	11,009,297,726	34,705,697,749	(¹⁰)	(¹⁰)	60,555,998,200	25,850,300,451
1921	10,765,427,145	2,563,102,300	8,202,324,839	25,321,055,346	(¹⁰)	(¹⁰)	43,653,282,833	18,332,227,487
1919	13,342,655,244	2,880,868,375	10,461,786,869	37,232,702,390	35,594,463,485	1,638,238,905	62,041,795,316	24,809,092,020
1914	5,342,157,369	1,274,438,629	4,067,718,740	14,278,333,194	13,612,435,727	665,897,467	23,987,860,617	9,709,527,423
1909	4,365,612,851	938,574,967	3,427,037,884	12,064,573,039	11,494,505,215	570,067,824	20,449,588,023	8,385,014,984
1904	3,184,884,275	574,439,322	2,610,444,953	8,438,860,722	8,113,992,806	324,867,826	14,617,774,351	6,178,913,629
1899	2,389,132,440	380,771,321	2,008,361,119	6,575,851,491	6,368,711,944	207,139,547	11,406,926,701	4,831,075,210
PER CENT OF INCREASE OR DECREASE (—)								
1927-1929 ⁴	8.1	11.3	7.1	(⁵)	(⁵)	-1.6	12.3	(⁵) 3.0
1925-1927 ⁴	3.1	10.5	1.1	-2.2			(⁵) 3.0	3.0
1923-1925 ⁴	-1.2	4.1	-2.5	3.5			38.7	41.0
1921-1923	28.3	9.5	34.2	37.1			-29.6	-26.1
1919-1921	-19.3	-11.0	-21.6	-32.0				
1919-1929	14.0	24.8	11.1	(⁵)	(⁵)	13.9	13.5	(⁵)
1909-1919	205.6	206.9	205.3	203.0	200.7	187.4	203.4	195.9
1899-1909	82.7	146.5	70.6	83.5	80.5	176.2	79.3	73.6

¹ Data for employees of central-administrative offices are included in the figures for 1921 and earlier years but not in those for 1923 and subsequent years. The numbers and salaries of such employees, as reported for 1929, 1925, and 1923, are as follows: For 1929, 208,363 employees, \$600,437,331; 1925, 84,646, \$225,512,798; 1923, 86,378, \$207,840,169. Corresponding data for 1921 and earlier years can not be segregated. No percentages are, therefore, given for the 1921-1923 and 1919-1929. No data in regard to central-administrative-office employees were collected for 1927.

² Not called for on schedule.

³ No comparable data available for proprietors and firm members.

⁴ Because of the omission of data for the "Coffee and spice, roasting and grinding" industry for 1925 and of data for the "Poultry killing, dressing, and packing, wholesale" industry for 1927 (see headnote), the percentages for 1923-1925 understate slightly the true increases and overstate slightly the true decreases, and those for 1925-1927 and for 1927-1929 overstate slightly the true increases and understate slightly the true decreases.

⁵ Less than one-tenth of 1 per cent.

⁶ Manufacturers' profits can not be calculated from the census figures because no data are collected for certain expense items, such as interest on investment, rent, depreciation, taxes, insurance, and advertising.

⁷ The aggregates for cost of materials and value of products include large but indeterminate amounts of duplication due to the use of the products of some industries as materials by others.

⁸ Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture. The figures for 1927 and earlier years are not strictly comparable with those for 1929 because of a change in the cost-of-materials item, and therefore no percentages of increase are shown for 1927-1929 and 1919-1929. (See footnote 9.)

⁹ The cost-of-materials items for 1927 and earlier years, which include data on the cost of mill or shop supplies, are not strictly comparable with that for 1929, which does not include such data, and therefore no percentage of increase is shown. See GENERAL EXPLANATIONS—Comparableness with Preceding Years—Schedule Changes—Mill or Shop Supplies.

¹⁰ Not reported separately.

* Not comparable with figures for later years. Includes number reporting products valued at less than \$5,000. See headnote.

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TABLE 4.—GENERAL STATISTICS FOR ALL INDUSTRIES, BY GEOGRAPHIC DIVISIONS AND BY STATES: 1929, 1927, AND 1919
 [Data for the "Automobile repairing" industry and data for establishments with products valued at \$500 or more but less than \$5,000, in all industries, are included in the geographic division and State items for 1919 but not in the United States totals. No data for either of these classes of establishments are included in any of the figures for 1927 or 1929.]

Division and State	Census year	Number of establishments	Persons engaged in manufacturing industries ¹				Horse-power	Salaries ¹	Wages	Cost of materials, containers for products, fuel, and purchased electric energy				Value of products	Value added by manufacture ¹
			Total ¹	Proprietors and firm members ¹	Salariatd officers and employ-ees ¹	Wage earners (average for the year)				Total	Materials and containers	Fuel and purchased energy			
UNITED STATES	1929	210,950	10,330,728	183,210	1,558,775	8,838,743	42,931,061	\$11,620,973,254	\$85,549,579,792	\$36,685,414,013	\$1,866,165,719	\$70,494,863,443	\$31,835,283,711		
	1927	191,866	9,783,438	132,861	1,301,002	8,349,755	38,825,681	10,548,962,532	35,133,136,889	33,224,795,366	1,897,337,523	62,718,347,289	27,585,210,400		
	1919	214,383	10,683,949	250,571	1,438,219	9,000,059	20,327,699	10,461,786,869	37,282,702,330	35,694,463,485	1,638,238,905	62,041,795,316	24,809,092,926		
GEOGRAPHIC DIVISIONS:															
New England:															
Middle Atlantic.....	1929	18,272	1,256,504	10,636	147,354	1,088,514	4,683,822	1,346,891,525	3,138,416,191	3,014,417,376	143,998,815	6,398,214,686	3,239,798,494		
	1927	17,745	1,098,748	4,566,155	1,098,748	4,566,155	3,825,681	1,328,650,205	2,895,257,067	2,895,257,067	150,605,980	6,028,474,916	2,979,611,869		
	1919	26,628	1,535,055	21,470	162,196	1,351,339	3,770,818	1,436,436,657	3,961,908,159	3,811,641,271	140,206,888	7,183,070,789	3,231,162,640		
East North Central.....	1929	64,730	3,047,316	44,473	440,903	2,562,340	11,623,682	3,640,419,329	11,188,618,642	10,581,193,780	602,424,862	21,369,573,975	10,176,956,333		
	1927	62,276	2,467,781	2,467,781	2,467,781	2,467,781	10,968,754	3,491,679,907	10,498,831,747	9,376,334,130	612,497,617	19,583,075,079	9,044,248,382		
	1919	88,360	3,450,593	86,266	491,674	2,872,653	8,512,612	3,464,931,267	11,424,086,826	10,843,787,208	580,308,618	19,864,772,760	8,430,676,934		
West North Central.....	1929	46,398	2,974,216	24,860	407,180	2,542,176	12,602,451	3,738,864,099	11,689,798,724	11,040,248,699	649,580,125	21,663,289,041	9,973,490,317		
	1927	45,671	2,884,836	49,588	438,632	2,309,860	11,056,846	3,340,800,715	9,888,100,045	9,888,100,045	637,283,153	18,988,400,328	8,463,007,125		
	1919	61,332	2,884,836	49,588	438,632	2,309,860	7,702,551	2,992,930,744	10,621,687,089	10,113,945,205	507,741,854	17,737,479,599	7,116,792,510		
South Atlantic.....	1929	17,792	577,214	10,054	93,045	474,115	2,210,192	589,162,333	3,507,392,311	3,413,044,209	94,348,102	5,377,382,984	1,869,990,673		
	1927	16,192	446,162	446,162	446,162	446,162	2,063,074	560,695,451	2,437,870,882	2,074,167,429	86,822,018	4,785,111,997	1,562,122,550		
	1919	20,166	633,323	20,859	112,829	499,635	1,592,809	546,172,557	3,778,125,226	3,689,336,004	88,188,622	5,157,064,766	1,406,933,540		
East South Central.....	1929	20,860	1,014,505	14,510	87,748	912,247	4,318,015	825,902,832	2,811,055,098	2,670,355,650	140,469,548	5,269,276,425	2,458,221,327		
	1927	17,029	879,000	879,000	879,000	879,000	3,806,038	794,264,870	2,487,870,882	2,346,656,241	141,214,641	4,631,952,156	2,144,081,274		
	1919	29,976	931,595	20,833	84,500	817,212	2,791,038	778,026,847	2,596,264,687	2,489,150,307	107,114,380	4,456,151,691	1,868,837,004		
West South Central.....	1929	9,860	423,880	6,975	39,035	377,870	1,999,354	348,733,174	1,080,015,001	1,014,461,541	75,563,460	2,014,443,188	924,428,157		
	1927	7,637	339,542	339,542	339,542	339,542	1,787,836	311,279,629	932,675,099	877,695,744	72,447,083	1,808,818,353	783,696,171		
	1919	14,655	382,595	15,620	37,749	320,226	1,414,190	298,710,318	1,077,894,517	897,695,744	80,128,773	1,642,891,461	664,566,944		
Mountain.....	1929	10,876	347,435	6,356	48,936	287,743	1,749,555	316,474,819	1,851,629,694	1,798,150,397	53,479,287	2,802,091,813	950,462,119		
	1927	8,208	287,142	287,142	287,142	287,142	1,179,588	182,155,572	644,155,128	1,563,407,956	78,477,172	2,399,410,287	755,256,329		
	1919	13,909	339,950	13,437	41,269	285,244	1,419,896	293,021,068	1,547,993,571	1,500,847,009	47,146,562	2,277,861,299	729,897,722		
Pacific.....	1929	4,319	121,185	2,407	16,286	102,492	838,689	144,465,836	899,855,516	827,859,292	41,996,224	1,239,910,888	370,056,342		
	1927	3,919	94,957	94,957	94,957	94,957	680,409,489	182,816,500	615,783,939	43,816,500	43,816,500	981,090,829	321,490,390		
	1919	7,612	133,447	6,829	17,402	109,216	685,192	141,900,942	610,289,118	569,007,154	41,281,964	922,676,092	312,436,974		
NEW ENGLAND:															
Maine.....	1929	1,568	77,680	891	6,640	70,159	679,153	74,199,861	217,366,820	204,622,359	12,744,231	391,751,334	174,384,514		
	1927	1,426	68,142	2,745	7,916	68,142	628,941	74,212,035	208,965,679	196,073,350	12,792,329	372,035,474	163,227,795		
	1919	2,965	90,312	705	5,722	88,551	545,613	94,225,346	254,508,523	241,054,861	13,483,662	456,821,783	202,253,260		
New Hampshire.....	1929	1,075	71,941	705	5,722	65,511	402,147	70,519,819	185,402,323	176,903,427	8,498,896	332,534,763	147,132,430		
	1927	1,028	65,462	65,462	65,462	65,462	376,373	72,809,225	182,106,373	175,239,125	8,807,248	327,523,366	145,421,993		
	1919	1,499	90,332	1,426	5,832	83,074	348,592	79,826,341	239,527,617	231,599,446	7,923,171	407,204,934	167,677,317		
Vermont.....	1929	927	31,189	649	3,119	27,421	163,940	33,309,957	66,262,873	62,871,755	3,391,118	143,522,547	77,259,674		
	1927	880	26,241	1,804	3,550	25,241	172,762	32,305,433	66,491,432	66,491,432	3,465,792	134,023,978	64,072,546		
	1919	1,790	38,845	1,804	3,550	33,491	184,327	34,083,935	95,172,531	91,624,436	3,548,145	168,108,072	72,935,491		
Massachusetts.....	1929	9,872	645,031	5,867	81,670	567,494	2,068,621	694,805,312	1,681,432,788	1,608,241,295	73,191,493	3,392,162,327	1,710,729,449		
	1927	10,037	578,008	2,130,503	578,008	2,130,503	1,200,009	705,829,549	1,678,812,411	1,498,573,855	80,239,552	3,317,851,838	1,693,093,477		
	1919	11,906	812,321	9,451	89,234	713,836	1,716,982	766,623,337	2,260,713,036	2,188,353,757	72,330,279	4,011,131,532	1,750,468,496		
Rhode Island.....	1929	1,701	141,074	968	14,048	126,068	463,822	144,196,834	342,290,071	328,399,079	13,890,992	666,368,210	324,075,139		
	1927	1,497	120,009	410,181	120,009	410,181	319,688	138,895,884	297,336,627	297,336,627	15,770,452	592,232,647	279,125,572		
	1919	2,466	156,012	2,124	14,223	139,665	319,688	137,496,377	415,989,203	402,205,892	13,783,311	747,322,858	331,333,655		
Connecticut.....	1929	3,129	289,979	1,563	36,155	251,861	909,239	328,865,412	665,661,317	633,379,231	22,282,085	1,471,875,603	806,214,288		
	1927	2,877	240,806	1,563	36,155	240,806	847,395	304,500,907	566,642,076	566,642,076	29,471,304	1,284,738,564	688,724,486		
	1919	4,872	338,033	3,920	41,441	292,672	664,316	324,682,251	685,937,199	656,772,879	29,164,320	1,392,431,620	706,494,421		

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 4.—GENERAL STATISTICS FOR ALL INDUSTRIES, BY GEOGRAPHIC DIVISIONS AND BY STATES: 1929, 1927, AND 1919—Continued
 (See note at head of this table)

DIVISION AND STATE	Census year	Number of establishments	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES ¹				Horse-power	Salaries ¹	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufacture ²
			Total ¹	Proprietors and firm members ¹	Salaried officers and employees ¹	Wage earners (average for the year)				Total	Materials and containers	Fuel and purchased energy		
MIDDLE ATLANTIC: New York	1929	39,395	1,359,731	28,374	225,931	1,105,966	644,503,633	\$1,850,378,858	\$5,004,635,985	\$4,810,232,972	\$194,403,013	\$9,978,556,143	\$4,973,920,158	
	1927	36,650	1,072,254	24,147	171,074	970,308,302	513,547,903	1,603,375,085	4,804,172,874	4,606,940,039	197,252,855	9,400,001,376	4,685,888,502	
	1919	49,330	1,524,761	49,484	247,147	1,228,130	1,458,206,804	1,458,206,804	4,943,213,919	4,780,956,952	162,256,967	8,867,004,906	3,923,790,987	
New Jersey	1929	8,388	521,262	4,680	74,248	442,328	198,265,860	610,599,378	2,165,727,126	2,080,852,202	74,873,924	3,937,156,775	1,771,429,649	
	1927	8,312	408,093	3,499	508,686	1,496,935	171,074,267	570,308,302	1,956,927,097	1,866,372,502	90,224,295	3,417,450,238	1,460,865,181	
	1919	11,057	602,170	9,349	84,135	508,686	1,140,554	600,658,345	2,270,473,279	2,194,512,449	75,960,830	3,672,064,987	1,461,391,708	
Pennsylvania	1929	16,947	1,166,323	11,413	140,864	1,014,046	369,843,008	1,379,444,293	4,013,255,531	3,680,107,606	333,147,925	7,443,961,057	3,430,605,596	
	1927	17,314	987,414	10,887	130,837	976,527	334,763,215	1,315,993,519	3,728,061,776	3,408,021,289	326,040,487	6,715,266,455	2,987,591,679	
	1919	27,973	1,323,662	27,433	160,392	1,153,837	1,402,066,138	1,402,066,138	4,210,408,628	3,868,317,807	342,096,821	5,165,294,239	3,165,294,239	
EAST NORTH CENTRAL: Ohio	1929	11,855	859,289	5,904	112,242	747,143	302,013,905	1,022,165,499	3,138,098,824	2,919,341,176	187,757,648	6,097,908,137	2,880,804,303	
	1927	10,961	609,087	5,300	730,733	874,787	273,714,339	963,181,103	3,727,108,587	3,601,364,501	126,744,086	5,200,328,268	2,365,107,023	
	1919	16,125	852,918	12,823	139,362	730,733	944,631,734	944,631,734	3,174,930,568	2,911,947,871	262,682,697	4,100,308,728	2,188,360,837	
Indiana	1929	5,091	302,453	2,565	45,190	314,698	115,415,151	418,771,100	1,401,491,157	1,280,124,322	123,366,835	5,109,893,849	1,136,462,692	
	1927	4,726	280,717	2,377	37,717	273,000	88,116,446	317,042,997	1,227,108,587	1,034,824,524	132,284,063	2,153,470,432	926,310,875	
	1919	7,916	350,145	6,768	45,787	277,358	381,116,446	317,042,997	1,174,930,568	1,084,756,375	90,194,193	1,868,763,387	723,802,761	
Illinois	1929	15,333	836,347	8,840	135,952	691,555	368,721,898	1,024,970,935	3,352,054,470	3,108,957,624	153,096,846	6,282,092,240	2,930,897,761	
	1927	14,711	604,865	5,382	82,463	522,402	274,616,349	814,102,612	3,031,092,107	2,768,710,071	153,382,036	5,386,003,255	2,464,911,128	
	1919	18,395	804,865	13,282	136,409	668,456	1,654,947	801,067,558	3,468,270,446	3,362,381,054	125,889,392	5,425,244,694	1,936,974,249	
Michigan	1929	9,686	602,988	3,809	69,144	530,095	201,283,914	840,505,393	2,589,374,167	2,480,160,584	109,213,583	4,658,718,084	2,067,343,879	
	1927	9,300	488,854	3,414	48,854	439,940	149,084,968	700,602,310	2,346,678,396	2,248,213,128	98,465,268	4,244,941,132	1,898,292,736	
	1919	8,306	540,069	6,762	71,055	471,242	149,084,968	638,703,093	1,919,248,243	1,859,906,060	66,337,183	3,406,188,483	1,546,845,240	
Wisconsin	1929	7,431	313,139	3,742	44,652	264,745	115,083,424	352,490,893	1,206,840,087	1,161,664,833	45,175,254	2,156,681,769	949,841,682	
	1927	7,473	247,722	2,178	20,817	226,905	47,724,098	706,390,744	1,153,327,898	1,110,321,838	43,006,060	1,973,632,261	820,325,363	
	1919	10,393	317,899	7,951	45,999	268,949	87,537,742	290,440,651	1,127,274,961	1,084,868,069	42,406,892	1,846,984,307	719,709,346	
WEST NORTH CENTRAL: Minnesota	1929	4,215	126,409	2,178	20,817	103,414	47,724,098	132,418,195	768,218,329	741,454,482	26,763,847	1,173,213,606	404,935,471	
	1927	3,866	98,323	1,882	18,323	80,001	45,359,956	123,619,231	706,390,744	700,530,491	25,860,253	1,666,727,215	340,336,471	
	1919	6,225	147,678	5,128	26,927	115,623	45,359,956	127,106,805	883,680,777	860,607,295	22,482,478	1,218,159,735	335,039,938	
Iowa	1929	3,217	99,311	1,897	15,736	81,575	34,916,521	102,326,738	574,393,729	555,592,882	17,800,847	898,213,272	323,810,543	
	1927	3,091	73,982	1,897	15,736	72,146	34,916,521	91,246,064	496,939,635	480,095,664	16,843,971	769,340,610	273,401,975	
	1919	5,083	106,439	5,363	19,485	80,551	34,916,521	90,117,169	620,240,807	606,084,871	14,205,986	745,472,697	225,231,890	
Missouri	1929	5,765	243,778	3,170	37,723	202,879	91,909,198	240,368,992	1,139,688,082	1,111,265,172	28,392,910	1,917,155,275	777,497,193	
	1927	5,422	244,939	7,076	42,226	195,863	79,044,650	230,017,341	1,094,700,373	1,029,012,510	29,689,219	1,665,173,463	600,464,090	
	1919	8,392	344,939	7,076	42,226	195,863	79,044,650	196,616,353	1,086,467,164	1,029,012,510	26,644,354	1,594,208,338	537,751,174	
North Dakota	1929	373	5,211	194	993	4,024	2,074,697	5,857,028	39,694,462	38,573,196	1,111,266	55,321,592	15,697,130	
	1927	307	3,200	774	902	2,426	1,434,037	3,403,122	21,271,002	20,283,479	987,523	12,732,022	12,884,123	
	1919	894	6,148	774	902	4,472	1,434,037	4,468,499	44,468,499	43,477,254	1,012,245	57,373,622	12,884,123	
South Dakota	1929	615	8,204	401	1,208	6,585	2,568,447	8,132,240	75,016,424	73,544,176	1,472,248	97,697,636	22,681,212	
	1927	472	5,551	317	676	5,234	2,568,447	6,833,832	63,619,877	62,252,264	1,367,613	83,001,163	16,381,236	
	1919	1,414	9,024	1,410	1,242	6,382	2,076,199	7,905,420	42,985,870	41,821,013	1,164,867	62,170,732	19,184,912	
Nebraska	1929	1,491	35,682	930	6,540	28,210	14,466,307	36,881,112	364,174,710	357,509,096	6,665,014	484,108,409	119,993,699	
	1927	1,707	49,076	2,916	9,639	46,160	14,466,307	326,917,490	319,990,229	319,990,229	6,297,261	420,296,190	93,378,700	
	1919	2,894	49,076	2,916	9,639	46,160	15,741,937	46,066,755	480,774,122	473,634,425	7,137,697	595,042,498	115,208,376	
Kansas	1929	1,916	58,619	1,273	9,068	47,373	21,861,198	63,248,228	546,246,575	534,104,605	12,141,970	751,613,194	205,366,619	
	1927	1,707	45,368	1,273	9,068	45,368	21,861,198	59,925,089	518,141,326	502,995,148	15,146,175	681,570,334	163,493,088	
	1919	3,474	77,009	3,562	12,398	61,049	21,795,653	73,060,019	750,687,987	734,546,932	15,541,058	913,667,094	163,579,107	

GENERAL SUMMARY

SOUTH ATLANTIC: Delaware	1929	460	26,828	272	3,004	23,552	114,961	8,844,642	29,052,739	80,490,738	4,389,170	149,642,042	69,151,304
	1927	446	32,972	593	3,344	21,524	103,166	7,709,068	25,222,182	69,024,720	4,235,473	129,894,753	60,867,015
	1919	668	153,276	2,370	19,807	131,099	659,823	46,178,193	148,835,183	606,985,542	34,099,729	1,119,082,269	428,096,747
Maryland	1929	3,231	165,875	5,129	20,404	126,700	406,637	42,034,007	141,622,197	574,720,437	29,985,208	943,410,399	370,200,459
	1927	4,037	14,328	326	4,250	8,752	44,916	9,836,418	15,512,711	36,200,070	3,104,737	88,973,885	324,997,986
	1919	5,647	14,101	515	3,104	9,319	38,471	9,867,379	13,698,455	36,008,695	2,450,088	90,349,527	52,797,815
District of Columbia	1929	3,287	133,908	2,322	11,313	120,273	646,251	29,263,940	118,088,986	365,824,341	15,715,268	745,910,071	380,985,734
	1927	2,432	139,178	5,900	13,926	114,915	505,792	29,263,940	120,377,945	346,175,760	15,986,624	671,345,808	325,181,089
	1919	5,603	139,178	5,900	13,926	118,352	419,738	23,903,084	120,006,452	371,549,833	19,481,261	643,511,621	271,070,788
Virginia	1929	1,468	94,359	794	8,239	85,226	650,199	20,996,851	115,294,705	261,397,786	28,413,392	513,012,514	251,614,514
	1927	1,313	133,908	2,322	11,313	120,273	646,251	29,263,940	120,377,945	346,175,760	15,986,624	671,345,808	325,181,089
	1919	2,785	139,178	5,900	13,926	118,352	419,738	23,903,084	120,006,452	371,549,833	19,481,261	643,511,621	271,070,788
West Virginia	1929	1,039	114,989	1,113	5,099	108,777	641,899	37,942,407	160,897,988	618,911,596	22,864,962	1,154,646,612	693,012,662
	1927	2,854	175,423	6,070	11,688	108,992	478,245	37,942,407	158,394,434	580,816,216	22,698,170	1,154,646,612	593,827,376
	1919	5,999	175,423	6,070	11,688	157,659	549,808	23,774,333	126,080,099	526,906,181	512,969,300	943,807,949	416,901,768
North Carolina	1929	1,659	175,081	3,947	12,960	158,774	641,899	37,942,407	160,897,988	618,911,596	22,864,962	1,154,646,612	693,012,662
	1927	2,004	141,012	4,776	12,795	154,108	433,719	23,503,423	108,118,193	360,261,684	15,886,170	609,917,660	249,655,976
	1919	4,803	141,012	4,776	12,795	123,441	433,719	23,503,423	108,118,193	360,261,684	15,886,170	609,917,660	249,655,976
South Carolina	1929	2,212	72,777	1,432	6,477	64,865	192,695	14,068,356	54,582,198	96,980,247	4,795,088	232,386,427	135,488,187
	1927	1,912	82,986	2,616	5,955	74,415	177,580	10,833,946	56,671,574	91,715,524	5,360,246	218,790,152	127,074,628
	1919	2,982	89,958	1,375	10,758	77,825	318,755	24,979,014	83,858,907	250,632,937	4,231,373	213,326,811	120,646,587
Georgia	1929	2,246	89,958	1,375	10,758	77,825	318,755	24,979,014	83,858,907	250,632,937	4,231,373	213,326,811	120,646,587
	1927	1,851	88,954	4,003	10,611	69,340	246,399	19,677,651	67,032,546	235,715,626	11,229,937	395,660,417	159,944,791
	1919	3,957	143,915	1,895	13,620	126,400	606,704	33,203,137	115,877,677	407,610,560	17,089,719	720,508,612	329,898,062
Florida	1929	2,848	132,200	2,166	10,475	119,559	779,156	24,385,866	102,004,851	302,253,388	41,399,154	560,378,132	268,194,744
	1927	2,355	120,889	3,914	9,816	114,968	475,243	18,567,405	98,065,800	306,694,290	31,688,839	509,572,136	232,573,719
	1919	3,654	120,889	3,914	9,816	107,159	628,287	18,567,405	98,065,800	306,694,290	31,688,839	509,572,136	232,573,719
East South Central: Kentucky	1929	1,911	57,807	1,539	4,182	52,086	252,680	9,219,856	42,207,657	113,592,287	3,938,949	290,917,692	107,323,395
	1927	1,333	64,452	2,311	4,081	50,569	214,252	7,926,819	40,734,359	104,594,493	2,967,542	187,476,987	73,633,691
	1919	2,455	64,452	2,311	4,081	57,560	200,772	7,926,819	51,256,716	96,677,871	2,993,245	187,476,987	73,633,691
Tennessee	1929	1,731	50,118	1,371	4,542	44,205	223,034	9,942,946	39,503,121	116,648,475	4,245,382	210,924,298	84,254,753
	1927	1,146	58,202	3,682	4,566	40,022	183,041	9,942,946	35,298,168	108,813,280	3,215,870	182,750,871	73,633,691
	1919	3,128	58,202	3,682	4,566	40,954	212,219	9,329,043	47,136,189	102,812,977	2,931,567	200,312,858	97,499,581
Alabama	1929	1,989	98,475	924	10,206	87,245	450,404	24,092,926	83,867,448	438,540,094	12,895,421	685,036,857	246,496,763
	1927	1,624	112,523	2,042	12,216	82,415	415,852	22,946,257	79,673,477	427,904,241	16,803,306	638,361,215	210,866,574
	1919	2,617	112,523	2,042	12,216	98,265	387,253	22,946,257	94,405,732	431,403,867	10,256,726	676,180,770	244,786,903
Louisiana	1929	1,658	39,632	994	6,943	31,695	223,257	16,226,552	41,276,993	308,501,497	9,043,878	455,905,297	149,403,800
	1927	1,373	38,314	2,320	6,491	27,632	185,480	15,961,191	35,785,268	264,418,231	12,988,519	371,718,409	102,800,188
	1919	2,445	38,314	2,320	6,491	24,508	189,550	11,961,191	33,023,942	312,668,829	11,068,013	401,369,869	88,757,040
Oklahoma	1929	5,198	159,210	3,067	21,645	134,498	692,860	49,904,900	151,827,257	989,939,899	27,189,516	1,450,246,431	460,306,893
	1927	4,085	130,911	5,893	17,986	106,328	635,454	49,904,900	130,408,661	842,927,266	45,739,338	1,206,579,962	365,652,676
	1919	5,724	130,911	5,893	17,986	107,322	440,394	31,503,978	116,463,800	701,170,838	22,892,256	993,985,796	298,824,898

See footnotes at end of table

CENSUS OF MANUFACTURES: 1929

TABLE 4.—GENERAL STATISTICS FOR ALL INDUSTRIES, BY GEOGRAPHIC DIVISIONS AND BY STATES: 1929, 1927, AND 1919—Continued

DIVISION AND STATE	Cen- sus year	Number of estab- lish- ments	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES ¹				Horse- power	Salaries ¹	Wages	COST OF MATERIALS, CONTAINERS FOR PROD- UCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufac- ture ¹
			Total ¹	Proprietors and firm mem- bers ¹	Skilled officers and employ- ees ¹	Wage earners (average for the year)				Total	Materials and containers	Fuel and purchased energy		
MOUNTAIN: Montana	1929	589	17,465	330	2,266	14,869	\$24,214,612	\$24,214,612	\$209,845,438	\$202,615,534	\$7,229,904	\$271,084,446	\$61,249,008	
	1927	500	17,242	1,200	2,332	14,740	20,915,203	20,915,203	151,701,608	144,794,553	6,909,655	203,503,250	51,711,742	
	1919	1,290	20,692	1,200	2,332	17,160	24,742,562	24,742,562	122,151,924	117,594,932	4,556,972	166,064,518	44,512,564	
Idaho	1929	582	17,358	335	1,375	15,648	3,086,272	23,451,545	51,863,505	50,225,704	1,637,801	96,352,026	44,488,521	
	1927	470	13,513	335	1,375	13,513	18,970,643	18,970,643	47,927,463	46,875,197	1,052,266	86,256,399	38,328,996	
	1919	922	16,268	831	1,500	13,917	18,548,272	18,548,272	43,948,505	42,345,546	1,602,959	80,510,749	36,562,244	
Wyoming	1929	248	7,281	127	896	6,258	2,288,632	10,255,365	62,720,084	60,033,573	2,686,511	96,348,076	33,627,992	
	1927	229	8,665	567	5,777	9,036,022	63,741,234	9,036,022	63,741,234	60,846,061	2,895,173	85,368,360	21,627,126	
	1919	576	8,665	567	6,634	5,277	11,188,979	11,188,979	42,250,928	40,510,297	1,740,231	81,445,394	39,194,866	
Colorado	1929	1,548	39,980	807	6,223	32,800	13,580,172	43,640,403	183,739,553	170,113,113	13,626,440	306,071,031	122,331,478	
	1927	1,483	44,729	2,294	7,241	35,254	13,045,975	173,277,309	173,277,309	155,046,508	18,230,801	278,221,431	104,944,032	
	1919	2,631	44,729	2,294	7,241	35,254	13,045,975	173,277,309	174,870,275	160,204,000	14,666,215	275,622,335	100,762,060	
New Mexico	1929	250	5,234	164	594	4,476	1,266,139	5,564,991	10,419,449	9,736,401	683,048	21,697,148	11,277,699	
	1927	200	6,646	336	574	4,653	1,027,341	5,421,441	10,055,852	9,412,924	642,928	20,182,672	10,126,820	
	1919	337	6,646	336	574	5,736	1,027,341	6,638,462	7,727,493	5,974,121	1,753,362	17,856,602	10,128,119	
Arizona	1929	12,400	191	1,659	10,550	180,037	4,268,292	15,074,525	167,713,595	159,518,783	8,194,812	200,002,217	32,288,622	
	1927	300	10,347	416	1,403	8,967	3,111,833	12,132,957	77,769,198	71,839,885	5,909,310	117,624,434	39,825,236	
	1919	480	10,347	416	1,403	8,967	3,111,833	12,014,768	92,645,437	84,273,872	8,371,565	120,769,112	28,123,675	
Utah	1929	651	18,833	323	2,909	15,601	6,407,917	19,693,684	157,902,021	150,715,551	7,186,470	214,628,855	56,726,834	
	1927	556	23,107	1,089	3,150	13,585	5,690,485	16,638,574	120,567,348	113,587,697	6,979,651	163,118,376	42,551,028	
	1919	1,100	23,107	1,089	3,150	18,868	5,690,485	21,454,997	110,154,349	103,106,399	7,047,950	156,933,071	46,776,722	
Nevada	1929	123	2,694	70	364	2,200	813,640	3,585,425	25,651,871	24,900,633	751,238	33,717,059	8,065,188	
	1927	116	3,563	136	308	2,419	537,665	3,915,135	14,440,437	13,330,999	1,109,438	26,816,907	12,375,470	
	1919	166	3,563	136	308	3,119	537,665	4,313,022	16,490,617	14,997,907	1,492,710	22,874,311	6,383,694	
PACIFIC: Washington	1929	3,672	130,878	2,138	13,910	114,830	85,904,583	160,670,891	428,413,026	415,184,051	13,278,975	795,561,861	367,148,835	
	1927	3,344	150,479	4,105	13,356	104,468	30,373,766	145,930,930	889,894,598	878,532,862	11,301,736	677,913,579	288,028,981	
	1919	4,918	150,479	4,105	13,356	132,928	30,373,766	194,968,222	443,177,551	431,896,276	11,281,265	806,622,984	366,445,453	
Oregon	1929	2,463	75,567	1,702	8,360	65,505	19,412,571	86,323,968	205,227,190	198,542,375	6,684,815	411,768,975	206,541,785	
	1927	1,779	68,065	2,540	6,906	57,179	13,990,171	75,716,972	187,771,163	182,134,441	5,636,722	342,852,371	155,081,208	
	1919	2,707	68,065	2,540	6,906	58,559	13,990,171	81,063,784	206,206,041	201,354,721	4,851,320	366,782,627	160,576,586	
California	1929	12,019	362,028	9,099	62,013	290,911	184,045,164	423,069,245	1,754,158,339	1,709,776,843	44,381,496	3,103,349,668	1,349,191,329	
	1927	10,066	296,833	12,459	40,714	292,816	75,420,209	378,321,461	1,504,655,053	1,457,700,157	46,954,896	2,583,247,224	1,088,592,171	
	1919	11,942	296,833	12,459	40,714	243,692	75,420,209	305,207,389	1,218,838,518	1,181,532,228	37,726,260	1,981,204,701	762,346,188	

¹ Data for employees of central-administrative offices are included in the totals and in the numbers of salaried employees for 1919 for the United States and for each State, but are not included for 1927 or for 1929. The total number of such employees, as reported for 1929, was 203,383, and their compensation amounted to \$600,437,331. The corresponding data for 1919 can not be segregated, and no such data were collected for 1927. The number of proprietors and firm members and the numbers of salaried employees and the amounts of their salaries were not tabulated for States at the census for 1927.

² Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

CENSUS OF MANUFACTURES: 1929

TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Cen- sus year	Number of estab- lish- ments	PERSONS ENGAGED IN THE INDUSTRY			Horse- power	Salaries ¹	Wages	Cost of materials, containers for products, fuel, and purchased electric energy ²	Value of products ³	Value added by manu- facture ⁴
			Total	Pro- prieters and firm mem- bers	Salaried officers and em- ployees ¹						
Bookbinding and blank-book making--	1929	1,108	29,495	676	4,065	21,754	21,741	Dollars			
	1927	1,063	26,477	927	3,641	19,038	19,038	10,854,865	31,779,037	30,754,777	102,783,405
	1919	1,113	25,287	1,111	3,815	20,361	11,037	8,332,184	28,281,066	25,875,185	87,327,392
Boot and shoe cut stock, not made in boot and shoe factories.	1929	210	10,639	160	980	9,499	15,828	2,293,324	10,319,996	107,545,777	133,447,914
	1927	201	9,938	192	1,135	8,611	13,718	2,391,255	9,354,040	97,966,431	121,022,421
	1919	252	11,512	234	1,568	9,715	8,448	3,328,226	9,124,778	133,887,276	161,203,310
Boot and shoe findings, not made in boot and shoe factories.	1929	382	12,037	228	1,435	10,376	20,259	3,866,441	11,058,282	31,964,401	58,625,445
	1927	379	11,739	255	1,534	9,950	18,021	2,391,255	11,201,872	31,862,322	57,433,389
	1919	427	10,615	424	1,260	8,941	9,970	2,018,598	8,187,196	40,428,347	62,825,408
Boots and shoes, other than rubber----	1929	1,341	225,701	466	19,595	205,640	140,326	44,284,882	222,407,732	515,055,246	965,922,694
	1927	1,367	224,004	568	20,326	203,110	138,706	43,364,138	225,090,242	494,553,016	944,714,463
	1919	1,449	237,107	883	25,175	211,049	115,886	68,124,966	210,734,610	715,269,315	1,155,041,436
Boots and shoes, rubber-----	1929	22	29,278	-----	3,619	25,659	62,603	7,745,144	29,945,265	34,396,606	102,537,625
	1927	22	30,267	-----	3,419	26,848	68,359	8,300,763	32,078,955	43,372,916	124,027,801
	1919	25	37,929	1	5,053	32,875	49,400	7,401,388	30,882,722	50,346,880	116,917,434
Boxes, cigar, wooden-----	1929	118	4,740	98	268	4,374	5,518	814,228	3,507,711	5,238,209	12,459,425
	1927	136	5,014	105	332	4,577	5,478	794,052	3,925,329	5,620,725	12,008,798
	1919	180	5,761	187	358	5,218	5,009	797,525	3,512,236	6,336,540	13,110,213
Boxes, paper, not elsewhere classified..	1929	1,249	63,894	440	7,800	55,654	30,004	22,314,874	57,109,700	169,839,577	294,253,296
	1927	1,219	64,640	512	7,739	50,398	31,300	20,738,937	57,700,664	168,463,790	306,555,062
	1919	1,201	63,408	767	6,779	55,862	54,675	15,572,451	48,325,554	101,135,292	206,419,343
Boxes, wooden, except cigar boxes-----	1929	792	33,581	438	2,589	30,554	137,261	7,261,078	29,193,575	74,081,937	135,025,675
	1927	748	33,662	383	2,482	30,797	135,637	6,684,242	29,250,351	75,797,392	133,992,877
	1919	1,140	40,897	849	3,608	42,445	143,583	8,654,033	36,811,185	102,946,235	177,818,454
Bread and other bakery products-----	1929	20,785	244,070	21,588	21,041	200,841	355,523	49,884,765	274,561,581	737,099,500	1,526,110,811
	1927	18,129	211,113	19,431	10,637	171,995	284,244	46,739,072	236,225,862	693,236,163	1,394,700,224
	1919	25,005	200,642	27,908	31,142	141,592	165,711	48,819,966	158,237,059	713,230,411	1,151,896,318
Brooms-----	1929	407	5,405	339	474	4,542	4,672	1,097,040	4,169,087	9,647,688	19,166,353
	1927	394	5,388	388	550	4,450	4,401	1,167,459	4,274,688	9,175,710	18,444,912
	1919	1,034	8,536	1,162	1,061	6,313	6,037	1,940,126	5,708,885	17,365,109	30,205,267
Brushes, other than rubber-----	1929	303	8,947	188	1,498	7,261	11,915	4,240,287	7,962,538	21,688,253	45,540,270
	1927	302	9,459	202	1,584	7,678	12,093	3,752,200	8,244,032	22,553,058	47,844,124
	1919	379	9,941	330	1,643	7,968	7,307	3,648,594	7,113,201	19,598,133	39,005,607
Butter-----	1929	3,527	27,934	1,307	7,530	19,097	164,413	12,489,080	24,197,840	635,873,586	746,417,620
	1927	3,519	28,948	1,279	7,573	20,096	145,973	11,897,609	25,532,586	637,336,685	739,010,876
	1919	3,738	26,339	2,006	6,092	17,641	94,962	9,522,089	18,852,729	514,345,730	633,163,011
Bulbous-----	1929	242	10,055	127	894	9,034	14,615	2,442,244	8,813,927	11,501,401	28,977,919
	1927	229	10,662	131	889	9,642	15,899	2,172,579	9,435,821	11,237,579	29,130,168
	1919	557	17,758	575	1,606	15,577	15,706	3,349,328	13,772,599	16,745,367	41,840,459
Candles-----	1929	20	941	4	156	781	1,971	501,787	923,039	3,250,627	6,686,104
	1927	17	932	11	212	709	996	642,518	761,464	2,958,987	6,350,931
	1919	19	666	13	112	541	597	287,832	437,581	2,178,528	3,350,806
Canning and preserving: Fish, crabs, shrimps, oysters, and clams.	1929	348	14,898	128	1,158	13,612	21,082	2,806,704	8,799,058	52,399,911	88,848,513
	1927	337	13,990	155	1,194	12,650	18,574	2,499,203	8,105,581	45,291,556	65,082,187
	1919	475	14,136	326	1,373	12,437	25,830	3,051,628	9,505,019	53,993,789	80,200,423
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.	1929	2,997	110,551	1,755	9,930	98,896	224,997	22,133,979	74,978,590	462,062,128	750,342,041
	1927	2,436	91,518	1,614	8,980	80,924	189,831	19,257,609	62,309,660	355,185,602	572,345,862
	1919	3,805	94,125	3,833	12,806	77,486	154,031	21,717,036	56,939,004	358,665,958	548,027,502
Car and general construction and re- pairs, electric-railroad repair shops.	1929	446	31,982	-----	2,507	29,475	76,424	5,423,674	47,108,710	32,781,113	85,481,577
	1927	515	34,137	-----	2,553	31,584	73,357	5,249,032	48,391,897	30,421,479	84,504,448
	1919	624	33,120	1	1,847	31,272	53,805	2,979,367	39,073,164	32,025,484	75,210,701
Car and general construction and re- pairs, steam-railroad repair shops.	1929	1,851	393,655	-----	29,974	368,681	1,076,723	76,171,019	590,202,724	515,562,462	1,184,435,262
	1927	1,794	432,147	-----	35,059	397,088	1,037,464	85,368,132	600,516,555	515,070,275	1,205,190,716
	1919	1,744	510,279	2	31,840	484,437	591,070	66,948,100	687,617,312	515,803,210	1,279,235,393
Carbon paper and inked ribbons-----	1929	57	1,781	21	509	1,251	3,042	1,530,423	1,702,358	7,990,753	17,295,140
	1927	40	1,619	20	421	1,078	3,267	1,113,835	1,514,230	6,019,758	13,773,123
	1919	16	1,714	2	287	1,025	3,251	743,260	1,337,177	4,953,915	9,138,415
Card cutting and designing-----	1929	70	2,853	45	470	2,338	3,909	1,383,196	2,725,047	9,235,931	19,362,179
	1927	60	2,505	31	450	2,024	3,915	1,227,691	2,706,033	7,544,043	16,871,312
	1919	75	1,897	69	180	1,148	743	442,902	958,877	2,298,339	5,323,349
Carpets and rugs, rag-----	1929	94	1,866	83	254	1,520	2,416	480,079	1,562,372	1,688,937	5,510,768
	1927	110	2,006	92	281	1,633	2,005	511,189	1,677,572	1,636,371	5,890,265
	1919	339	2,716	391	809	2,016	2,659	383,870	1,550,501	2,037,874	5,597,057
Carpets and rugs, wool, other than rag.	1929	67	35,051	10	2,418	32,623	65,205	7,359,683	40,014,207	36,080,892	176,915,364
	1927	65	34,622	9	1,784	32,828	65,328	5,416,434	42,040,892	35,601,835	166,888,408
	1919	76	24,251	50	1,268	22,933	37,593	4,749,784	24,216,121	67,118,039	123,253,828
Carriage, wagon, sleigh, and sled mate- rials.	1929	45	832	30	121	681	4,760	238,968	564,635	1,481,988	2,792,228
	1927	44	909	32	113	764	5,213	215,059	664,515	1,554,564	3,049,943
	1919	268	7,429	212	708	6,509	23,672	1,305,544	5,666,771	14,734,673	28,765,316

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY			Horse-power	Salaries ¹	Wages	Cost of materials, containers for products, fuel, and purchased electric energy ²	Value of products ³	Value added by manufacture ⁴
			Total	Proprietors and firm members	Salaried officers and employees ¹						
Collapsible tubes.....	1929	17	1,968	7	147	1,821	2,272	Dollars 1,782,024	Dollars 5,385,906	Dollars 8,912,977	Dollars 3,527,071
	1927	17	2,169	7	185	1,984	2,849	1,018,055	7,103,927	11,350,710	4,246,783
Collars, men's.....	1929	15	3,192	7	233	2,952	1,281	341,353	2,263,935	3,630,168	5,110,228
	1927	24	3,606	18	318	3,270	3,131	652,086	2,665,638	5,866,077	7,397,530
	1919	39	12,562	37	1,422	11,103	5,276	2,012,639	7,430,729	10,434,095	28,130,854
Combs and hairpins, not made from metal or rubber.	1929	24	793	16	121	656	1,015	267,983	640,857	1,006,824	1,475,595
	1927	36	1,474	15	200	1,259	1,591	491,550	1,240,004	1,873,003	2,593,656
	1919	45	2,475	38	208	2,229	1,588	488,232	1,809,453	3,168,818	3,397,547
Compressed and liquefied gases.....	1929	354	6,440	3	3,056	3,390	85,293	5,662,732	5,378,211	14,528,603	37,661,176
	1927	313	5,756	3	2,541	3,212	70,459	4,779,887	4,947,577	11,748,839	38,547,395
Concrete products.....	1929	2,438	21,697	1,734	3,483	16,595	67,651	8,349,404	22,688,062	34,035,184	58,865,565
	1927	2,330	22,980	1,866	3,306	17,808	54,342	7,462,907	24,897,709	33,913,387	59,346,120
	1919	2,785	12,870	3,055	1,446	8,378	22,178	2,290,980	9,310,899	18,913,310	19,751,015
Condensed and evaporated milk.....	1929	535	8,530	38	1,433	7,065	85,258	2,885,342	8,705,029	163,786,818	45,322,882
	1927	464	8,763	21	1,362	7,399	63,969	2,505,997	9,190,599	169,680,081	200,086,091
	1919	401	16,633	46	2,812	13,675	49,178	5,045,566	14,277,066	282,595,282	339,506,774
Confectionery.....	1929	2,021	73,040	1,222	6,217	63,501	112,644	23,585,475	56,442,674	215,192,474	393,269,849
	1927	1,908	74,525	1,383	6,979	68,163	110,595	24,564,736	50,980,548	218,372,553	391,027,343
	1919	3,149	93,982	3,146	14,343	76,493	77,036	31,244,470	54,461,087	282,433,691	447,726,103
Cooperage.....	1929	586	11,994	303	970	10,691	33,885	2,548,874	11,705,704	41,515,500	64,841,788
	1927	528	12,685	261	969	11,455	33,563	2,554,298	12,937,460	43,821,250	66,947,424
	1919	1,099	15,399	641	1,209	13,219	30,688	2,923,177	14,082,224	58,520,655	88,236,061
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.	1929	2,161	37,063	1,516	6,054	28,593	53,749	15,413,534	43,254,611	112,648,112	222,434,625
	1927	1,981	32,065	1,623	5,915	24,527	35,890	14,686,571	33,667,690	98,356,897	101,128,636
	1919	4,796	38,559	5,056	5,863	27,640	24,130	11,009,408	33,866,823	80,898,528	160,313,945
Cordage and twine.....	1929	123	15,915	17	1,409	14,489	73,021	3,995,068	12,833,561	54,573,259	91,455,117
	1927	116	16,508	19	1,405	14,084	74,924	3,856,990	13,674,081	56,105,063	99,172,495
	1919	120	19,232	29	1,581	17,622	66,556	4,015,501	14,700,061	89,705,282	143,366,476
Cork products.....	1929	35	4,265	12	411	3,842	14,829	902,800	4,203,674	12,002,522	23,023,329
	1927	27	3,562	4	373	3,185	11,683	4,273,273	3,500,013	9,395,123	17,368,825
	1919	62	4,061	30	480	3,545	8,556	1,028,039	3,387,114	9,134,960	16,282,239
Corn sirup, corn sugar, corn oil, and starch.	1929	35	8,227	9	1,488	6,739	84,686	4,136,258	9,872,009	104,284,827	165,983,739
	1927	26	8,257	3	1,282	6,972	81,003	3,075,505	10,489,679	90,995,776	134,461,166
	1919	56	8,694	37	862	7,795	52,036	2,212,362	11,902,483	130,328,848	186,256,200
Corsets and allied garments.....	1929	213	15,958	99	2,195	13,664	6,048	6,233,226	12,446,334	36,035,079	76,802,199
	1927	222	16,239	131	2,330	13,778	7,819	5,369,850	12,402,288	35,394,422	77,118,202
	1919	188	21,751	98	3,238	18,415	6,950	7,150,167	13,082,242	38,815,803	75,541,959
Cotton goods.....	1929	1,281	430,101	91	14,094	424,910	2,269,346	41,020,722	324,289,094	898,028,977	1,524,177,087
	1927	1,347	480,817	167	13,054	407,596	2,328,830	38,154,444	330,909,543	871,591,901	1,567,400,612
	1919	1,288	445,423	239	14,218	430,966	1,836,298	37,364,478	355,474,937	1,277,785,597	2,125,272,193
Cotton small wares.....	1929	202	16,080	69	1,330	15,281	27,308	4,015,407	15,449,435	33,630,208	65,169,753
	1927	220	16,621	105	1,558	14,968	29,205	4,514,817	15,333,332	32,222,020	64,819,963
Crucibles.....	1929	11	413	92	321	1,680	1,680	310,540	430,141	1,035,414	2,944,724
	1927	11	300	102	258	1,688	370,452	343,552	772,155	1,982,135	1,209,980
	1919	6	289	50	239	608	100,739	100,739	257,119	1,045,718	2,146,236
Cutlery (not including silver and plated cutlery) and edge tools.	1929	230	17,005	111	1,903	14,991	49,886	5,414,960	17,651,262	14,789,335	78,660,872
	1927	230	17,858	115	1,911	15,822	43,419	4,710,217	18,892,154	18,130,385	76,988,444
	1919	304	22,529	173	2,497	19,859	38,555	4,740,961	20,048,465	19,477,437	66,629,570
Dairyman's supplies; creamery, cheese-factory, and butter-factory equipment; poultrymen's and apiarists' supplies.	1929	172	7,210	96	1,664	5,460	13,672	3,810,437	6,025,320	16,371,116	42,246,758
	1927	152	6,587	66	1,430	5,091	13,576	3,352,138	6,373,561	15,686,293	36,823,648
	1919	244	8,614	164	2,013	6,437	11,756	3,504,406	7,078,433	18,526,743	37,397,448
Dental goods and equipment.....	1929	87	5,555	38	953	4,589	6,216	2,710,592	5,359,432	17,320,748	35,180,165
	1927	97	4,534	61	714	3,759	3,792	1,657,884	3,941,289	18,188,584	32,348,979
Doors, shutters, and window sash and frames, metal.	1929	148	11,949	33	2,359	9,557	25,027	7,190,256	17,065,422	30,178,161	72,160,388
	1927	117	10,109	29	2,030	8,050	20,626	6,053,343	15,564,458	25,602,238	65,279,973
	1919	57	2,660	22	561	2,077	4,013	1,268,034	2,729,774	4,577,934	10,377,001
Druggists' preparations.....	1929	429	14,753	135	3,930	10,888	19,448	11,417,620	12,452,068	43,775,986	124,778,457
	1927	373	14,770	154	4,473	10,138	15,919	10,372,765	11,942,409	40,499,392	110,309,139
	1919	524	22,569	283	6,715	15,568	12,670	13,318,486	12,161,926	55,138,475	114,593,486
Drug grinding.....	1929	26	844	5	162	677	5,277	599,422	840,935	5,675,079	9,660,220
	1927	25	837	9	169	659	4,262	555,020	820,187	5,683,720	9,205,243
	1919	31	1,661	16	295	1,347	6,723	797,642	1,526,137	11,556,480	16,937,698
Dyeing and finishing textiles.....	1929	732	89,647	217	10,103	79,327	304,057	31,274,996	94,244,685	235,712,156	465,820,629
	1927	743	83,457	267	9,339	73,851	287,212	27,032,701	91,697,210	210,680,900	406,047,372
	1919	928	62,858	363	6,240	56,985	159,887	16,251,555	57,189,978	174,742,816	323,967,683
Electrical machinery, apparatus, and supplies	1929	1,802	405,053	464	75,867	328,722	893,519	170,847,326	450,377,620	971,017,623	2,300,915,572
	1927	1,777	306,968	915	64,487	241,506	661,163	148,248,997	336,238,750	645,761,699	1,637,807,035
	1919	1,404	271,912	473	69,065	212,374	438,082	98,180,439	238,188,852	425,008,211	997,968,110
Electroplating.....	1929	634	7,313	470	915	5,928	24,015	2,557,492	9,536,800	4,798,667	23,727,910
	1927	419	4,589	463	570	3,556	14,090	1,365,534	5,629,104	3,335,140	13,930,321
	1919	515	4,032	590	418	3,024	6,788	743,256	3,793,605	2,630,248	10,389,617

See footnotes at end of table.

GENERAL SUMMARY

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TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horse-power	Salaries ¹	Wages	Cost of materials, containers for products, fuel, and purchased electric energy ²	Value of products ²	Value added by manufacture ³
			Total	Proprietors and firm members	Salaried officers and employees ¹	Wage earners (average for the year)						
Embroideries.....	1929	813	8,161	819	720	6,622	2,270	<i>Dollars</i> 1,839,075	<i>Dollars</i> 7,867,908	<i>Dollars</i> 6,608,840	<i>Dollars</i> 25,286,796	<i>Dollars</i> 18,677,956
	1927	1,069	11,234	1,273	997	8,064	2,930	2,050,191	10,962,090	7,969,769	32,418,888	24,459,110
Emery wheels and other abrasive and polishing appliances.	1929	67	4,950	16	1,091	3,873	18,113	2,990,160	5,820,143	12,416,063	32,154,311	19,737,648
	1927	68	3,956	15	680	3,261	13,464	1,028,266	4,608,167	10,830,073	24,181,837	13,341,804
	1919	60	6,921	20	1,300	5,601	12,963	2,387,470	5,878,748	12,228,187	30,949,270	18,721,083
Engines, turbines, tractors, and water wheels.	1929	199	72,207	27	11,032	61,148	287,079	28,256,279	98,705,080	202,900,430	457,217,669	254,317,230
	1927	215	63,433	33	9,059	54,341	241,788	22,467,103	84,790,771	165,202,801	367,878,688	202,675,787
	1919	370	96,286	93	18,576	77,617	190,005	30,912,039	105,435,455	217,560,771	404,774,735	247,228,964
Engravers' materials.....	1929	19	383	3	67	313	1,493	270,807	448,385	1,794,804	3,120,483	1,334,670
	1927	17	245	3	64	178	864	186,464	293,962	1,280,261	2,168,737	879,476
	1919	21	252	11	67	174	733	166,179	212,171	1,484,260	2,248,122	703,853
Engraving (other than steel, copperplate, or wood), chasing, etching, and diesinking.	1929	189	2,833	182	411	2,240	2,065	1,828,075	3,211,743	2,588,089	10,938,741	8,350,702
	1927	173	2,295	164	326	1,805	2,028	949,841	2,612,434	2,078,160	7,930,688	6,852,528
	1919	478	2,656	533	246	1,878	1,750	491,951	2,391,604	1,927,323	7,350,602	5,423,270
Engraving, steel and copperplate, and plate printing.	1929	456	12,498	317	2,051	10,180	8,506	5,936,687	14,459,730	11,804,704	47,161,041	35,290,877
	1927	393	10,567	811	1,707	8,549	6,894	4,350,765	11,886,737	10,836,216	39,071,105	28,534,859
	1919	421	8,779	370	1,395	7,014	5,353	2,879,317	7,908,100	6,980,747	24,209,154	17,228,407
Engraving, wood.....	1929	27	200	30	28	142	54	73,860	323,211	82,260	738,951	656,701
	1927	23	194	26	36	132	45	77,316	290,777	76,354	641,437	565,083
	1919	65	387	62	90	235	67	152,162	407,215	219,268	1,153,618	934,350
Envelopes.....	1929	171	12,432	38	2,027	10,367	13,077	5,424,406	11,526,849	29,927,688	61,280,992	31,359,300
	1927	153	11,496	33	1,718	9,745	11,391	4,176,674	10,754,036	28,078,192	56,006,225	27,033,933
	1919	106	9,493	33	1,331	8,129	7,124	2,708,311	6,049,989	21,964,743	30,664,077	17,699,334
Excelsior.....	1929	66	1,391	64	96	1,241	10,667	272,214	1,219,144	2,439,530	5,008,769	2,569,239
	1927	64	1,433	42	119	1,272	10,930	312,588	1,181,488	2,547,114	4,821,098	2,273,984
	1919	95	1,491	81	168	1,242	10,332	326,041	1,144,603	2,521,967	4,913,460	2,391,483
Explosives.....	1929	95	6,433	28	791	5,614	51,012	2,226,390	8,487,890	31,764,307	72,539,724	40,775,417
	1927	100	6,600	25	802	5,803	38,239	2,272,514	8,131,234	36,893,576	72,480,668	35,596,092
	1919	118	15,429	28	6,182	9,249	51,635	13,244,224	12,504,986	45,911,049	92,474,818	40,563,764
Fancy and miscellaneous articles, not elsewhere classified.	1929	814	21,969	472	2,775	18,722	11,071	7,972,209	19,040,511	35,139,854	85,388,961	50,249,107
	1927	595	20,299	467	2,867	16,965	10,822	6,815,473	18,306,510	34,673,611	83,006,431	48,332,920
	1919	661	17,140	606	2,573	13,961	8,667	5,622,193	12,207,913	32,691,073	64,064,481	31,463,408
Feathers, plumes, and manufactures thereof.	1929	39	322	23	62	257	100	127,144	309,693	386,356	1,141,418	755,062
	1927	38	416	32	62	322	139	139,102	306,683	534,149	1,438,441	904,292
	1919	216	4,224	239	481	3,504	602	1,023,964	3,405,765	6,694,566	15,377,963	8,083,367
Feeds, prepared, for animals and fowls.	1929	750	14,736	352	4,161	10,223	170,482	6,579,066	12,821,380	327,919,743	402,762,634	74,832,791
	1927	447	11,567	189	3,746	7,632	116,865	7,772,435	9,702,954	244,675,705	299,792,642	55,116,937
Felt goods, wool, hair, or jute.....	1929	54	6,185	8	637	5,540	25,655	2,506,186	7,531,298	26,223,967	45,466,823	19,241,866
	1927	50	6,014	7	555	5,452	23,479	2,201,898	6,663,147	23,289,338	41,894,844	18,005,506
	1919	49	5,934	8	690	5,236	16,411	2,067,342	4,873,490	22,780,775	39,229,540	10,448,765
Fertilizers.....	1929	638	25,116	139	4,051	20,925	166,984	6,397,707	17,883,925	159,801,195	232,510,936	72,709,741
	1927	621	22,711	119	3,980	18,612	156,274	8,936,036	17,649,661	138,142,925	190,384,890	52,241,965
	1919	600	32,522	219	6,007	26,296	125,939	11,571,660	25,363,132	185,040,522	281,143,687	96,103,065
Files.....	1929	33	4,299	6	319	3,974	12,091	981,668	5,239,808	3,052,675	14,114,378	11,061,703
	1927	36	4,269	11	300	3,968	10,979	848,927	5,144,987	3,135,955	12,973,734	9,837,779
	1919	60	6,343	24	552	5,797	11,867	953,113	6,192,444	4,227,860	17,610,663	13,388,633
Firearms.....	1929	21	7,747	1	908	6,838	15,427	1,979,971	9,200,551	4,117,069	21,970,367	17,853,268
	1927	20	6,885	1	754	6,130	15,747	1,679,624	7,938,639	5,047,555	19,452,372	14,404,817
	1919	26	12,534	9	1,238	11,287	26,167	2,094,183	13,333,495	7,613,784	30,181,870	22,567,586
Fire extinguishers, chemical.....	1929	28	1,054	8	336	740	1,464	907,375	968,570	4,187,524	8,566,080	4,378,565
	1927	26	1,193	6	355	832	1,564	607,132	1,191,708	4,009,775	8,038,150	4,025,381
	1919	32	1,128	19	332	777	1,565	645,611	751,119	2,693,416	5,563,180	2,869,764
Fireworks.....	1929	50	2,002	16	175	1,811	1,746	463,215	1,930,595	2,464,617	6,583,602	4,118,885
	1927	36	1,710	8	136	1,564	1,300	367,070	1,395,024	2,623,672	5,884,930	3,261,267
	1919	57	1,306	26	148	1,222	1,065	825,274	994,851	2,108,156	4,020,984	2,521,828
Flags and banners.....	1929	54	1,169	31	190	938	577	439,488	794,328	1,771,320	3,835,824	2,064,504
	1927	46	1,258	35	177	1,046	700	352,663	897,906	2,282,456	4,536,348	2,253,892
	1919	79	1,345	60	220	1,065	480,960	800,960	795,242	3,286,165	5,340,089	2,059,924
Flavoring extracts and flavoring sirups.	1929	642	7,847	302	2,504	5,041	33,838	7,748,504	7,070,860	55,517,926	129,086,237	73,568,311
	1927	500	7,887	219	2,657	5,011	27,963	7,137,333	7,134,274	51,090,727	107,219,395	50,128,068
	1919	602	6,771	432	2,753	3,586	6,553	5,230,983	2,962,566	50,416,804	76,923,650	26,500,846
Flax and hemp, dressed.....	1929	6	62	2	13	47	429	18,428	35,406	93,477	197,035	193,568
	1927	7	77	5	10	62	654	12,912	51,390	116,166	282,896	166,729
	1919	20	491	26	45	420	1,920	87,591	447,373	1,708,670	2,369,114	660,444
Flour and other grain-mill products....	1929	4,022	39,126	3,334	8,764	27,028	641,456	20,694,955	35,072,386	868,872,569	1,000,269,418	191,396,849
	1927	4,035	43,790	3,602	10,146	29,982	641,668	22,231,064	37,559,472	972,711,040	1,148,760,360	170,049,320
	1919	10,708	75,769	11,937	18,351	45,481	875,464	32,013,030	60,888,383	1,769,180,987	2,062,434,385	253,263,398
Food preparations, not elsewhere classified.	1929	802	14,376	571	3,180	10,616	36,716	8,792,802	11,657,720	96,387,639	171,860,987	75,473,348
	1927	674	13,942	456	3,192	10,294	34,773	7,785,967	11,386,636	98,248,740	166,964,672	68,715,932

See footnotes at end of table.

GENERAL SUMMARY

TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horse-power	Salaries ¹	Wages	Cost of materials, containers for products, fuel, and purchased electric energy ²	Value of products ³	Value added by manufacture ⁴
			Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)						
Handkerchiefs.....	1929	105	0,525	60	451	6,014	2,409					
	1927	115	7,314	71	584	6,659	2,665					
Hand stamps and stencils and brands..	1929	332	4,112	211	930	2,971	3,596	2,346,875	4,080,780	3,811,158	15,036,023	11,224,865
	1927	293	3,963	220	1,075	2,668	3,159	2,398,167	3,841,771	3,733,718	14,155,607	10,421,889
	1919	382	3,341	377	828	2,136	1,848	1,406,066	2,261,287	3,148,667	9,336,558	6,187,891
Hardware not elsewhere classified.....	1929	485	60,250	124	7,820	62,306	112,705	19,768,563	67,702,255	76,480,210	229,477,507	162,997,297
	1927	485	55,050	188	7,028	47,834	99,674	17,313,654	60,827,474	71,877,055	208,253,586	136,376,531
	1919	585	53,027	340	6,507	46,180	74,240	13,121,350	49,273,740	62,815,368	168,661,444	105,846,036
Hat and cap materials, men's.....	1929	112	2,937	77	296	2,564	5,164	958,415	2,875,718	17,305,115	25,030,943	7,725,828
	1927	96	3,116	87	267	2,762	5,188	934,499	2,658,871	15,071,792	23,339,341	7,697,549
	1919	133	3,484	134	341	3,009	4,927	950,127	3,132,571	16,643,919	26,521,212	9,877,293
Hats and caps, except felt and straw, men's.	1929	576	7,279	564	880	5,826	1,796	2,314,648	7,604,478	16,907,661	35,900,684	18,993,093
	1927	568	8,015	701	1,014	6,300	1,999	2,430,033	9,126,438	15,071,792	41,213,965	20,511,699
	1919	709	9,752	931	1,282	7,539	1,687	2,765,699	9,438,864	24,176,514	44,539,861	20,333,347
Hats, fur-felt.....	1929	159	18,272	72	1,661	16,539	19,894	5,677,530	22,502,542	55,298,045	102,004,105	46,706,120
	1927	139	17,531	103	1,632	15,896	20,517	4,568,107	22,854,664	51,058,257	99,184,842	48,131,585
	1919	170	20,318	148	1,600	18,510	20,377	4,631,672	19,642,631	40,158,019	82,745,308	42,587,289
Hat, straw, men's.....	1929	50	3,792	12	400	3,380	1,836	1,368,351	3,087,570	8,704,621	18,738,994	10,034,373
	1927	48	3,772	11	498	3,263	1,554	1,280,630	4,232,332	11,782,950	21,717,880	9,934,733
Hats, wool-felt.....	1929	14	2,202	5	169	2,028	2,811	395,830	2,314,680	4,678,180	9,055,590	4,377,401
	1927	12	2,214	9	92	2,113	2,405	258,938	2,190,031	4,489,717	8,808,616	4,316,890
	1919	40	1,648	43	167	1,448	2,094	358,251	1,887,777	3,999,822	6,039,830	3,039,830
Hones, whetstones, and similar products.	1929	6	192	3	15	174	850	40,554	182,165	340,669	868,811	528,142
	1927	14	658	5	71	582	1,375	187,453	497,871	1,470,670	2,895,158	1,424,488
Horse blankets, fly nets, and related products.	1929	16	737	6	71	660	1,421	170,105	574,177	1,877,896	3,379,105	1,501,209
	1927	28	959	25	168	766	1,577	318,431	551,278	3,455,036	6,020,612	2,564,026
	1919	28	959	25	168	766	1,577	318,431	551,278	3,455,036	6,020,612	2,564,026
House-furnishing goods, not elsewhere classified.	1929	904	19,163	639	2,730	15,794	10,866	7,580,280	16,150,499	76,624,089	127,602,002	50,077,018
	1927	548	13,958	442	1,825	11,691	12,997	6,787,552	10,947,250	52,704,730	87,076,800	34,971,870
	1919	467	10,010	417	1,740	7,853	11,867	3,770,328	6,443,915	39,793,002	60,211,804	20,417,842
Ice cream.....	1929	3,150	31,625	2,194	7,032	22,309	230,882	17,144,814	38,803,044	155,064,386	328,413,911	172,440,525
	1927	2,961	31,055	2,362	6,776	21,927	206,315	15,457,225	33,107,615	150,602,029	301,644,991	161,042,962
	1919	3,475	28,046	3,905	4,980	19,155	102,646	8,551,550	21,698,809	116,375,470	189,483,065	73,107,586
Ice, manufactured.....	1929	4,110	40,710	1,161	7,365	32,184	1,077,295	10,820,375	42,399,295	30,808,164	210,952,264	171,144,100
	1927	3,160	30,092	937	7,035	22,120	965,406	14,671,505	32,611,118	16,054,512	184,794,988	143,970,476
	1919	2,807	38,605	1,566	6,792	30,247	560,025	10,952,131	34,001,837	42,877,609	137,004,798	94,127,289
Ink, printing.....	1929	147	3,597	36	1,113	2,448	20,300	4,311,804	3,957,185	19,204,715	42,740,992	23,545,277
	1927	123	3,282	30	958	2,288	18,001	3,313,582	3,005,199	16,054,110	37,734,493	28,080,383
	1919	90	3,061	50	1,023	1,988	10,229	2,817,162	2,574,920	14,061,115	26,244,470	11,583,355
Ink, writing.....	1929	29	756	14	326	416	847	635,736	479,965	1,092,573	4,594,974	2,002,401
	1927	24	787	20	276	491	743	629,090	576,091	2,208,835	5,342,027	3,183,192
	1919	61	1,216	58	459	702	610	957,046	698,168	3,320,346	6,433,941	3,113,595
Instruments, professional and scientific.	1929	276	21,185	124	4,185	16,876	22,816	11,014,706	22,682,052	28,411,430	89,746,369	61,334,939
	1927	280	20,270	197	3,659	16,414	25,637	8,698,555	22,288,978	28,880,222	87,783,488	58,903,266
	1919	351	19,787	248	3,608	15,931	12,981	7,061,640	17,490,888	19,494,634	58,136,691	36,642,057
Iron and steel: Blast furnaces.....	1929	105	27,370	-----	2,416	24,000	-----	6,846,360	41,958,569	610,203,691	771,425,464	161,131,778
	1927	116	30,514	-----	2,558	27,958	-----	7,335,957	44,258,499	579,655,036	708,904,238	129,340,202
	1919	195	46,956	41	5,255	41,600	7,632,530	13,435,048	78,769,395	621,280,406	794,466,558	173,180,062
Iron and steel: Steel works and rolling mills.	1929	486	431,528	17	36,937	394,574	5,399,574	103,432,723	680,015,541	1,904,083,157	3,365,788,805	1,461,705,648
	1927	486	397,347	16	36,019	361,312	5,399,574	97,199,644	601,275,499	1,689,655,265	2,779,840,238	1,090,184,943
	1919	500	421,861	35	46,738	375,088	5,399,574	99,880,420	637,687,430	1,680,675,758	2,828,902,376	1,148,326,618
Iron and steel, processed.....	1929	46	892	15	168	511	2,210	570,218	878,459	1,088,672	3,665,480	2,776,808
	1927	33	331	15	85	231	1,716	218,823	392,273	509,690	1,443,289	933,609
Ivory, shell, and bone work, not including buttons, combs, or hairpins.	1929	21	444	17	38	301	642	88,627	424,783	517,325	1,260,426	743,101
	1927	22	357	25	38	294	599	85,295	320,752	328,067	911,342	583,275
	1919	44	991	45	104	842	879	217,750	734,932	1,293,876	2,816,630	1,522,654
Jewelry.....	1929	1,536	34,797	1,340	5,535	27,922	27,402	10,090,552	38,079,810	79,304,617	177,386,932	97,532,315
	1927	1,867	31,174	1,337	5,721	24,110	17,070	13,947,534	36,765,805	76,915,375	164,865,067	87,949,682
	1919	2,054	39,630	2,339	6,420	30,871	15,096	14,187,847	33,863,718	110,450,683	203,939,280	98,488,547
Jewelry and instrument cases.....	1929	113	2,680	101	310	2,269	1,593	932,466	2,472,880	3,324,459	8,326,727	5,502,268
	1927	107	2,825	88	381	2,405	1,440	856,461	2,597,056	3,293,986	8,810,065	5,510,079
	1919	142	3,166	146	280	2,734	1,075	699,120	2,147,648	3,506,840	8,126,300	4,620,460
Jute goods.....	1929	20	5,830	5	394	4,931	85,079	1,033,423	4,276,143	11,967,573	21,869,757	9,902,179
	1927	23	5,772	8	406	5,358	36,210	1,085,845	4,987,228	11,802,323	23,186,997	11,383,669
	1919	26	7,687	13	430	7,138	32,185	1,114,015	6,436,286	17,708,834	34,442,998	16,733,864
Knit goods.....	1929	1,888	223,340	823	14,029	208,488	181,879	42,846,788	210,714,335	450,700,953	899,716,672	443,015,714
	1927	1,809	204,282	980	12,969	190,283	177,216	34,569,194	188,163,468	424,099,384	816,620,494	392,521,119
	1919	2,050	186,673	1,438	12,613	172,872	149,438	32,326,582	125,199,820	427,095,560	713,139,689	286,044,120

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY			Horse-power	Salaries ¹	Wages	Cost of materials, containers for products, fuel, and purchased electric energy ²	Value of products ³	Value added by manufacture ³
			Total	Proprietors and firm members	Salaried officers and employees ¹						
Labels and tags.....	1929	153	5,528	57	907	4,474	6,473	Dollars 3,107,478	Dollars 5,865,952	Dollars 28,042,325	Dollars 17,488,651
	1927	121	7,879	49	1,689	6,141	6,809	3,476,380	8,000,426	34,397,630	18,138,191
	1919	119	6,648	73	1,348	5,227	4,033	2,468,276	4,549,902	24,243,992	12,969,225
Lace goods.....	1929	42	7,694	4	836	6,854	10,466	2,899,867	7,670,122	10,112,353	29,237,434
	1927	43	7,250	16	752	6,482	11,309	2,213,902	7,584,848	11,392,370	27,298,159
	1919	44	7,196	8	698	6,490	9,078	2,024,441	6,086,557	13,075,994	29,396,853
Lapidary work.....	1929	100	741	112	123	506	474	396,877	1,001,706	8,234,889	11,942,421
	1927	92	782	101	134	547	513	366,197	1,220,647	9,133,059	12,351,503
	1919	124	1,469	147	107	1,155	680	698,043	2,837,811	10,363,024	30,051,460
Lasts and related products.....	1929	58	2,078	13	305	1,760	7,230	919,285	2,569,868	2,314,597	7,689,555
	1927	59	2,069	22	329	1,718	7,655	905,160	2,504,116	2,505,032	7,529,149
	1919	64	3,344	43	391	2,910	5,539	1,110,307	3,416,950	3,932,662	12,470,639
Leather goods, not elsewhere classified..	1929	392	7,210	283	892	6,035	3,196	2,532,733	6,759,742	18,013,489	35,951,013
	1927	413	8,754	328	1,233	7,188	3,651	2,637,367	8,379,080	21,639,590	43,291,552
	1919	503	11,141	438	1,708	8,945	3,840	4,022,442	9,416,403	30,035,537	52,952,772
Leather: Tanned, curried, and finished..	1929	471	54,316	93	4,201	49,932	229,660	15,649,249	63,413,707	337,697,868	481,940,299
	1927	494	57,487	103	4,400	52,024	220,530	13,856,133	67,887,231	331,984,736	494,255,838
	1919	680	79,292	398	6,418	72,476	217,701	20,178,072	85,205,473	646,621,627	928,501,701
Lime.....	1929	237	9,440	54	832	8,554	90,276	2,049,311	9,476,314	13,907,760	35,815,058
	1927	260	12,048	72	1,073	10,903	84,195	2,355,483	12,190,918	17,289,467	41,537,458
	1919	476	12,855	340	1,101	11,405	51,735	1,995,880	10,889,196	14,206,925	33,970,463
Linen goods.....	1929	16	2,410	-----	215	2,195	11,006	535,554	2,185,339	5,214,423	9,736,898
	1927	18	2,741	-----	211	2,530	11,473	617,486	2,545,210	5,409,441	10,377,346
	1919	10	2,070	-----	180	1,890	6,069	329,325	1,635,642	4,190,187	6,998,046
Linoleum.....	1929	7	6,894	-----	1,350	5,544	51,647	2,470,590	8,560,183	27,489,253	57,250,449
	1927	7	6,147	-----	783	5,364	41,432	1,767,082	8,176,644	24,215,618	47,442,441
	1919	7	6,147	-----	783	5,364	41,432	1,767,082	8,176,644	24,215,618	47,442,441
Liquors, vinous.....	1929	24	254	13	55	186	1,183	282,393	277,963	608,857	2,447,912
	1927	13	242	5	87	150	999	294,211	1,777,073	1,206,217	1,486,639
	1919	342	1,661	304	286	1,011	5,189	1,370,088	1,013,398	8,115,841	17,454,194
Lithographing.....	1929	376	23,719	92	4,648	18,979	35,471	15,510,732	32,021,910	38,992,142	121,014,321
	1927	309	20,127	76	3,703	16,348	28,541	12,060,439	27,465,552	32,703,772	97,050,124
	1919	331	19,305	160	3,537	15,618	18,550	9,112,951	18,201,089	27,718,217	73,151,115
Locomotives, not made in railroad repair shops.	1929	16	12,851	5	1,801	11,045	98,482	5,519,072	17,994,078	52,808,092	83,858,258
	1927	17	14,611	-----	1,650	12,961	148,971	2,355,951	17,648,206	45,983,450	76,719,403
	1919	17	28,742	1	2,026	26,715	96,504	4,778,316	38,798,641	72,375,950	150,209,730
Lubricating oils and greases, not made in petroleum refineries.	1929	177	4,093	34	1,482	2,577	13,281	4,167,049	3,738,637	39,571,373	69,684,240
	1927	177	4,093	34	1,482	2,577	13,281	4,167,049	3,738,637	39,571,373	69,684,240
	1919	177	4,093	34	1,482	2,577	13,281	4,167,049	3,738,637	39,571,373	69,684,240
Lumber and timber products, not elsewhere classified.	1929	12,915	454,143	13,345	21,714	419,084	1,935,301	56,438,365	421,684,874	419,603,388	1,273,472,320
	1927	7,510	441,703	6,514	21,333	413,946	1,781,734	51,966,991	413,361,954	493,950,120	1,214,645,683
	1919	26,119	533,788	31,348	26,495	480,945	2,355,345	55,928,275	499,416,091	470,960,488	1,387,471,413
Macaroni, spaghetti, vermicelli, and noodles.	1929	353	6,341	377	892	5,072	24,448	2,302,756	5,394,353	27,336,126	47,074,230
	1927	353	5,884	425	872	4,587	21,406	2,096,262	5,070,936	27,433,792	45,353,200
	1919	557	6,226	687	996	4,543	16,693	1,707,351	4,168,009	25,109,951	37,057,198
Machine-tool accessories and small metal-working tools, not elsewhere classified.	1929	722	30,973	406	3,385	26,082	64,398	12,825,679	51,034,540	26,902,631	144,410,890
	1927	722	30,973	406	3,385	26,082	64,398	12,825,679	51,034,540	26,902,631	144,410,890
	1919	722	30,973	406	3,385	26,082	64,398	12,825,679	51,034,540	26,902,631	144,410,890
Machine tools.....	1929	280	56,298	42	8,365	47,391	141,778	24,493,039	76,410,237	64,284,022	244,578,088
	1927	288	39,124	55	6,686	32,383	125,426	18,274,626	47,405,355	45,151,422	145,854,021
	1919	403	61,762	132	8,519	53,111	100,294	18,037,856	66,178,969	59,034,308	212,400,158
Malt.....	1929	23	742	1	151	590	18,098	613,682	1,056,759	18,923,749	23,602,938
	1927	28	628	4	124	500	15,390	451,886	904,420	17,180,750	20,274,172
	1919	55	1,713	8	353	1,352	27,483	1,017,501	1,846,210	31,612,707	39,340,414
Marble, granite, slate, and other stone products.	1929	1,881	45,258	1,525	5,916	37,817	305,915	18,405,849	63,040,864	57,637,838	192,163,916
	1927	1,078	48,201	1,694	6,033	40,474	295,174	16,719,146	68,490,655	66,328,248	201,181,281
	1919	4,240	42,214	4,774	4,672	32,768	169,177	8,760,854	38,354,822	40,624,341	129,164,653
Matches.....	1929	21	4,122	1	361	3,760	17,997	802,295	4,118,093	12,526,327	20,351,025
	1927	10	4,181	-----	276	3,905	17,607	557,164	4,130,988	12,526,327	24,005,835
	1919	21	5,126	3	1,397	3,726	12,947	1,805,995	3,059,637	6,852,970	18,495,876
Mats and matting, grass and coir.....	1929	7	523	4	52	467	1,293	145,975	439,802	684,951	1,692,200
	1927	7	478	3	53	422	1,425	115,901	398,426	668,856	1,538,567
	1919	12	1,173	7	93	1,073	1,670	229,644	810,607	2,102,580	4,860,855
Mattresses and bed springs, not elsewhere classified.	1929	951	20,544	688	2,669	17,187	50,554	7,013,762	22,583,835	61,627,026	123,279,717
	1927	838	16,821	615	2,725	13,481	32,937	7,003,802	16,888,711	52,182,075	98,834,558
	1919	1,041	16,244	953	2,624	12,037	23,387	5,558,348	12,805,351	49,208,560	83,952,609
Meat packing, wholesale.....	1929	1,277	146,717	863	23,349	122,505	524,989	54,733,864	165,867,420	2,974,127,757	3,434,654,098
	1927	1,250	144,224	885	24,244	119,095	489,576	54,641,992	161,683,827	2,663,740,403	3,057,215,718
	1919	1,304	197,392	1,071	35,325	160,996	358,522	59,685,365	209,489,263	3,782,929,593	4,246,290,614
Millinery.....	1929	1,293	38,155	782	5,187	32,206	10,176	15,893,015	42,715,059	98,089,659	195,693,467
	1927	1,148	39,499	843	5,345	33,311	7,920	14,020,920	46,787,735	103,469,714	209,494,828
	1919	1,148	39,499	843	5,345	33,311	7,920	14,020,920	46,787,735	103,469,714	209,494,828

See footnotes at end of table.

GENERAL SUMMARY

TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horse-power	Salaries ¹	Wages	Cost of materials, containers for products, fuel, and purchased electric energy ²	Value of products ²	Value added by manufacture ³
			Total	Proprietors and firm members	Salaried officers and employees ¹	Wage earners (average for the year)						
Minerals and earths, ground or otherwise treated.	1920	88	2,053	7	307	1,079	39,117	<i>Dollars</i> 1,202,305	<i>Dollars</i> 2,187,923	<i>Dollars</i> 8,937,883	<i>Dollars</i> 17,400,056	<i>Dollars</i> 8,471,173
Mirror and picture frames.....	1929	178	5,226	99	681	4,446	8,334	2,206,339	5,752,196	6,532,524	10,237,897	12,705,873
	1927	166	5,208	119	620	4,460	6,223	1,748,837	5,893,073	7,056,460	10,488,721	12,432,261
	1919	429	5,929	398	823	4,708	4,659	1,726,101	4,775,227	7,227,232	18,384,562	11,157,330
Mirrors, framed and unframed.....	1929	304	5,859	172	905	4,782	8,414	2,504,154	6,941,976	15,659,049	31,842,740	16,188,691
	1927	250	5,321	153	800	4,308	7,630	2,266,992	6,300,813	16,188,614	31,424,943	15,236,329
	1919	186	3,302	154	549	2,599	4,233	1,332,014	2,819,140	12,403,733	20,830,775	8,332,042
Models and patterns, not including paper patterns.	1929	804	8,484	684	1,022	6,778	12,378	3,212,408	13,233,622	5,814,359	30,621,074	25,360,715
	1927	693	7,100	725	791	5,584	11,495	2,329,054	10,544,094	23,459,266	23,459,092	18,835,726
	1919	928	8,860	1,078	833	0,949	13,750	1,908,116	10,318,104	6,895,834	25,800,389	18,904,555
Motion pictures, not including projection in theaters.	1929	142	10,639	37	8,818	10,784	49,732	60,167,520	24,860,062	38,441,025	184,102,419	145,661,394
	1927	142	10,055	42	7,598	8,415	32,160	56,298,560	18,637,062	34,867,472	134,343,869	99,475,888
Motor-vehicle bodies and motor-vehicle parts.	1929	1,154	241,813	540	19,941	221,332	824,705	57,663,412	366,503,385	856,085,637	1,537,929,793	680,944,150
	1927	1,213	200,895	493	18,913	181,489	551,639	2,329,407	291,290,968	641,306,562	1,151,426,365	510,119,803
	1919	2,515	153,182	2,120	18,497	132,559	250,770	34,908,340	178,955,503	362,170,302	692,170,692	330,143,300
Motor vehicles, not including motorcycles.	1929	244	253,228	36	27,076	226,116	713,912	79,865,972	366,579,233	2,401,511,763	3,722,793,274	1,321,281,511
	1927	264	213,970	30	26,030	187,910	725,674	71,118,022	321,664,093	1,880,426,249	2,848,442,843	959,016,594
	1919	315	242,922	36	32,327	210,559	282,323	67,215,804	312,165,870	1,578,061,674	2,387,903,287	809,251,713
Motorcycles, bicycles, and parts.....	1929	21	5,117	3	722	4,392	11,124	1,754,837	6,263,876	11,281,327	23,894,805	12,613,478
	1927	29	4,598	4	697	3,897	10,753	1,542,212	5,441,602	10,174,092	21,454,149	11,280,067
	1919	51	12,200	16	1,298	10,886	14,420	2,200,358	12,763,235	25,985,915	53,105,895	27,119,980
Mucilage, paste, and other adhesives, except glue and rubber cement.	1929	84	698	47	237	414	2,564	712,860	546,926	3,663,707	6,638,387	2,069,680
	1927	80	885	42	341	502	2,219	817,712	679,468	4,270,361	7,945,403	3,675,042
Musical instrument parts and materials: Piano and organ.	1929	67	3,621	21	510	3,090	11,089	1,565,421	3,597,210	4,247,919	11,883,098	7,635,179
	1927	85	6,150	31	720	5,369	14,185	2,238,419	6,593,645	6,657,350	11,543,823	12,587,381
	1919	113	11,886	38	839	11,000	15,716	2,042,424	10,467,137	16,693,140	36,789,627	20,006,487
Musical instruments and parts and materials, not elsewhere classified.	1929	106	3,983	52	755	3,176	6,066	1,751,268	4,580,720	3,825,294	14,274,078	10,448,784
	1927	99	4,796	78	700	2,770	5,356	1,553,504	5,737,005	4,640,553	17,891,948	13,251,395
	1919	240	4,957	223	621	4,113	3,219	1,032,172	3,984,656	4,444,720	12,500,334	8,061,005
Musical instruments: Organs.....	1929	62	2,756	47	320	2,380	4,740	1,014,866	3,603,631	3,090,676	11,322,736	8,232,060
	1927	63	3,138	33	335	2,770	4,332	1,110,796	4,303,731	4,494,449	15,438,623	10,944,174
	1919	68	2,285	56	288	1,941	3,245	523,672	1,978,518	2,217,097	5,973,268	3,756,171
Musical instruments: Pianos.....	1929	81	11,101	9	1,122	9,970	27,193	3,357,717	14,000,826	18,866,437	42,501,375	23,634,638
	1927	124	18,343	18	1,743	16,582	29,725	4,484,298	23,890,846	33,898,668	75,490,651	41,592,013
	1919	191	26,760	33	2,770	22,957	28,697	6,397,666	25,474,200	54,364,656	107,088,050	52,723,394
Nails, spikes, etc., not made in wire mills or in plants operated in connection with rolling mills.	1929	55	2,413	10	376	2,027	9,096	1,045,014	2,553,417	5,955,661	12,854,745	6,899,084
	1927	56	2,483	26	358	2,100	8,073	989,111	2,670,016	5,156,908	11,763,468	6,596,562
	1919	65	3,941	32	554	3,355	8,971	1,177,235	3,397,662	8,874,747	17,583,344	8,708,697
Needles, pins, hooks and eyes, and snap fasteners.	1929	43	7,023	9	772	6,242	6,694	2,021,477	6,565,732	6,187,822	22,030,950	15,843,128
	1927	45	6,338	10	722	5,606	7,250	1,865,555	6,098,477	5,222,844	20,326,250	14,402,406
	1919	92	10,389	39	1,056	9,294	8,428	2,506,250	8,809,781	10,227,199	29,304,995	19,077,796
Nets and seines.....	1929	19	1,048	7	133	903	1,155	314,614	768,871	3,789,356	6,164,403	2,375,047
	1927	21	1,000	11	120	869	1,162	412,786	776,326	3,847,719	5,401,173	2,063,454
	1919	19	943	5	79	859	959	209,206	561,282	3,648,206	5,114,414	1,466,208
Nonferrous-metal alloys and products, not including aluminum products.	1929	1,225	92,005	604	12,218	79,183	506,278	34,513,121	110,943,666	600,410,913	909,804,050	809,393,137
	1927	1,197	76,790	672	10,195	65,923	411,925	28,406,186	95,361,041	378,100,134	581,568,767	203,378,633
	1919	1,252	90,877	824	11,541	78,512	277,713	26,401,182	98,286,297	367,752,118	559,455,010	191,762,892
Oil, cake, and meal, cottonseed.....	1929	553	19,039	34	3,180	15,825	284,395	6,732,607	11,203,227	249,019,800	298,376,039	49,356,239
	1927	547	21,665	59	3,172	18,434	270,500	6,713,857	14,258,556	220,038,437	276,338,438	66,800,051
	1919	711	32,198	145	5,282	26,766	289,981	9,935,717	20,615,193	405,192,294	581,244,798	80,052,504
Oil, cake, and meal, linseed.....	1929	29	2,949	2	232	2,715	31,191	637,214	4,097,712	101,662,787	119,926,867	18,364,680
	1927	33	3,029	5	306	2,718	28,273	924,430	4,324,938	97,750,850	111,543,845	13,793,495
	1919	26	2,751	4	574	2,173	17,621	1,409,403	3,052,269	100,677,538	120,038,100	20,000,592
Oils, essential.....	1929	22	367	8	94	265	1,894	306,143	325,881	3,804,228	6,653,353	2,849,125
	1927	14	225	7	49	169	753	159,729	258,936	3,427,334	4,641,801	1,214,827
	1919	78	493	74	98	321	1,833	228,790	391,213	3,903,417	5,698,403	1,794,986
Oils, not elsewhere classified.....	1929	75	1,742	16	492	1,234	14,670	1,422,981	1,950,482	30,895,506	45,150,825	8,264,319
Oilcloth.....	1929	9	1,669	-----	257	1,412	5,017	625,167	2,144,067	14,924,651	23,107,272	8,182,621
	1927	8	1,264	-----	192	1,072	3,565	511,553	1,745,576	11,813,024	17,642,442	5,823,818
	1919	11	1,319	4	135	1,130	4,251	403,877	1,200,377	11,140,723	15,436,875	4,296,162
Oleomargarine, not made in meat-packing establishments.	1929	41	2,120	4	582	1,534	6,676	1,390,073	2,263,700	30,890,076	46,521,823	15,631,748
	1927	36	2,071	3	568	1,504	8,748	1,231,700	2,258,404	27,145,141	39,282,894	12,137,223
	1919	42	3,868	1	1,016	2,851	9,435	1,033,566	3,184,118	66,042,792	79,815,680	13,772,788
Optical goods.....	1929	117	11,243	65	1,487	9,701	15,626	4,205,251	12,633,947	11,850,128	40,562,459	28,703,331
	1927	96	9,508	38	1,374	7,596	12,401	3,991,845	9,560,725	8,865,025	32,757,210	23,892,185

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 5.—GENERAL STATISTICS, BY INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horse-power	Salaries ¹	Wages	Cost of materials, containers for products, fuel, and purchased electric energy ²	Value of products ³	Value added by manufacture ⁴
			Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)						
Window and door screens and weather strip.	1929	280	5,055	192	329	4,034	14,034	<i>Dollars</i> 2,416,318	<i>Dollars</i> 4,957,661	<i>Dollars</i> 10,512,746	<i>Dollars</i> 24,451,700	<i>Dollars</i> 13,938,954
	1927	214	4,573	134	773	3,661	11,520	1,994,342	4,805,657	9,803,932	22,643,361	13,339,379
	1919	214	2,732	197	406	2,179	7,515	825,868	2,046,768	4,897,339	10,932,867	6,035,468
Window shades and fixtures.....	1929	482	5,981	295	978	4,708	3,380	2,404,744	5,623,588	19,785,350	36,904,694	17,179,344
	1927	386	6,075	353	984	4,733	3,679	2,380,879	5,855,781	21,065,474	37,031,937	16,016,463
	1919	237	5,494	258	825	4,411	3,946	1,773,867	3,669,286	18,249,540	29,190,649	10,914,109
Wire, drawn from purchased bars or rods.	1929	81	25,024	3	2,554	22,467	150,620	6,979,078	35,110,335	126,182,429	213,997,410	87,814,981
	1927	73	22,222	9	2,347	19,806	152,574	6,201,089	30,038,299	128,082,414	190,709,790	62,617,376
	1919	66	22,236	13	2,482	19,741	119,301	5,454,406	29,289,667	102,813,591	162,151,236	59,337,645
Wirework, not elsewhere classified.....	1929	547	25,903	294	3,221	2,388	48,864	9,588,683	27,912,231	63,144,047	146,805,049	78,661,002
	1927	512	25,448	274	3,477	21,697	45,858	9,436,300	26,439,144	63,993,221	128,535,783	65,442,562
	1919	553	18,340	47	2,659	15,224	29,036	6,078,557	15,505,992	50,754,070	90,549,245	30,795,175
Wood distillation and charcoal manufacture.	1929	91	5,223	9	590	4,648	25,509	1,479,926	5,293,240	14,791,111	29,593,672	14,802,561
	1927	88	5,115	13	595	4,537	16,333	1,421,379	4,739,153	15,422,575	27,630,487	12,207,912
	1919	156	5,907	58	694	5,155	16,320	1,369,475	5,465,761	20,319,973	33,134,732	12,814,759
Wood preserving.....	1929	199	14,497	7	1,413	13,077	57,913	3,621,564	14,939,973	147,702,724	190,944,045	43,241,921
	1927	193	13,725	5	1,451	12,259	50,606	3,290,771	13,725,557	141,554,898	184,557,640	43,002,742
	1919	73	4,615	1	635	3,978	16,104	1,298,230	4,342,277	23,241,868	33,239,313	9,997,455
Wood turned and shaped and other wooden goods, not elsewhere classified.	1929	894	21,499	587	2,200	18,712	88,398	5,566,664	18,616,688	28,428,563	69,619,990	41,191,427
	1927	748	18,209	443	1,829	15,337	77,425	4,370,124	16,333,285	26,063,907	60,530,005	34,466,098
	1919	967	19,910	885	1,933	17,092	66,696	3,403,734	14,968,916	25,782,568	56,640,400	20,857,832
Woolen goods.....	1929	490	62,645	115	4,056	58,474	195,247	13,815,454	66,013,599	165,882,063	290,938,949	125,056,886
	1927	471	65,509	149	3,570	61,790	191,793	12,059,574	72,156,153	172,700,233	301,308,743	128,608,510
	1919	560	67,020	258	3,805	62,957	172,191	13,141,096	66,595,826	217,965,333	364,896,590	146,931,257
Wool pulling.....	1929	18	675	7	72	596	1,847	251,871	907,278	10,916,994	13,648,064	2,731,070
	1927	18	608	14	70	524	2,403	191,328	768,990	12,465,056	14,640,401	2,174,345
	1919	24	830	23	111	705	2,102	233,208	909,788	12,809,592	17,361,231	4,551,039
Wool scouring.....	1929	21	1,496	2	192	1,302	8,241	624,397	1,770,974	3,021,731	6,241,264	3,219,538
	1927	25	1,581	7	183	1,386	7,935	491,440	1,931,774	3,009,956	6,661,994	3,652,038
	1919	33	2,407	9	221	2,177	9,710	727,174	2,866,453	7,228,350	13,679,584	6,451,234
Wool shoddy.....	1929	50	2,057	17	273	1,762	15,940	1,017,154	2,109,374	10,126,717	15,344,978	5,218,261
	1927	55	1,950	35	236	1,679	15,353	819,350	1,916,195	7,980,876	12,596,726	4,615,851
	1919	78	2,956	64	326	2,500	10,597	1,017,223	2,653,169	16,076,315	23,254,398	7,178,083
Worsted goods.....	1929	264	93,763	53	5,225	88,485	372,536	16,822,297	98,137,732	336,649,459	536,067,399	199,417,940
	1927	288	97,456	62	4,823	92,571	364,422	15,894,253	101,665,747	329,407,699	516,669,556	187,261,947
	1919	292	109,372	129	5,413	103,830	294,028	17,840,660	101,512,855	447,629,350	700,637,482	252,908,132
Wrought pipe, welded and heavy riveted, not made in plants operated in connection with rolling mills.	1929	50	12,839	3	1,410	11,417	68,630	4,395,093	18,762,303	70,120,941	124,653,966	54,538,025
	1927	44	12,200	6	1,111	11,083	53,938	3,514,435	16,066,001	55,773,864	98,186,341	42,407,477
	1919	50	11,733	13	1,344	10,420	28,925	2,854,020	14,919,676	51,155,653	81,869,115	30,713,462

¹ Data for employees of central-administrative offices included in the figures for 1919 but not in those for 1927 or 1929. The number of such employees, as reported for 1929, was 208,363, and their compensation amounted to \$600,437,331. The corresponding data for 1919 can not be segregated, and no such data were collected for 1927.

² The aggregates for cost of materials and value of products include large but indeterminate amounts of duplication due to the use of the products of some establishments as materials by others. This duplication occurs, as a rule, between different industries, and is not found to any great extent in individual industries.

³ Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

⁴ No comparable data available for 1919.

⁵ Because of changes in classification, the figures for 1919 are not strictly comparable with those for later years.

⁶ Adjusted for comparison with 1929.

⁷ No comparable data available for 1927 or 1919.

⁸ New industry classification at the census for 1929.

GENERAL SUMMARY

TABLE 6.—RELATIVE IMPORTANCE OF LEADING INDUSTRIES, FOR THE UNITED STATES: 1929

INDUSTRY	WAGE EARNERS		COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE		
	Number of establishments	Average for the year	Rank	Amount	Rank	Amount	Rank	Amount	Rank
Industries reporting 100,000 wage earners or more, total.	97,228	4,725,511		\$17,491,269,712		\$33,596,430,225		\$16,105,160,513	
Foundry and machine-shop products, not elsewhere classified.	8,605	454,441	1	1,038,066,092	5	2,791,461,064	4	1,753,395,872	1
Cotton goods.....	1,281	424,916	2	898,028,977	9	1,524,177,087	11	626,148,110	13
Lumber and timber products, not elsewhere classified.....	12,015	419,084	3	419,003,388	25	1,273,472,320	12	853,868,932	6
Iron and steel: Steel works and rolling mills.....	483	394,574	4	1,904,083,157	4	3,365,788,805	3	1,461,705,648	2
Car and general construction and repairs, steam-railroad repair shops.....	1,851	368,681	5	515,562,452	17	1,184,435,262	13	668,872,810	12
Electrical machinery, apparatus, and supplies.....	1,802	328,722	6	971,017,623	6	2,300,915,572	6	1,329,897,949	4
Motor vehicles, not including motorcycles.....	244	225,110	7	2,401,511,763	2	3,722,793,274	1	4,321,281,511	5
Motor-vehicle bodies and motor-vehicle parts.....	1,154	221,332	8	856,985,637	11	1,537,929,793	9	680,944,166	11
Knit goods.....	1,888	208,488	9	450,700,958	20	899,716,672	23	443,015,714	19
Boots and shoes, other than rubber.....	1,341	205,640	10	515,055,246	18	905,922,694	19	450,897,448	18
Bread and other bakery products.....	20,785	200,841	11	737,099,500	12	1,526,110,811	10	789,011,311	7
Furniture, including store and office fixtures.....	3,778	193,399	12	420,454,169	24	948,110,358	20	521,602,189	15
Clothing, women's, not elsewhere classified.....	8,082	187,600	13	934,413,083	7	1,709,580,505	8	775,166,822	8
Printing and publishing, book and job.....	12,712	150,649	14	268,749,365	37	1,006,650,768	16	739,907,403	9
Clothing (except work clothing), men's, youths', and boys', not elsewhere classified.....	3,691	149,868	15	440,504,970	21	901,104,205	22	460,599,226	10
Silk and rayon manufactures.....	1,491	180,467	16	412,181,260	26	731,200,231	29	319,018,971	24
Printing and publishing, newspaper and periodical.....	11,524	129,660	17	391,737,705	27	1,738,298,892	7	1,346,561,187	3
Meat packing, wholesale.....	1,277	122,605	18	2,974,127,757	1	3,434,654,098	2	460,526,341	17
Cigars and cigarettes.....	1,690	105,808	19	350,778,023	29	1,060,908,888	14	710,130,805	10
Paper.....	655	103,820	20	574,607,978	16	507,180,026	18	392,578,048	20
Industries reporting 50,000 to 100,000 wage earners, total.	20,494	1,283,865		6,207,879,224		10,564,076,845		4,356,197,621	
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	2,997	98,866	21	462,062,128	10	750,342,041	26	288,279,913	26
Clay products (other than pottery) and nonclay refractories.....	1,740	93,336	22	81,608,742	84	294,934,513	50	213,235,771	33
Planing-mill products (including general millwork), not made in planing mills connected with sawmills.....	4,849	90,134	23	296,008,409	35	553,583,498	31	267,574,999	27
Worsted goods.....	264	88,485	24	333,049,459	31	636,007,399	32	199,417,940	35
Rubber tires and inner tubes.....	91	83,263	25	429,600,971	23	770,176,890	25	340,569,919	22
Petroleum refining.....	390	80,596	26	2,031,341,408	3	2,639,665,001	5	608,323,593	14
Dyeing and finishing textiles.....	732	79,327	27	235,712,156	40	465,820,620	37	230,108,473	31
Nonferrous-metal alloys and products, not including aluminum products.....	1,225	79,183	28	600,410,913	15	909,804,050	21	309,393,137	25
Glass.....	263	67,627	29	103,293,943	66	303,524,560	47	200,524,617	34
Confectionery.....	2,021	63,501	30	215,192,474	42	303,299,849	42	178,077,375	38
Chemicals, not elsewhere classified.....	551	62,199	31	363,576,811	28	738,048,388	28	374,471,575	21
Engines, turbines, tractors, and water wheels.....	199	61,148	32	202,900,430	44	457,217,600	38	264,317,239	28
Shirts.....	863	59,830	33	116,678,496	50	228,321,616	65	111,643,120	61
Woolen goods.....	1,460	58,474	34	165,882,063	49	290,938,949	52	125,056,886	57
Boxes, paper, not elsewhere classified.....	1,249	55,654	35	159,839,577	51	294,253,296	51	134,413,719	54
Ship and boat building, steel and wooden, including repair work.....	624	55,089	36	85,848,680	80	231,300,165	63	145,451,475	49
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills.....	1,482	54,947	37	244,000,254	39	477,030,827	36	232,340,573	30
Hardware not elsewhere classified.....	485	52,306	38	76,480,210	89	229,477,507	64	152,997,297	47
Industries reporting 25,000 to 50,000 wage earners, total.	30,728	1,076,069		3,866,486,055		7,738,763,023		3,372,276,968	
Leather: Tanned, curried, and finished.....	471	49,932	39	337,597,868	30	481,340,299	35	143,742,431	50
Machine tools.....	280	47,391	40	64,284,022	100	244,578,088	59	180,294,066	37
Stoves and ranges (other than electric and warm-air furnaces).....	609	46,616	41	100,747,049	70	271,747,009	55	170,969,900	42
Gas, manufactured, illuminating and heating.....	754	43,065	42	188,416,183	46	512,662,595	33	324,236,412	23
Agricultural implements.....	293	41,663	43	113,069,484	61	276,864,462	53	163,884,978	44
Rubber goods other than tires, inner tubes, and boots and shoes.....	412	40,226	44	114,674,244	60	244,745,737	58	130,071,493	55
Turpentine and rosin.....	1,183	40,157	45	10,293,954	232	30,281,632	194	25,937,678	161
Cars, electric and steam railroad, not built in railroad repair shops.....	147	40,015	46	223,880,397	41	328,220,204	44	104,330,807	65
Stamped ware, enameled ware, and metal stamping, enameling, japanning, and lacquering.....	582	40,000	47	87,639,495	78	204,806,134	71	116,666,639	59
Steam fitting and steam and hot-water heating apparatus.....	240	39,621	48	72,708,268	92	228,310,254	69	155,091,980	46
Rayon and allied products.....	29	39,106	49	33,334,763	140	149,540,107	91	116,211,354	60
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....	511	38,201	50	83,551,715	82	138,450,078	95	54,898,383	110
Marble, granite, slate, and other stone products.....	1,881	37,817	51	57,637,838	100	192,163,916	74	134,529,075	53
Pottery, including porcelain ware.....	313	35,499	52	27,007,364	159	110,622,453	112	35,015,089	80
Cement.....	174	33,868	53	95,242,497	74	267,599,200	67	172,236,763	40
Carpets and rugs, wool, other than rag.....	67	32,623	54	80,650,892	79	170,615,364	80	90,294,472	73
Milinery.....	1,293	32,200	55	93,039,659	72	195,693,467	72	97,693,785	69
Ice, manufactured.....	4,110	32,184	56	39,808,164	119	210,952,264	69	171,144,100	41
Tin cans and other tinware, not elsewhere classified.....	232	31,497	57	194,980,803	45	296,901,426	49	101,614,623	66
Boxes, wooden, except cigar boxes.....	792	30,554	58	74,031,937	91	135,025,675	96	60,943,738	105
Car and general construction and repairs, electric-railroad repair shops.....	446	29,475	59	32,781,113	141	85,481,577	130	52,700,404	113
Faints and varnishes.....	1,063	29,211	60	334,132,065	32	568,975,838	30	234,843,773	29
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	2,161	28,593	61	112,648,112	62	222,484,625	67	109,836,513	63
Beverages.....	5,154	28,281	62	103,026,180	67	270,323,303	56	167,297,623	43
Plumbers' supplies, not including pipe or vitreous-china sanitary ware.....	255	27,980	63	40,032,599	112	129,673,784	99	80,641,185	85
Jewelry.....	1,539	27,922	64	79,804,617	86	177,356,932	79	97,582,315	70
Flour and other grain-mill products.....	4,022	27,628	65	863,872,569	10	1,060,269,418	15	191,396,840	36
Textile machinery and parts.....	376	27,019	66	36,556,299	129	122,433,514	105	85,882,215	78
Machine-tool accessories and small metal-working tools, not elsewhere classified.....	722	26,682	67	26,992,631	160	144,410,890	94	117,418,259	58
Furnishing goods, men's, not elsewhere classified.....	598	26,588	68	83,631,818	81	150,963,603	90	67,331,735	98
Boots and shoes, rubber.....	22	26,659	69	34,396,466	136	102,537,625	121	68,141,156	96

CENSUS OF MANUFACTURES: 1929

TABLE 6.—RELATIVE IMPORTANCE OF LEADING INDUSTRIES, FOR THE UNITED STATES: 1929—Continued

INDUSTRY	Number of establishments		WAGE EARNERS		COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	Average for the year	Rank	Amount	Rank	Amount	Rank	Amount	Rank	Amount	Rank
Industries reporting 10,000 to 25,000 wage earners, total.....	35,337	1,096,141	\$7,089,748,685		\$11,880,303,568		\$4,790,554,883			
Iron and steel: Blast furnaces.....	106	24,960	70	610,293,691	14	771,425,464	24	161,131,773	45	
Bookbinding and blank-book making.....	1,108	24,754	71	30,754,777	148	102,783,405	120	72,028,628	94	
Pulp (wood and other fiber).....	198	24,729	72	148,752,729	54	238,928,279	60	90,176,550	74	
Gas and electric fixtures; lamps, lanterns, and reflectors.....	614	23,680	73	57,918,407	105	144,965,706	93	87,047,299	77	
Pumps (hand and power) and pumping equipment.....	322	23,106	74	66,802,372	99	164,009,397	85	97,207,025	71	
Wire, drawn from purchased bars or rods.....	81	22,467	75	126,182,420	58	126,182,420	68	87,814,981	76	
Ice cream.....	3,150	22,399	76	155,904,386	53	328,413,911	43	172,440,626	30	
Wirework, not elsewhere classified.....	547	22,388	77	68,144,047	98	140,805,049	92	78,601,002	86	
Aluminum manufactures.....	150	21,210	78	94,036,463	76	153,457,248	80	59,420,785	107	
Fertilizers.....	638	20,926	79	150,801,195	52	232,510,936	61	72,709,741	92	
Forgings, iron and steel, not made in plants operated in connection with rolling mills.....	218	20,882	80	71,606,904	95	156,248,947	87	84,641,983	79	
Coke, not including gas-house coke.....	163	20,552	81	281,592,430	36	416,348,468	40	134,756,028	52	
Paper goods, not elsewhere classified.....	436	20,227	82	100,308,676	71	182,647,712	77	82,279,036	82	
Signs and advertising novelties.....	1,239	20,000	83	35,701,412	132	118,044,157	110	82,342,745	81	
Screw-machine products and wood screws.....	273	19,881	84	39,402,598	122	105,974,662	116	66,512,004	99	
Cast-iron pipe.....	72	19,741	85	34,289,305	137	80,260,550	135	45,971,185	119	
Tools, not including edge tools, machine tools, files, or saws.....	534	19,305	86	32,110,507	143	99,462,032	124	67,351,625	97	
Butter.....	3,527	19,097	87	636,878,586	13	746,417,620	27	110,544,034	62	
Lithographing.....	376	18,979	88	38,992,142	124	121,014,321	106	82,022,179	83	
Fancy and miscellaneous articles, not elsewhere classified.....	814	18,722	80	35,139,864	134	85,388,961	131	50,249,107	115	
Wood turned and shaped and other wooden goods, not elsewhere classified.....	894	18,712	90	28,428,503	153	69,619,990	146	41,191,427	130	
Mattresses and bed springs, not elsewhere classified.....	951	17,187	91	61,527,026	102	123,279,717	104	61,752,691	102	
Typewriters and parts.....	26	16,945	92	7,248,601	248	61,857,615	154	54,609,014	111	
Refrigerators, mechanical.....	34	16,883	93	72,413,047	94	161,565,676	86	89,152,629	75	
Instruments, professional and scientific.....	276	16,876	94	28,411,430	154	89,746,369	128	61,334,939	104	
Cash registers and adding, calculating, and card-tabulating machines.....	46	16,840	95	10,766,013	225	110,000,986	113	99,234,973	68	
Toys (not including children's wheel goods or sleds), games, and playground equipment.....	476	16,660	96	29,981,527	151	74,828,981	139	44,847,454	121	
Hats, fur-felt.....	169	16,539	97	55,298,045	108	102,004,165	123	46,706,120	118	
Concrete products.....	2,438	16,505	98	34,035,184	138	92,900,749	126	58,865,565	108	
Patent or proprietary medicines and compounds.....	1,522	16,434	99	94,780,838	75	318,906,928	45	224,137,095	32	
Bolts, nuts, washers, and rivets, not made in plants operated in connection with rolling mills.....	117	16,175	100	44,211,785	113	102,392,009	122	58,180,314	109	
Oil, cake, and meal, cottonseed.....	553	15,825	101	249,019,800	38	298,376,039	48	49,356,239	116	
House-furnishing goods, not elsewhere classified.....	964	15,794	102	76,624,989	88	127,602,002	101	50,977,013	114	
Fur goods.....	2,855	15,752	103	176,106,910	48	277,592,752	54	101,486,842	67	
Cotton small wares.....	202	15,281	104	33,636,203	139	65,169,753	150	31,633,546	145	
Cutlery (not including silver and plated cutlery) and edge tools.....	230	14,991	105	14,789,335	201	78,660,872	136	63,871,637	101	
Aircraft and parts.....	132	14,710	106	27,368,103	157	71,152,924	144	43,784,821	123	
Smelting and refining, copper.....	26	14,544	107	920,351,441	8	994,783,862	17	74,432,421	89	
Cordage and twine.....	123	14,489	108	54,573,259	109	91,455,117	127	36,881,868	138	
Soap.....	59	14,416	109	37,323,137	127	96,849,048	125	59,525,911	106	
Sugar refining, cane.....	282	14,363	110	180,352,984	47	310,191,530	46	129,838,546	56	
Corsets and allied garments.....	21	13,912	111	438,399,151	22	507,389,262	34	68,090,111	95	
Canning and preserving: Fish, crabs, shrimps, oysters, and clams.....	213	13,664	112	36,035,079	130	76,802,199	138	40,767,120	132	
Perfumes, cosmetics, and other toilet preparations.....	348	13,612	113	53,230,911	110	80,848,513	134	27,608,602	158	
Wood preserving.....	815	13,109	114	68,298,879	104	193,440,550	73	135,141,671	51	
Caskets, coffins, burial cases, and other morticians' goods.....	109	13,077	115	147,702,724	55	190,944,645	75	43,241,921	124	
Photographic apparatus and materials.....	414	13,033	116	39,350,294	123	88,281,872	120	48,931,678	117	
Photo-engraving, not done in printing establishments.....	115	12,967	117	30,392,531	149	102,827,386	119	72,434,856	93	
Bags, other than paper, not made in textile mills.....	654	12,353	118	11,003,121	222	77,352,259	137	66,379,138	100	
Smelting and refining, zinc.....	202	11,828	119	144,275,477	56	170,175,893	83	25,900,416	163	
Wrought pipe, welded and heavy riveted, not made in plants operated in connection with rolling mills.....	30	11,618	120	74,766,088	90	118,901,070	109	44,140,982	122	
Trunks, suitcases, and bags.....	50	11,417	121	70,120,941	97	124,658,966	103	54,638,025	112	
Stationary goods, not elsewhere classified.....	467	11,369	122	31,693,935	146	63,968,929	153	32,274,994	144	
Locomotives, not made in railroad repair shops.....	203	11,078	123	32,177,887	142	74,062,047	140	41,884,160	128	
Tobacco: Chewing and smoking, and snuff.....	16	11,045	124	52,808,092	111	83,558,258	132	31,050,166	149	
Sporting and athletic goods, not including firearms or ammunition.....	152	10,811	125	72,494,329	93	179,332,951	78	106,838,622	64	
Motion pictures, not including projection in theaters.....	242	10,793	126	24,482,236	168	58,283,728	160	33,806,492	142	
Watches and watch movements.....	142	10,784	127	38,441,025	126	184,102,419	76	145,001,394	48	
Plated ware.....	8	10,788	128	10,455,921	231	34,370,399	202	23,914,478	169	
Cooperage.....	96	10,728	129	16,780,985	192	55,429,959	163	38,078,974	134	
Druggists' preparations.....	580	10,691	130	41,515,500	116	64,841,788	151	23,326,288	176	
Food preparations, not elsewhere classified.....	429	10,688	131	43,775,986	114	124,778,487	102	81,002,501	87	
Sewing machines and attachments.....	892	10,616	132	96,387,639	73	171,860,987	82	75,473,348	84	
Pocketbooks, purses, and cardcases.....	39	10,467	133	16,458,425	193	45,094,600	180	28,636,176	156	
Clocks, clock movements, time-recording devices, and time stamps.....	290	10,430	134	35,351,605	133	68,027,515	148	33,275,910	143	
Boot and shoe findings, not made in boot and shoe factories.....	56	10,401	135	10,675,113	227	42,165,875	185	31,490,762	146	
Envelopes.....	382	10,376	136	31,964,401	144	58,625,445	159	26,661,044	160	
Feeds, prepared, for animals and fowls.....	171	10,367	137	29,927,683	162	61,286,992	156	31,369,309	148	
Engraving, steel and copperplate, and plate printing.....	750	10,223	138	327,919,743	34	402,752,534	41	74,332,707	88	
Engraving, steel and copperplate, and plate printing.....	456	10,130	139	11,864,764	217	47,161,641	171	35,206,871	140	
All other industries (reporting less than 10,000 wage earners), total.....	27,172	657,157	3,894,196,656		6,655,289,782		2,761,093,726			

GENERAL SUMMARY

TABLE 7.—ESTIMATED NET VALUE OF MANUFACTURED PRODUCTS, BY INDUSTRY GROUPS: 1929

[While the net-value figure in the final column for "All groups" represents the value of all the finished products of industry, the 16 items for the individual industry groups which together make up the total net value of products do not represent exactly the values of completely-manufactured products for the respective groups. For example: To arrive at the value of "Food and kindred products" ready for ultimate consumption it would be necessary to add to the \$9,682,000,000 items an estimated cost of containers obtained from other industry groups. On the other hand, for the "Rubber products" group it would be necessary to deduct from the gross-value figure the estimated value of rubber semimanufactures, such as tires sold for initial installation on motor vehicles. For method of computing net value, see GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products, p. 6]

INDUSTRY GROUP	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY					VALUE OF PRODUCTS	
	Total	Fuel and purchased energy		Raw materials and imported semimanufactures	Domestic semimanufactures	Gross	Net
		Coal, natural gas, and purchased energy	Manufactured fuels				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
All groups	\$38,549,579,732	\$1,298,319,367	\$567,846,352	\$14,531,000,000	\$22,152,000,000	\$70,434,863,443	\$47,243,000,000
Food and kindred products.....	8,032,282,857	134,218,841	27,224,052	6,156,000,000	2,315,000,000	12,023,589,289	9,682,000,000
Textiles and their products.....	5,103,845,724	109,173,983	11,030,830	1,907,000,000	3,076,000,000	9,243,302,523	15,854,000,000
Forest products.....	1,586,182,953	31,219,400	4,591,249	295,000,000	1,255,000,000	3,591,765,090	2,332,000,000
Paper and allied products.....	1,092,722,103	75,131,224	6,564,567	319,000,000	692,000,000	1,892,251,148	1,194,000,000
Printing, publishing, and allied industries.....	766,483,548	22,147,106	3,588,053	157,000,000	684,000,000	3,170,139,651	2,412,000,000
Chemicals and allied products.....	1,970,713,269	84,474,632	14,962,658	821,000,000	1,050,000,000	3,769,404,040	2,695,000,000
Products of petroleum and coal.....	2,546,849,193	* 204,764,176	108,461,352	1,895,000,000	248,000,000	3,647,747,957	3,291,000,000
Rubber products.....	578,677,681	19,067,788	609,587	211,000,000	348,000,000	1,117,460,252	769,000,000
Leather and its manufactures.....	1,131,941,963	13,181,497	506,494	343,000,000	775,000,000	1,905,976,775	1,180,000,000
Stone, clay, and glass products.....	526,339,979	138,813,844	18,716,826	219,000,000	150,000,000	1,561,414,590	1,393,000,000
Iron and steel and their products, not including machinery.....	3,862,873,486	166,994,501	296,133,346	700,000,000	2,640,000,000	7,137,928,058	4,202,000,000
Nonferrous metals and their products.....	2,465,444,129	43,593,460	21,281,525	825,000,000	1,576,000,000	3,697,057,717	2,000,000,000
Machinery, not including transportation equipment.....	2,694,370,628	78,113,499	32,183,361	54,000,000	2,530,000,000	7,043,387,390	4,481,000,000
Transportation equipment, air, land, and water.....	3,683,148,078	41,153,215	12,803,903	4,000,000	3,625,000,000	6,047,209,390	2,409,000,000
Railroad repair shops.....	548,343,565	26,678,923	4,504,808	-----	517,000,000	1,269,916,839	748,000,000
Miscellaneous industries.....	1,359,360,506	19,683,338	3,092,841	564,000,000	772,000,000	3,426,319,134	2,651,000,000

* Amount deducted, \$302,059,330, representing cost of contract work.

* Amount deducted, \$169,898,605, representing cost of contract work.

* Contains \$38,263,293, which represents the cost of crude oil used as fuel.

TABLE 8.—SUMMARY BY GROUPS OF INDUSTRIES: 1914 TO 1929

[Includes, for 1919 and 1914, data for establishments reporting products valued at less than \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size. The totals for all groups and the figures for Group 1 for years prior to 1927 as given in this summary differ from those published in the report for 1927 because of the inclusion in this table, but not in the corresponding table in the report for 1927, of data for the "Poultry killing and dressing" industry for 1925 and earlier years. The figures for 1927, and in most cases those for earlier years, for Groups 1, 3, 4, 5, 11, 12, 13, and 16 differ from those published in the 1927 report. The reasons for these differences are given in the introductory text for the respective groups, Chapter VIII. See GENERAL EXPLANATIONS—Changes in Groups, Industry Titles, and Classifications, p. 9]

GROUP	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture ¹	Horsepower
All groups, total	1929	210,959	8,838,743	\$11,620,973,254	\$38,549,579,732	\$70,434,863,443	\$31,885,283,711	42,931,061
	1927	191,866	8,349,755	10,848,802,532	35,133,136,889	62,718,347,289	27,585,210,400	38,825,081
	1925	187,390	8,384,201	10,729,968,927	35,935,647,704	62,713,713,730	26,778,066,026	35,772,628
	1923	196,309	8,778,156	11,009,207,726	34,705,697,749	60,555,998,200	25,850,300,451	33,064,228
	1921	196,267	6,946,570	8,202,324,339	25,321,055,340	43,668,282,833	18,332,227,487	(2)
	1919	274,698	9,041,311	10,461,786,869	37,288,731,430	62,193,426,614	24,904,695,184	20,327,669
	1914	272,518	7,023,686	4,067,718,740	14,368,935,014	24,216,514,573	9,857,679,559	22,290,899
1. Food and kindred products	1929	56,320	753,247	902,142,970	8,632,282,857	12,023,589,289	3,391,306,432	4,607,913
	1927	40,787	470,520	823,387,583	8,113,432,583	11,015,860,010	2,902,427,427	4,134,973
	1925	48,113	604,760	793,680,786	7,748,677,877	10,418,536,301	2,669,858,424	3,881,952
	1923	51,847	682,137	795,571,072	6,990,846,444	9,524,060,769	2,533,204,315	3,723,025
	1921	52,113	626,618	746,260,284	6,122,932,791	8,297,129,564	2,144,196,773	(2)
	1919	69,423	733,664	774,723,836	10,252,630,856	12,748,348,465	2,495,717,609	3,203,106
	1914	67,403	536,436	303,341,625	3,907,186,447	4,977,760,917	1,070,674,470	2,508,932
2. Textiles and their products	1929	27,404	1,707,798	1,733,031,423	5,103,845,724	9,243,302,523	4,130,459,799	4,145,908
	1927	26,843	1,694,416	1,759,958,139	4,922,715,868	8,950,472,873	4,027,757,005	4,173,433
	1925	24,450	1,628,283	1,654,814,276	5,349,924,770	9,126,154,902	3,776,230,132	3,986,522
	1923	26,763	1,715,293	1,743,797,717	5,394,441,315	9,462,281,966	4,067,340,651	3,783,401
	1921	25,955	1,569,738	1,472,352,098	3,801,090,387	6,956,494,993	3,155,374,576	(2)
	1919	28,451	1,610,003	1,481,142,946	5,379,387,636	9,210,932,957	3,831,645,321	3,248,364
	1914	23,350	1,505,912	675,781,743	2,013,737,838	3,444,810,423	1,431,072,685	2,717,078
3. Forest products	1929	20,912	876,383	939,382,973	1,586,182,953	3,591,765,090	2,006,582,137	3,674,204
	1927	20,169	864,608	931,920,537	1,636,647,040	3,462,925,167	1,826,278,127	3,332,457
	1925	21,926	921,266	978,472,291	1,725,350,920	3,089,126,705	1,663,775,785	3,472,970
	1923	21,678	931,816	962,594,530	1,666,395,023	3,633,385,573	1,966,960,550	3,336,236
	1921	21,398	709,360	670,461,643	1,197,627,939	2,456,857,043	1,250,229,104	(2)
	1919	41,201	864,001	859,872,003	1,368,341,322	3,113,460,426	1,745,119,104	3,409,746
	1914	43,466	865,294	446,897,411	765,935,795	1,616,462,752	850,518,957	3,176,436
4. Paper and allied products	1929	3,126	233,393	287,330,792	1,092,722,103	1,892,251,148	799,520,045	3,166,304
	1927	2,972	224,437	272,153,679	1,082,363,311	1,788,097,679	703,634,368	2,813,694
	1925	2,727	221,502	263,097,360	919,657,498	1,546,814,124	627,156,626	2,574,707
	1923	2,685	219,026	250,144,000	878,763,995	1,456,970,076	678,200,081	2,313,562
	1921	2,600	184,756	202,702,800	669,070,172	1,071,800,316	402,730,144	(2)
	1919	2,677	208,115	212,724,291	720,908,211	1,250,446,203	529,536,992	1,967,446
	1914	2,452	166,762	88,844,233	314,832,826	519,689,671	204,856,845	1,697,268
5. Printing, publishing, and allied industries	1929	27,522	357,988	630,371,372	766,483,548	3,170,139,651	2,408,656,103	649,441
	1927	25,433	328,603	586,183,261	755,937,668	2,859,860,389	2,104,822,721	569,528
	1925	23,826	315,264	542,418,876	694,576,980	2,596,870,775	1,902,293,795	486,087
	1923	23,114	307,993	492,905,953	665,654,236	2,315,318,106	1,649,069,776	429,967
	1921	22,777	282,500	434,727,594	663,300,138	2,078,763,839	1,415,463,701	(2)
	1919	33,747	301,934	351,997,797	587,293,851	1,764,386,909	1,177,093,058	379,236
	1914	34,767	286,254	207,720,982	266,435,038	937,125,476	670,690,433	341,806

See footnotes at end of table

CENSUS OF MANUFACTURES: 1929

TABLE 8.—SUMMARY BY GROUPS OF INDUSTRIES: 1914 TO 1929—Continued

[See note at head of this table]

GROUP	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture ¹	Horsepower
6. Chemicals and allied products ¹	1929	8,278	280,868	\$354,393,308	\$1,970,713,209	\$3,759,404,640	\$1,788,691,371	2,312,295
	1927	7,541	253,436	317,908,093	1,803,084,544	3,351,892,059	1,548,807,515	1,848,309
	1925	7,282	244,812	296,525,641	1,830,591,898	3,211,230,498	1,380,638,600	1,748,481
	1923	7,197	246,527	288,833,729	1,702,944,290	2,938,561,637	1,230,617,347	1,654,228
	1921	7,348	199,596	224,332,535	1,352,904,081	2,225,917,456	873,013,375	(²)
	1919	10,732	320,053	364,884,045	2,269,338,413	3,803,752,737	1,634,414,324	1,720,521
	1914	11,461	258,413	104,420,708	1,011,126,288	1,964,030,406	953,605,118	1,459,062
7. Products of petroleum and coal.....	1929	1,497	147,216	229,050,010	2,546,840,193	3,647,747,957	1,100,907,704	1,755,258
	1927	1,418	141,055	217,485,282	2,262,698,554	3,060,225,699	797,527,145	1,513,314
	1925	1,582	136,366	210,033,811	2,356,683,404	3,230,008,511	873,425,107	1,241,877
	1923	1,650	138,330	212,881,574	1,981,370,216	2,778,888,167	797,617,951	1,092,914
	1921	1,560	115,000	180,452,175	1,760,804,612	2,372,039,178	611,234,566	(²)
	1919	1,684	131,759	185,699,027	1,638,919,806	2,289,170,161	653,250,355	709,597
	1914	1,782	90,882	60,881,720	474,558,358	721,656,198	247,097,840	464,659
8. Rubber products.....	1929	525	149,148	207,305,857	578,677,681	1,117,460,252	538,782,571	821,312
	1927	510	141,997	198,073,743	660,370,209	1,225,077,114	564,706,905	790,622
	1925	530	141,869	191,285,520	721,729,675	1,260,806,063	530,076,388	659,691
	1923	529	137,868	182,034,056	501,162,768	958,517,634	457,354,866	605,634
	1921	496	103,273	123,612,873	377,879,372	704,903,133	327,023,761	(²)
	1919	477	158,549	193,763,089	594,343,590	1,138,216,019	543,572,429	429,273
	1914	342	74,022	44,167,402	163,034,713	300,693,796	137,959,083	109,242
9. Leather and its manufactures.....	1929	4,277	318,415	359,412,072	1,131,941,963	1,905,076,775	774,034,612	436,342
	1927	4,265	315,991	364,447,396	1,088,640,717	1,869,305,448	780,664,331	419,591
	1925	4,243	314,025	355,346,411	1,012,880,605	1,763,709,361	750,828,756	413,173
	1923	4,868	344,545	388,630,008	1,083,346,380	1,880,085,716	796,740,336	412,998
	1921	4,813	280,071	314,411,672	934,397,705	1,544,185,251	609,787,546	(²)
	1919	6,397	349,362	363,453,419	1,713,807,326	2,610,230,727	896,423,391	332,537
	1914	6,758	307,060	169,357,560	753,136,354	1,104,594,557	351,450,203	311,194
10. Stone, clay, and glass products.....	1929	8,514	328,417	432,817,393	526,339,979	1,561,414,590	1,035,074,611	2,854,402
	1927	8,673	350,017	464,272,991	594,774,314	1,612,548,765	1,017,774,451	2,709,181
	1925	8,478	363,036	467,012,428	603,426,910	1,640,651,985	1,037,225,075	2,348,157
	1923	8,317	351,692	453,567,361	573,472,386	1,563,120,627	989,048,241	1,936,054
	1921	8,347	252,990	307,064,599	428,258,661	1,033,091,070	604,832,469	(²)
	1919	12,599	302,810	332,725,753	422,611,208	1,111,746,070	689,134,862	1,584,917
	1914	14,790	335,824	206,084,765	240,818,101	618,699,787	377,881,686	1,493,976
11. Iron and steel and their products, not including machinery.....	1929	6,640	880,882	1,380,986,821	3,862,873,486	7,137,928,058	3,275,054,572	9,200,822
	1927	6,340	834,907	1,268,812,344	3,544,615,067	6,197,594,589	2,652,970,522	8,322,730
	1925	6,063	860,783	1,283,840,706	3,734,084,771	6,460,222,488	2,726,137,717	7,518,726
	1923	6,363	892,185	1,324,172,787	4,152,741,176	6,827,670,385	2,674,029,209	4,729,009
	1921	6,251	671,426	730,875,339	2,140,171,458	3,455,541,015	1,315,369,557	(²)
	1919	7,017	857,764	1,243,726,202	3,423,290,005	5,687,843,671	2,464,663,606	6,429,697
	1914	6,326	617,776	421,746,126	1,315,690,489	2,137,113,329	821,422,840	4,587,572
12. Nonferrous metals and their products	1929	7,522	314,741	443,466,623	2,466,444,193	3,597,057,717	1,131,618,519	1,570,217
	1927	6,761	272,067	383,184,596	1,788,213,469	2,677,107,246	893,893,579	1,226,411
	1925	7,006	276,616	382,652,356	1,948,438,054	2,839,550,465	891,112,411	1,162,140
	1923	7,501	297,798	395,078,970	1,767,637,612	2,637,159,840	869,622,228	1,171,192
	1921	7,853	212,030	256,892,785	886,264,843	1,408,059,444	521,794,601	(²)
	1919	10,441	304,768	379,171,419	1,737,233,945	2,519,031,512	781,797,567	953,109
	1914	9,808	239,542	154,579,750	964,555,946	1,329,834,086	366,278,141	550,903
13. Machinery, not including transportation equipment.....	1929	12,955	1,001,269	1,634,165,729	2,694,379,629	7,043,380,390	4,349,000,761	3,647,343
	1927	11,982	883,508	1,284,132,534	2,053,941,624	5,848,723,728	3,294,781,804	2,995,296
	1925	11,807	858,843	1,225,359,140	1,985,367,067	5,020,281,100	3,034,914,033	2,714,377
	1923	12,147	907,707	1,258,742,642	1,891,624,166	4,727,818,290	2,836,294,124	2,300,443
	1921	12,395	662,277	832,782,828	1,361,163,280	3,235,074,906	1,873,911,626	(²)
	1919	14,821	998,484	1,240,486,944	1,973,457,522	4,768,673,305	2,795,215,873	2,060,325
	1914	13,467	618,737	412,406,274	662,066,570	1,582,408,404	919,441,834	1,266,908
14. Transportation equipment, air, land, and water.....	1929	2,550	583,355	943,221,005	3,683,148,078	6,047,200,390	2,364,061,312	2,271,192
	1927	2,537	494,905	803,297,856	2,907,949,399	4,698,971,606	1,786,022,207	2,027,686
	1925	2,778	559,578	908,487,503	3,389,101,383	5,451,753,433	2,062,652,050	1,888,961
	1923	3,873	608,328	963,039,377	3,394,504,710	5,333,479,375	1,938,974,665	1,624,468
	1921	4,273	406,773	591,333,775	1,803,011,413	3,018,154,321	1,215,142,908	(²)
	1919	6,768	868,582	1,259,014,020	3,200,602,252	5,627,262,900	2,426,660,738	1,463,804
	1914	7,818	312,562	230,614,798	639,793,313	1,137,422,934	497,620,621	602,469
15. Railroad repair shops.....	1929	2,297	398,156	637,311,434	548,343,565	1,260,916,330	721,573,274	1,163,147
	1927	2,309	428,672	648,903,452	545,491,754	1,298,695,158	744,208,404	1,110,821
	1925	2,363	457,755	668,191,768	563,046,944	1,332,679,079	760,038,136	942,248
	1923	2,348	523,430	772,068,122	631,358,483	1,520,092,751	888,734,283	4,708,005
	1921	2,326	418,285	671,955,829	506,571,099	1,267,342,559	760,771,460	(²)
	1919	2,398	515,709	726,690,466	547,828,694	1,354,446,064	806,617,400	644,875
	1914	2,011	365,902	253,149,943	261,438,131	552,617,790	291,179,609	478,893
16. Miscellaneous industries.....	1929	14,620	417,467	500,581,672	1,359,360,506	3,426,319,134	2,066,958,623	664,371
	1927	14,320	440,456	529,676,055	1,378,160,468	3,317,090,159	1,938,929,691	837,680
	1925	14,216	499,593	508,749,895	1,351,609,948	3,125,318,940	1,773,708,992	732,569
	1923	15,439	475,481	528,385,828	1,429,535,649	3,003,697,298	1,574,061,749	701,511
	1921	15,702	413,221	442,100,510	1,315,807,395	2,557,058,775	1,242,351,380	(²)
	1919	25,195	516,754	511,812,383	1,461,746,815	2,995,478,626	1,533,732,111	751,116
	1914	26,537	442,317	227,722,928	603,691,216	1,270,703,669	667,012,453	449,512

¹ Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

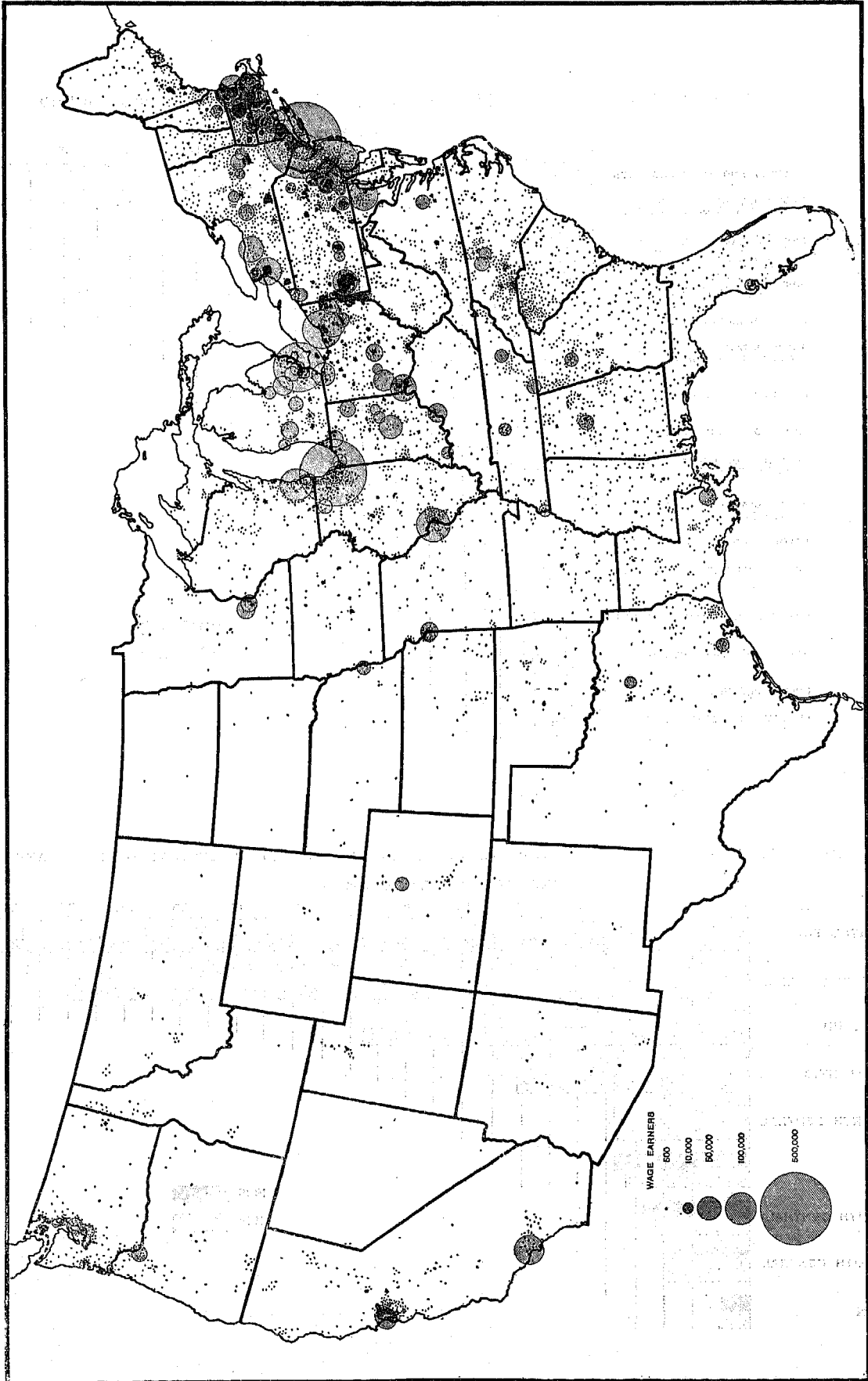
² Not called for on schedule.

³ The comparableness of the figures for 1914 and 1919 with those for later years is affected by the decrease in the legal manufacture of alcoholic beverages resulting from the enactment of the national prohibition act.

⁴ Revised; revision not carried into total for all groups

FIGURE 1.—GEOGRAPHIC DISTRIBUTION OF WAGE EARNERS IN MANUFACTURING INDUSTRIES: 1929

[Circles in italic cities reporting 10,000 or more wage earners; dots indicate other areas]



CENSUS OF MANUFACTURES: 1929

FIGURE 2.—WAGE EARNERS IN MANUFACTURES, BY INDUSTRY GROUPS: 1929 AND 1919

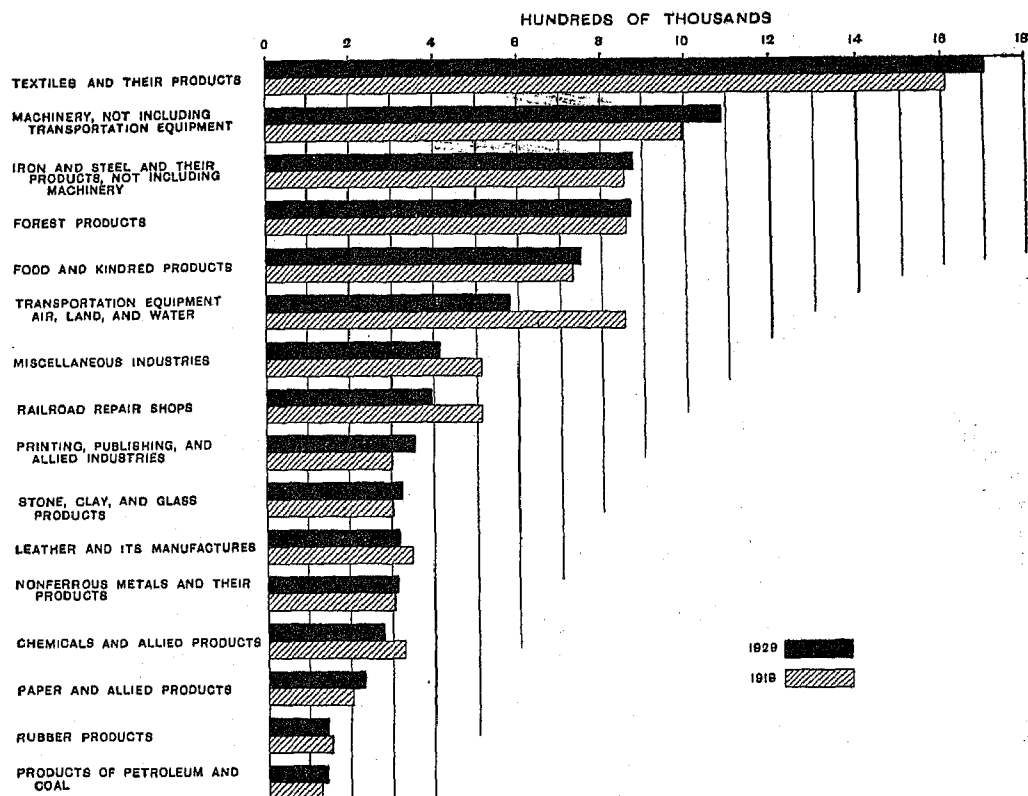


FIGURE 3.—WAGE EARNERS IN MANUFACTURING INDUSTRIES, BY GEOGRAPHIC DIVISIONS: 1929 AND 1919

