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MANUFACTURES: 1919

OHIO

Prepared under the supervision of EUGENE F. HARTLEY, Chief Statistician for Manufactures

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EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census did not cover establishments which were idle during the entire year or for which products were valued at less than \$500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1919, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city, county, or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city, county, or state in which it was located. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products different from those covered by the class designation, and, on the other hand, may not represent the total product covered by this designation, because some of this class of product may be made in establishments in which it is not the product of chief value.

As a rule, the same designation is used for the industry wherever it appears, although all of the products indicated by this designation were not manufactured in the state or city for which these statistics are presented. In some instances the wording is changed so as to more correctly describe the products represented. For a number of industries subclasses are shown which indicate more definitely the kind of products.

Selected industries.—The general tables at the end of this bulletin give the principal facts separately for the industries of the state. A selection has been made of certain leading industries of the state for more detailed consideration. Sometimes an industry of great importance has to be omitted because it comprises so few establishments that a detailed presentation would reveal the operations of individual concerns.

Comparisons with previous censuses.—Owing to changes in industrial conditions it is not always possible to classify establishments by industries in such a way as to permit accurate comparison with preceding censuses. At the census of 1909 the figures for kindred industries were combined. This practice has been followed in compiling the statistics for 1919 and 1914 when placed in comparison with those for 1909 and prior years. The comparative summary for 1919, 1914, and 1909, therefore, does not show separately all the industries given for 1919 in the detailed statement for the state.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1919 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the manufacturing industries were distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners. In the reports for the censuses of 1904 and 1899 these five classes were shown according to the three main groups: (1) Proprietors and firm members, (2) salaried officials, clerks, etc., and (3) wage earners. In comparative tables covering the census of 1904 it is of course necessary to group the figures according to the classification that was employed at the earlier censuses.

The number of persons engaged in each industry, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where this date was not a representative day an earlier date was chosen.

In the case of employees other than wage earners the number thus reported for the representative date has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, by sex, without distinction of age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given in certain tables for each separate industry, is not totaled for all industries combined for any state, because, in view of the variations of date, such a total is not believed to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation. This total, however, is shown for the different cities, because the limited area and greater regularity of employment largely overcame the objection incident to its publication for the separate states or the United States.

(2)

In order to determine as nearly as possible the age distribution of the average number of wage earners for a given state as a whole, the per cent distribution by age of the wage earners in each industry for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. The percentages thus obtained have been applied to the average number of wage earners for the year in that industry to determine the average numbers 16 years and over, and under 16, employed. These calculated averages for the several industries have been added to give the average distribution for each state as a whole and for the entire country.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number of wage earners fluctuates from month to month in every industry, and in some cases to a very great extent. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month, and while representing the number according to the pay rolls to whom wages were paid on that date, no doubt represent a larger number than would be required to perform the work in any industry if all were continuously employed during the year.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a few wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital.—The instructions on the schedule for securing data relating to capital were as follows:

"The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises."

These instructions were identical with those employed at the censuses of 1914 and 1909. The data compiled in respect to capital, however, at both censuses, as well as at all preceding censuses of manufactures, have been so defective as to be of little value except as indicating very general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include certain Federal taxes and state, county, and local taxes. Under "Federal taxes" there are included the internal revenue tax on manufactures (tobacco, beverages, etc.), excise taxes when included in values reported for products, corporation capital stock tax, and corporation income tax, but not the income tax for individuals and partners.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of depreciation or interest, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power generated by the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, fuel oils, gasoline and other volatile oils, and gas—natural and manufactured, and represent the quantity used during the year. As only the principal kinds of fuel are shown, comparison as to the total cost of all fuels is impracticable. A comparison, however, of the total quantities of the several kinds of fuel used in 1919 and 1914 is given.

OHIO.

GENERAL STATISTICS.

General character of the state.—Ohio has a gross area of 41,040 square miles, of which 40,740 represent land surface. The inhabitants of the state in 1900 numbered 4,157,545; in 1910, 4,767,121; and in 1920, 5,759,394. In total population Ohio ranked fourth among the states in 1920. The number of inhabitants per square mile in 1910 was 117, the corresponding figure for 1920 being 141.4.

In 1920 there were 50 cities in the state having more than 10,000 inhabitants, for 48 of which manufacturing statistics are shown. Statistics for Cleveland Heights and East Youngstown could not be shown without the possibility of disclosing the operations of individual establishments. The combined population of these 48 cities in that year was 3,137,372, which formed 54.5 per cent of the total population for Ohio; and in 1919, 79.6 per cent of the state's manufactured products were reported from these cities.

Importance and growth of manufactures (Table 1).—The large increases in salaries and wages, cost of materials, and value of products, as presented in Table 1, are largely due to the changes in industrial conditions brought about by the World War, and, therefore, can not properly be used to measure the growth of manufactures during the census period 1914 to 1919. The increases shown, however, in number of wage earners and horsepower are indicative of a decided growth in the manufacturing activities of the state. The addition of the Federal income tax since 1914 will account for the exceptional increase in "Rent and taxes."

Statistics for the state, by counties (Table 2).—Figures are not available for comparison of the totals for the 88 counties in 1919 with those of prior censuses.

Principal industries, ranked by value of products (Table 3).—The ranking of industries by value of products is not always satisfactory as indicating their importance from a manufacturing standpoint. Their ranking in many instances would change materially if based upon the average number of wage earners or value added by manufacture.

Persons engaged in manufacturing industries (Table 4).—The age classification of the average number of wage earners in this and other tables is an estimate obtained by the method described in the "Explanation of terms." The classification by sex for 1919 was reported separately, but for 1914 and 1909 was obtained in the same manner as the distribution by age. Figures for individual industries will be found in Table 46.

Average number of wage earners for selected industries (Table 5).—The industries covered by this table

are those which employed more than 2,000 wage earners in 1919, and for which statistics can be shown without the possibility of disclosing the operations of individual establishments.

Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more (Table 6).—Each of the 48 cities for which comparative figures are presented in this table shows an increase in value of products from 1914 to 1919. Increases in the total number of wage earners are also shown for all such cities, except Bellaire, East Cleveland, East Liverpool, Findlay, Marietta, Newark, Steubenville, Warren, and Zanesville.

Wage earners, by months (Table 7).—The statistics for wage earners in this table are intended to show the steadiness of employment; or the reverse, in accordance with the industrial conditions existing during the several census years.

Wage earners, by months, for selected industries and for cities (Table 8).—In addition to the number of wage earners employed by months, similar data are given for males and females for all industries combined, and also for each of the 48 cities. The table also shows a number of industries in the state in 1919 which employed a large number of female wage earners. Of the total number of female wage earners in the state, 85.4 per cent were in the 48 cities, while of the male wage earners only 77.9 per cent were reported by the cities.

Prevailing hours of labor (Table 9).—Since 1914 there has been a marked shortening of the working day in Ohio. In that year 13.7 per cent of the wage earners were included in the group "48 and under" as against 40.5 per cent in 1919. In 1914, the "60" and "Over 60" groups constituted 23.3 per cent of the total wage earners as compared with 12.4 per cent in 1919.

Size of establishments, by average number of wage earners, for selected industries and for cities (Table 10).—The predominance of the number of small establishments, when based on the number of wage earners employed, is evidenced in this table by the fact that of the total number of establishments in the state, 91.6 per cent were in the several classes having fewer than 101 wage earners, while such establishments employed but 23.5 per cent of the total number of wage earners. On the other hand, the establishments employing an average of more than 100 wage earners represented only 8.4 per cent of the total number of manufacturing establishments in the state, but reported 76.5 per cent of the total number of wage earners.

Size of establishments, by value of products (Table 11).—At the censuses of 1909 and 1914 establishments with products valued at "\$100,000 to \$1,000,000" constituted one group, but at the census of 1919 this group was subdivided into "\$100,000 to \$500,000" and "\$500,000 to \$1,000,000." Separate figures for the number of establishments and value of products have been compiled, however, from the returns for 1914. The table, therefore, gives combined figures for these two groups for all items for 1909, and for the average number of wage earners and value added by manufacture for 1914.

Size of establishments, by value of products, for selected industries (Table 12).—In the preparation of this table it was necessary in several instances to combine the establishments of one group of the industry with those of some other group of that industry to avoid the possibility of disclosing the operations of individual establishments.

Size of establishments, by value of products, for cities of 10,000 inhabitants or more (Table 13).—This table strikingly illustrates the fact that the number of establishments of itself is no real index of manufacturing activities.

Character of ownership (Table 14).—The preponderance of corporate ownership is clearly brought out in this table. Corporations owned 42 per cent of the manufacturing establishments in the state in 1919, and reported 92.9 per cent of the average number of wage earners and 93.9 per cent of the total value of products. During the five-year period 1914 to 1919, the average number of wage earners in corporations increased 229,605, or 51.1 per cent, and the value of products \$3,188,836,309, or 199.1 per cent.

Manufactures, by population groups, in cities of 10,000 inhabitants or more (Table 15).—This table shows that the combined number of establishments in the 48 cities in 1919 represented 65.3 per cent of the total for the state. They reported in that year 79 per cent of the average number of wage earners and 79.6

per cent of the value of products. These proportions do not differ materially from those of 1914.

Principal industries in the nine cities of 50,000 inhabitants or more in 1920, with per cent of total for state (Table 16).—This table shows for Akron, Canton, Cincinnati, Cleveland, Columbus, Dayton, Springfield, Toledo, and Youngstown, industries of most importance for which figures can be shown without disclosing the operations of individual establishments. The names of a number of important industries are also given for which figures can not be shown without the possibility of disclosing the operations of individual establishments.

Number and horsepower of types of prime movers (Table 17).—The total horsepower reported in 1919, as compared with that for 1914, shows an increase of 904,417 horsepower, or 45.4 per cent. This increase is due chiefly to the gain of 676,887, or 240.9 per cent, in the use of rented electric power. Of the total horsepower in 1914, 85.9 per cent represented owned power and 14.1 per cent rented. The corresponding proportions for 1919 were 66.9 per cent and 33.1 per cent, respectively.

Fuel consumed (Table 18).—This table shows the principal kinds of fuel used by the manufacturing plants in the state in 1919 and 1914, and gives separately for 1919 the amounts consumed by a number of important industries which use considerable quantities of fuel, and by manufacturing enterprises in the 48 cities having 10,000 inhabitants or more. In 1919 four industries combined—coke, not including gas-house coke; iron and steel, steel works and rolling mills; brick and tile, terra-cotta, and fire-clay products; and rubber tires, tubes, and rubber goods, not elsewhere specified—consumed 61.7 per cent of the bituminous coal, using more than a million tons each. Iron and steel blast furnaces consumed 89.6 per cent of the coke. The statistics indicate the diminishing use of gas as fuel for manufacturing in Ohio.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

	MANUFACTURING INDUSTRIES.					PER CENT OF INCREASE. ¹			
	1919	1914	1909	1904	1899	1914-1919	1909-1914	1904-1909	1899-1904
Number of establishments.....	16,125	15,658	15,138	13,785	13,808	3.0	3.4	9.8	-0.6
Persons engaged.....	882,918	606,807	523,004	417,940	(²)	45.5	16.0	25.1	.....
Proprietors and firm members.....	12,823	13,024	14,719	13,657	(²)	-5.9	-7.4	7.8	.....
Salaries employees.....	139,362	82,748	61,351	39,991	28,109	68.4	34.9	53.4	42.3
Wage earners (average number).....	730,733	510,435	440,934	364,298	308,109	43.2	14.2	22.7	18.2
Primary horsepower.....	2,897,497	1,993,080	1,583,155	1,116,932	783,665	44.7	26.5	41.7	42.5
Capital.....	\$3,748,743,996	\$1,677,551,633	\$1,300,732,732	\$856,988,830	\$570,908,968	123.5	29.0	51.8	50.1
Salaries and wages.....	1,218,366,093	423,188,649	317,597,403	225,864,293	164,579,020	187.2	33.6	40.6	37.2
Salaries.....	273,714,350	105,204,836	72,147,499	43,434,868	28,151,441	160.0	45.9	66.1	54.3
Wages.....	944,651,734	317,923,813	245,449,904	182,429,425	136,427,579	197.1	29.5	34.5	33.7
Paid for contract work.....	17,609,025	5,437,438	6,717,474	5,377,027	(³)	223.8	-19.1	24.9	.....
Rent and taxes.....	195,393,107	37,433,863	20,413,298	8,016,126	(³)	422.0	27.3	.....	28.9
Cost of materials.....	2,911,947,871	1,020,782,015	824,201,947	527,636,585	409,302,501	185.3	23.8	56.2	28.9
Value of products.....	6,100,308,728	1,782,808,279	1,437,935,817	960,811,857	748,670,855	186.1	24.0	49.7	23.3
Value added by manufacture ⁴	2,188,360,857	762,026,264	613,733,870	433,175,272	339,368,354	187.2	24.2	41.7	27.6

¹ A minus sign (-) denotes decrease.

² Figures not available.

³ Exclusive of internal revenue.

⁴ Value of products less cost of materials.

MANUFACTURES—OHIO.

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TABLE 2.—STATISTICS FOR THE STATE, BY COUNTIES: 1919.

COUNTY.	Number of establishments.	WAGE EARNERS.		Rent and taxes.	Cost of materials.	Value of products.	Value added by manufacture.	Primary horse-power.
		Average number.	Wages.					
The state.....	16,125	730,733	\$944,051,734	\$195,393,167	\$2,911,947,871	\$5,100,308,728	\$2,188,360,857	2,897,497
Adams.....	64	326	218,875	40,184	697,277	1,276,750	579,473	1,985
Allen.....	190	7,821	8,407,828	2,461,062	28,588,357	48,238,716	19,650,350	20,814
Ashland.....	70	1,851	1,646,903	277,182	5,446,626	11,936,871	6,540,245	4,100
Ashtabula.....	145	5,880	7,042,792	1,488,233	16,212,394	31,841,390	15,628,966	14,041
Athens.....	65	583	539,566	91,915	2,723,020	4,041,343	1,317,414	3,176
Auglaize.....	87	2,228	1,807,995	343,938	5,815,664	10,041,459	4,225,795	6,442
Belmont.....	189	5,643	7,256,992	974,467	23,925,038	37,103,142	13,178,104	30,245
Brown.....	48	322	218,229	37,000	1,059,830	1,591,791	531,961	1,202
Butler.....	224	15,513	19,533,583	11,379,910	62,603,049	115,174,575	52,571,526	90,520
Carroll.....	38	827	931,043	65,039	1,586,706	3,271,562	1,684,856	3,907
Champaign.....	68	931	1,020,397	135,864	4,681,918	7,156,056	2,474,133	3,312
Clark.....	238	12,813	13,923,412	2,297,962	36,394,482	71,839,890	35,445,408	23,237
Clermont.....	61	961	676,870	245,351	2,720,761	4,474,226	1,753,465	2,211
Clinton.....	71	538	550,634	32,114	1,125,470	2,432,463	1,306,993	2,122
Columbiana.....	215	12,663	15,537,097	1,498,751	28,104,257	61,100,183	32,995,926	34,442
Coshocton.....	84	2,510	2,233,692	260,835	4,766,947	9,754,782	4,987,835	7,200
Crawford.....	118	3,026	4,394,870	291,414	7,944,045	16,425,704	8,481,659	9,060
Cuyahoga.....	3,132	167,630	225,801,854	49,380,487	640,933,368	1,158,921,941	508,988,573	507,708
Darke.....	105	405	381,009	82,345	2,163,968	3,016,935	852,967	1,792
Defiance.....	72	1,354	1,433,567	183,660	3,280,923	6,069,876	2,788,948	4,394
Delaware.....	70	892	763,879	64,019	2,015,104	4,087,530	2,072,426	3,206
Erie.....	166	4,448	4,703,544	944,802	13,233,658	23,720,637	10,480,979	23,310
Fairfield.....	89	3,111	3,189,723	506,746	9,404,697	16,203,280	6,798,683	7,000
Fayette.....	35	435	331,465	150,591	2,312,697	3,559,719	1,247,622	1,475
Franklin.....	774	31,573	37,440,743	6,961,986	125,466,722	208,347,572	82,881,850	88,411
Fulton.....	46	564	509,966	95,338	5,399,008	7,365,405	1,966,397	1,955
Gallia.....	32	134	83,822	8,261	733,465	965,521	232,056	666
Geauga.....	23	112	90,404	110,539	472,193	741,222	269,029	734
Greene.....	64	1,246	1,071,117	128,439	5,864,030	8,415,359	2,551,320	5,859
Guernsey.....	68	2,477	3,645,575	214,289	6,800,607	13,065,344	6,264,677	6,361
Hamilton.....	2,466	88,912	89,622,629	27,166,595	424,443,583	688,530,229	264,086,646	185,507
Hancock.....	106	2,116	2,116,555	319,040	7,773,203	11,911,268	4,138,062	6,709
Hardin.....	81	1,041	1,058,719	129,408	2,455,065	4,867,243	2,411,638	6,498
Harrison.....	47	116	125,075	7,002	570,302	896,294	325,992	1,103
Henry.....	59	288	219,359	37,520	907,772	1,432,852	525,080	1,596
Highland.....	92	953	734,473	213,477	3,538,825	6,096,384	2,557,559	4,643
Hocking.....	42	1,032	1,140,769	45,425	1,437,175	3,360,995	1,873,820	4,981
Holmes.....	47	265	292,967	29,733	858,607	1,440,907	582,240	1,062
Huron.....	104	1,846	2,121,050	152,577	4,251,288	8,432,221	4,180,933	7,500
Jackson.....	65	1,604	1,757,259	289,110	4,539,318	7,542,583	3,006,205	10,820
Jafferson.....	104	7,054	12,232,974	4,009,740	37,742,599	61,792,420	24,049,821	97,838
Knox.....	50	1,877	2,478,317	349,580	4,232,209	8,300,851	4,068,642	4,481
Lake.....	50	2,183	3,325,031	860,741	5,516,564	14,537,325	9,020,761	12,553
Lawrence.....	67	2,587	3,105,744	648,595	11,896,625	18,704,695	6,808,070	24,263
Licking.....	118	5,550	5,712,763	518,660	10,549,781	20,975,892	10,426,111	12,807
Logan.....	86	1,139	1,402,370	79,937	3,388,169	5,693,910	2,305,741	3,810
Lorain.....	183	17,352	30,209,276	5,851,759	79,190,393	148,134,011	68,943,618	188,318
Lucas.....	714	44,713	56,909,316	10,946,699	179,424,363	305,061,520	125,667,157	101,793
Madison.....	35	218	186,945	28,689	1,227,739	1,771,191	543,452	988
Mahoning.....	333	32,967	62,608,087	7,401,472	223,863,994	344,207,073	120,343,064	493,471
Marion.....	98	4,395	5,128,980	895,067	11,578,948	22,627,945	11,048,997	11,752
Medina.....	53	1,078	1,956,871	495,204	4,553,627	10,107,344	5,553,717	11,140
Meigs.....	40	650	842,517	33,941	913,354	2,044,465	1,131,111	3,185
Mercer.....	72	1,241	1,038,220	113,434	3,763,552	6,758,715	2,995,103	2,838
Miami.....	157	5,000	4,958,307	1,007,407	17,250,032	31,368,127	14,118,095	12,199
Monroe.....	52	137	89,999	30,367	573,095	833,955	200,890	855
Montgomery.....	670	33,085	41,844,580	7,495,794	85,140,401	185,759,071	100,618,670	70,664
Morgan.....	28	270	217,287	40,101	829,255	1,673,607	844,362	1,215
Morrow.....	25	218	217,267	62,026	873,814	1,407,441	533,627	976
Muskingum.....	162	6,295	6,823,034	474,750	19,631,589	33,553,813	13,922,224	10,532
Noble.....	33	77	63,115	6,852	635,406	803,604	168,258	768
Ottawa.....	47	1,272	1,547,334	387,023	2,317,830	5,541,681	3,223,851	14,463
Paulding.....	42	178	206,313	96,627	1,178,578	1,974,577	795,999	1,697
Perry.....	56	1,467	1,551,281	100,743	1,643,925	3,856,168	2,212,243	5,319
Pickaway.....	53	554	307,079	52,814	1,710,478	2,662,643	952,105	4,025
Pike.....	22	43	35,376	2,411	426,306	538,527	112,221	731
Portage.....	97	3,052	3,607,454	355,625	8,646,115	17,414,954	8,768,839	11,919
Preble.....	72	291	209,125	18,514	534,508	800,517	265,951	2,716
Putnam.....	76	529	475,456	94,310	1,064,081	3,116,105	1,151,214	3,309
Richland.....	191	7,319	8,943,809	2,211,821	26,275,253	47,628,663	21,353,410	20,194
Ross.....	58	1,718	1,882,788	129,891	4,769,464	8,277,376	3,507,912	5,727
Sandusky.....	100	4,070	4,155,577	361,440	9,723,221	19,671,461	9,948,237	11,393
Scioto.....	92	9,096	11,327,501	1,690,120	26,917,991	50,398,501	23,480,510	37,095
Seneca.....	178	3,837	4,121,652	800,297	14,630,337	24,532,788	9,902,451	15,216
Shelby.....	65	2,300	2,016,021	497,632	5,230,870	10,178,402	4,947,532	4,157
Stark.....	584	34,182	47,876,368	5,547,409	113,639,963	222,309,894	108,669,911	132,137
Summit.....	405	71,050	102,708,324	26,304,107	333,933,524	595,108,643	261,175,119	211,778
Trumbull.....	254	15,168	25,122,447	3,260,016	78,531,337	124,743,657	46,212,320	125,592
Tuscarawas.....	218	7,751	10,548,477	832,112	22,459,994	39,197,409	16,737,415	30,037
Union.....	41	439	361,113	31,912	3,774,806	4,427,836	653,030	1,429
Van Wert.....	51	586	600,725	74,553	1,561,717	2,827,422	1,265,705	4,253
Vinton.....	18	137	161,801	8,789	143,142	527,627	384,485	1,005
Warren.....	71	1,094	1,892,404	461,155	5,890,381	10,963,914	5,103,533	9,132
Washington.....	105	2,174	2,108,687	485,997	5,912,766	11,225,910	5,313,144	7,090
Wayne.....	120	1,910	2,284,439	286,190	8,419,871	13,987,355	5,567,484	8,153
Williams.....	77	731	714,029	40,075	3,075,138	4,667,462	1,592,324	2,220
Wood.....	82	2,146	2,743,019	669,363	12,179,569	18,423,158	6,243,589	29,471
Wyandot.....	54	506	525,600	23,142	1,381,911	2,386,698	1,004,787	2,353

MANUFACTURES—OHIO.

TABLE 3.—PRINCIPAL INDUSTRIES, RANKED BY VALUE OF PRODUCTS: 1919.

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.			Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.
All industries.....	16,125	730,733	100.0	\$5,100,309	100.0	\$2,188,361	100.0	Tinware, not elsewhere specified.....	14	2,608	0.4	\$16,981	0.3	\$6,293	0.3
Iron and steel, steel works and rolling mills.....	86	73,025	10.0	626,370	12.3	245,310	11.2	Hardware.....	50	4,576	0.6	16,694	0.3	9,172	0.4
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	96	63,637	8.7	551,118	10.8	251,756	11.5	Screws, machine.....	19	4,226	0.6	16,599	0.3	11,291	0.5
Foundry and machine-shop products.....	1,000	72,227	9.9	347,635	6.8	200,337	9.2	Copper, tin, and sheet-iron work.....	262	2,650	0.4	15,809	0.3	7,320	0.3
Automobiles.....	44	29,212	4.0	287,046	5.6	88,607	4.0	Stamped and enameled ware, not elsewhere specified.....	49	3,834	0.5	15,466	0.3	8,094	0.4
Iron and steel, blast furnaces.....	42	9,793	1.3	179,233	3.5	41,547	1.9	Paper goods, not elsewhere specified.....	22	1,755	0.2	15,368	0.3	7,358	0.3
Slaughtering and meat packing.....	141	5,338	0.7	170,338	3.3	19,739	0.9	Steel barrels, drums, and tanks, portable.....	13	1,581	0.2	14,553	0.3	4,850	0.2
Electrical machinery, apparatus, and supplies.....	189	26,672	3.7	156,924	3.1	84,627	3.9	Fertilizers.....	23	1,197	0.2	14,042	0.3	5,971	0.3
Cars and general shop construction and repairs by steam-railroad companies.....	117	35,245	4.8	96,484	1.9	56,894	2.6	Varnishes.....	33	732	0.1	13,629	0.3	4,920	0.2
Automobile bodies and parts.....	237	16,670	2.3	92,391	1.8	39,849	1.8	Roofing materials.....	20	1,138	0.2	12,785	0.3	4,876	0.2
Flour-mill and gristmill products.....	577	2,122	0.3	89,397	1.8	12,295	0.6	Bags, paper, exclusive of those made in paper mills.....	11	694	0.1	12,610	0.3	3,470	0.2
Bread and other bakery products.....	1,621	0,091	1.2	78,819	1.6	28,863	1.3	Lumber and timber products.....	514	3,135	0.4	12,031	0.2	6,886	0.3
Boots and shoes, not including rubber boots and shoes.....	60	14,092	1.9	71,355	1.4	30,552	1.4	Steam fittings and steam and hot-water heating apparatus.....	29	2,723	0.4	11,852	0.2	7,903	0.4
Machine tools.....	102	13,855	1.9	62,554	1.2	45,077	2.1	Aluminum manufactures.....	20	1,840	0.3	11,132	0.2	4,460	0.2
Printing and publishing, newspapers and periodicals.....	794	7,627	1.0	58,567	1.2	40,125	1.8	Motorcycles, bicycles, and parts.....	9	2,480	0.3	10,874	0.2	5,744	0.3
Clothing, men's.....	246	9,939	1.4	58,169	1.1	28,099	1.3	Patent medicines and compounds.....	202	889	0.1	10,861	0.2	6,514	0.3
Shipbuilding, steel, new vessels and repair work.....	9	11,102	1.5	56,482	1.1	33,128	1.5	Pickles, preserves, and sauces.....	37	1,375	0.2	10,451	0.2	3,349	0.2
Paper and wood pulp.....	49	6,899	0.9	55,098	1.1	19,388	0.9	Automobile repairing.....	540	2,430	0.3	10,245	0.2	5,751	0.3
Clothing, women's.....	175	8,258	1.1	48,704	1.0	22,627	1.0	Ice, manufactured.....	141	1,952	0.3	10,208	0.2	7,310	0.3
Coke, not including gas-house coke.....	13	3,407	0.5	46,514	0.9	13,342	0.6	Boxes, paper and other, not elsewhere specified.....	58	2,952	0.4	10,030	0.2	5,225	0.2
Food preparations, not elsewhere specified.....	98	1,857	0.3	46,340	0.9	8,926	0.4	Coal-tar products.....	15	834	0.1	9,495	0.2	4,105	0.2
Petroleum, refining.....	11	2,431	0.3	43,283	0.9	11,325	0.5	Safes and vaults.....	18	1,821	0.2	9,478	0.2	6,038	0.3
Engines, steam, gas, and water.....	44	6,218	0.9	42,851	0.8	22,507	1.0	Oils, linseed.....	3	270	(1)	9,369	0.2	1,608	0.1
Structural ironwork, not made in steel works or rolling mills.....	93	5,231	0.7	41,793	0.8	17,022	0.8	Lithographing.....	28	1,939	0.3	9,151	0.2	5,607	0.3
Butter.....	141	1,362	0.2	41,062	0.8	6,835	0.3	Oil, not elsewhere specified.....	21	302	(1)	8,986	0.2	2,440	0.1
Iron and steel forgings, not made in steel works or rolling mills.....	38	5,931	0.8	39,563	0.8	20,877	1.0	Boxes, wooden packing, except cigar boxes.....	98	1,874	0.3	8,937	0.2	3,584	0.2
Printing and publishing, book and job.....	871	8,505	1.2	39,202	0.8	24,020	1.1	Wirework, including wire rope and cable, not elsewhere specified.....	47	1,822	0.2	8,710	0.2	4,375	0.2
Confectionery and ice cream.....	380	5,451	0.7	39,185	0.8	17,363	0.8	Plumbers' supplies, not elsewhere specified.....	48	1,897	0.3	8,083	0.2	4,398	0.2
Iron and steel, wrought pipe.....	61	4,434	0.6	37,968	0.7	14,238	0.6	Signs and advertising novelties.....	70	1,907	0.3	7,904	0.2	4,737	0.2
Paints.....	61	2,197	0.3	30,848	0.6	13,251	0.6	Gloves and mittens, cloth, not including gloves made in textile mills.....	35	2,162	0.3	7,568	0.2	2,659	0.1
Glass.....	44	10,935	1.5	35,241	0.7	22,588	1.0	Pumps, not including power pumps.....	20	1,265	0.2	7,393	0.1	4,626	0.2
Furniture.....	162	8,346	1.1	35,224	0.7	20,645	0.9	Shirts.....	32	1,900	0.3	7,390	0.1	3,631	0.2
Chemicals.....	37	3,670	0.5	32,719	0.6	17,424	0.8	Sugar, beet.....	5	630	0.1	7,249	0.1	2,141	0.1
Tools, not elsewhere specified.....	149	6,961	1.0	32,527	0.6	21,792	1.0	Marble and stone work, except slate.....	191	1,504	0.2	7,202	0.1	4,684	0.2
Lumber, planing-mill products, not including planing mills connected with sawmills.....	378	4,495	0.6	32,429	0.6	12,077	0.6	Lamps and reflectors.....	14	1,095	0.1	7,187	0.1	3,017	0.1
Brick and tile, terra-cotta, and fire-clay products.....	341	12,060	1.6	32,173	0.6	22,212	1.0	Awnings, tents, and sails.....	41	851	0.1	6,937	0.1	3,202	0.1
Coffee and spice, roasting and grinding.....	43	1,088	0.1	29,271	0.6	6,394	0.3	Minerals and earths, ground or otherwise treated.....	44	1,960	0.3	6,861	0.1	4,642	0.2
Tobacco, cigars and cigarettes.....	676	10,995	1.5	28,854	0.6	15,739	0.7	Canning and preserving, fruits and vegetables.....	87	1,576	0.2	6,838	0.1	2,426	0.1
Pottery.....	95	11,339	1.6	28,675	0.6	19,663	0.9	Mineral and soda waters.....	217	867	0.1	6,769	0.1	3,515	0.2
Cars, steam-railroad, not including operations of railroad companies.....	8	2,177	0.3	28,146	0.6	6,830	0.3	Flavoring extracts.....	44	325	(1)	6,596	0.1	1,796	0.1
Brass, bronze, and copper products.....	92	4,264	0.6	27,802	0.5	11,624	0.5	Coffins, burial cases, and undertakers' goods.....	20	1,148	0.2	6,475	0.1	3,635	0.2
Agricultural implements.....	46	4,931	0.7	26,556	0.5	13,589	0.6	Photographs and graphophones.....	20	1,424	0.2	6,221	0.1	3,265	0.1
Liquors, malt.....	73	3,327	0.5	25,161	0.5	18,066	0.8	Carriage and wagon materials.....	33	1,219	0.2	5,932	0.1	2,670	0.1
Stoves and hot-air furnaces.....	67	6,069	0.8	25,009	0.5	14,212	0.6	Envelopes.....	7	1,021	0.1	5,893	0.1	2,016	0.1
Leather, tanned, curried, and finished.....	24	1,565	0.2	25,008	0.5	6,190	0.3	Grease and tallow, not including lubricating greases.....	54	711	0.1	5,639	0.1	1,846	0.1
Stoves, gas and oil.....	34	4,329	0.6	23,578	0.5	12,747	0.6	Ink, printing.....	8	397	0.1	5,515	0.1	1,940	0.1
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	23	4,778	0.7	23,451	0.5	13,102	0.6	Models and patterns, not including paper patterns.....	138	1,192	0.2	5,460	0.1	3,756	0.2
Knit goods.....	34	4,407	0.6	18,779	0.4	7,700	0.4	Sausage, not made in slaughtering and meat-packing establishments.....	30	269	(1)	5,355	0.1	1,157	0.1
Condensed milk.....	30	711	0.1	17,198	0.3	3,035	0.1	Saddlery and harness.....	106	799	0.1	5,143	0.1	2,106	0.1
								Carriages and wagons, including repairs.....	119	994	0.1	5,014	0.1	2,621	0.1
								All other industries.....	2,747	81,628	11.2	554,245	10.9	239,757	11.0

¹ Less than one-tenth of 1 per cent.

² Among the industries for which statistics can not be shown separately without the possibility of disclosing the operations of individual establishments are a number having products in excess of some for which figures are shown in the table. Of these industries the most important are the following: "Bags, other than paper, not including bags made in textile mills"; "cash registers and calculating machines"; "oleomargarine"; "soap"; "springs, steel, automobile"; "tin plate andterneplate"; "tobacco, chewing and smoking, and snuff"; "wire"; and "woolen goods."

MANUFACTURES—OHIO.

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TABLE 4.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES: 1919, 1914, AND 1909.

CLASS.	Cen- sus year.	Total.	Male.	Fe- male.	PER CENT OF TOTAL.		CLASS.	Cen- sus year.	Total.	Male.	Fe- male.	PER CENT OF TOTAL.	
					Male.	Fe- male.						Male.	Fe- male.
All classes.....	1919	882,918	739,167	143,751	83.7	16.3	Clerks and other subordinate salaried employees.	1919	109,097	71,636	37,461	65.7	34.3
	1914	606,807	512,621	94,186	84.5	15.5		1914	63,790	46,357	17,433	72.7	27.3
	1909	523,004	439,811	83,193	84.1	15.9		1909	44,857	34,101	10,756	76.0	24.0
Proprietors and officials.....	1919	43,088	41,863	1,225	97.2	2.8	Wage earners (average number).	1919	730,733	625,068	105,065	85.6	14.4
	1914	32,582	31,622	960	97.1	2.9		1914	510,435	434,042	75,793	85.2	14.8
	1909	31,213	30,341	872	97.2	2.8		1909	446,934	375,369	71,565	84.0	16.0
Proprietors and firm members..	1919	12,823	12,202	621	95.9	4.1	16 years of age and over.....	1919	727,333	622,697	104,636	85.6	14.4
	1914	13,624	13,001	623	95.4	4.6		1914	508,693	433,325	75,368	85.2	14.8
	1909	14,710	14,141	578	96.1	3.9		1909	441,690	372,694	68,996	84.4	15.6
Salaried officers of corporations..	1919	9,825	9,540	285	97.1	2.9	Under 16 years of age.....	1919	3,400	2,971	429	87.4	12.6
	1914	7,114	6,945	169	97.6	2.4		1914	1,742	1,317	425	75.6	24.4
	1909	6,371	6,258	113	98.2	1.8		1909	5,244	2,675	2,569	51.0	49.0
Superintendents and managers..	1919	20,440	20,031	409	98.0	2.0							
	1914	11,844	11,676	168	98.6	1.4							
	1909	10,123	9,942	181	98.2	1.8							

TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS FOR SELECTED INDUSTRIES, WITH PER CENT, BY SEX AND AGE: 1919 AND 1914.

INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.			INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.		
			16 years of age and over.		Un- der 16 years of age.				16 years of age and over.		Un- der 16 years of age.
			Male.	Fe- male.					Male.	Fe- male.	
All industries.....	1919	730,733	85.2	14.3	0.5	Flour-mill and gristmill products.....	1919	2,122	98.8	0.9	0.2
	1914	510,435	84.9	14.8	0.3		1914	2,363	99.1	0.8	0.1
	1909	446,934	83.4	15.4	1.2	Foundry and machine-shop products ²	1919	87,803	97.3	2.6	0.1
Agricultural implements.....	1919	4,931	98.6	1.4	.....		1914	51,553	98.9	1.0	0.1
	1914	5,464	99.4	0.4	0.2	Furniture.....	1919	8,340	90.7	8.7	0.6
Automobile bodies and parts.....	1919	16,070	94.0	5.7	0.4		1914	7,750	94.5	4.4	1.0
	1914	4,128	96.1	3.9	.....	Glass.....	1919	10,935	83.5	16.1	0.4
Automobiles.....	1919	29,212	96.1	3.9	.....		1914	10,997	91.6	7.9	0.5
	1914	14,624	98.3	1.6	0.1	Gloves and mittens, cloth, not including gloves made in textile mills. ⁴	1919	2,162	12.8	83.2	4.0
Automobile repairing.....	1919	2,430	98.3	1.2	0.5		1914	.....	.....	.....	.....
	1914	215	99.5	0.5	.....	Hardware.....	1919	4,576	84.9	14.8	0.3
Boots and shoes, not including rubber boots and shoes.	1919	14,092	57.7	41.4	0.9		1914	4,803	90.9	8.7	0.5
	1914	14,461	58.3	40.8	0.9	Iron and steel, blast furnaces.....	1919	9,793	99.9	0.1	.....
Boxes, paper and other, not elsewhere speci- fied.	1919	2,952	35.5	63.7	0.8		1914	5,786	100.0	(¹)	.....
	1914	2,456	35.1	64.5	0.4	Iron and steel, steel works and rolling mills..	1919	73,025	98.6	1.3	0.1
Brass, bronze, and copper products.....	1919	4,264	96.5	3.3	0.2		1914	46,397	99.3	0.7	(¹)
	1914	2,277	98.6	1.4	.....	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.	1919	4,778	82.3	17.0	0.7
Bread and other bakery products.....	1919	9,091	72.4	26.8	0.8		1914	2,365	88.1	11.8	(¹)
	1914	7,665	79.1	20.5	0.4	Iron and steel forgings, not made in steel works or rolling mills.	1919	5,931	99.6	0.3	0.1
Brick and tile, terra-cotta, and fire-clay products.	1919	12,000	95.5	3.9	0.6		1914	2,308	99.7	0.1	0.2
	1914	10,238	96.7	3.2	0.1	Iron and steel, wrought pipe.....	1919	4,434	98.5	1.5	.....
Cars and general shop construction and repairs by steam-railroad companies.	1919	35,245	99.2	0.8	.....		1914	2,285	100.0	.....	.....
	1914	21,639	99.9	0.1	.....	Knit goods.....	1919	4,407	20.6	78.3	1.1
Cars, steam-railroad, not including opera- tions of railroad companies.	1919	2,177	99.9	0.1	(¹)		1914	3,411	22.9	76.4	0.7
	1914	2,885	99.8	0.2	.....	Liquors, malt.....	1919	3,327	99.2	0.8	.....
Chemicals.....	1919	3,670	95.0	4.9	0.1		1914	5,340	99.8	0.2	.....
	1914	2,017	98.3	1.7	.....	Lumber and timber products.....	1919	3,135	99.5	0.4	0.1
Clothing, men's.....	1919	9,939	31.1	68.5	0.4		1914	4,798	99.2	0.8	(¹)
	1914	8,691	34.6	64.7	0.6	Lumber, planing-mill products, not in- cluding planing mills connected with saw- mills.	1919	4,495	98.7	1.2	0.1
Clothing, women's.....	1919	8,258	31.5	68.2	0.3		1914	5,516	99.4	0.5	(¹)
	1914	9,775	35.4	64.4	0.1	Motorcycles, bicycles, and parts.....	1919	2,480	88.7	11.3	.....
Coke, not including gas-house coke.....	1919	3,407	85.9	0.1	14.0		1914	752	96.0	4.0	.....
	1914	489	100.0	.....	.....	Paints.....	1919	2,197	88.9	11.1	.....
Confectionery and ice cream ²	1919	5,451	46.2	52.9	0.9		1914	1,097	92.1	7.9	.....
	1914	3,965	45.1	54.2	0.7	Paper and wood pulp.....	1919	6,899	87.2	12.6	0.1
Copper, tin, and sheet-iron work.....	1919	2,650	94.9	5.0	0.1		1914	5,430	87.7	11.7	0.6
	1914	2,335	96.2	3.5	0.3	Petroleum, refining.....	1919	2,431	99.2	0.8	.....
Electrical machinery, apparatus, and sup- plies.	1919	26,672	72.4	27.5	0.1		1914	1,519	98.6	1.4	.....
	1914	12,695	77.9	22.0	0.1	Pottery.....	1919	11,339	70.6	29.0	0.4
Engines, steam, gas, and water.....	1919	6,218	99.4	0.6	.....		1914	11,096	72.9	26.5	0.6
	1914	2,962	99.5	0.3	0.2						

¹ Less than one-tenth of 1 per cent.
² Includes "chewing gum" in 1914.

³ Includes "iron and steel, tempering and welding"; "machine tools"; and "steel barrels, drums, and tanks, portable."
⁴ Not reported separately in 1914.

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TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS FOR SELECTED INDUSTRIES, WITH PER CENT, BY SEX AND AGE: 1919 AND 1914—Continued.

INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.			INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.		
			16 years of age and over.		Under 16 years of age.				16 years of age and over.		Under 16 years of age.
			Male.	Fe- male.					Male.	Fe- male.	
Printing and publishing, book and job.....	1919	8,505	69.3	29.9	0.8	Stoves and hot-air furnaces.....	1919	6,009	97.4	2.6	0.1
	1914	7,978	73.9	26.6	0.5		1914	5,041	99.5	0.4	0.1
Printing and publishing, newspapers and periodicals.	1919	7,027	81.5	17.5	1.0	Stoves, gas and oil.....	1919	4,329	88.1	11.8	0.2
	1914	7,274	80.8	17.8	1.9		1914	3,534	99.0	0.4	0.6
Rubber tires, tubes, and rubber goods, not elsewhere specified.	1919	63,637	88.8	9.8	1.4	Structural ironwork, not made in steel works or rolling mills.	1919	5,231	99.8	0.2	0.1
	1914	21,705	88.8	11.1	0.1		1914	6,657	98.9	0.9	0.2
Screws, machine.....	1919	4,226	82.4	17.6	.....	Tinware, not elsewhere specified.....	1919	2,608	66.9	33.0	0.1
	1914	1,464	92.8	7.0	0.2		1914	2,260	68.9	31.1	.....
Shipbuilding, steel, new vessels and repair work.	1919	11,192	99.9	0.1	.....	Tobacco, cigars and cigarettes.....	1919	10,965	22.8	77.0	0.2
	1914	2,023	99.9	.....	0.1		1914	12,025	31.3	68.6	0.1
Slaughtering and meat packing.....	1919	5,336	92.4	7.5	0.1	Tools, not elsewhere specified.....	1919	6,961	93.0	6.0	0.4
	1914	3,480	97.6	2.8	0.1		1914	2,227	92.6	7.3	(¹)
Stamped and enameled ware, not elsewhere specified.	1919	3,834	75.3	24.5	0.2	All other industries.....	1919	133,456	78.2	21.2	0.6
	1914	2,853	79.4	20.4	0.3		1914	117,753	70.4	19.0	0.7
Steam fittings and steam and hot-water heating apparatus.	1919	2,723	97.3	2.6	0.1						
	1914	2,414	99.7	.....	0.3						

¹ Less than one-tenth of 1 per cent.

TABLE 6.—AVERAGE NUMBER OF WAGE EARNERS, BY SEX AND AGE, AND VALUE OF PRODUCTS FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

CITY.	AVERAGE NUMBER OF WAGE EARNERS IN MANUFACTURING INDUSTRIES.										VALUE OF PRODUCTS.				
	Total.			16 years of age and over.						Under 16 years of age.					
				Male.			Female.								
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
Akron.....	65,054	24,680	15,831	59,094	21,825	13,887	5,914	2,802	2,223	46	53	221	\$558,962,007	\$122,291,600	\$73,168,200
Alliance.....	5,117	2,333	2,524	4,895	2,266	2,385	252	64	131	.....	3	8	32,871,087	7,174,766	6,135,420
Ashtabula.....	4,172	1,898	1,471	3,946	1,770	1,334	225	95	128	1	3	9	23,098,509	5,020,091	3,458,612
Barberton.....	4,782	3,118	.....	4,336	2,606	.....	420	421	.....	1	1	.....	27,713,226	8,843,422	.....
Bellaire.....	2,277	2,603	2,597	1,879	2,357	2,301	394	284	254	4	12	42	14,502,401	12,170,206	10,091,654
Bucyrus.....	1,861	.....	.....	1,718	.....	.....	142	.....	.....	1	.....	.....	8,435,746	.....	.....
Cambridge.....	1,782	1,455	1,230	1,652	1,353	1,174	125	98	56	5	4	.....	11,220,809	3,923,786	4,290,560
Canton.....	20,830	12,255	9,964	18,365	10,823	8,892	1,965	1,893	955	6	39	117	124,292,924	43,713,446	28,682,811
Chillicothe.....	1,038	1,557	1,074	1,304	1,239	1,157	269	315	517	5	3	.....	7,607,182	4,083,486	4,345,224
Cincinnati.....	69,080	59,861	60,182	51,854	44,991	43,889	18,100	14,509	14,940	226	361	1,344	500,040,996	210,800,386	192,515,602
Cleveland.....	157,730	103,817	84,728	130,840	85,069	69,043	25,384	17,756	13,746	1,506	492	1,339	1,091,577,490	352,418,052	271,990,833
Columbus.....	29,751	17,236	16,428	22,022	14,260	13,137	4,030	2,922	3,146	90	45	145	184,021,849	57,608,081	49,031,872
Coshocton.....	1,959	1,014	.....	1,253	991	.....	702	623	.....	4	.....	.....	7,684,762	3,476,686	.....
Cuyahoga Falls.....	784	.....	.....	753	.....	.....	22	.....	.....	9	.....	.....	5,820,347	.....	.....
Dayton.....	31,131	24,061	21,549	25,934	20,222	17,876	5,153	3,812	3,572	44	27	101	174,990,007	71,071,374	60,878,376
East Cleveland.....	88	129	.....	68	124	.....	20	5	.....	.....	.....	.....	420,505	295,780	.....
East Liverpool.....	4,311	4,830	4,873	3,037	3,566	3,587	1,225	1,238	1,218	29	20	68	12,501,181	7,092,093	6,029,076
Elyria.....	4,590	2,735	2,673	3,858	2,355	2,557	729	376	289	3	4	27	25,191,454	8,791,734	8,004,614
Findlay.....	1,715	1,737	1,370	1,204	1,020	921	458	709	454	23	8	1	7,924,282	4,062,778	3,484,793
Fremont.....	2,999	2,063	.....	2,369	1,682	.....	628	379	.....	2	2	.....	12,915,095	4,779,982	.....
Hamilton.....	8,553	6,043	6,895	7,571	5,252	6,047	974	775	752	8	16	96	47,024,031	16,877,200	18,183,693
Ironton.....	1,971	1,420	1,920	1,551	1,193	1,647	384	207	209	36	20	4	14,071,850	4,660,185	7,118,250
Kenmore.....	135	.....	.....	128	.....	.....	7	.....	.....	.....	.....	.....	844,363	.....	.....
Lakewood.....	1,821	1,774	(¹)	1,547	1,555	(¹)	274	219	.....	(¹)	.....	(¹)	7,602,803	3,006,498	(¹)
Lancaster.....	2,024	1,583	1,532	1,571	1,134	1,118	452	449	412	1	.....	2	11,478,883	4,002,615	4,074,004
Lima.....	4,901	4,876	3,607	3,609	3,676	2,474	1,233	1,199	1,082	59	1	51	23,638,704	11,598,580	7,753,877
Lorain.....	11,677	6,430	6,697	12,565	6,357	6,674	97	77	20	15	2	3	116,908,610	29,110,037	38,980,996
Mansfield.....	4,711	3,398	3,204	3,812	2,663	2,201	894	730	984	5	5	19	31,877,551	10,281,068	8,172,911
Marietta.....	1,285	1,401	1,288	1,163	1,317	1,181	129	80	106	3	4	1	5,917,469	4,128,018	3,214,553
Marion.....	4,125	2,577	2,610	3,637	2,323	2,344	458	248	272	30	6	3	20,712,973	6,384,864	6,666,976
Martins Ferry.....	1,517	.....	.....	1,458	.....	.....	57	.....	.....	2	.....	.....	15,402,280	.....	.....
Massillon.....	2,153	1,768	1,934	1,941	1,591	1,826	204	177	87	8	.....	21	13,984,871	5,293,124	4,787,772
Middletown.....	6,442	4,003	2,576	5,349	3,523	1,805	1,091	480	769	2	.....	2	62,838,289	21,787,151	16,510,785
Newark.....	4,570	4,583	3,913	3,954	4,132	3,576	604	440	286	12	11	51	10,503,149	9,276,762	7,851,118
New Philadelphia.....	1,247	.....	.....	1,105	.....	.....	134	.....	.....	8	.....	.....	8,445,658	.....	.....
Niles.....	2,945	.....	.....	2,815	.....	.....	128	.....	.....	2	.....	.....	13,358,773	.....	.....
Norwood.....	3,283	5,808	3,907	6,802	4,538	3,215	1,480	1,269	684	1	1	8	47,947,183	16,724,860	9,684,332
Piqua.....	3,293	2,777	2,683	2,273	1,923	1,913	1,017	850	751	3	4	19	10,921,345	7,988,279	6,930,672
Portsmouth.....	5,014	3,597	3,728	4,235	2,441	2,237	1,491	1,137	1,390	188	19	101	36,645,736	7,682,145	7,270,893
Salem.....	2,237	.....	.....	2,138	.....	.....	99	.....	.....	.....	.....	.....	11,069,550	.....	.....
Sandusky.....	3,447	2,727	2,118	2,805	2,403	1,608	632	322	466	10	2	44	19,248,571	8,284,865	5,940,853
Springfield.....	12,264	7,868	7,405	10,420	7,074	6,616	1,832	786	777	12	8	12	67,759,001	27,721,789	19,249,141
Stenbonville.....	3,855	4,506	4,267	3,028	4,294	4,045	208	202	196	19	10	26	30,903,344	16,958,987	21,187,127
Tiffin.....	2,213	2,177	1,632	1,948	1,775	1,289	261	348	278	4	54	65	10,516,809	4,995,880	3,254,328
Toledo.....	42,090	27,076	18,878	35,008	22,859	15,279	6,323	4,115	3,327	159	102	272	293,520,000	115,049,426	61,229,542
Warren.....	2,433	2,862	1,798	1,808	2,347	1,190	620	511	547	5	4	61	19,747,395	10,399,737	5,983,174
Youngstown.....	19,414	15,861	10,498	18,542	14,997	10,214	867	860	272	5	4	12	241,458,370	92,111,272	81,270,747
Zanesville.....	2,014	3,035	12,932	2,310	2,540	12,582	659	492	325	39	3	25	13,437,777	8,300,231	18,020,433

¹ Figures can not be shown without disclosing individual operations.

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TABLE 7.—WAGE EARNERS, BY MONTHS: 1919, 1914, AND 1909.

MONTH.	NUMBER. ¹			PER CENT OF MAXIMUM.			MONTH.	NUMBER. ¹			PER CENT OF MAXIMUM.		
	1919	1914	1909	1919	1914	1909		1919	1914	1909	1919	1914	1909
January.....	714,195	511,055	<i>414,278</i>	90.3	95.6	86.2	July.....	740,188	506,133	435,241	93.6	94.7	90.6
February.....	608,011	524,063	421,045	88.4	98.2	87.8	August.....	708,579	506,991	448,898	97.2	94.8	93.4
March.....	694,564	534,537	432,343	88.0	100.0	90.0	September.....	773,510	510,037	465,551	97.8	95.4	96.9
April.....	683,040	533,186	432,828	87.0	99.7	90.1	October.....	740,570	501,396	474,448	93.8	93.8	98.8
May.....	687,683	523,653	430,450	87.1	98.0	90.8	November.....	701,688	478,412	470,023	96.4	89.5	99.1
June.....	710,187	518,316	444,998	89.8	97.0	92.6	December.....	790,681	476,341	480,405	100.0	89.2	100.0

¹ The figures represent the number employed on the 15th of each month or the nearest representative day. Maximum number indicated by bold-faced figures, minimum by *italic* figures.

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

[The month of maximum employment for each industry is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
All industries.....	730,733	714,195	698,011	694,564	688,040	687,683	710,187	740,188	768,579	773,510	740,570	701,688	790,681	87.0
Males.....	625,668	611,400	598,494	594,994	590,013	590,210	610,378	637,195	660,714	663,495	628,424	640,009	676,120	87.3
Females.....	105,065	102,795	100,417	99,570	97,427	97,473	99,809	103,023	107,865	110,019	112,142	115,679	114,561	84.2
Agricultural implements.....	4,931	5,263	5,344	5,411	5,032	4,813	4,609	<i>4,406</i>	4,642	4,741	4,765	4,938	5,148	81.4
Automobile bodies and parts.....	16,070	13,797	<i>12,635</i>	13,244	15,029	15,318	16,828	17,890	19,001	19,770	20,950	20,950	21,679	58.3
Automobiles.....	20,212	28,494	28,099	29,575	30,086	<i>20,874</i>	22,740	28,035	29,594	30,430	32,583	34,124	35,931	56.4
Automobile repairing.....	2,430	<i>2,159</i>	2,194	2,247	2,323	2,418	2,452	2,524	2,556	2,532	2,798	2,472	2,485	77.1
Boots and shoes, not including rubber boots and shoes.....	14,092	13,054	13,846	13,568	<i>13,473</i>	13,805	14,061	14,292	14,449	14,270	14,236	14,478	14,963	90.0
Boxes, paper and other, not elsewhere specified.....	2,952	2,856	2,909	2,907	2,870	2,773	<i>2,745</i>	2,940	2,977	2,930	3,090	3,233	3,179	84.9
Brass, bronze, and copper products.....	4,204	3,716	<i>3,681</i>	3,744	3,843	3,840	3,968	4,338	4,594	4,632	4,843	5,036	4,983	73.1
Bread and other bakery products.....	9,091	<i>8,477</i>	8,507	8,566	8,666	8,778	8,910	9,220	9,299	9,418	9,571	9,794	9,868	85.9
Brick and tile, terra-cotta, and fire-clay products.....	12,000	<i>9,439</i>	9,452	10,193	11,106	12,217	13,014	13,667	13,610	13,817	13,066	12,817	11,771	68.3
Cars and general shop construction and repairs by steam-railroad companies.....	35,245	34,896	34,292	33,047	<i>32,688</i>	34,106	34,808	35,451	35,812	36,515	36,914	36,995	37,236	87.8
Cars, steam-railroad, not including operations of railroad companies.....	2,177	2,494	2,213	2,242	2,134	1,952	<i>1,847</i>	1,921	1,934	2,091	2,332	2,425	2,539	72.7
Chemicals.....	3,670	3,901	3,402	3,315	<i>3,088</i>	3,002	3,247	3,569	3,762	4,155	4,210	4,138	4,197	71.8
Clothing, men's.....	9,939	8,761	8,972	9,016	<i>8,688</i>	9,000	9,406	9,924	10,400	10,694	11,167	11,581	11,660	74.5
Clothing, women's.....	8,258	<i>7,694</i>	8,145	8,145	8,214	7,712	8,214	8,821	9,138	9,061	8,389	7,771	7,892	83.1
Coke, not including gas-house coke.....	3,407	<i>4,257</i>	3,838	3,047	3,575	3,242	3,474	3,533	3,555	3,416	<i>2,859</i>	2,961	3,130	53.0
Confectionery and ice cream.....	5,451	4,931	4,913	4,758	4,588	4,098	5,023	5,040	5,810	6,361	6,889	6,584	6,007	68.0
Copper, tin, and sheet-iron work.....	2,680	2,038	2,351	<i>2,288</i>	2,364	2,468	2,613	2,671	2,783	2,845	2,891	2,931	2,955	77.4
Electrical machinery, apparatus, and supplies.....	26,672	25,360	25,021	25,262	24,841	<i>22,000</i>	23,970	25,350	27,478	28,277	29,406	30,558	31,551	72.6
Engines, steam, gas, and water.....	6,218	6,351	6,041	6,175	5,909	<i>5,673</i>	5,988	6,029	6,667	6,231	6,202	6,213	6,477	85.1
Flour-mill and gristmill products.....	2,122	2,064	<i>1,887</i>	2,003	2,007	2,030	2,033	2,022	2,200	2,281	2,243	2,252	2,272	84.1
Foundry and machine-shop products.....	72,227	75,538	70,460	69,652	68,523	<i>67,390</i>	67,489	69,097	71,068	72,489	75,869	78,068	78,995	84.9
Furniture.....	8,340	7,617	<i>7,614</i>	7,673	7,820	7,836	8,045	8,332	8,684	8,741	9,002	9,247	9,541	79.8
Glass.....	10,935	9,851	10,961	11,094	11,517	11,177	10,943	<i>9,077</i>	10,239	10,818	11,516	11,942	12,085	75.1
Gloves and mittens, cloth, not including gloves made in textile mills.....	2,162	2,745	2,450	2,162	1,882	<i>1,735</i>	1,810	2,020	2,100	2,000	2,147	2,178	2,651	63.1
Hardware.....	4,576	<i>4,178</i>	4,351	4,620	4,634	4,635	4,626	4,611	<i>4,904</i>	4,455	4,573	4,588	4,832	85.1
Iron and steel, blast furnaces.....	9,793	12,137	11,086	10,247	9,534	9,322	9,405	9,085	10,163	10,440	<i>6,105</i>	8,881	10,201	50.3
Iron and steel, steel works and rolling mills.....	73,025	<i>85,394</i>	80,123	75,342	69,910	70,438	72,505	80,007	81,136	80,241	<i>41,747</i>	60,712	78,745	48.9
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	4,778	5,334	4,908	4,980	4,824	4,805	4,810	4,705	4,810	4,800	<i>5,075</i>	4,698	4,962	74.5
Iron and steel forgings, not made in steel works or rolling mills.....	5,931	6,563	6,302	5,842	5,737	5,712	5,803	5,727	6,072	<i>5,701</i>	5,761	5,953	5,999	86.9
Iron and steel, wrought pipe.....	4,434	4,659	4,403	4,317	4,400	4,444	4,606	4,793	4,970	4,955	<i>4,415</i>	4,588	4,546	68.7
Knit goods.....	4,407	3,877	<i>3,586</i>	3,688	3,850	4,006	4,203	4,525	4,879	4,893	5,075	5,123	5,149	69.6
Liquors, malt.....	3,327	3,221	3,121	3,142	3,204	3,410	3,788	3,835	3,806	3,474	3,206	2,835	2,776	70.5
Lumber and timber products.....	3,135	<i>2,850</i>	2,881	3,035	3,133	3,054	3,228	2,904	3,002	3,160	3,399	3,431	3,543	80.4
Lumber, planing-mill products, not including planing mills connected with sawmills.....	4,495	<i>3,736</i>	3,740	3,803	4,077	4,332	4,656	4,804	4,926	4,879	4,998	4,968	5,021	74.4
Motorcycles, bicycles, and parts.....	2,480	2,995	2,616	2,892	2,204	2,285	<i>2,224</i>	2,280	2,328	2,402	2,551	2,709	2,748	74.3
Paints.....	2,197	<i>1,930</i>	1,949	1,976	2,037	2,192	2,300	2,320	2,351	2,273	2,321	2,379	2,306	81.1
Paper and wood pulp.....	6,899	6,838	6,403	6,384	<i>6,308</i>	6,438	6,726	7,171	7,382	6,804	7,431	7,464	7,591	84.5
Petroleum, refining.....	2,431	2,410	2,431	2,351	<i>2,331</i>	2,356	2,389	2,524	2,556	2,495	2,477	2,440	2,397	91.2
Pottery.....	11,330	<i>10,698</i>	10,728	10,928	11,074	11,163	11,171	11,801	11,597	11,590	11,894	11,991	11,929	80.2
Printing and publishing, book and job.....	8,505	7,887	7,922	7,949	8,132	8,222	8,445	8,696	8,700	8,705	8,854	9,252	9,346	83.9
Printing and publishing, newspapers and periodicals.....	7,027	<i>7,241</i>	7,207	7,418	7,483	7,585	7,674	7,645	7,690	7,719	7,805	8,038	8,069	89.7
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	63,637	<i>53,904</i>	56,840	56,747	58,382	61,209	63,049	67,157	71,484	71,834	74,720	63,864	64,354	72.1
Screws, machine.....	4,226	<i>3,541</i>	3,642	3,830	4,025	4,130	4,146	4,204	4,470	4,582	4,746	4,644	4,762	74.5
Shipbuilding, steel, new vessels and repair work.....	11,192	10,606	11,419	12,081	11,925	12,068	12,067	11,140	11,740	11,054	10,992	9,937	<i>9,879</i>	70.8
Slaughtering and meat packing.....	5,336	5,844	5,348	5,148	4,999	4,994	5,396	5,810	5,933	5,993	5,198	5,738	5,884	83.5
Stamped and enameled ware, not elsewhere specified.....	3,834	3,839	3,462	<i>3,444</i>	3,623	3,684	3,727	3,848	3,973	4,018	4,220	4,328	4,187	70.6
Steam fittings and steam and hot-water heating apparatus.....	2,723	2,709	2,603	2,574	2,545	<i>2,518</i>	2,507	2,718	2,826	2,822	2,872	2,861	3,061	82.3
Stoves and hot-air furnaces.....	6,069	5,066	5,762	5,486	5,641	5,733	6,028	5,487	6,370	6,536	6,539	6,793	6,824	80.4
Stoves, gas and oil.....	4,329	3,651	3,727	3,609	<i>3,624</i>	3,672	3,707	4,353	4,906	4,983	5,195	5,509	5,492	65.8
Structural ironwork, not made in steel works or rolling mills.....	5,231	5,502	5,088	4,826	<i>4,553</i>	4,605	4,843	5,147	5,470	5,621	5,286	5,800	5,971	70.3
Timware, not elsewhere specified.....	2,008	2,491	2,352	2,312	<i>2,295</i>	2,472	2,625	2,727	2,912	2,789	2,993	2,780	2,735	78.8
Tobacco, cigars and cigarettes.....	10,995	10,845	11,064	10,910	10,714	10,565	10,803	10,558	10,529	10,464	11,398	11,704	12,516	85.5
Tools, not elsewhere specified.....	6,961	7,415	6,965	6,800	6,308	6,398	6,359	6,608	6,558	7,058	7,270	7,015	7,838	79.5
All other industries.....	149,032	139,820	<i>137,205</i>	138,397	137,307	142,753	149,091	152,852	159,217	159,884	156,793	157,283	157,782	85.8

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919—Continued.

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
<i>Industries showing large proportion of females.</i>														
Boots and shoes, not including rubber boots and shoes	5,805	5,843	5,907	5,699	5,506	5,708	5,846	6,005	6,077	5,950	5,785	5,927	6,127	80.9
Boxes, paper and other, not elsewhere specified	1,901	1,828	1,871	1,870	1,844	1,792	1,762	1,924	1,867	1,870	1,696	2,116	2,036	83.3
Bread and other bakery products	2,455	2,448	2,247	2,201	2,252	2,284	2,307	2,617	2,557	2,607	2,688	2,785	2,709	82.5
Clothing, men's	6,830	6,094	6,211	6,169	6,008	6,310	6,443	6,801	7,101	7,306	7,652	7,092	8,039	74.7
Clothing, women's	5,054	5,184	5,645	5,444	5,556	5,345	5,640	6,088	6,308	6,220	5,750	5,362	5,397	83.2
Confectionery and ice cream	2,895	2,763	2,712	2,565	2,296	2,207	2,261	2,201	2,875	3,505	3,900	3,847	3,468	58.0
Electrical machinery, apparatus, and supplies	7,341	7,231	7,142	7,629	6,902	6,118	6,727	6,737	7,404	7,841	7,958	8,131	8,222	74.4
Glass	1,771	1,639	1,777	1,843	1,843	1,836	1,851	1,424	1,558	1,667	1,872	1,876	1,960	72.1
Gloves and mittens, cloth, not including gloves made in textile mills	1,862	2,401	2,127	1,890	1,627	1,476	1,536	1,710	1,803	1,772	1,830	1,803	2,300	61.5
Hardware	879	898	665	689	663	638	678	656	686	643	763	726	733	76.8
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills	816	806	788	767	763	789	833	804	841	840	732	820	620	76.6
Knit goods	3,471	3,016	2,768	2,877	2,995	3,131	3,337	3,592	3,855	3,893	4,050	4,083	4,100	67.1
Paper and wood pulp	874	874	798	801	803	846	885	918	915	930	930	955	963	82.9
Pottery	3,309	3,078	3,112	3,176	3,211	3,289	3,277	3,201	3,382	3,418	3,498	3,528	3,498	87.2
Printing and publishing, book and job	2,550	2,358	2,352	2,310	2,410	2,472	2,537	2,661	2,596	2,605	2,621	2,833	2,845	81.2
Printing and publishing, newspapers and periodicals	1,338	1,363	1,326	1,360	1,357	1,381	1,327	1,290	1,298	1,286	1,338	1,361	1,370	93.0
Rubber tires, tubes, and rubber goods, not elsewhere specified	6,223	6,276	6,177	5,821	5,754	5,540	5,572	5,726	5,985	6,125	6,481	8,197	7,022	67.6
Screws, machine	742	618	661	706	727	708	692	714	719	727	685	652	705	62.7
Stoves, gas and oil	500	442	462	456	426	468	520	540	540	548	561	600	624	68.3
Tinware, not elsewhere specified	860	872	808	792	764	830	875	901	932	913	878	896	850	82.0
Tobacco, cigars and cigarettes	8,481	8,452	8,688	8,505	8,337	8,212	8,101	8,101	8,001	8,000	8,005	9,029	8,462	84.6
Total for cities ¹	577,271	561,688	553,007	551,468	545,555	541,706	557,860	582,876	604,870	600,131	590,001	604,995	626,495	80.5
Males	487,460	473,446	466,765	466,222	461,901	458,105	472,823	495,015	513,200	513,067	495,002	505,820	528,463	86.7
Females	89,772	88,242	86,242	85,246	83,654	83,601	85,037	87,861	91,670	87,064	95,000	99,175	98,032	84.2
AKRON	65,054	65,897	57,575	57,455	58,870	62,110	65,258	69,013	73,074	72,507	75,929	66,305	66,547	73.6
Males	59,138	49,958	51,840	51,092	53,544	56,918	59,695	63,698	67,448	66,743	69,574	58,316	59,730	71.8
Females	5,916	5,939	5,735	6,463	5,326	5,201	5,263	5,415	5,626	5,764	6,355	8,079	6,817	64.4
ALLIANCE	5,117	5,898	5,836	5,501	5,249	5,158	5,031	5,004	5,014	4,894	4,842	4,497	4,480	76.0
Males	4,865	5,666	5,614	5,205	5,010	4,921	4,780	4,701	4,770	4,629	4,568	4,228	4,122	72.0
Females	252	232	222	296	239	237	242	243	244	265	274	269	351	58.7
ASHTABULA	4,172	3,952	4,021	4,110	4,103	4,301	4,391	4,403	4,485	3,953	3,985	4,192	4,219	87.5
Males	3,947	3,763	3,808	3,927	3,906	4,078	4,130	4,110	4,226	3,697	3,673	3,974	4,067	86.9
Females	225	190	213	192	197	223	262	297	259	256	252	218	152	53.0
BARBERTON	4,762	5,661	4,967	4,679	4,423	4,408	4,364	4,570	4,643	4,738	4,841	4,891	4,989	77.1
Males	4,336	5,168	4,476	4,234	4,034	4,028	3,980	4,160	4,220	4,318	4,416	4,427	4,562	77.2
Females	426	493	491	445	389	380	375	410	423	420	425	434	427	76.1
BELLAIRE	2,277	2,503	2,501	2,309	2,148	2,004	2,065	2,538	2,734	2,687	1,018	1,006	1,051	60.7
Males	1,882	2,198	2,187	1,917	1,740	1,624	1,676	2,200	2,349	2,281	1,405	1,466	1,492	62.4
Females	395	305	314	392	408	380	389	338	385	406	453	440	459	71.7
BUCKEYUS	1,861	2,421	2,023	1,815	1,637	1,696	1,795	1,817	1,818	1,796	1,854	1,844	1,816	67.6
Males	1,719	2,267	1,872	1,665	1,508	1,567	1,656	1,674	1,682	1,666	1,716	1,698	1,657	67.0
Females	142	154	151	150	129	129	139	143	136	130	138	146	159	81.1
CAMBRIDGE	1,782	1,808	1,654	1,676	1,679	1,681	1,773	1,840	1,880	1,832	1,866	1,813	1,882	87.9
Males	1,657	1,693	1,548	1,561	1,561	1,550	1,643	1,741	1,764	1,694	1,716	1,675	1,738	87.8
Females	126	115	106	115	118	131	130	140	116	138	150	138	144	60.0
CANTON	20,336	19,368	19,695	20,016	19,210	19,626	20,098	20,048	21,023	20,748	18,845	21,950	21,905	85.9
Males	18,371	17,488	17,781	18,075	17,312	17,702	18,170	18,953	19,508	18,716	16,779	19,890	18,838	85.2
Females	1,965	1,880	1,914	1,941	1,898	1,894	1,928	1,905	2,025	2,032	2,076	2,060	1,970	90.0
CHILLICOTHE	1,638	1,424	1,428	1,380	1,430	1,542	1,896	1,817	1,940	1,751	1,751	1,584	1,604	66.6
Males	1,308	1,212	1,231	1,198	1,224	1,255	1,709	1,432	1,457	1,431	1,470	1,379	1,379	70.1
Females	270	212	197	181	206	287	287	385	493	320	272	205	225	42.2
CINCINNATI	69,680	66,318	65,805	65,385	64,807	65,304	67,171	69,742	72,042	72,860	73,706	75,871	77,149	84.0
Males	51,405	48,587	48,318	48,209	47,871	48,145	49,547	51,569	53,380	54,060	54,660	56,093	57,405	83.4
Females	18,185	17,731	17,487	17,086	16,936	17,159	17,624	18,173	18,660	18,800	19,046	19,778	19,744	85.6
CLEVELAND	157,730	153,830	149,085	148,993	147,365	150,237	153,748	159,223	164,754	165,455	159,310	167,900	178,842	85.2
Males	132,205	129,126	125,320	125,159	123,925	126,634	129,552	133,934	137,841	138,499	131,752	140,317	145,477	85.2
Females	25,435	24,713	23,765	23,834	23,440	23,603	24,196	25,289	26,913	26,956	27,558	27,583	27,365	85.0
COLUMBUS	26,751	26,188	26,017	25,574	25,052	25,407	25,743	26,564	27,545	27,534	28,117	28,673	28,698	87.4
Males	22,067	21,920	21,568	21,108	20,601	20,970	21,277	22,049	22,853	22,795	23,015	23,351	23,297	88.2
Females	4,684	4,268	4,449	4,466	4,451	4,437	4,466	4,515	4,692	4,739	5,102	5,322	5,301	80.2
COSHOCOTON	1,959	1,772	1,820	1,788	1,854	1,897	1,928	2,018	2,061	2,066	2,081	2,064	2,097	84.5
Males	1,267	1,111	1,169	1,122	1,180	1,206	1,232	1,318	1,321	1,354	1,389	1,358	1,387	81.3
Females	702	661	651	666	674	691	696	700	733	712	744	730	730	87.5
CUYAHOGA FALLS	784	700	712	714	741	789	785	843	899	810	798	780	810	77.0
Males	762	681	696	699	723	770	767	819	871	799	771	761	787	78.2
Females	22	19	16	15	18	19	18	24	28	21	27	28	32	40.0
DAYTON	31,131	28,443	28,887	27,011	28,616	30,061	30,691	31,765	31,658	33,220	34,324	34,580	35,110	76.6
Males	25,971	23,190	21,905	23,109	23,853	25,165	25,690	26,665	26,800	27,708	28,801	29,060	29,514	74.2
Females	5,160	5,253	6,982	4,802	4,763	4,896	5,001	5,100	5,062	5,422	5,523	5,520	5,596	85.1
EAST CLEVELAND	88	95	90	80	90	92	84	94	80	85	85	81	82	85.3
Males	68	76	71	70	72	73	65	73	60	64	63	60	61	77.6
Females	20	19	19	10	18	19	10	21	20	21	22	21	21	81.8
EAST LIVERPOOL	4,311	4,191	4,116	4,131	4,184	4,220	4,274	4,315	4,420	4,406	4,518	4,502	4,455	91.1
Males	3,082	3,005	2,917	2,937	2,999	3,000	3,004	3,114	3,101	3,137	3,243	3,215	3,183	89.9
Females	1,229	1,186	1,199	1,194	1,185	1,211	1,210	1,201	1,250	1,269	1,275	1,287	1,272	92.1

¹ Excludes Cleveland Heights and East Youngstown, to avoid disclosure of individual operations.

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919—Continued.

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Percent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
ELYRIA.....	4,590	3,843	4,270	4,328	4,288	4,486	4,051	4,350	4,502	4,834	5,002	5,421	5,555	89.2
Males.....	3,861	3,249	3,635	3,651	3,631	3,822	3,336	3,598	3,804	4,059	4,204	4,558	4,695	89.2
Females.....	729	594	635	677	657	664	715	752	758	775	798	863	860	88.8
FINDLAY.....	1,715	1,559	1,609	1,555	1,503	1,667	1,000	1,743	1,880	1,786	1,821	1,837	1,900	81.8
Males.....	1,210	1,080	1,062	1,042	1,059	1,165	1,180	1,265	1,378	1,310	1,352	1,345	1,330	74.5
Females.....	505	533	547	513	504	502	480	478	502	470	469	492	564	83.2
FREMONT.....	2,999	2,983	2,871	2,805	2,783	2,903	2,957	2,953	3,000	2,980	3,108	3,283	3,230	84.8
Males.....	2,371	2,350	2,290	2,283	2,205	2,351	2,371	2,352	2,380	2,351	2,401	2,544	2,532	86.7
Females.....	628	633	574	522	578	552	586	601	620	629	707	739	698	77.4
HAMILTON.....	8,553	8,080	7,087	8,004	7,953	8,142	8,110	8,907	9,251	8,982	9,070	8,907	9,121	85.9
Males.....	7,670	7,168	7,170	7,152	7,005	7,223	7,107	7,030	8,184	7,919	8,010	7,920	8,000	86.0
Females.....	974	912	917	852	858	919	943	1,048	1,067	1,063	1,060	1,077	1,115	67.1
IRONTON.....	1,071	2,083	2,078	1,042	1,806	1,843	1,834	1,887	1,894	2,004	2,217	1,988	2,076	82.4
Males.....	1,587	1,650	1,633	1,533	1,400	1,451	1,481	1,465	1,517	1,635	1,847	1,638	1,695	78.6
Females.....	384	424	445	409	376	392	353	362	377	369	370	350	381	78.7
KENMORE.....	135	130	130	131	134	135	137	139	138	138	130	136	136	93.5
Males.....	128	120	120	120	127	120	120	130	120	130	128	128	128	96.9
Females.....	7	4	4	5	7	6	8	9	9	8	8	8	8	44.4
LAKEWOOD.....	1,821	1,082	1,708	1,084	1,010	1,020	1,616	1,689	1,741	1,897	1,067	2,104	2,225	72.4
Males.....	1,547	1,020	1,437	1,424	1,373	1,386	1,387	1,430	1,490	1,611	1,683	1,804	1,913	71.8
Females.....	274	362	271	260	243	243	229	253	251	286	284	300	312	63.3
LANCASTER.....	2,024	2,024	1,905	2,023	2,025	2,076	1,958	1,993	2,007	2,007	2,031	2,072	2,083	93.7
Males.....	1,572	1,595	1,561	1,589	1,603	1,648	1,511	1,548	1,550	1,534	1,553	1,583	1,580	91.7
Females.....	452	429	434	434	422	428	441	445	457	473	478	489	494	85.4
LIMA.....	4,001	5,619	5,527	5,331	4,032	4,413	4,403	4,624	4,030	4,080	4,521	5,179	5,553	72.6
Males.....	3,631	4,326	4,235	4,000	3,446	3,250	3,235	3,404	3,832	3,572	3,144	3,633	4,000	66.4
Females.....	1,270	1,293	1,292	1,232	1,180	1,167	1,168	1,130	1,098	1,208	1,377	1,546	1,553	70.7
LORAIN.....	11,077	11,466	11,810	12,323	11,820	11,121	11,524	11,003	11,585	11,715	11,821	11,015	12,012	89.3
Males.....	11,574	11,283	11,670	12,335	11,743	11,037	11,446	10,903	11,488	11,621	11,722	11,813	11,922	89.1
Females.....	103	183	134	88	86	84	78	101	97	94	90	102	90	42.6
MANSFIELD.....	4,711	4,078	4,484	4,498	4,454	4,381	4,490	4,630	4,847	4,843	4,898	5,150	5,239	82.5
Males.....	3,817	3,780	3,592	3,624	3,630	3,525	3,676	3,807	3,971	3,938	3,926	4,121	4,214	83.6
Females.....	894	898	892	874	824	796	814	823	876	905	972	1,029	1,025	77.4
MARIETTA.....	1,285	1,025	925	972	1,048	1,154	1,230	1,316	1,381	1,473	1,603	1,617	1,670	55.4
Males.....	1,155	948	857	807	967	1,044	1,095	1,170	1,216	1,314	1,437	1,439	1,478	58.1
Females.....	130	77	68	75	81	110	141	146	165	159	166	178	194	35.1
MARION.....	4,125	4,202	4,147	4,071	4,049	4,065	3,900	4,069	4,155	4,070	4,194	4,257	4,231	93.7
Males.....	3,641	3,777	3,695	3,607	3,579	3,603	3,529	3,573	3,671	3,584	3,672	3,710	3,692	93.4
Females.....	484	425	452	464	470	462	461	496	484	486	522	547	539	77.7
MARTINS FERRY.....	1,517	2,106	2,203	1,550	763	1,206	1,891	2,206	2,249	1,480	359	507	1,449	14.8
Males.....	1,460	2,030	2,110	1,480	722	1,201	1,830	2,126	2,190	1,429	321	581	1,415	14.5
Females.....	57	67	83	73	41	65	61	80	89	57	18	10	34	18.0
MASSILLON.....	2,153	2,082	2,030	2,048	2,151	2,250	2,271	2,207	2,154	2,151	2,178	2,130	2,175	89.8
Males.....	1,940	1,881	1,851	1,854	1,953	2,052	2,072	1,995	1,947	1,932	1,957	1,907	1,951	89.3
Females.....	207	201	188	194	198	198	190	212	207	219	221	223	224	83.9
MIDDLETOWN.....	6,442	6,538	6,576	6,500	6,288	6,164	6,180	6,318	6,453	6,430	6,473	6,674	6,698	92.0
Males.....	5,351	5,578	5,472	5,388	5,228	5,183	5,180	5,250	5,354	5,340	5,350	5,441	5,501	91.9
Females.....	1,091	960	1,104	1,112	1,060	1,041	1,006	1,059	1,099	1,090	1,123	1,233	1,197	78.0
NEWARK.....	4,570	4,443	4,247	4,295	4,490	4,588	4,680	4,150	4,601	4,095	4,795	4,815	4,963	83.0
Males.....	3,959	3,738	3,646	3,701	3,871	3,953	4,060	3,590	4,074	3,123	4,100	4,184	4,368	82.2
Females.....	611	705	601	594	618	635	620	560	527	572	599	631	597	70.4
NEW PHILADELPHIA.....	1,247	1,283	1,190	1,107	1,088	1,080	1,122	1,345	1,382	1,847	1,397	1,326	1,357	73.6
Males.....	1,112	1,103	1,053	980	893	930	990	1,209	1,243	1,209	1,264	1,192	1,220	70.0
Females.....	135	180	137	138	135	150	132	136	139	138	133	134	128	80.0
NILES.....	2,945	3,770	3,270	3,035	3,323	2,830	3,158	3,129	2,931	2,986	1,086	2,590	3,280	27.2
Males.....	2,817	3,640	3,135	2,900	3,202	2,701	3,027	2,903	2,807	2,873	914	2,462	3,150	25.1
Females.....	128	130	135	135	121	136	131	136	124	113	112	134	130	82.4
NORWOOD.....	8,283	8,259	7,832	7,751	7,615	7,845	8,022	8,208	8,418	8,428	8,720	8,977	9,222	82.6
Males.....	6,803	6,636	6,327	6,284	6,164	6,374	6,525	6,822	6,901	7,003	7,282	7,471	7,727	80.2
Females.....	1,480	1,623	1,505	1,467	1,451	1,471	1,497	1,386	1,517	1,425	1,447	1,506	1,495	87.6
PIQUA.....	3,203	2,980	3,147	3,147	3,102	3,138	3,201	2,907	3,390	3,455	3,598	3,633	3,809	76.3
Males.....	2,275	1,961	2,137	2,130	2,106	2,167	2,222	2,011	2,372	2,423	2,520	2,540	2,646	73.7
Females.....	1,018	1,019	1,010	1,017	996	971	979	896	1,017	1,032	1,078	1,093	1,163	77.0
PORTSMOUTH.....	5,914	5,744	5,613	5,408	5,594	5,365	5,624	5,727	6,038	6,178	6,321	6,496	6,860	78.2
Males.....	4,403	4,248	4,120	3,954	4,177	3,907	4,120	4,217	4,478	4,641	4,797	4,926	5,230	74.6
Females.....	1,511	1,496	1,493	1,454	1,417	1,458	1,405	1,510	1,560	1,537	1,524	1,570	1,624	87.3
SALEM.....	2,237	2,134	2,077	2,040	2,207	2,145	2,200	2,277	2,233	2,282	2,318	2,300	2,505	79.5
Males.....	2,134	2,047	1,987	1,954	2,110	2,050	2,102	2,182	2,134	2,182	2,201	2,253	2,448	79.8
Females.....	99	87	90	86	91	95	98	95	99	100	117	113	117	73.5
SANDUSKY.....	3,447	3,427	3,404	3,398	3,278	3,323	3,411	3,352	3,390	3,506	3,540	3,658	3,781	85.7
Males.....	2,815	2,829	2,810	2,774	2,670	2,757	2,870	2,782	2,824	2,806	2,817	2,920	3,109	85.9
Females.....	632	598	594	624	608	566	541	570	570	700	723	738	672	70.7
SPRINGFIELD.....	12,204	11,638	11,068	11,738	11,540	11,861	12,093	12,393	12,544	12,699	12,858	13,044	13,153	87.8
Males.....	10,426	10,016	10,000	10,120	9,936	10,184	10,237	10,500	10,566	10,592	10,803	10,993	11,126	89.3
Females.....	1,838	1,622	1,608	1,617	1,604	1,677	1,856	1,893	1,978	2,037	2,055	2,081	2,027	77.3
STEUBENVILLE.....	3,855	4,073	4,504	4,543	3,008	3,053	3,823	4,538	4,737	4,803	1,208	1,390	4,057	20.3
Males.....	3,043	4,480	4,348	4,328	3,400	3,452	3,620	4,335	4,503	4,597	1,040	1,186	4,400	22.8
Females.....	212	184	216	215	199	201	203	203	234	206	213	213	257	71.6

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919—Continued.

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
TIFFIN.....	2,213	2,151	2,095	2,133	2,109	2,084	2,107	2,189	2,258	2,286	2,294	2,420	2,430	85.8
Males.....	1,948	1,893	1,810	1,852	1,849	1,836	1,855	1,947	1,996	2,016	2,043	2,146	2,183	83.7
Females.....	265	288	285	281	260	248	252	242	262	270	251	274	267	81.0
TOLEDO.....	42,090	42,597	43,348	44,479	44,211	51,205	33,740	39,492	42,499	43,352	45,608	46,408	48,141	64.8
Males.....	35,750	35,986	36,910	38,102	37,969	45,838	28,585	33,731	36,199	36,651	38,767	39,397	40,895	63.2
Females.....	6,340	6,611	6,438	6,377	6,242	5,367	5,155	5,761	6,300	6,701	6,841	7,041	7,246	71.1
WARREN.....	2,433	2,440	2,350	2,230	2,205	2,177	2,229	2,384	2,467	2,584	2,641	2,687	2,802	77.7
Males.....	1,811	1,815	1,690	1,556	1,593	1,624	1,621	1,800	1,880	1,940	2,035	2,060	2,138	72.3
Females.....	622	625	660	674	612	553	608	584	607	644	606	627	664	82.0
YOUNGSTOWN.....	19,414	22,093	20,404	19,766	19,477	19,312	20,150	21,145	21,698	22,303	10,916	15,232	20,460	48.9
Males.....	18,547	21,092	19,450	18,886	18,660	18,483	19,323	20,341	20,882	21,441	10,955	14,368	19,577	46.9
Females.....	867	1,001	954	880	817	829	823	804	816	862	961	864	883	80.3
ZANESVILLE.....	3,014	3,112	3,117	3,014	2,847	2,917	2,952	2,982	2,997	3,032	3,053	3,034	3,111	91.3
Males.....	2,342	2,431	2,437	2,355	2,278	2,251	2,266	2,302	2,325	2,340	2,363	2,348	2,408	92.4
Females.....	672	681	680	659	569	666	686	680	672	692	690	686	703	80.9

TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48. ¹	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
All industries.....	1919	730,733	48,750	48,030	108,838	156,028	51,695	136,582	50,145	31,650
	1914	510,435	(²)	(²)	69,975	78,201	116,627	126,649	89,552	29,431
	1909	446,934	(²)	(²)	31,977	29,296	88,015	130,852	131,853	34,041
Agricultural implements.....	1919	4,931	4	(²)	4	1,864	634	2,006	416	3
	1914	5,464	(²)	(²)	10	593	811	3,519	531	.....
Automobile bodies and parts.....	1919	10,670	2,385	487	5,914	3,477	1,241	2,570	506	.....
	1914	4,128	(²)	(²)	437	538	265	2,557	331	.....
Automobiles.....	1919	29,212	692	704	12,344	10,534	231	4,707	.....	.....
	1914	14,624	(²)	(²)	39	9,600	2,409	2,400	170	.....
Automobile repairing.....	1919	2,430	58	4	282	134	778	603	532	30
	1914	215	(²)	(²)	25	49	47	20	64	1
Boots and shoes, not including rubber boots and shoes.....	1919	14,092	15	(²)	17	12,309	257	1,470	24	.....
	1914	14,461	(²)	(²)	810	103	6,089	7,201	258	.....
Boxes, paper and other, not elsewhere specified.....	1919	2,952	196	83	39	2,083	204	220	67	.....
	1914	2,456	(²)	(²)	329	149	1,594	210	165	.....
Brass, bronze, and copper products.....	1919	4,264	578	104	741	2,159	200	444	32	.....
	1914	2,277	(²)	(²)	484	422	543	651	75	102
Bread and other bakery products.....	1919	9,091	223	394	4,549	448	1,472	525	899	111
	1914	7,665	(²)	(²)	758	328	3,787	493	1,909	330
Brick and tile, terra-cotta, and fire-clay products.....	1919	12,060	76	70	1,024	1,587	2,552	2,052	3,000	193
	1914	16,238	(²)	(²)	604	814	2,840	2,802	9,046	132
Cars and general shop construction and repairs by steam-railroad companies.....	1919	35,245	243	916	21,533	189	585	11,062	117	.....
	1914	21,039	(²)	(²)	8,512	3,184	5,025	730	857	3,351
Cars, steam-railroad, not including operations of railroad companies.....	1919	2,177	132	773	.....	213	.....	1,059	.....	.....
	1914	2,885	.....	.....	.....	929	98	1,858	.....	.....
Chemicals.....	1919	3,670	116	46	77	371	20	2,739	283	18
	1914	2,017	(²)	(²)	380	.....	.....	859	266	512
Clothing, men's.....	1919	9,939	6,154	1,599	1,303	751	122	9	1	.....
	1914	8,691	(²)	(²)	3,058	4,095	1,358	142	38	.....
Clothing, women's.....	1919	8,258	6,521	506	660	563	8	.....	.....	.....
	1914	9,775	(²)	(²)	903	7,385	1,457	3	27	.....
Coke, not including gas-house coke.....	1919	3,407	.....	.....	.....	.....	.....	1,094	.....	2,313
	1914	489	.....	.....	.....	.....	.....	.....	205	284
Confectionery and ice cream ³	1919	5,451	122	284	1,044	1,713	728	845	488	227
	1914	3,965	(²)	(²)	292	357	2,091	587	322	316
Copper, tin, and sheet-iron work.....	1919	2,650	543	45	315	948	113	248	437	1
	1914	2,335	(²)	(²)	783	310	396	518	328	.....
Electrical machinery, apparatus, and supplies.....	1919	26,672	736	362	6,336	10,998	722	5,468	2,050	.....
	1914	12,695	(²)	(²)	657	3,850	4,098	3,795	295	.....
Engines, steam, gas, and water.....	1919	6,218	633	308	1,207	327	110	3,582	51	.....
	1914	2,962	(²)	(²)	100	170	59	2,400	224	.....
Flour-mill and gristmill products.....	1919	2,122	23	7	429	27	171	68	1,289	108
	1914	2,363	(²)	(²)	115	18	216	105	1,683	220
Foundry and machine-shop products ⁴	1919	87,803	3,847	2,797	25,681	22,910	9,206	20,096	2,956	310
	1914	51,553	(²)	(²)	4,377	7,786	10,749	21,324	7,308	.....

¹ Includes 48 and under for 1914 and 1909.² Corresponding figures not available.³ Includes "chewing gum" in 1919.⁴ Includes "iron and steel, tempering and welding"; "machine tools"; and "steel barrels, drums, and tanks, portable."

TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914—Continued.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48. ¹	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
Furniture.....	1919	8,846	253	44	423	2,513	503	4,084	436	.....
	1914	7,750	(²)	(²)	622	1,496	813	2,591	2,228	.....
Glass.....	1919	10,935	1,107	2,723	3,780	1,471	916	783	65	.....
	1914	10,997	(²)	(²)	784	4,515	2,916	198	2,276	308
Gloves and mittens, cloth, not including gloves made in textile mills ³	1919	2,162	20	176	52	1,914	.....	.....	.....	.....
Hardware.....	1919	4,576	5	2,400	141	515	509	694	153	.....
	1914	4,803	(²)	(²)	100	170	127	2,399	600	1,341
Iron and steel, blast furnaces.....	1919	9,793	.....	.....	87	.....	.....	988	1,702	6,056
	1914	5,786	.....	.....	.....	.....	.....	.....	918	4,868
Iron and steel, steel works and rolling mills.....	1919	73,025	8,343	.....	8,058	1,204	567	16,060	24,170	13,003
	1914	46,397	(²)	(²)	3,303	2,013	2,961	8,004	20,551	9,475
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.	1919	4,778	.....	.....	7	1,019	153	3,436	31	132
	1914	2,305	(²)	(²)	341	7	60	1,957	.....	.....
Iron and steel forgings, not made in steel work or rolling mills.	1919	5,931	471	664	1,901	1,063	29	1,738	65	.....
	1914	2,308	(²)	(²)	449	234	244	1,174	41	166
Iron and steel, wrought pipe.....	1919	4,434	24	230	.....	1,217	31	1,581	1,342	.....
	1914	2,285	.....	.....	.....	.....	176	1,083	1,026	.....
Knit goods.....	1919	4,407	7	184	374	3,333	286	203	20	.....
	1914	3,411	(²)	(²)	64	205	2,035	107	100	.....
Liquors, malt.....	1919	3,327	33	.....	3,063	59	60	.....	106	.....
	1914	5,340	(²)	(²)	4,287	59	619	143	232	.....
Lumber and timber products.....	1919	3,135	132	31	181	183	570	829	1,209	.....
	1914	4,798	(²)	(²)	318	175	688	1,141	2,459	17
Lumber, planing-mill products, not including planing mills connected with sawmills.	1919	4,405	101	50	242	872	1,168	1,569	402	1
	1914	5,516	(²)	(²)	502	473	2,080	1,507	948	.....
Motorcycles, bicycles, and parts.....	1919	2,480	.....	.....	160	130	220	1,970	.....	.....
	1914	752	.....	.....	.....	78	199	467	6	2
Paints.....	1919	2,107	29	10	328	1,048	86	629	67	.....
	1914	1,607	(²)	(²)	55	184	209	800	389	.....
Paper and wood pulp.....	1919	6,899	270	.....	1,873	.....	437	1,518	783	2,018
	1914	5,430	.....	.....	.....	.....	829	344	820	3,437
Petroleum, refining.....	1919	2,431	.....	.....	604	1,020	186	270	121	212
	1914	1,519	.....	.....	.....	828	406	.....	123	162
Pottery.....	1919	11,339	310	.....	2,895	4,352	2,733	1,045	4	.....
	1914	11,096	(²)	(²)	1,591	2,090	5,009	955	1,361	.....
Printing and publishing, book and job.....	1919	8,505	298	643	6,423	967	124	48	2	.....
	1914	7,978	(²)	(²)	5,420	1,006	1,240	242	70	.....
Printing and publishing, newspapers and periodicals.....	1919	7,027	139	73	6,567	287	357	81	75	48
	1914	7,274	(²)	(²)	5,535	408	820	423	79	.....
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	1919	63,637	2,207	22,480	33,308	2,306	205	2,874	98	.....
	1914	21,705	(²)	(²)	3,057	5,848	99	12,207	64	340
Screws, machine.....	1919	4,226	3	2,453	155	702	70	753	.....	.....
	1914	1,404	(²)	(²)	1,001	.....	.....	157	306	.....
Shipbuilding, steel.....	1919	11,192	2,340	.....	8,600	97	65	.....	.....	.....
	1914	2,623	.....	.....	.....	.....	232	663	1,728	.....
Slaughtering and meat packing.....	1919	5,336	915	137	1,469	547	1,174	385	693	16
	1914	3,480	(²)	(²)	110	6	636	459	2,209	1
Stamped and enameled ware, not elsewhere specified.....	1919	3,834	.....	147	139	1,302	219	1,657	280	.....
	1914	2,853	(²)	(²)	65	245	393	1,600	490	.....
Steam fittings and steam and hot-water heating apparatus.....	1919	2,723	91	1	2,175	179	238	39	.....	.....
	1914	2,414	(²)	(²)	71	210	1,109	673	252	.....
Stoves and hot-air furnaces.....	1919	6,009	802	60	1,658	1,127	1,838	354	230	.....
	1914	5,041	(²)	(²)	484	871	812	2,032	842	.....
Stoves, gas and oil.....	1919	4,329	4	.....	2,625	1,304	29	367	.....	.....
	1914	3,534	(²)	(²)	2,360	135	81	368	590	.....
Structural ironwork, not made in steel works or rolling mills.....	1919	5,231	183	21	279	1,442	508	2,553	245	.....
	1914	6,057	(²)	(²)	13	948	1,584	3,027	1,085	.....
Tinware, not elsewhere specified.....	1919	2,608	242	.....	861	1,356	107	42	.....	.....
	1914	2,260	(²)	(²)	252	463	1,384	60	6	95
Tobacco, cigars and cigarettes.....	1919	10,995	1,512	1,013	1,216	6,568	402	271	12	1
	1914	12,025	(²)	(²)	4,397	1,592	5,488	464	80	4
Tools, not elsewhere specified.....	1919	6,961	102	749	1,397	1,988	.....	2,562	253	.....
	1914	2,227	(²)	(²)	21	1,568	35	520	83	.....
All other industries.....	1919	133,456	5,420	3,665	23,698	40,059	18,269	25,093	12,293	4,959
	1914	117,753	(²)	(²)	10,775	11,696	38,217	28,386	23,498	5,271

¹ Includes 48 and under for 1914 and 1909.² Corresponding figures not available.³ Not reported separately in 1914.

TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914—Continued.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48. ¹	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
Total for cities ²	1919 1914	577, 271 385, 608	42, 142 (³)	43, 058 (³)	171, 125 57, 842	134, 870 68, 747	38, 564 92, 067	97, 460 98, 650	29, 941 47, 354	20, 105 20, 948
AKRON.....	1919 1914	65, 054 24, 680	100 (³)	21, 052 (³)	36, 736 4, 188	3, 285 5, 930	1, 700 953	1, 760 11, 873	257 580	104 1, 150
ALLIANCE.....	1919 1914	5, 117 2, 333	400 (³)	..... (³)	989 306	1, 465 11	387 1, 136	1, 751 107	38 711	27 62
ASHTABULA.....	1919 1914	4, 172 1, 898	74 (³)	190 (³)	2, 699 265	426 25	509 852	229	35 615	10 111
BARBERTON.....	1919 1914	4, 762 3, 118	31 (³)	579 (³)	725 0	1, 047 19	124 1, 201	2, 241 1, 245	0 642	6 5
BELLAIRE.....	1919 1914	2, 277 2, 603	121 (³)	666 (³)	132 118	..... 19	100 1, 099	426 469	155 36	587 862
BUCYRUS ⁴	1919	1, 861	1	.....	925	349	52	485	39	10
CAMBRIDGE.....	1919 1914	1, 782 1, 455	552 (³)	20 (³)	277 180	440 491	28 015	5 136	400 27	..... 0
CANTON.....	1919 1914	20, 336 12, 255	3, 878 (³)	208 (³)	1, 383 1, 400	2, 019 811	1, 123 1, 555	9, 911 7, 579	1, 674 506	140 344
CHILlicothe.....	1919 1914	1, 638 1, 557	8 (³)	..... (³)	432 27	38 59	34 401	819 637	278 198	29 235
CINCINNATI.....	1919 1914	69, 680 59, 861	8, 045 (³)	2, 556 (³)	20, 854 11, 075	21, 343 13, 526	4, 013 10, 330	5, 322 12, 713	1, 343 4, 410	204 907
CLEVELAND.....	1919 1914	157, 730 103, 317	15, 288 (³)	9, 488 (³)	36, 548 17, 103	46, 756 20, 680	10, 547 24, 581	24, 945 19, 409	10, 764 10, 556	3, 394 4, 988
COLUMBUS.....	1919 1914	26, 751 17, 236	778 (³)	737 (³)	9, 225 5, 611	2, 482 1, 614	7, 729 3, 905	7, 729 4, 702	1, 075 1, 255	271 89
COSHOCOTON.....	1919 1914	1, 959 1, 614	2 (³)	..... (³)	731 57	1, 015 240	162 1, 206	37 49	12 21	..... 41
CUYAHOGA FALLS ⁴	1919	784	1	112	103	226	30	230	20	2
DAYTON.....	1919 1914	31, 131 24, 061	2, 283 (³)	1, 165 (³)	3, 340 2, 335	9, 863 1, 451	6, 062 8, 492	6, 453 10, 041	954 1, 605	111 137
EAST CLEVELAND.....	1919 1914	88 129	15 (³)	..... (³)	8 2	32	3 14	30 104	..... 1	..... 8
EAST LIVERPOOL.....	1919 1914	4, 311 4, 830	6 (³)	15 (³)	1, 500 1, 500	1, 680 614	1, 058 2, 350	..... 66	17 146	17 55
ELYRIA.....	1919 1914	4, 590 2, 735	9 (³)	192 (³)	1, 056 25	1, 747 988	440 107	563 762	583 420	..... 394
FINDLAY.....	1919 1914	1, 715 1, 737	11 (³)	..... (³)	110 104	503 124	292 925	645 115	126 326	28 143
FREMONT.....	1919 1914	2, 969 2, 063	9 (³)	10 (³)	76 193	1, 306 118	140 241	1, 238 1, 190	133 318	87 3
HAMILTON.....	1919 1914	8, 553 6, 043	605 (³)	506 (³)	4, 661 797	607 99	225 506	1, 760 2, 580	30 926	..... 1, 135
IRONTON.....	1919 1914	1, 971 1, 420	100 (³)	..... (³)	330 236	606 81	50 319	309 183	278 412	298 189
KENMORE ⁴	1919	135	.....	5	1	.....	100	26	.....	3
LAKEWOOD.....	1919 1914	1, 821 1, 774	10 (³)	2 (³)	1, 059 35	127 1, 238	0 13	7 77	10 404	7
LANCASTER.....	1919 1914	2, 024 1, 583	100 (³)	..... (³)	582 40	1, 000 3	167 1, 100	130 224	9 59	27 67
LIMA.....	1919 1914	4, 901 4, 876	48 (³)	7 (³)	628 98	2, 934 719	109 1, 882	843 1, 906	233 259	9 12
LORAIN.....	1919 1914	11, 677 6, 436	7 (³)	14 (³)	4, 274 287	263 20	311 43	50 16	193 1, 657	6, 565 4, 413
MANSFIELD.....	1919 1914	4, 711 3, 398	327 (³)	264 (³)	138 300	1, 832 469	29 1, 456	2, 076 1, 006	45 160	..... 7
MARIETTA.....	1919 1914	1, 285 1, 401	6 (³)	12 (³)	589 58	184 22	174 523	274 178	46 608	..... 12
MARION.....	1919 1914	4, 125 2, 577	..... (³)	..... (³)	79 1, 383	640 154	77 862	3, 019 26	309 132	1 20
MARTINS FERRY ⁴	1919	1, 517	847	.....	75	7	378	108	18	84
MASSILLON.....	1919 1914	2, 153 1, 768	458 (³)	2 (³)	48 57	924 354	129 714	305 509	132 98	155 6

¹ Includes 48 and under for 1914 and 1909.² Excludes Cleveland Heights and East Youngstown to avoid disclosure of individual operations.³ Corresponding figures not available.⁴ Not shown separately in 1914.

TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914—Continued.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48. ¹	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
MIDDLETOWN.....	1919	6,442	5	.....	3,380	1,098	46	512	128	673
	1914	4,008	(²)	(²)	44	20	1,088	417	2,011	384
NEWARK.....	1919	4,570	47	489	685	487	1,359	1,331	165	7
	1914	4,583	(²)	(²)	72	892	1,638	1,778	187	16
NEW PHILADELPHIA ³	1919	1,247	617	9	196	307	39	12	65	2
NILES ³	1919	2,045	416	.....	645	208	141	1,274	6	255
NORWOOD.....	1919	8,283	146	898	3,808	2,030	272	521	4	4
	1914	5,808	(²)	(²)	1,060	1,338	2,707	656	33	5
PIQUA.....	1919	3,203	25	184	44	1,055	538	826	303	318
	1914	2,777	(²)	(²)	31	357	1,219	239	764	167
PORTSMOUTH.....	1919	5,914	4	.....	113	2,481	29	1,454	1,824	9
	1914	3,597	(²)	(²)	94	.....	268	2,869	343	23
SALEM ³	1919	2,237	624	892	208	67	88	9	340	.....
SANDUSKY.....	1919	3,447	223	68	551	475	544	1,171	273	142
	1914	2,727	(²)	(²)	415	60	785	710	400	361
SPRINGFIELD.....	1919	12,261	174	11	1,360	2,416	395	7,670	214	24
	1914	7,808	(²)	(²)	1,010	1,227	471	4,601	508	51
STRUBENVILLE.....	1919	3,855	475	.....	144	505	106	2,000	143	422
	1914	4,506	(²)	(²)	729	533	33	150	2,663	398
TIFFIN.....	1919	2,213	10	489	109	170	926	302	166	35
	1914	2,177	(²)	(²)	31	408	331	883	404	30
TOLEDO.....	1919	42,090	3,430	1,582	20,903	11,204	2,131	1,404	575	705
	1914	27,078	(²)	(²)	2,258	13,615	6,309	2,675	1,300	709
WARREN.....	1919	2,438	10	2	204	1,733	133	291	26	28
	1914	2,862	(²)	(²)	1,605	40	444	627	68	18
YOUNGSTOWN.....	1919	19,414	1,005	277	1,121	754	506	3,893	5,892	5,806
	1914	15,861	(²)	(²)	1,384	94	2,384	3,030	4,784	3,285
ZANESVILLE.....	1919	3,014	64	265	672	409	130	944	524	6
	1914	3,035	(²)	(²)	264	143	670	1,213	702	43

¹ Includes 48 and under for 1914 and 1909.² Corresponding figures not available.³ Not shown separately in 1914.

TABLE 10.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING—																
	Establishments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.	6 to 20 wage earners, inclusive.	21 to 50 wage earners, inclusive.	51 to 100 wage earners, inclusive.	101 to 250 wage earners, inclusive.	251 to 500 wage earners, inclusive.	501 to 1,000 wage earners, inclusive.	Over 1,000 wage earners.								
			Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.		
All industries.....	16,125	730,733	2,028	7,002	16,393	3,096	34,943	1,615	53,388	935	66,641	700	125,032	312	110,104	168	118,061	80	205,271
Agricultural implements.....	46	4,931	3	14	36	5	70	4	152	4	325	9	1,493	5	1,593	2	1,262		
Automobile bodies and parts.....	237	10,670	20	72	175	59	676	34	1,117	23	1,044	12	1,867	7	2,565	8	5,540	2	3,086
Automobiles.....	44	20,212	1	5	3	43	6	195	3	204	13	1,923	8	2,673	5	3,405	5	20,764	
Automobile repairing.....	540	2,430	25	425	995	76	734	10	298	3	182	1	221						
Boots and shoes, not including rubber boots and shoes.....	60	14,092		4	10	6	72	3	79	8	681	23	3,810	8	2,890	7	5,012	1	1,559
Boxes, paper and other, not elsewhere specified.....	58	2,952		6	16	15	224	15	552	13	905	9	1,255						
Brass, bronze, and copper products.....	92	4,264		4	24	68	30	344	17	526	6	387	6	1,025	4	1,471	1	543	
Bread and other bakery products.....	1,021	9,091	284	1,062	2,277	202	2,055	43	1,334	15	1,085	13	1,790	2	1,550				
Brick and tile, terra-cotta, and fire-clay products.....	341	12,060	5	112	306	65	779	81	2,983	56	3,891	18	2,756	4	1,345				
Cars and general shop construction and repairs by steam-railroad companies.....	117	35,245		5	22	6	79	13	423	20	1,468	20	5,214	27	9,780	11	7,436	6	10,814
Cars, steam-railroad, not including operations of railroad companies.....	8	2,177						1	27	2	144	3	383			2	1,623		
Chemicals.....	37	3,670		5	19	12	138	10	277	5	345	1	214	1	275	2	1,317	1	1,085
Clothing, men's.....	246	9,939	11	62	184	81	1,012	45	1,520	25	1,832	10	2,362	3	1,052	3	1,977		
Clothing, women's.....	175	8,268	4	25	68	62	745	43	1,520	23	1,042	13	1,043	3	1,136	2	1,204		
Coke, not including gas-house coke.....	13	3,407							3	214	4	745	5	1,944	1	504			
Confectionery and ice cream.....	380	5,451	65	191	390	61	643	33	1,073	15	1,147	14	1,860	1	329				
Copper, tin, and sheet-iron work.....	262	2,650	26	155	349	56	675	16	470	4	253	4	498	1	396				
Electrical machinery, apparatus, and supplies.....	189	26,672	5	48	144	40	496	38	1,311	11	798	25	4,142	11	3,762	5	3,508	0	12,511
Engines, steam, gas, and water.....	44	6,218		9	27	6	59	7	215	8	553	5	742	5	1,560	3	1,860	1	1,100
Flour-mill and gristmill products.....	577	2,122	113	885	827	61	533	13	388	4	261	1	113						
Foundry and machine-shop products.....	1,000	72,227	57	247	607	228	2,604	179	5,967	118	8,384	99	15,942	42	14,197	25	17,712	5	0,724
Furniture.....	102	8,346	11	31	96	38	501	35	1,180	30	2,150	13	2,013	2	530	1	731	1	1,430
Glass.....	44	10,935				1	17	1	43	11	760	14	2,154	11	4,015	6	3,910		
Gloves and mittens, cloth, not including gloves made in textile mills.....	35	2,162		6	18	10	122	8	282	5	319	4	638	2	783				
Hardware.....	50	4,576	4	15	28	9	86	9	310	4	246	7	1,141	1	303			1	2,462
Iron and steel, blast furnaces.....	42	9,793				1	19	3	102	10	714	16	2,708	6	2,126	6	4,124		
Iron and steel, steel works and rolling mills.....	86	73,025		1	1	2	30	4	167	3	106	14	2,480	17	6,125	27	20,075	18	43,951
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	23	4,778		2	9	4	36	4	160	2	148	6	1,036	3	1,112	1	975	1	1,362
Iron and steel forgings, not made in steel works or rolling mills.....	38	5,931	1	3	6	2	26	7	250	5	336	13	1,752	5	1,967	2	1,594		
Iron and steel, wrought pipe.....	8	4,434						3	100	7		1	230			2	1,581	2	2,514
Knit goods.....	34	4,407	1	3	9	7	104	2	98	7	404	8	1,368	0	2,334				
Liquors, malt.....	73	3,327		7	27	20	241	25	815	14	1,030	7	1,214						
Lumber and timber products.....	514	3,135	13	379	770	98	1,088	18	570	3	211	3	490						
Lumber, planing-mill products, not including planing mills connected with sawmills.....	378	4,495	23	200	475	99	1,158	39	1,202	10	573	6	734	1	353				
Motorcycles, bicycles, and parts.....	9	2,480	1						3	221	3	509	1	374				1	1,370
Paints.....	61	2,197		26	71	17	172	9	295	2	150	5	849	2	660				
Paper and wood pulp.....	49	6,899				3	40	14	429	12	898	14	2,045	4	1,455	1	621	1	1,365
Petroleum, refining.....	11	2,431				2	13	2	93			4	698			1	598	1	1,620
Pottery.....	95	11,339	1	7	10	7	84	19	637	22	1,572	20	6,082	8	2,605	2	1,349		
Printing and publishing, book and job.....	871	8,505	176	424	1,002	175	1,986	67	2,181	17	1,236	11	1,714	1	436				
Printing and publishing, newspapers and periodicals.....	794	7,627	253	350	890	118	1,286	37	1,153	16	1,192	9	1,301	4	1,220	1	576		
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	96	63,637		13	38	22	249	20	737	6	469	13	2,011	12	4,427	3	1,802	7	53,904
Screws, machine.....	19	4,223		4	9	5	76	1	37	2	123	3	415	3	1,112			1	2,454
Shipbuilding, steel, now vessels and repair work.....	9	11,192				1	9		3	242	1	157						4	10,784
Slaughtering and meat packing.....	141	5,336	14	54	147	31	368	21	635	12	883	6	758			3	2,545		
Stamped and enameled ware, not elsewhere specified.....	49	3,834		9	27	9	104	9	294	9	574	9	1,366	4	1,469				
Steam fittings and steam and hot-water heating apparatus.....	29	2,723	3	7	17	7	71	4	125	3	208	3	517			1	569	1	1,216
Stoves and hot-air furnaces.....	67	6,069	1	11	27	13	150	11	340	14	1,026	13	1,924	2	748	1	575	1	1,279
Stoves, gas and oil.....	34	4,329		15	45	4	33	6	203	2	124	2	406	4	1,246			1	2,272
*Structural ironwork, not made in steel works or rolling mills.....	93	5,231	1	20	52	31	326	17	521	9	662	12	1,762	1	260	2	1,639		
Tinware, not elsewhere specified.....	14	2,608		2	5	2	30	2	83	1	96	2	355	4	1,514	1	525		
Tobacco, cigars and cigarettes.....	676	10,995	255	271	529	62	773	34	1,169	22	1,650	23	4,616	2	629	1	537	1	1,092
Tools, not elsewhere specified.....	149	8,961	8	27	63	61	632	38	1,163	12	863	10	1,672	1	472	1	972	1	1,124
All other industries.....	5,285	149,032	639	2,347	5,398	1,171	13,126	535	17,616	295	20,894	192	20,552	08	24,314	28	10,854	10	18,278
Total for cities ¹	10,537	577,271	1,263	4,104	10,207	2,273	25,699	1,193	39,156	661	47,341	599	94,413	242	84,152	134	90,093	68	179,610
AKRON.....	304	65,054	14	130	351	58	691	43	1,430	23	1,631	19	3,058	7	2,808	4	3,103	0	51,983
ALLIANCE.....	74	5,117	13	34	75	9	95	8	267	1	89	3	563	3	1,068	2	1,508	1	1,392
ASHTABULA.....	62	4,172	3	36	79	7	79	2	71	4	285	4	689	5	1,365				
BARBERTON.....	32	4,762	6	6	10	5	42	3	90	3	201	2	317	2	512				
BELLAIRE.....	45	2,277	5	18	38	10	104	4	123			5	836	3	1,170				

¹ Excludes Cleveland Heights and East Youngstown, to avoid disclosure of individual operations.

TABLE 10.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919—Continued.

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING—																
	Establishments.	Wage earners (average number).	No. wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		251 to 500 wage earners, inclusive.		501 to 1,000 wage earners, inclusive.		Over 1,000 wage earners.	
				Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
BUYCRUS.....	43	1,861	6	16	25	12	130	2	60	1	54	3	391	3	1,201	1	549	4	9,573
CAMBRIDGE.....	32	1,782	19	57	7	93	40	1,304	15	1,072	12	1,809	13	4,405	2	1,131	4	9,573	
CANTON.....	287	20,336	26	105	231	70	751	3	97	1	72	2	318	1	394	12	8,389	1	1,216
CHILLICOTHE.....	35	1,638	1	18	53	8	79	3	97	1	72	2	318	1	394	12	8,389	1	1,216
CINCINNATI.....	2,239	69,680	280	837	2,120	518	5,907	276	9,075	163	11,774	113	17,247	39	13,952	1	1,216	1	1,216
CLEVELAND.....	2,946	157,730	401	1,123	2,746	626	7,179	323	10,569	171	12,161	103	25,890	67	23,260	48	35,805	24	40,120
COLUMBUS.....	600	26,751	86	264	692	163	1,871	83	2,078	41	2,908	35	5,002	9	3,103	7	4,446	2	5,931
COSHOCOTON.....	45	1,959	5	17	51	7	79	7	245	3	206	4	670	2	702	1	1,216	1	1,216
CUYAHOGA FALLS.....	30	784	1	16	39	6	71	4	129	1	4	4	545	1	545	1	545	1	545
DAYTON.....	571	31,131	51	222	562	118	1,297	83	2,054	46	3,423	34	5,341	8	2,469	4	2,974	5	12,421
EAST CLEVELAND.....	17	88	2	12	35	2	25	1	28	1	28	1	28	1	28	1	28	1	28
EAST LIVERPOOL.....	67	4,311	2	26	62	15	193	5	181	6	449	9	1,368	2	709	2	1,849	2	1,849
ELYRIA.....	75	4,590	6	36	79	10	95	1	22	10	669	7	1,108	3	926	2	1,091	2	1,091
FINLAY.....	75	1,715	9	35	83	16	150	8	235	1	66	6	1,181	1	1,181	1	1,181	1	1,181
FREMONT.....	53	2,999	2	20	55	16	194	5	122	5	874	1	122	2	782	2	1,350	2	1,350
HAMILTON.....	130	8,553	19	49	116	27	290	13	468	6	424	7	1,081	4	1,207	2	1,212	3	3,755
IRONTON.....	52	1,971	1	16	38	15	176	9	323	5	415	6	1,019	1	1,019	1	1,019	1	1,019
KENMORE.....	7	135	1	6	15	1	20	1	100	1	100	1	100	1	100	1	100	1	100
LAKEWOOD.....	33	1,821	3	15	35	7	65	1	28	1	83	1	83	1	83	1	83	1	83
LANCASTER.....	43	2,024	3	15	30	13	122	1	27	4	814	6	1,114	1	417	1	417	1	417
LIMA.....	108	4,901	8	43	110	29	310	15	519	5	309	3	390	2	736	2	1,434	1	1,003
LORAIN.....	55	11,077	9	15	34	13	195	4	111	1	82	2	361	3	1,050	1	739	2	9,105
MANSFIELD.....	132	4,711	18	53	126	33	379	8	264	3	560	8	1,268	2	852	2	1,202	2	1,202
MARIETTA.....	59	1,285	5	20	73	10	181	2	60	2	154	4	553	1	204	1	678	1	1,092
MARION.....	70	4,125	9	27	73	15	152	7	265	3	223	5	813	2	834	1	678	1	1,092
MARTINS FERRY.....	40	1,517	10	16	31	5	55	3	90	2	155	3	526	1	1,115	1	690	1	690
MASSILLON.....	80	2,153	9	43	99	11	139	7	242	5	819	2	239	3	1,115	1	690	1	690
MIDDLETOWN.....	56	6,442	5	19	48	11	139	6	200	0	400	0	904	1	378	1	378	1	378
NEWARK.....	70	4,570	8	30	79	18	188	10	349	8	533	1	109	1	489	1	536	2	4,372
NEW PHILADELPHIA.....	43	1,247	4	26	56	8	66	2	61	1	150	1	150	1	297	1	617	1	2,287
NILES.....	40	2,945	2	18	40	4	44	5	162	3	242	4	558	3	950	1	943	1	1,180
NORWOOD.....	70	8,283	5	30	88	6	78	5	132	2	172	11	1,719	6	1,919	4	3,019	1	1,180
PIQUA.....	66	3,293	6	26	59	14	157	8	156	3	226	7	1,152	5	1,543	2	1,540	2	3,184
PORTSMOUTH.....	60	5,014	9	24	73	9	83	5	287	3	228	2	292	1	277	2	1,540	2	3,184
SALEM.....	36	2,237	2	14	38	8	88	4	140	3	193	1	227	3	922	1	624	2	3,184
SANDUSKY.....	115	3,447	20	34	87	24	311	18	565	13	942	3	611	3	981	1	981	1	981
SPRINGFIELD.....	206	12,264	27	70	201	42	445	25	794	14	1,068	19	3,073	4	1,304	4	2,451	1	2,028
STUBENVILLE.....	57	8,855	3	26	65	17	172	3	94	1	71	4	677	2	716	1	539	1	2,000
TIFFIN.....	75	2,213	10	35	85	16	109	4	126	5	343	3	407	1	484	1	539	1	2,000
TOLEDO.....	671	42,090	80	239	624	159	1,890	84	2,876	40	2,787	42	6,047	15	5,555	10	7,195	2	14,546
WARREN.....	96	2,433	18	44	97	16	195	6	199	3	185	6	832	3	955	3	6,680	5	8,258
YOUNGSTOWN.....	239	19,414	38	110	252	33	348	24	703	10	689	9	1,661	2	733	3	6,680	5	8,258
ZANESVILLE.....	97	3,014	9	43	92	15	170	13	419	8	335	7	1,155	2	634	1	634	1	634

TABLE 11.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS: 1919, 1914, AND 1909.

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes.....	16,125	15,658	15,138	730,733	510,435	446,934	\$5,100,308,728	\$1,782,808,279	\$1,437,935,817	\$2,188,360,857	\$702,026,204	\$613,733,870
Less than \$5,000.....	3,192	5,105	5,005	2,102	6,151	7,021	8,120,780	12,447,953	12,198,229	5,074,894	7,755,381	7,811,667
\$5,000 to \$20,000.....	4,452	4,614	4,474	12,089	20,996	23,571	49,105,812	47,800,840	48,028,999	27,477,990	27,043,887	26,308,694
\$20,000 to \$100,000.....	4,270	3,464	3,405	44,277	61,750	64,853	201,110,443	159,828,406	166,080,099	100,752,506	70,804,644	70,800,063
\$100,000 to \$500,000.....	2,674	1,823	1,919	123,388	220,226	208,050	607,923,301	411,267,188	557,384,719	298,904,714	308,732,635	258,737,951
\$500,000 to \$1,000,000.....	673	352	245	85,097	192,306	142,833	475,436,292	244,622,194	686,243,771	227,190,031	338,689,717	244,068,505
\$1,000,000 and over.....	894	300	245	463,780	192,306	142,833	3,758,012,100	900,945,638	686,243,771	1,528,960,722	338,689,717	244,068,505
PER CENT DISTRIBUTION.												
All classes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5,000.....	19.8	32.6	33.7	0.3	1.2	1.6	0.2	0.7	0.8	0.2	1.0	1.3
\$5,000 to \$20,000.....	27.6	29.5	29.6	1.7	4.1	5.3	1.0	2.7	3.2	1.3	3.5	4.3
\$20,000 to \$100,000.....	26.5	22.1	22.5	6.1	12.1	14.5	3.9	9.0	10.9	4.6	10.5	12.5
\$100,000 to \$500,000.....	16.6	11.6	12.7	16.9	44.9	46.0	11.9	23.1	38.8	13.7	40.5	42.2
\$500,000 to \$1,000,000.....	4.2	2.2	1.6	11.6	37.7	32.0	9.3	13.7	10.4	10.4	44.4	39.8
\$1,000,000 and over.....	5.4	1.9	1.6	63.5	37.7	32.0	73.7	50.9	46.3	60.9	44.4	39.8

TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1919 AND 1914.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
	1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.	
			1919	1914			1919	1914			1919	1914			1919	1914
AGRICULTURAL IMPLEMENTS.	46	59	100.0	100.0	4,931	5,404	100.0	100.0	\$26,559,031	\$17,484,615	100.0	100.0	\$13,589,296	\$9,674,830	100.0	100.0
Less than \$5,000.....	7	10	15.2	16.9	10	8	0.2	0.1	23,575	17,421	0.1	0.1	11,916	11,353	0.1	0.1
\$5,000 to \$20,000.....	9	15	19.6	25.4	24	75	0.5	1.4	101,049	120,534	0.4	0.7	47,421	76,840	0.3	0.8
\$20,000 to \$100,000.....	5	11	10.9	18.6	57	287	1.2	5.3	269,725	638,360	1.0	3.7	127,702	344,419	0.9	3.6
\$100,000 to \$500,000.....	8	10	17.4	16.9	424	1,024	8.6	55.3	2,022,773	3,611,494	7.6	20.7	1,102,297	1,472,398	8.1	48.8
\$500,000 to \$1,000,000.....	8	9	17.4	15.3	1,271	1,271	25.8	25.8	5,776,757	5,500,310	21.8	31.8	2,748,885	2,748,885	20.2	20.2
\$1,000,000 and over.....	9	4	10.6	6.8	3,145	2,070	63.8	37.9	18,362,152	7,627,496	69.1	43.1	9,550,985	4,518,820	70.3	46.7
AUTOMOBILE BODIES AND PARTS.	237	63	100.0	100.0	16,670	4,128	100.0	100.0	92,390,646	9,556,097	100.0	100.0	39,848,697	5,096,922	100.0	100.0
Less than \$5,000.....	28	9	11.8	14.3	12	13	0.1	0.3	64,818	31,469	0.1	0.3	37,763	23,279	0.1	0.5
\$5,000 to \$20,000.....	61	18	25.7	28.6	173	110	1.0	2.7	635,926	201,776	0.7	2.1	387,558	124,751	1.0	2.4
\$20,000 to \$100,000.....	55	19	27.4	30.2	855	339	5.1	8.2	2,987,840	956,733	3.2	10.0	1,788,220	487,769	4.5	9.6
\$100,000 to \$500,000.....	54	14	22.8	22.2	2,765	1,301	16.6	31.5	11,937,310	4,130,621	12.9	43.2	6,327,250	1,011,835	15.9	37.5
\$500,000 to \$1,000,000.....	8	3	3.4	4.8	1,215	1,215	7.3	7.3	5,382,785	4,235,498	5.8	44.3	3,053,025	2,549,285	7.7	50.0
\$1,000,000 and over.....	21	3	8.9	4.8	11,650	2,365	69.9	57.3	71,381,907	4,235,498	77.3	44.3	28,253,985	2,549,285	70.9	50.0
AUTOMOBILES.	44	39	100.0	100.0	20,212	14,624	100.0	100.0	287,045,832	76,154,488	100.0	100.0	88,606,871	25,283,166	100.0	100.0
Less than \$100,000.....	3	10	6.8	25.6	27	82	0.1	0.6	153,212	321,609	0.1	0.4	47,609	129,428	0.1	0.5
\$100,000 to \$500,000.....	10	10	22.7	25.6	402	1,502	1.6	10.3	2,504,485	1,800,035	0.9	2.4	808,042	1,237,370	1.0	9.3
\$500,000 to \$1,000,000.....	3	7	6.8	17.9	275	275	0.9	0.9	2,443,057	5,014,859	0.9	6.6	910,785	1,010,785	1.0	9.3
\$1,000,000 and over.....	28	12	63.6	30.8	28,448	13,040	97.4	80.2	281,855,078	69,017,385	98.2	90.6	80,780,345	22,790,368	97.9	90.2
BOOTS AND SHOES, NOT INCLUDING RUBBER BOOTS AND SHOES.	60	62	100.0	100.0	14,062	14,401	100.0	100.0	71,354,850	32,773,922	100.0	100.0	30,552,366	13,526,326	100.0	100.0
Less than \$20,000.....	6	6	10.0	9.7	28	43	0.2	0.3	61,166	31,120	0.1	0.1	38,190	19,723	0.1	0.1
\$20,000 to \$100,000.....	6	11	10.0	17.7	167	304	1.2	2.1	208,943	452,820	0.4	1.4	150,815	210,611	0.5	1.6
\$100,000 to \$500,000.....	9	28	15.0	45.2	606	1,618	4.7	44.4	3,085,892	9,627,797	4.3	29.4	1,667,316	6,295,602	5.6	46.5
\$500,000 to \$1,000,000.....	13	7	21.7	11.3	1,533	1,533	13.0	13.0	9,221,779	4,725,193	12.9	14.4	3,874,285	1,011,835	12.7	7.7
\$1,000,000 and over.....	26	10	43.3	16.1	11,398	7,696	80.9	53.2	58,717,070	17,936,980	82.3	54.7	25,421,760	6,964,330	83.2	51.7
BRASS, BRONZE, AND COPPER PRODUCTS.	92	84	100.0	100.0	4,264	2,277	100.0	100.0	27,801,760	7,843,092	100.0	100.0	11,624,227	3,653,547	100.0	100.0
Less than \$5,000.....	5	13	5.4	15.5	1	13	(*)	0.6	14,274	33,455	0.1	0.4	8,586	7,089	0.1	0.2
\$5,000 to \$20,000.....	15	23	10.3	27.4	38	100	0.9	4.4	101,315	252,175	0.4	3.2	98,869	130,408	0.8	3.7
\$20,000 to \$100,000.....	30	31	32.6	36.0	265	423	6.2	18.6	1,523,083	1,457,952	5.5	18.6	635,482	591,493	5.6	16.2
\$100,000 to \$500,000.....	28	17	30.4	20.2	806	1,741	21.1	76.5	6,246,828	6,099,510	22.6	77.8	2,634,843	2,018,557	21.8	79.9
\$500,000 to \$1,000,000.....	8	8	8.7	19.7	841	841	19.7	19.7	5,628,350	5,628,350	20.2	20.2	1,845,513	1,845,513	15.9	15.9
\$1,000,000 and over.....	6	6	6.5	52.1	2,220	2,220	52.1	52.1	14,230,010	14,230,010	51.2	51.2	6,501,434	6,501,434	55.9	55.9
BREAD AND OTHER BAKERY PRODUCTS.	1,021	1,034	100.0	100.0	9,091	7,665	100.0	100.0	78,819,001	30,500,881	100.0	100.0	28,803,456	13,265,708	100.0	100.0
Less than \$5,000.....	200	608	12.9	37.2	64	444	0.7	5.8	587,877	1,800,731	0.7	5.9	232,790	813,222	0.8	6.1
\$5,000 to \$20,000.....	705	781	47.2	47.8	1,015	1,033	11.2	26.2	8,550,363	7,499,783	10.8	24.5	3,135,022	3,857,491	10.9	25.3
\$20,000 to \$100,000.....	623	192	32.3	11.8	2,514	1,806	27.7	23.0	21,035,002	6,997,005	26.7	22.9	7,000,242	2,777,010	24.5	20.9
\$100,000 to \$500,000.....	92	40	5.7	2.8	2,075	1,482	22.8	45.4	18,183,397	9,403,065	23.1	31.0	6,200,000	1,617,085	21.7	47.6
\$500,000 to \$1,000,000.....	21	7	1.3	0.4	1,666	1,666	18.3	18.3	15,452,597	4,799,637	19.6	15.7	6,100,345	1,617,085	21.3	21.3
\$1,000,000 and over.....	11	11	0.7	0.7	1,767	1,767	19.3	19.3	15,009,105	15,009,105	19.0	19.0	6,000,057	6,000,057	20.8	20.8
BRICK AND TILE, TERRAZZOS AND FIRE-CLAY PRODUCTS.	341	450	100.0	100.0	12,000	16,238	100.0	100.0	32,172,576	23,375,689	100.0	100.0	22,211,005	16,167,536	100.0	100.0
Less than \$5,000.....	41	145	12.0	32.2	61	335	0.5	2.1	116,206	381,164	0.4	1.6	84,330	280,012	0.4	1.8
\$5,000 to \$20,000.....	95	117	27.9	26.0	407	1,043	3.4	6.4	888,237	1,153,009	2.8	4.9	628,248	878,023	2.8	5.4
\$20,000 to \$100,000.....	97	120	28.4	26.7	2,571	4,889	21.3	30.1	5,137,021	6,397,273	16.0	27.4	3,430,454	4,408,757	15.4	27.8
\$100,000 to \$500,000.....	100	64	29.3	14.2	7,093	9,971	58.8	61.4	20,161,059	12,222,107	62.7	52.3	14,016,304	10,501,141	63.1	65.0
\$500,000 and over.....	8	4	2.3	0.9	1,928	1,928	16.0	16.0	5,370,058	3,221,470	18.2	13.8	4,052,660	4,052,660	18.2	18.2
BUTTER.	141	143	100.0	100.0	1,362	1,099	100.0	100.0	41,061,993	14,938,608	100.0	100.0	6,334,790	2,519,943	100.0	100.0
Less than \$5,000.....	5	9	3.5	6.3	2	5	0.1	0.5	13,162	30,811	(*)	0.2	1,026	5,833	(*)	0.2
\$5,000 to \$20,000.....	12	31	8.5	21.7	8	43	0.6	3.9	150,662	425,120	0.4	2.8	26,079	90,042	0.4	3.6
\$20,000 to \$100,000.....	54	69	38.3	48.3	162	247	11.9	22.5	3,090,291	3,189,553	7.5	21.4	429,848	405,437	6.8	18.5
\$100,000 to \$500,000.....	47	29	33.3	20.3	465	804	34.1	73.2	10,774,830	6,724,838	26.2	45.0	1,307,184	1,957,721	20.6	77.7
\$500,000 to \$1,000,000.....	14	5	9.9	3.5	337	337	24.7	24.7	11,194,827	4,558,280	27.3	30.6	1,726,404	1,726,404	27.2	27.2
\$1,000,000 and over.....	9	9	0.4	0.4	388	388	28.5	28.5	15,832,221	15,832,221	38.6	38.6	2,846,649	2,846,649	44.9	44.9
CARS AND GENERAL SHOP CONSTRUCTION AND REPAIRS BY STEAM-RAILROAD COMPANIES.	117	88	100.0	100.0	35,245	21,639	100.0	100.0	96,483,946	33,286,205	100.0	100.0	56,893,898	17,232,484	100.0	100.0
Less than \$20,000.....	7	29	6.0	33.0	40	360	0.1	6.5	103,797	519,103	0.1	0.8	66,401	984,030	0.1	5.7
\$20,000 to \$100,000.....	14	38	12.0	43.2	5,731	13,798	10.3	63.8	13,474,148	9,081,008	14.0	30.0	8,017,031	10,709,000	10.9	62.5
\$100,000 to \$500,000.....	47	18	15.4	18.2	5,902	5,902	15.2	15.2	13,168,050	10,169,151	13.6	30.6	8,297,646	8,297,646	14.6	14.6
\$500,000 to \$1,000,000.....	18	5	26.5	5.7	23,740	6,048	67.4	80.7	68,918,788	11,579,757	71.4	34.8	38,290,416	5,477,608	67.3	31.8
\$1,000,000 and over.....	31	5	26.5	5.7	23,740	6,048	67.4	80.7	68,918,788	11,579,757	71.4	34.8	38,290,416	5,477,608	67.3	31.8
CHEMICALS.	37	29	100.0	100.0	3,670	2,017	100.0	100.0	32,719,466	11,388,140	100.0	100.0	17,423,937	4,662,147	100.0	100.0
Less than \$100,000.....	7	14	18.9	48.3	46	74	1.3	3.7	304,361	865,500	0.9	3.2	205,000	206,340	1.2	4.4
\$100,000 to \$500,000.....	19	10	51.4	34.5	446	1,276	12.2	13.6	4,715,279	12,585,756	14.4	22.7	2,558,083	1,890,744	14.7	19.3
\$500,000 to \$1,000,000.....	5	5	13.5	17.2	425	425	11.0	11.0	3,295,555	3,295,555	10.1	10.1	2,153,236	2,153,236	12.4	12.4
\$1,000,000 and over.....	6	5	10.2	17.2	2,753	1,668	75.0	82.7	24,404,331	8,430,884	74.6	74.1	12,500,022	3,556,063	71.8	76.8

* Includes the group "\$500,000 to \$1,000,000."

* Less than one-tenth of 1 per cent.

* Includes the groups "\$500,0

TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1919 AND 1914—Con.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.				
	1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		
			1919	1914			1919	1914			1919	1914			1919	1914	
CLOTHING, MEN'S.....	246	224	100.0	100.0	9,939	8,691	100.0	100.0	\$58,169,320	\$24,063,408	100.0	100.0	\$28,098,099	\$12,071,215	100.0	100.0	
Less than \$5,000.....	35	71	14.2	31.7	61	358	0.6	4.1	104,501	104,831	0.2	0.7	93,032	161,718	0.3	1.3	
\$5,000 to \$20,000.....	56	56	22.8	25.0	512	953	5.2	11.0	630,960	583,200	1.1	2.3	571,046	407,072	2.0	3.0	
\$20,000 to \$100,000.....	68	48	27.6	21.4	1,044	1,566	10.5	18.0	3,094,640	2,505,695	5.3	10.7	1,799,142	1,414,881	6.4	11.7	
\$100,000 to \$500,000.....	55	39	22.4	17.4	2,340	1,514	23.5	60.9	12,682,345	9,440,715	21.0	39.2	5,000,893	110,036,944	19.9	83.1	
\$500,000 to \$1,000,000.....	18	10	7.3	4.5	1,853	.....	18.6	.....	13,075,834	11,330,027	22.5	47.1	6,436,250	.....	22.9	.....
\$1,000,000 and over.....	14	.....	5.7	.....	4,120	.....	41.5	.....	28,078,304	.....	40.3	.....	18,597,176	.....	48.4	.....
CLOTHING, WOMEN'S...	175	170	100.0	100.0	8,258	9,775	100.0	100.0	48,703,704	22,881,753	100.0	100.0	22,026,084	10,791,914	100.0	100.0	
Less than \$5,000.....	11	38	6.3	22.4	11	121	0.1	1.2	28,756	87,497	0.1	0.4	23,063	70,978	0.1	0.7	
\$5,000 to \$20,000.....	20	29	16.6	17.1	182	211	2.2	2.2	339,507	810,333	0.7	1.4	253,291	193,533	1.1	1.8	
\$20,000 to \$100,000.....	54	56	30.9	32.9	968	1,413	11.7	14.5	3,252,778	3,063,293	6.7	13.4	1,098,086	1,412,576	7.5	13.1	
\$100,000 to \$500,000.....	55	37	31.4	21.8	2,248	1,558	27.2	57.9	13,534,158	7,921,178	27.8	34.6	5,348,042	5,528,381	23.6	51.2	
\$500,000 to \$1,000,000.....	16	9	9.1	5.5	1,052	.....	20.0	.....	10,571,574	4,070,796	21.7	17.8	4,974,869	.....	22.0	.....
\$1,000,000 and over.....	10	4	5.7	2.4	3,199	2,372	38.7	24.3	20,976,871	7,422,656	43.1	32.4	10,328,148	3,580,496	45.6	33.2	
COFFEE AND SPICE, ROASTING AND GRINDING.....	43	35	100.0	100.0	1,088	822	100.0	100.0	29,271,332	13,312,493	100.0	100.0	6,394,431	3,128,109	100.0	100.0	
\$5,000 to \$20,000.....	5	7	11.6	20.0	3	14	0.3	1.7	59,701	48,351	0.2	0.4	19,504	18,735	0.3	0.6	
\$20,000 to \$100,000.....	8	10	18.6	28.0	40	52	3.7	6.3	608,090	599,877	2.1	4.2	135,574	102,228	2.1	5.2	
\$100,000 to \$500,000.....	16	9	37.2	25.7	140	431	12.9	52.4	3,740,908	2,248,075	12.8	16.9	880,007	1,090,610	13.9	35.1	
\$500,000 to \$1,000,000.....	4	5	9.3	14.3	123	.....	11.3	.....	3,001,068	2,047,467	10.3	22.1	540,989	.....	8.6	.....
\$1,000,000 and over.....	10	4	23.3	11.4	782	325	71.9	39.5	21,854,056	7,498,723	74.7	56.3	4,906,207	1,850,538	75.2	59.2	
CONFECTIONERY AND ICE CREAM¹.....	380	202	100.0	100.0	5,451	3,965	100.0	100.0	39,185,084	14,341,068	100.0	100.0	17,363,305	5,970,028	100.0	100.0	
Less than \$5,000.....	82	95	21.6	32.5	38	99	0.7	2.5	198,838	281,409	0.5	1.8	94,225	131,888	0.5	2.2	
\$5,000 to \$20,000.....	120	93	31.6	31.8	188	272	3.4	6.9	1,244,510	948,376	3.2	6.6	557,352	429,149	3.2	7.2	
\$20,000 to \$100,000.....	97	74	25.5	25.3	624	1,030	11.4	26.0	4,549,351	3,539,453	11.6	26.0	1,800,585	1,507,707	10.4	25.2	
\$100,000 to \$500,000.....	58	24	15.3	8.2	1,960	2,564	36.0	64.7	12,839,024	5,589,586	32.5	39.0	5,476,170	3,910,164	31.5	65.4	
\$500,000 to \$1,000,000.....	15	6	3.9	2.1	1,486	.....	27.3	.....	9,432,230	3,952,844	24.1	27.6	4,100,487	.....	23.6	.....
\$1,000,000 and over.....	8	.....	2.1	.....	1,155	.....	21.2	.....	10,895,733	.....	27.8	.....	6,325,486	.....	30.7	.....
ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES.....	189	119	100.0	100.0	26,672	12,095	100.0	100.0	156,924,143	36,120,978	100.0	100.0	84,620,936	18,638,780	100.0	100.0	
Less than \$5,000.....	13	22	6.0	18.5	20	35	0.1	0.8	36,224	60,755	(*)	0.2	18,807	20,280	(*)	0.2	
\$5,000 to \$20,000.....	30	22	15.9	18.5	86	101	0.3	0.8	327,750	231,182	0.2	0.6	152,976	130,649	0.2	0.7	
\$20,000 to \$100,000.....	49	32	25.9	26.9	641	572	2.4	4.5	2,543,268	1,694,114	1.6	4.4	1,859,169	865,200	1.6	4.6	
\$100,000 to \$500,000.....	57	27	30.2	22.7	3,160	3,995	11.8	31.5	13,617,482	6,007,870	8.7	16.6	7,882,116	5,578,597	9.3	29.9	
\$500,000 to \$1,000,000.....	13	6	6.9	5.0	2,213	.....	8.3	.....	9,369,538	3,885,727	6.0	10.2	5,085,811	.....	6.0	.....
\$1,000,000 and over.....	27	10	14.3	8.4	20,552	7,092	77.1	63.0	131,020,891	24,531,350	83.5	67.9	70,128,067	12,025,998	82.9	64.5	
ENGINES, STEAM, GAS, AND WATER.....	44	47	100.0	100.0	6,218	2,002	100.0	100.0	42,850,677	6,861,351	100.0	100.0	22,506,896	4,024,147	100.0	100.0	
Less than \$20,000.....	7	11	15.9	23.4	15	47	0.2	1.6	61,995	105,872	0.1	1.5	38,998	57,261	0.2	1.4	
\$20,000 to \$100,000.....	11	19	25.0	40.4	195	474	3.1	16.0	605,948	1,080,294	1.4	15.7	350,122	618,085	1.6	15.4	
\$100,000 to \$500,000.....	11	17	25.0	36.2	567	1,441	9.1	82.4	2,489,161	1,507,685	5.8	32.7	1,207,900	1,348,801	5.8	33.2	
\$500,000 to \$1,000,000.....	6	.....	13.6	.....	819	.....	13.2	.....	4,320,338	.....	10.1	.....	2,518,847	.....	11.2	.....
\$1,000,000 and over.....	9	.....	20.5	.....	4,622	.....	74.3	.....	35,373,235	.....	82.5	.....	18,305,944	.....	81.3	.....
FLOUR-MILL AND GRISTMILL PRODUCTS.....	577	649	100.0	100.0	2,122	2,363	100.0	100.0	89,396,619	45,171,200	100.0	100.0	12,294,538	6,213,814	100.0	100.0	
Less than \$5,000.....	34	61	5.9	9.4	8	32	0.4	1.4	96,029	178,668	0.1	0.4	18,414	39,578	0.1	0.6	
\$5,000 to \$20,000.....	121	239	21.0	36.8	97	290	3.2	12.3	1,528,240	2,200,130	1.7	0.5	269,105	532,354	2.2	8.0	
\$20,000 to \$100,000.....	280	279	50.1	43.0	557	760	26.2	36.8	14,233,331	12,458,066	15.9	27.6	2,274,711	2,125,091	18.5	34.6	
\$100,000 to \$500,000.....	103	56	17.9	8.6	584	869	27.5	27.0	18,810,440	11,136,893	21.0	24.0	2,777,662	1,900,130	22.6	80.2	
\$500,000 to \$1,000,000.....	9	5	1.6	0.8	127	.....	6.0	.....	4,064,333	3,385,544	7.2	7.5	761,908	.....	6.2	.....
\$1,000,000 and over.....	21	9	3.6	1.4	779	512	36.7	21.7	48,204,240	15,091,899	54.0	33.4	6,192,738	1,616,661	50.4	26.0	
FOUNDRY AND MACHINE-SHOP PRODUCTS¹.....	1,102	992	100.0	100.0	87,803	51,553	100.0	100.0	425,497,682	122,810,681	100.0	100.0	250,811,011	72,472,448	100.0	100.0	
Less than \$5,000.....	120	170	11.1	17.1	108	221	0.1	0.4	327,062	438,118	0.1	0.4	224,453	305,314	0.1	0.4	
\$5,000 to \$20,000.....	212	255	18.2	25.7	912	1,354	1.0	2.6	3,448,942	2,832,314	0.8	2.3	2,169,798	1,905,927	0.9	2.6	
\$20,000 to \$100,000.....	300	301	26.6	30.3	4,439	6,977	5.1	13.5	15,882,036	14,420,159	3.7	11.7	10,047,255	8,591,087	4.0	11.9	
\$100,000 to \$500,000.....	306	208	26.3	21.0	17,248	33,626	19.6	65.2	71,861,387	45,819,951	16.0	37.3	43,017,262	345,151,249	17.2	62.3	
\$500,000 to \$1,000,000.....	96	44	8.3	4.4	14,093	.....	16.1	.....	98,445,620	33,017,377	16.1	20.9	40,028,352	.....	16.0	.....
\$1,000,000 and over.....	110	14	9.5	1.4	61,003	9,375	68.1	18.2	285,530,835	26,288,762	62.4	21.4	155,328,801	16,518,871	61.9	22.8	
FURNITURE.....	102	209	100.0	100.0	8,346	7,760	100.0	100.0	35,224,313	16,411,298	100.0	100.0	20,644,770	9,120,723	100.0	100.0	
Less than \$5,000.....	17	37	10.5	17.7	10	39	0.1	0.5	23,505	87,011	0.1	0.5	20,128	59,142	0.1	0.6	
\$5,000 to \$20,000.....	25	50	15.4	23.9	103	308	1.3	4.0	296,685	550,283	0.8	3.4	176,547	333,215	0.9	3.7	
\$20,000 to \$100,000.....	44	78	27.2	37.3	728	1,991	8.7	25.7	2,441,748	3,786,771	6.9	23.1	1,353,420	2,061,218	6.6	22.6	
\$100,000 to \$500,000.....	64	44	39.5	21.1	3,888	5,412	46.0	69.8	14,981,109	11,987,233	42.5	73.0	8,283,807	6,667,148	40.1	73.1	
\$500,000 to \$1,000,000.....	8	.....	4.9	.....	1,207	.....	15.2	.....	5,783,390	.....	10.4	.....	3,456,300	.....	16.7	.....
\$1,000,000 and over.....	4	.....	2.5	.....	2,400	.....	28.8	.....	11,688,816	.....	38.2	.....	7,354,508	.....	35.6	.....
GLASS.....	44	39	100.0	100.0	10,935	10,907	100.0	100.0	35,240,877	19,101,342	100.0	100.0	22,588,480	12,145,065	100.0	100.0	
\$20,000 to \$100,000.....	4	10.3	113	1.0	1.5	175,671	1.4
\$100,000 to \$500,000.....	26	22	59.1	56.4	2,372	7,405	26.3	67.3	7,777,398	5,083,869	22.1	29.6	5,273,908	7,034,747	23.3	57.9	
\$500,000 to \$1,000,000.....	7	9	15.9	23.1	2,300	.....	21.0	.....	5,877,824	5,213,672	15.3	27.2	3,041,493	.....	16.1	.....
\$1,000,000 and over.....	11	4	25.0	10													

TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1919 AND 1914—Con.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
	1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.	
			1919	1914			1919	1914			1919	1914			1919	1914
IRON AND STEEL, BLAST FURNACES.....	42	33	100.0	100.0	9,793	5,786	100.0	100.0	\$179,233,435	\$72,060,303	100.0	100.0	\$41,547,328	\$12,230,844	100.0	100.0
Less than \$500,000.....	6	8	14.3	24.2	251	1,112	2.6	19.2	2,071,580	1,875,855	1.2	2.6	516,418	1,050,302	1.2	8.6
\$500,000 to \$1,000,000.....	4	8	9.5	24.2	270	1,112	2.8	19.2	2,451,245	6,187,106	1.4	8.5	573,948	1,180,542	1.4	9.4
\$1,000,000 and over.....	32	17	76.2	51.5	9,272	4,574	94.7	80.8	174,710,610	64,008,317	97.5	88.9	40,459,962	11,180,542	97.4	91.4
IRON AND STEEL, ROLLING MILLS.....	86	70	100.0	100.0	73,025	46,397	100.0	100.0	626,370,025	205,023,391	100.0	100.0	245,310,352	65,340,900	100.0	100.0
Less than \$100,000.....	3	5	3.5	7.1	31	131	(?)	0.3	155,673	170,847	(?)	0.1	85,988	100,028	(?)	0.2
\$100,000 to \$500,000.....	7	15	8.1	21.4	474	1,736	0.6	10.2	1,946,017	9,912,871	0.3	3.4	929,217	1,517,159	0.4	8.6
\$500,000 to \$1,000,000.....	7	8	8.1	11.4	1,035	1,035	1.4	1.4	4,920,888	9,255,711	0.8	3.1	2,712,649	5,629,713	1.1	8.6
\$1,000,000 and over.....	69	42	80.2	60.0	71,485	41,590	97.9	80.5	619,347,947	101,074,062	98.9	93.5	241,582,498	50,629,713	98.5	91.2
LEATHER, TANNED, CURRIED, AND FINISHED.....	24	28	100.0	100.0	1,565	1,605	100.0	100.0	25,008,070	11,627,016	100.0	100.0	6,190,279	3,121,663	100.0	100.0
\$5,000 to \$20,000.....	5	5	17.9	17.9	13	13	0.8	0.8	46,558	46,558	0.2	0.4	8,599	8,599	0.3	0.3
\$20,000 to \$100,000.....	6	4	25.0	14.3	40	25	2.6	1.6	202,317	135,820	0.8	1.2	73,715	74,788	1.2	2.4
\$100,000 to \$500,000.....	10	13	41.7	46.4	221	1,667	14.1	97.6	3,010,681	3,224,107	12.1	27.7	762,323	3,038,276	12.3	97.3
\$500,000 to \$1,000,000.....	3	6	12.5	21.4	222	222	14.2	14.2	2,350,136	8,221,371	9.4	70.7	1,022,635	1,022,635	16.5	70.0
\$1,000,000 and over.....	5	7	20.8	20.8	1,082	1,082	99.1	99.1	19,432,636	19,432,636	77.7	77.7	4,331,006	4,331,006	70.0	70.0
LIQUORS, MALT.....	73	101	100.0	100.0	3,327	5,340	100.0	100.0	25,161,227	31,990,274	100.0	100.0	18,065,655	22,799,792	100.0	100.0
Less than \$5,000.....	3	3	3.0	3.0	2	2	(?)	(?)	5,047	5,047	(?)	(?)	3,299	3,299	(?)	(?)
\$5,000 to \$20,000.....	4	4	5.5	4.0	12	17	0.4	0.3	45,241	49,605	0.2	0.2	23,683	35,023	0.1	0.2
\$20,000 to \$100,000.....	22	26	30.1	25.7	208	944	8.1	6.4	1,318,590	1,300,070	5.2	4.3	852,389	895,955	4.7	3.9
\$100,000 to \$500,000.....	32	51	43.8	50.5	1,200	1,312	36.1	58.7	8,488,392	11,593,933	33.7	36.2	6,000,628	13,180,810	33.2	57.9
\$500,000 to \$1,000,000.....	10	10	13.7	9.9	999	999	30.0	30.0	7,180,533	6,722,424	28.5	21.0	5,178,411	8,075,699	28.7	38.1
\$1,000,000 and over.....	5	7	6.8	6.9	848	1,845	25.5	34.6	8,127,966	12,229,129	32.3	38.2	6,007,544	8,075,699	33.3	38.1
LUMBER, PLANING-MILL PRODUCTS, NOT INCLUDING PLANING MILLS CONNECTED WITH SAWMILLS.....	378	400	100.0	100.0	4,465	5,516	100.0	100.0	32,428,847	18,892,000	100.0	100.0	12,076,704	7,490,163	100.0	100.0
Less than \$5,000.....	62	80	16.4	21.5	48	102	1.1	1.8	158,381	215,778	0.5	1.1	84,942	103,396	0.7	1.4
\$5,000 to \$20,000.....	107	130	28.3	32.5	267	526	5.7	9.5	1,157,065	1,423,433	3.6	7.5	571,159	690,951	4.7	9.2
\$20,000 to \$100,000.....	131	125	34.7	31.2	1,149	1,801	26.6	32.7	6,244,802	5,628,447	19.3	20.8	2,643,239	2,229,638	21.9	29.8
\$100,000 to \$500,000.....	66	159	17.5	14.8	1,794	1,087	39.9	56.0	13,744,438	11,624,402	42.4	61.5	5,069,420	4,460,278	42.2	50.6
\$500,000 to \$1,000,000.....	8	4	2.1	1.1	595	595	13.2	13.2	5,690,119	5,690,119	17.5	17.5	1,801,944	1,801,944	15.4	15.4
\$1,000,000 and over.....	4	4	1.1	1.1	652	652	14.5	14.5	5,445,442	5,445,442	16.8	16.8	1,816,570	1,816,570	15.0	15.0
PAINTS.....	61	65	100.0	100.0	2,197	1,697	100.0	100.0	36,848,364	14,824,073	100.0	100.0	13,250,596	5,915,465	100.0	100.0
Less than \$5,000.....	9	9	13.8	13.8	5	5	0.3	0.3	23,741	23,741	0.2	0.2	10,024	10,024	0.2	0.2
\$5,000 to \$20,000.....	17	17	11.5	24.6	10	28	0.5	1.6	87,331	180,830	0.2	1.3	37,878	82,045	0.3	1.4
\$20,000 to \$100,000.....	19	17	31.1	26.2	72	137	3.3	8.1	994,744	981,081	2.7	6.6	371,622	410,887	2.8	0.9
\$100,000 to \$500,000.....	10	10	31.1	24.6	255	1,527	11.6	90.0	4,401,665	4,080,748	12.1	27.6	1,789,911	1,512,609	13.5	91.5
\$500,000 to \$1,000,000.....	8	7	13.1	10.8	206	206	12.1	12.1	5,497,159	9,545,073	14.8	64.4	1,789,911	1,512,609	13.4	91.5
\$1,000,000 and over.....	8	8	13.1	10.8	1,594	1,594	72.6	72.6	25,837,656	25,837,656	70.1	70.1	9,281,657	9,281,657	70.0	70.0
POTTERY.....	95	99	100.0	100.0	11,339	11,090	100.0	100.0	28,675,361	15,291,085	100.0	100.0	19,662,920	10,323,883	100.0	100.0
Less than \$5,000.....	3	12	3.2	12.1	3	28	(?)	0.3	8,284	42,336	(?)	0.3	6,163	30,625	(?)	0.3
\$5,000 to \$20,000.....	6	17	6.3	17.2	15	164	0.1	1.5	57,627	121,072	0.2	1.8	40,294	233,773	0.2	2.3
\$20,000 to \$100,000.....	19	21	20.0	21.2	623	985	5.5	8.0	1,003,560	1,093,620	3.7	7.2	717,064	701,292	3.6	8.8
\$100,000 to \$500,000.....	50	45	52.6	45.5	5,525	10,019	49.0	89.4	13,075,194	10,857,570	45.6	71.0	8,054,913	10,355,193	45.5	90.6
\$500,000 and over.....	17	4	17.9	4.0	5,146	5,146	45.4	45.4	14,470,996	3,017,187	50.5	19.7	9,044,486	9,044,486	50.6	50.6
PRINTING AND PUBLISHING, BOOK AND JOB.....	871	772	100.0	100.0	8,505	7,978	100.0	100.0	39,201,684	19,915,250	100.0	100.0	24,019,704	13,004,041	100.0	100.0
Less than \$5,000.....	257	328	29.5	42.5	132	320	1.6	4.0	652,892	797,989	1.7	4.0	437,442	570,834	1.8	4.4
\$5,000 to \$20,000.....	312	261	35.8	33.8	867	1,154	10.2	14.8	3,371,085	2,550,193	8.6	12.8	2,195,950	1,831,582	9.1	14.1
\$20,000 to \$100,000.....	218	145	25.0	18.8	2,427	2,642	28.5	33.1	10,285,645	6,227,691	26.2	31.3	6,550,869	4,210,884	27.3	32.4
\$100,000 to \$500,000.....	68	35	7.8	4.5	2,787	3,832	32.4	48.0	12,930,820	7,303,019	33.0	36.7	8,106,850	6,384,741	33.8	49.1
\$500,000 and over.....	10	3	1.8	0.4	2,322	2,322	27.3	27.3	11,955,336	3,030,358	30.5	15.2	6,728,623	6,728,623	28.0	28.0
PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS.....	794	901	100.0	100.0	7,627	7,274	100.0	100.0	58,567,435	28,023,290	100.0	100.0	40,125,410	20,250,724	100.0	100.0
Less than \$5,000.....	282	480	35.5	63.3	222	658	2.9	9.0	787,922	1,244,041	1.3	4.4	628,226	1,018,504	1.6	5.0
\$5,000 to \$20,000.....	294	245	37.0	27.2	730	1,002	9.6	14.6	2,534,644	2,329,110	4.8	8.3	2,232,647	1,899,411	5.0	9.4
\$20,000 to \$100,000.....	154	136	19.4	15.1	1,587	1,522	20.8	25.0	6,785,644	5,382,025	11.6	19.2	5,197,844	4,245,301	13.0	21.0
\$100,000 to \$500,000.....	42	29	5.3	3.2	1,452	1,210	19.0	29.7	9,270,247	6,127,845	15.8	21.9	6,904,932	4,245,301	17.2	33.8
\$500,000 to \$1,000,000.....	10	5	1.3	0.6	919	919	12.0	12.0	6,480,157	3,572,352	11.1	12.7	4,543,208	4,543,208	11.3	11.3
\$1,000,000 and over.....	12	6	1.5	0.7	2,717	1,572	35.6	21.6	32,402,921	9,367,017	55.3	33.4	20,618,553	6,241,154	51.4	30.8
RUBBER TIRES, TUBES, AND RUBBER GOODS, NOT ELSEWHERE SPECIFIED.....	96	54	100.0	100.0	63,637	21,705	100.0	100.0	551,118,488	109,658,005	100.0	100.0	251,755,057	50,921,129	100.0	100.0
Less than \$20,000.....	11	10	11.5	18.5	53	27	0.1	0.1	123,309	64,746	(?)	(?)	69,828	32,061	(?)	0.1
\$20,000 to \$100,000.....	23	16	24.0	29.6	302	242	0.5	1.1	1,112,904	658,260	0.2	0.6	350,337	314,080	0.1	0.6
\$100,000 to \$500,000.....	22	10	22.9	18.5	787	1,656	1.2	7.0	3,735,493	2,604,061	0.7	2.4	1,692,205	1,313,167	0.7	6.3
\$500,000 to \$1,000,000.....	6	7	6.3	13.0	540	540	0.8	0.8	4,850,605	4,346,805	0.9	4.0	2,088,817	2,088,817	0.8	0.8
\$1,000,000 and over.....	34	11	35.4	20.4	61,955	19,780	97.4	91.1	541,290,187	101,934,733	98.2	93.0	247,554,770	47,361,821	98.3	93.0

1 Includes the group "\$500,000 to \$1,000,000."

2 Less than one-tenth of 1 per cent.

3 Includes the group "Less than \$5,000."

4 Includes the groups "\$500,000 to \$1,000,000" and "\$1,000,000 and over."

5 Includes the group "\$1,000,000 and over."

TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1919 AND 1914—Con.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.				
	1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		
			1919	1914			1919	1914			1919	1914			1919	1914	
SLAUGHTERING AND MEAT PACKING.....	141	152	100.0	100.0	5,336	3,480	100.0	100.0	\$170,337,802	\$64,060,396	100.0	100.0	\$19,739,453	\$6,663,426	100.0	100.0	
Less than \$20,000.....	11	22	7.8	14.5	3	13	0.1	0.4	127,497	254,033	0.1	0.4	22,848	42,037	0.1	0.6	
\$20,000 to \$100,000.....	34	53	24.1	34.9	112	161	2.1	4.6	2,101,333	2,680,301	1.2	4.1	393,657	438,089	2.0	5.5	
\$100,000 to \$500,000.....	46	47	32.6	30.9	345	1,009	6.5	26.1	11,253,554	10,488,551	6.6	10.1	1,347,717	1,283,864	6.8	34.3	
\$500,000 to \$1,000,000.....	20	12	14.2	7.9	442	83	8.3	.....	13,833,200	8,843,634	8.1	13.6	1,650,466	.....	8.4	.....
\$1,000,000 and over.....	30	18	21.3	11.8	4,434	2,397	83.1	68.9	143,022,308	42,684,877	84.0	65.7	10,824,765	3,969,436	82.7	56.6	
STOVES AND HOT-AIR FURNACES.....	67	79	100.0	100.0	6,069	5,011	100.0	100.0	25,009,260	9,990,696	100.0	100.0	14,212,357	6,487,997	100.0	100.0	
Less than \$5,000.....	5	6.3	11	0.2	15,138	0.2	4,240	0.1
\$5,000 to \$20,000.....	27	10	10.4	12.7	8	50	0.1	1.0	53,842	116,449	0.2	1.2	41,773	70,512	0.3	1.1	
\$20,000 to \$100,000.....	18	35	26.9	44.3	191	735	3.1	14.6	1,000,047	1,804,121	4.2	18.7	539,535	1,122,134	3.8	17.3	
\$100,000 to \$500,000.....	29	20	43.3	36.7	1,836	4,245	30.3	84.2	7,608,426	7,994,988	30.8	80.0	4,325,385	5,201,111	30.4	81.0	
\$500,000 to \$1,000,000.....	6	.....	9.0	.....	880	.....	14.5	.....	3,739,442	.....	15.0	.....	2,267,634	.....	16.0	.....
\$1,000,000 and over.....	7	.....	10.4	.....	3,154	.....	52.0	.....	12,457,503	.....	49.8	.....	7,038,030	.....	49.5	.....
STRUCTURAL IRON- WORK, NOT MADE IN STEEL WORKS OR ROLLING MILLS.....	93	93	100.0	100.0	5,231	6,657	100.0	100.0	41,792,720	22,015,796	100.0	100.0	17,021,788	10,011,491	100.0	100.0	
Less than \$5,000.....	13	14.0	14	0.2	35,226	0.2	18,379	0.2
\$5,000 to \$20,000.....	19	13	20.4	14.0	48	62	0.9	0.9	189,844	144,511	0.5	0.6	110,266	77,444	0.6	0.8	
\$20,000 to \$100,000.....	32	31	34.4	33.3	334	507	6.4	7.6	1,716,275	1,511,083	4.1	6.7	889,020	730,750	5.2	7.8	
\$100,000 to \$500,000.....	25	23	26.9	24.7	1,130	1,324	21.6	48.6	7,008,661	5,780,385	16.8	25.6	3,149,842	4,451,015	18.5	44.5	
\$500,000 to \$1,000,000.....	10	8	10.8	8.6	1,075	.....	20.6	.....	7,371,448	4,074,830	17.6	22.0	3,859,294	.....	19.7	.....
\$1,000,000 and over.....	7	5	7.5	6.4	2,644	2,840	50.5	42.7	25,506,492	10,109,760	61.0	45.0	9,513,360	4,083,903	55.9	46.8	
TOBACCO, CIGARS AND CIGARETTES.....	676	937	100.0	100.0	10,995	12,025	100.0	100.0	28,854,444	17,238,751	100.0	100.0	15,738,813	10,110,233	100.0	100.0	
Less than \$5,000.....	381	667	56.4	71.2	149	571	1.4	4.7	804,337	1,297,900	2.8	7.5	400,610	831,815	2.9	8.2	
\$5,000 to \$20,000.....	157	171	23.2	18.2	520	1,077	4.7	9.0	1,452,277	1,515,208	5.0	8.8	829,599	988,585	5.3	9.8	
\$20,000 to \$100,000.....	76	57	11.2	6.1	1,464	1,054	13.3	16.2	3,508,211	2,637,409	12.2	15.3	1,070,458	1,033,777	12.5	16.2	
\$100,000 to \$500,000.....	49	42	7.2	4.5	4,800	8,423	43.7	70.0	11,765,788	11,787,994	40.8	68.4	6,254,374	6,656,056	39.7	65.8	
\$500,000 and over.....	13	.....	1.9	.....	4,062	.....	36.9	.....	11,323,831	.....	39.2	.....	6,223,775	.....	39.5	.....
TOOLS, NOT ELSE- WHERE SPECIFIED.....	149	62	100.0	100.0	6,961	2,227	100.0	100.0	32,527,373	5,187,996	100.0	100.0	21,791,568	3,064,340	100.0	100.0	
Less than \$5,000.....	13	19	8.7	30.6	3	26	(1)	1.2	28,057	44,276	0.1	0.9	18,570	29,955	0.1	0.8	
\$5,000 to \$20,000.....	24	25	16.1	40.3	88	124	1.3	5.6	278,935	205,740	0.9	5.1	207,889	208,578	1.0	5.7	
\$20,000 to \$100,000.....	73	8	49.0	12.9	1,243	105	17.9	7.4	3,967,023	413,963	12.2	8.0	3,023,605	218,966	13.9	6.0	
\$100,000 to \$500,000.....	27	10	18.1	16.1	1,567	1,012	22.5	55.9	5,149,747	4,404,017	15.8	80.0	3,780,878	3,209,843	17.3	87.5	
\$500,000 to \$1,000,000.....	7	.....	4.7	.....	1,032	.....	14.8	.....	4,747,260	.....	14.6	.....	2,521,181	.....	11.6	.....
\$1,000,000 and over.....	5	.....	3.4	.....	3,028	.....	43.5	.....	18,366,351	.....	56.4	.....	12,230,385	.....	56.2	.....

1 Includes the group "\$500,000 to \$1,000,000."

2 Includes the group "Less than \$5,000."

3 Includes the groups "\$500,000 to \$1,000,000," and "\$1,000,000 and over."

4 Less than one-tenth of 1 per cent.

5 Includes the group "\$1,000,000 and over."

TABLE 13.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919.

CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
AKRON.....	304	65,054	100.0	\$558,962,067	100.0	\$244,590,473	100.0	COSHOCTON.....	45	1,959	100.0	\$7,684,702	100.0	\$3,812,093	100.0
Less than \$5,000.....	35	29	(¹)	89,849	(¹)	41,749	(¹)	Less than \$5,000.....	8	6	0.3	14,653	0.2	7,484	0.2
\$5,000 to \$20,000.....	71	180	0.3	793,022	0.1	481,021	0.2	\$5,000 to \$20,000.....	16	30	1.5	105,820	1.4	48,541	1.3
\$20,000 to \$100,000.....	87	814	1.3	3,899,485	0.7	2,049,972	0.8	\$20,000 to \$100,000.....	11	152	7.8	592,070	7.7	281,375	7.4
\$100,000 to \$500,000.....	69	2,775	4.3	15,281,087	2.7	7,903,361	3.2	\$100,000 to \$500,000.....	10	440	22.5	2,180,180	28.4	837,217	22.0
\$500,000 to \$1,000,000.....	19	2,162	3.3	13,444,955	2.4	7,237,911	3.0	\$500,000 and over.....	6	1,331	67.9	4,792,139	62.4	2,637,476	69.2
\$1,000,000 and over.....	25	59,085	90.8	525,453,069	94.0	226,876,459	92.8								
ALLIANCE.....	74	5,117	100.0	32,871,087	100.0	18,081,650	100.0	CUYAHOGA FALLS.....	30	784	100.0	5,820,347	100.0	2,780,310	100.0
Less than \$5,000.....	10	1	(¹)	21,196	0.1	13,810	0.1	Less than \$20,000.....	10	18	2.3	78,495	1.3	47,228	1.7
\$5,000 to \$20,000.....	28	43	0.8	307,020	0.9	155,234	0.9	\$20,000 to \$100,000.....	12	107	13.6	547,711	9.4	290,687	10.4
\$20,000 to \$100,000.....	17	154	3.0	700,543	2.3	389,290	2.2	\$100,000 to \$500,000.....	5	218	27.8	1,274,849	21.9	529,141	18.6
\$100,000 to \$500,000.....	12	827	16.2	3,341,910	10.2	1,665,850	9.2	\$500,000 and over.....	3	441	56.2	3,928,292	67.4	1,931,254	69.2
\$1,000,000 and over.....	7	4,092	80.0	28,440,418	86.5	15,887,466	87.7								
ASHTABULA.....	62	4,172	100.0	23,098,509	100.0	12,129,641	100.0	DAYTON.....	571	31,131	100.0	174,990,607	100.0	90,530,139	100.0
Less than \$5,000.....	11	10	0.2	29,079	0.1	18,781	0.2	Less than \$5,000.....	92	67	0.2	227,030	0.1	141,196	0.1
\$5,000 to \$20,000.....	10	41	1.0	183,201	0.8	91,306	0.8	\$5,000 to \$20,000.....	127	2,046	6.6	11,392,086	6.5	3,841,161	4.0
\$20,000 to \$100,000.....	15	158	3.8	507,904	2.2	272,974	2.2	\$20,000 to \$100,000.....	172	1,957	6.3	8,901,780	5.1	4,857,350	5.0
\$100,000 to \$500,000.....	8	514	12.3	1,731,021	7.5	940,203	7.8	\$100,000 to \$500,000.....	127	6,852	21.0	27,438,740	15.7	14,322,204	14.8
\$500,000 and over.....	0	3,449	82.7	20,647,304	89.4	10,803,317	89.1	\$500,000 to \$1,000,000.....	27	3,423	11.0	18,830,907	10.8	10,125,880	10.5
								\$1,000,000 and over.....	26	17,086	54.9	108,191,070	61.8	63,242,639	65.5
BARBERTON.....	32	4,762	100.0	27,713,223	100.0	13,017,487	100.0	EAST CLEVELAND.....	17	88	100.0	420,565	100.0	229,558	100.0
Less than \$5,000.....	5	1	(¹)	13,115	(¹)	8,400	0.1	\$5,000 to \$20,000.....	10	23	26.1	98,384	23.4	50,130	21.5
\$5,000 to \$20,000.....	5	5	0.1	53,591	0.2	22,213	0.2	\$20,000 to \$100,000.....	7	65	73.0	322,121	76.6	173,428	75.5
\$20,000 to \$100,000.....	7	62	1.3	355,827	1.3	217,992	1.7								
\$100,000 to \$500,000.....	9	843	17.7	3,190,501	11.5	2,063,521	15.9	EAST LIVERPOOL.....	67	4,311	100.0	12,501,181	100.0	7,610,101	100.0
\$1,000,000 and over.....	6	3,851	80.9	24,091,192	86.9	10,705,361	82.2	Less than \$5,000.....	0	0	0.1	16,487	0.1	10,426	0.1
BELLAIKE.....	45	2,277	100.0	14,502,401	100.0	4,573,889	100.0	\$5,000 to \$20,000.....	16	37	0.9	181,556	1.5	96,001	1.3
Less than \$5,000.....	7	6	0.3	18,984	0.1	10,536	0.2	\$20,000 to \$100,000.....	18	273	6.3	1,057,622	8.5	527,373	6.9
\$5,000 to \$20,000.....	14	44	1.9	142,717	1.0	85,829	1.9	\$100,000 to \$500,000.....	21	1,725	40.0	5,130,872	41.0	3,012,141	39.6
\$20,000 to \$100,000.....	11	134	5.9	550,616	3.8	287,481	6.3	\$500,000 and over.....	6	2,270	52.7	6,114,644	48.9	3,964,160	52.1
\$100,000 to \$500,000.....	9	681	29.9	2,275,258	15.7	1,200,720	26.4								
\$1,000,000 and over.....	4	1,412	62.0	11,508,826	79.4	2,983,323	65.2	ELYRIA.....	75	4,590	100.0	25,191,454	100.0	14,063,840	100.0
BUCYRUS.....	43	1,861	100.0	8,435,740	100.0	4,034,817	100.0	Less than \$5,000.....	14	8	0.2	35,385	0.1	21,090	0.2
Less than \$5,000.....	7	3	0.2	14,820	0.2	7,123	0.2	\$5,000 to \$20,000.....	15	30	0.7	170,355	0.7	98,534	0.7
\$5,000 to \$20,000.....	14	26	1.4	124,930	1.5	68,988	1.7	\$20,000 to \$100,000.....	21	122	2.7	802,028	3.2	404,397	2.7
\$20,000 to \$100,000.....	7	55	3.0	343,173	4.1	162,554	3.8	\$100,000 to \$500,000.....	13	800	17.4	3,414,937	13.6	1,409,128	9.4
\$100,000 to \$500,000.....	10	208	10.0	2,095,660	24.8	940,706	23.3	\$500,000 to \$1,000,000.....	5	895	19.5	4,000,274	15.9	2,296,997	15.4
\$500,000 and over.....	5	1,479	79.5	6,857,113	89.4	2,865,441	71.0	\$1,000,000 and over.....	7	2,735	59.8	16,788,475	66.6	10,730,385	71.7
CAMBRIDGE.....	32	1,782	100.0	11,226,809	100.0	5,373,042	100.0	FINDLAY.....	75	1,715	100.0	7,924,282	100.0	3,096,521	100.0
Less than \$5,000.....	4	7	0.4	15,332	0.1	8,295	0.2	Less than \$5,000.....	15	7	0.4	37,531	0.5	21,840	0.7
\$5,000 to \$20,000.....	10	29	1.6	127,923	1.1	45,016	0.8	\$5,000 to \$20,000.....	25	78	4.5	306,807	3.9	150,388	4.9
\$20,000 to \$100,000.....	11	95	5.3	543,656	4.8	189,209	3.5	\$20,000 to \$100,000.....	20	174	10.1	841,870	10.6	360,034	11.8
\$100,000 and over.....	7	1,651	92.6	10,539,898	93.9	5,131,122	95.5	\$100,000 to \$500,000.....	12	863	50.3	3,124,354	39.4	1,322,592	42.7
								\$1,000,000 and over.....	3	593	34.6	3,613,630	45.6	1,234,701	39.9
CANTON.....	287	20,336	100.0	124,292,024	100.0	59,215,399	100.0	FREMONT.....	53	2,999	100.0	12,915,095	100.0	7,477,431	100.0
Less than \$5,000.....	48	20	0.1	117,067	0.1	66,052	0.1	Less than \$5,000.....	7	0	0.2	16,602	0.1	10,110	0.1
\$5,000 to \$20,000.....	62	189	0.9	692,580	0.6	392,653	0.7	\$5,000 to \$20,000.....	12	33	1.1	138,430	1.1	86,160	1.2
\$20,000 to \$100,000.....	83	906	4.5	3,827,217	3.1	2,199,494	3.7	\$20,000 to \$100,000.....	10	239	8.0	986,575	7.6	548,516	7.3
\$100,000 to \$500,000.....	57	2,214	10.9	13,840,840	11.1	6,754,362	11.4	\$100,000 to \$500,000.....	9	438	14.6	2,020,330	15.7	1,058,005	14.2
\$500,000 to \$1,000,000.....	15	2,019	9.9	10,010,824	8.1	6,000,414	10.1	\$500,000 to \$1,000,000.....	3	462	15.4	2,180,428	16.9	954,530	12.8
\$1,000,000 and over.....	22	14,988	73.7	95,798,887	77.1	43,892,514	74.0	\$1,000,000 and over.....	3	1,821	60.7	7,557,730	58.5	4,810,504	64.5
CHILLICOTHE.....	35	1,638	100.0	7,667,182	100.0	3,320,963	100.0	HAMILTON.....	130	8,553	100.0	47,021,031	100.0	24,386,589	100.0
Less than \$20,000.....	12	30	1.8	132,394	1.7	65,085	2.0	Less than \$5,000.....	28	12	0.1	53,463	0.1	29,028	0.1
\$5,000 to \$20,000.....	17	203	12.4	814,163	10.6	383,712	11.5	\$5,000 to \$20,000.....	34	104	1.2	351,569	0.7	191,543	0.8
\$100,000 to \$500,000.....	3	363	22.2	1,486,305	19.4	559,227	16.8	\$20,000 to \$100,000.....	28	262	3.1	1,314,403	2.8	575,276	2.4
\$1,000,000 and over.....	3	1,042	63.6	5,234,320	68.3	2,318,939	69.7	\$100,000 to \$500,000.....	31	2,027	23.7	8,564,204	18.2	4,363,592	17.9
								\$1,000,000 and over.....	9	6,148	71.9	36,740,392	78.1	10,224,150	78.8
CINCINNATI.....	2,239	69,680	100.0	500,040,990	100.0	208,780,553	100.0	IRONTON.....	52	1,971	100.0	14,071,850	100.0	5,235,008	100.0
Less than \$5,000.....	389	266	0.4	964,724	0.2	654,872	0.3	Less than \$20,000.....	13	26	1.3	124,255	0.9	70,498	1.3
\$5,000 to \$20,000.....	573	1,778	2.6	6,253,300	1.3	3,789,309	1.9	\$20,000 to \$100,000.....	18	359	18.2	875,275	6.2	475,606	9.1
\$20,000 to \$100,000.....	589	6,455	9.3	27,930,094	5.6	14,914,401	7.3	\$100,000 to \$500,000.....	12	359	18.2	2,748,050	19.5	1,026,255	19.6
\$100,000 to \$500,000.....	469	19,345	27.8	106,950,783	21.4	51,800,647	25.4	\$500,000 and over.....	9	1,227	62.3	10,324,270	73.4	3,662,559	70.0
\$500,000 to \$1,000,000.....	113	12,050	17.3	77,034,741	15.4	34,640,039	17.0								
\$1,000,000 and over.....	106	20,786	42.7	280,907,354	56.2	97,951,285	48.1								
CLEVELAND.....	2,940	157,730	100.0	1,091,577,490	100.0	478,128,046	100.0	KENMORE.....	7	135	100.0	844,303	100.0	239,922	100.0
Less than \$5,000.....	457	197	0.1	1,204,212	0.1	771,459	0.2	Less than \$100,000.....	4	11	8.1	51,121	6.1	31	

TABLE 13.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919—Continued.

CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
LIMA.....	108	4,901	100.0	\$23,038,704	100.0	\$10,895,473	100.0	Piqua.....	68	3,293	100.0	\$10,021,845	100.0	\$8,960,318	100.0
Less than \$5,000.....	15	14	0.3	38,550	0.2	22,070	0.2	Less than \$5,000.....	12	7	0.2	22,547	0.1	11,093	0.1
\$5,000 to \$20,000.....	34	122	2.5	412,909	1.7	229,742	2.1	\$5,000 to \$20,000.....	12	20	0.6	128,001	0.0	70,987	0.8
\$20,000 to \$100,000.....	35	500	10.2	1,891,400	8.0	980,003	9.0	\$20,000 to \$100,000.....	17	155	4.6	801,140	4.0	351,503	3.9
\$100,000 to \$500,000 ¹	17	877	17.9	4,200,057	17.8	1,881,304	17.3	\$100,000 to \$500,000.....	13	551	16.7	3,185,055	10.0	1,009,351	17.9
\$1,000,000 and over.....	7	3,388	69.1	17,095,842	72.3	7,782,284	71.4	\$500,000 to \$1,000,000.....	4	671	17.3	3,030,003	15.2	1,770,929	19.8
LORAIN.....	55	11,077	100.0	110,908,610	100.0	50,013,851	100.0	\$1,000,000 and over.....	8	1,982	60.2	12,747,000	64.0	5,151,965	57.5
Less than \$5,000.....	0	.....	.....	14,000	(*)	5,330	(*)	PORTSMOUTH.....	60	5,914	100.0	30,045,736	100.0	16,407,980	100.0
\$5,000 to \$20,000.....	12	22	0.2	140,448	0.1	71,330	0.1	Less than \$5,000.....	8	.....	.....	22,621	0.1	12,028	0.4
\$20,000 to \$100,000.....	21	194	1.7	993,308	0.8	448,096	0.9	\$5,000 to \$20,000.....	10	46	0.8	205,586	0.6	107,125	0.1
\$100,000 to \$500,000 ¹	8	200	1.8	1,734,744	1.5	800,745	1.7	\$20,000 to \$100,000.....	19	203	3.4	975,483	2.7	423,022	2.7
\$1,000,000 and over.....	8	11,255	96.4	114,025,150	97.5	49,528,350	97.3	\$100,000 to \$500,000 ¹	12	710	12.1	3,171,512	8.0	1,537,897	9.6
MANSFIELD.....	132	4,711	100.0	31,877,551	100.0	14,518,413	100.0	\$1,000,000 and over.....	5	4,650	83.7	32,270,734	88.1	14,380,708	87.3
Less than \$5,000.....	25	21	0.4	62,323	0.2	38,248	0.3	SALEM.....	30	2,237	100.0	11,060,550	100.0	6,848,940	100.0
\$5,000 to \$20,000.....	37	95	2.0	408,170	1.3	230,052	1.6	Less than \$5,000.....	4	3	0.1	7,030	0.1	4,582	0.1
\$20,000 to \$100,000.....	34	290	6.3	1,023,020	5.1	551,046	4.5	\$5,000 to \$20,000.....	9	24	1.1	110,006	1.1	72,309	1.1
\$100,000 to \$500,000.....	23	1,079	22.9	5,070,152	17.8	2,048,127	18.2	\$20,000 to \$100,000.....	11	121	5.4	593,451	5.4	305,790	5.3
\$500,000 to \$1,000,000.....	5	043	13.6	2,752,788	8.0	1,499,033	10.3	\$100,000 to \$500,000.....	12	2,089	93.4	10,344,103	93.4	6,400,208	93.5
\$1,000,000 and over.....	7	2,577	54.7	21,301,030	67.0	9,444,407	65.1	\$500,000 and over.....	23	1,904	85.2	12,406,713	84.5	8,401,590	67.6
MARIETTA.....	59	1,285	100.0	5,917,409	100.0	3,065,611	100.0	SANDUSKY.....	115	3,447	100.0	10,248,571	100.0	8,588,926	100.0
Less than \$5,000.....	12	10	1.2	37,310	0.6	22,212	0.7	Less than \$5,000.....	22	10	0.3	65,782	0.3	43,278	0.5
\$5,000 to \$20,000.....	13	26	2.0	114,973	1.9	60,403	2.0	\$5,000 to \$20,000.....	27	75	2.2	303,041	1.0	178,054	2.1
\$20,000 to \$100,000.....	25	237	18.4	1,090,915	18.5	505,140	16.5	\$20,000 to \$100,000.....	32	453	13.1	1,701,580	8.8	540,852	6.3
\$100,000 and over.....	9	1,000	78.3	4,608,265	78.9	2,477,856	80.8	\$100,000 to \$500,000.....	23	1,005	29.2	4,772,455	24.8	2,304,552	27.0
MARION.....	70	4,125	100.0	20,712,973	100.0	10,339,043	100.0	\$500,000 and over.....	11	1,904	55.2	12,406,713	84.5	8,401,590	67.6
Less than \$5,000.....	12	7	0.2	26,831	0.1	18,185	0.2	SPRINGFIELD.....	200	12,204	100.0	67,750,001	100.0	33,868,702	100.0
\$5,000 to \$20,000.....	13	29	0.7	140,009	0.7	70,850	0.7	Less than \$5,000.....	31	10	0.2	78,003	0.1	49,457	0.1
\$20,000 to \$100,000.....	20	338	8.2	1,235,529	6.0	698,754	5.5	\$5,000 to \$20,000.....	50	169	1.4	610,022	0.9	390,090	1.2
\$100,000 to \$500,000.....	11	025	15.2	2,454,333	11.8	1,180,091	11.5	\$20,000 to \$100,000.....	54	022	5.1	2,758,494	4.1	1,017,480	4.8
\$500,000 and over.....	8	3,123	75.7	16,855,071	81.4	8,480,157	82.1	\$100,000 to \$500,000.....	30	2,017	16.4	8,753,240	12.9	4,890,808	14.4
MARTINS FERRY.....	40	1,517	100.0	15,402,280	100.0	5,130,213	100.0	\$500,000 to \$1,000,000.....	15	1,993	18.3	10,498,403	15.5	5,042,628	16.7
Less than \$5,000.....	16	8	0.5	32,183	0.2	19,101	0.4	\$1,000,000 and over.....	14	7,444	60.7	45,054,879	66.6	21,277,359	62.8
\$5,000 to \$20,000.....	10	23	1.5	113,826	0.7	51,063	1.0	STEUBENVILLE.....	57	3,855	100.0	30,093,344	100.0	14,527,594	100.0
\$20,000 to \$100,000.....	4	59	3.9	239,738	1.6	127,191	2.5	Less than \$5,000.....	3	3	0.1	7,500	(*)	4,684	(*)
\$100,000 to \$500,000.....	6	204	17.4	1,241,476	8.1	597,016	11.6	\$5,000 to \$20,000.....	19	46	1.2	222,309	0.7	96,300	0.7
\$500,000 and over.....	4	1,168	76.7	13,775,067	89.4	4,385,842	84.5	\$20,000 to \$100,000.....	20	140	3.8	790,812	2.6	385,993	2.7
MASSILON.....	80	2,153	100.0	13,984,871	100.0	6,011,044	100.0	\$100,000 and over.....	15	3,001	95.0	20,882,723	96.7	14,040,017	96.6
Less than \$5,000.....	18	12	0.6	49,295	0.4	31,421	0.5	TIFFIN.....	75	2,213	100.0	10,510,360	100.0	5,765,895	100.0
\$5,000 to \$20,000.....	22	42	2.0	227,041	1.6	138,125	2.0	Less than \$5,000.....	17	10	0.5	40,254	0.4	20,977	0.5
\$20,000 to \$100,000.....	17	100	4.6	607,730	4.3	288,510	4.2	\$5,000 to \$20,000.....	20	65	2.9	210,338	2.1	129,037	2.8
\$100,000 to \$500,000.....	19	860	39.9	5,137,036	36.7	2,704,554	39.1	\$20,000 to \$100,000.....	23	192	8.7	1,183,842	11.3	492,834	8.5
\$500,000 and over.....	4	1,139	52.9	7,962,570	56.9	3,743,434	54.2	\$100,000 to \$500,000.....	10	504	22.8	2,760,971	26.3	1,163,537	20.5
MIDDLETOWN.....	56	6,442	100.0	62,838,289	100.0	27,151,077	100.0	\$500,000 and over.....	5	1,442	65.2	6,290,004	59.9	3,062,590	58.2
Less than \$5,000.....	8	2	(*)	9,503	(*)	4,552	(*)	TOLEDO.....	671	42,000	100.0	203,520,900	100.0	120,233,281	100.0
\$5,000 to \$20,000.....	9	30	0.5	109,068	0.2	51,438	0.2	Less than \$5,000.....	97	43	0.1	245,628	0.1	154,005	0.1
\$20,000 to \$100,000.....	15	149	2.3	808,100	1.4	453,349	1.7	\$5,000 to \$20,000.....	161	393	0.9	1,811,603	0.9	1,084,002	0.9
\$100,000 to \$500,000.....	10	270	4.2	1,895,000	3.0	780,585	2.7	\$20,000 to \$100,000.....	199	2,024	4.8	9,680,995	3.8	5,148,494	4.3
\$500,000 to \$1,000,000.....	4	318	4.9	2,750,233	4.4	1,070,480	3.0	\$100,000 to \$500,000.....	131	6,373	15.1	20,680,136	10.1	14,802,923	12.3
\$1,000,000 and over.....	10	5,075	88.1	57,199,059	91.0	24,840,097	91.5	\$500,000 to \$1,000,000.....	30	3,162	7.5	20,846,734	7.1	8,812,183	7.3
NEW PHILADELPHIA.....	43	1,247	100.0	8,445,058	100.0	3,503,985	100.0	\$1,000,000 and over.....	53	30,095	71.5	231,355,844	78.8	90,231,674	75.0
Less than \$5,000.....	13	15	1.2	41,181	0.5	25,505	0.7	WARREN.....	96	2,433	100.0	19,747,395	100.0	7,816,812	100.0
\$5,000 to \$20,000.....	15	44	3.5	155,402	1.8	94,558	2.6	Less than \$5,000.....	22	5	0.2	40,710	0.2	24,191	0.3
\$20,000 to \$100,000.....	10	63	5.1	386,858	4.6	237,112	6.0	\$5,000 to \$20,000.....	27	47	1.9	287,330	1.5	143,500	1.8
\$100,000 and over.....	5	1,125	90.2	7,802,160	93.1	3,236,750	90.1	\$20,000 to \$100,000.....	25	189	7.8	1,167,675	5.9	616,991	7.9
NEWARK.....	79	4,570	100.0	10,503,149	100.0	8,291,523	100.0	\$100,000 to \$500,000.....	13	494	20.3	2,494,776	12.0	1,266,804	16.1
Less than \$5,000.....	12	10	0.2	30,500	0.2	18,998	0.2	\$500,000 to \$1,000,000.....	4	498	20.5	2,912,390	14.7	1,417,825	18.1
\$5,000 to \$20,000.....	20	58	1.3	223,582	1.3	123,587	1.5	\$1,000,000 and over.....	5	1,200	49.3	12,844,514	65.0	4,357,411	55.7
\$20,000 to \$100,000.....	24	295	6.5	1,234,421	7.5	593,044	7.2	YOUNGSTOWN.....	230	10,414	100.0	241,468,370	100.0	73,359,653	100.0
\$100,000 to \$500,000.....	10	674	14.7	3,001,039	18.1	1,389,239	16.8	Less than \$5,000.....	53	26	0.1	141,871	0.1	85,093	0.1
\$500,000 to \$1,000,000.....	3	221	4.8	2,289,274	13.8	517,835	6.2	\$5,000 to \$20,000.....	60	150	0.8	665,169	0.3	390,875	0.5
\$1,000,000 and over.....	4	3,312	72.5	9,784,933	59.1	5,048,220	68.1	\$20,000 to \$100,000.....	61	390	2.0	2,497,601	1.0	1,222,895	1.6
NILES.....	40	2,945	100.0	18,358,773	100.0	8,282,899	100.0	\$100,000 to \$500,000.....	36	1,187	6.1	9,349,882	3.9	4,599,351	5.8
Less than \$5,000.....	4	2	0.1	9,800	0.1	5,712	0.1	\$500,000 to \$1,000,000.....	9	1,160	6.0	6,285,587	2.6	2,020,964	3.7
\$5,000 to \$20,000.....	12	31	1.1	129,846	0.7	77,138	0.9	\$1,000,000 and over.....	20	10,501	85.0	222,578,290	92.2	69,160,875	88.3
\$20,000 to \$100,000.....	7	50	1.9	244,506	1.3	104,841	1.3	ZANESVILLE.....	97	3,014	100.0	13,437,777	100.0	6,010,488	100.0
\$100,000 to \$500,000.....	8	390	12.2	2,244,431	12.2	970,738	11.7	Less than \$5,000.....	20	15	0.5	40,701	0.4	28,843	0.5
\$500,000 to \$1,000,000.....	5	787	26.7	3,041,898	21.5	1,845,838	22.3	\$5,000 to \$20,000.....	27	93	3.1	274,487	2.0	162,748	2.7
\$1,000,000 and over.....	4	1,709	58.0	11,788,292	64.2	5,278,634	63.7	\$20,000 to \$1							

TABLE 14.—CHARACTER OF OWNERSHIP, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Census year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
		Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.	Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.			Total.	Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.
						Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.	Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.		Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.	Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.				
All industries.....	1919	8,490	6,766	2,869	730,733	28,421	678,849	23,403	3.9	92.9	3.2	\$5,100,308,728	\$157,000,289	\$4,700,633,085	\$152,015,354	3.1	93.9	3.0				
	1914	6,959	5,775	2,624	510,435	32,628	449,244	28,503	6.4	88.0	5.6	1,782,808,279	89,037,502	1,601,796,776	91,974,001	5.0	89.8	5.2				
	1909	6,978	5,123	3,037	446,934	34,346	378,473	34,116	7.7	84.7	7.6	1,437,935,817	88,075,465	1,249,778,444	100,081,908	6.1	86.9	7.0				
Automobile bodies and parts.	1919	71	126	40	10,670	399	15,881	390	2.4	95.3	2.3	92,390,646	2,777,329	87,405,711	2,207,606	3.0	94.0	2.4				
	1914	15	41	7	4,128	142	3,943	43	3.4	95.5	1.0	9,556,097	637,985	8,801,079	117,033	6.7	92.1	1.2				
Brass, bronze, and copper products.	1919	25	54	13	4,264	211	3,944	109	4.9	92.5	2.5	27,801,700	1,353,885	25,927,394	520,481	4.9	93.3	1.9				
	1914	28	42	14	2,277	107	1,922	168	8.7	84.4	6.9	7,843,092	532,955	6,804,127	416,010	6.8	87.9	5.3				
Bread and other bakery products.	1919	1,230	150	241	9,091	3,198	5,010	883	35.2	55.1	9.7	78,819,001	26,949,498	43,871,455	7,998,048	34.2	55.7	10.1				
	1914	1,318	81	235	7,065	3,240	3,566	853	42.3	46.5	11.1	30,560,881	12,755,385	14,279,550	3,525,946	41.7	46.7	11.5				
Brick and tile, terra-cotta, and fire-clay products.	1919	64	215	62	12,060	492	10,961	607	4.1	90.9	5.0	32,172,576	672,210	30,149,117	1,351,240	2.1	93.7	4.2				
	1914	124	223	103	16,238	776	14,527	935	4.8	89.4	5.8	22,875,689	1,029,397	20,998,577	1,347,715	4.4	89.8	5.8				
Butter.....	1919	29	80	32	1,362	154	1,104	104	11.3	81.1	7.6	41,061,093	2,334,594	36,306,409	2,300,990	5.7	88.6	5.7				
	1914	33	71	39	1,099	104	874	121	9.5	79.5	11.0	14,938,608	1,065,531	12,544,402	1,418,675	87.1	3.4	9.5				
Cars and general shop construction and repairs by steam-railroad companies.	1919	.....	117	.....	35,245	.....	35,245	.....	100.0	.....	.....	96,483,946	.....	96,483,946	.....	100.0	.....	.....		
	1914	.....	88	.....	21,639	.....	21,639	.....	100.0	.....	.....	33,280,205	.....	33,280,205	.....	100.0	.....	.....		
Cars, steam-railroad, not including operations of railroad companies.	1919	.....	8	.....	2,177	.....	2,177	.....	100.0	.....	.....	28,145,542	.....	28,145,542	.....	100.0	.....	.....		
	1914	.....	8	.....	2,885	.....	2,885	.....	100.0	.....	.....	11,795,726	.....	11,795,726	.....	100.0	.....	.....		
Clothing, men's.....	1919	114	71	61	9,939	1,524	6,649	1,766	15.3	66.9	17.8	58,160,320	4,501,512	41,392,307	12,275,501	7.7	71.2	21.1				
	1914	121	45	58	8,091	1,874	3,769	3,048	21.6	43.4	35.1	24,033,468	2,804,335	11,236,060	10,022,173	11.7	46.7	41.6				
Clothing, women's.....	1919	53	88	34	8,258	1,015	6,485	758	12.3	78.5	9.2	43,703,704	4,507,299	38,860,637	5,320,768	9.3	79.8	10.9				
	1914	67	66	37	9,775	692	7,293	1,790	7.1	74.6	18.3	22,881,753	1,330,251	16,853,882	4,691,620	5.8	73.7	20.5				
Coke, not including gas-house coke.	1919	.....	13	.....	3,407	.....	3,407	.....	100.0	.....	.....	46,514,213	.....	46,514,213	.....	100.0	.....	.....		
	1914	.....	5	.....	489	.....	489	.....	100.0	.....	.....	2,156,814	.....	2,156,814	.....	100.0	.....	.....		
Confectionery and ice cream. ¹	1919	148	118	114	5,451	351	4,495	605	6.4	82.5	11.1	39,185,084	2,057,140	32,117,440	4,410,504	6.8	82.0	11.3				
	1914	134	90	68	3,965	418	3,036	511	10.5	70.6	12.9	14,841,668	1,252,838	11,625,147	1,463,683	8.7	81.1	10.2				
Electrical machinery, apparatus, and supplies.	1919	26	151	12	26,672	179	26,329	164	0.7	98.7	0.6	150,924,143	828,705	155,381,835	713,603	0.5	99.0	0.5				
	1914	20	87	12	12,695	88	12,482	125	0.7	98.3	1.0	30,120,978	257,038	35,520,772	343,168	0.7	98.3	1.0				
Flour-mill and gristmill products.	1919	220	143	214	2,122	378	1,338	406	17.8	63.1	19.1	89,396,619	10,204,759	66,500,505	12,541,355	11.5	74.6	14.0				
	1914	263	137	249	2,303	478	1,294	591	20.2	54.8	25.0	45,171,200	6,438,927	28,824,681	9,007,592	13.4	63.8	21.9				
Food preparations, not elsewhere specified.	1919	40	39	19	1,857	51	1,751	55	2.7	94.3	3.0	40,340,447	350,151	45,010,734	373,562	0.8	98.4	0.8				
	1914	30	34	12	1,523	82	1,396	45	5.4	91.7	3.0	27,340,187	313,748	26,915,712	110,727	1.1	98.4	0.4				
Foundry and machine-shop products. ²	1919	269	741	152	87,803	1,965	83,004	2,834	2.2	94.5	3.2	425,497,682	7,001,512	403,900,063	13,936,117	1.8	94.9	3.3				
	1914	224	619	149	51,553	1,355	48,244	1,954	2.6	93.6	3.8	212,810,081	3,100,976	214,803,880	4,709,839	2.5	93.6	3.9				
Furniture.....	1919	33	104	25	8,346	404	7,680	312	4.8	91.4	3.7	35,224,813	1,440,422	32,363,275	1,420,610	4.1	91.9	4.0				
	1914	61	110	38	7,750	777	6,434	539	10.0	83.0	7.0	10,411,298	1,358,558	13,960,248	1,092,492	8.3	85.1	6.7				
Iron and steel, blast furnaces.	1919	.....	42	.....	9,793	.....	9,793	.....	100.0	.....	.....	170,233,435	.....	170,233,435	.....	100.0	.....	.....		
	1914	.....	33	.....	5,780	.....	5,780	.....	100.0	.....	.....	72,009,368	.....	72,009,368	.....	100.0	.....	.....		
Leather, tanned, curried, and finished.	1919	2	17	5	1,565	.....	1,488	* 77	.....	95.1	4.9	26,008,070	.....	24,052,018	* 955,152	.....	96.2	3.8				
	1914	4	19	5	1,605	.....	1,504	* 101	.....	93.7	6.3	11,627,910	.....	10,840,933	* 786,983	.....	93.2	6.8				
Liquors, malt.....	1919	4	67	2	3,327	445	3,282	.....	1.4	98.6	.....	25,161,227	4 182,141	24,979,086	.....	0.7	99.3	.....			
	1914	7	83	11	5,340	49	5,200	91	0.9	97.4	1.7	31,990,274	219,205	31,420,717	341,202	0.7	98.2	1.1				
Lumber, planing-mill products, not including planing mills connected with sawmills.	1919	102	199	77	4,495	609	3,443	443	13.5	76.6	9.9	32,428,847	3,988,051	25,796,234	2,644,562	12.3	79.6	8.2				
	1914	126	188	86	5,516	620	4,190	706	11.2	76.0	12.8	18,892,060	2,034,656	13,811,644	3,045,700	10.8	73.1	16.1				
Paints.....	1919	7	51	3	2,197	.....	2,163	* 34	.....	98.5	1.5	36,848,364	.....	36,271,410	* 576,954	.....	98.4	1.6				
	1914	14	48	3	1,697	.....	1,654	* 43	.....	97.5	2.5	14,824,073	.....	14,491,592	* 332,481	.....	97.8	2.2				
Petroleum, refining.....	1919	.....	11	.....	2,431	.....	2,431	.....	100.0	.....	.....	43,282,801	.....	43,282,801	.....	100.0	.....	.....		
	1914	.....	7	.....	1,519	.....	1,519	.....	100.0	.....	.....	11,169,189	.....	11,169,189	.....	100.0	.....	.....		
Pottery.....	1919	8	79	8	11,339	4 683	10,656	.....	6.0	94.0	.....	28,075,361	4 1,480,916	27,188,445	.....	5.2	94.8	.....			
	1914	11	70	12	11,096	455	10,466	175	4.1	94.3	1.0	15,291,685	539,581	14,530,252	221,852	3.5	95.0	1.5				
Printing and publishing, book and job.	1919	462	252	157	8,505	1,306	6,213	980	15.4	73.1	11.0	39,201,684	5,237,135	29,743,181	4,221,368	13.4	75.9	10.8				
	1914	429	214	129	7,078	1,302	5,666	920	17.4	71.0	11.5	19,015,250	3,093,466	14,775,210	2,040,574	15.5	74.2	10.3				
Printing and publishing, newspapers and periodicals.	1919	330	280	124	7,627	850	6,282	405	11.1	82.4	6.5	58,597,435	4,823,328	50,358,137	3,385,970	8.2	86.0	5.8				
	1914	420	299	182	7,274	1,240	5,393	641	17.0	74.1	8.8	28,028,290	3,853,296	24,098,989	2,430,000	13.8	77.6	8.7				
Rubber tires, tubes, and rubber goods, not elsewhere specified.	1919	5	86	5	63,637	.....	63,637	* 100	.....	99.8	0.2	551,118,488	.....	550,440,055	* 671,833	.....	99.9	0.1				
	1914	2	48	4	21,705	.....	21,659	* 46	.....	99.8	0.2	108,658,605	.....	109,527,183	* 131,422	.....	99.9	0.1				
Shipbuilding, steel.....	1919	.....	9	.....	11,192	.....	11,192	.....	100.0	.....	.....	56,481,960	.....	56,481,960	.....	100.0	.....	.....		
	1914	.....	5	.....	2,623	.....	2,623	.....	100.0	.....	.....	4,291,645	.....	4,291,645	.....	100.0	.....	.....		
Slaughtering and meat packing.	1919	54	54	33																		

TABLE 14.—CHARACTER OF OWNERSHIP, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914—Continued.

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.						VALUE OF PRODUCTS.							
		Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.		
						Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Indi- vid- uals.	Cor- pora- tions.	All oth- ers.		Indi- vid- uals.	Corpora- tions.	All others.	Indi- vid- uals.	Corpora- tions.	All oth- ers.
Total for cities ¹	1919	3,960	4,891	1,881	577,271	20,644	539,102	17,525	3.6	93.4	3.0	\$4,059,713,323	\$117,252,283	\$3,890,203,897	\$112,257,143	2.9	94.3	2.8
	1914	4,000	3,972	1,542	385,608	22,048	341,293	21,307	6.0	88.5	5.5	1,372,110,101	61,653,709	1,244,169,806	66,280,586	4.5	90.7	4.8
AKRON.....	1919	101	162	41	65,054	394	64,443	217	0.6	99.1	0.3	558,902,067	2,292,393	554,909,010	1,760,964	0.4	99.3	0.3
	1914	115	144	40	24,680	424	24,141	115	1.7	97.8	0.5	122,201,000	1,240,626	120,416,724	1,025,250	1.0	98.4	0.5
ALLIANCE.....	1919	34	23	17	5,117	71	4,877	169	1.4	95.3	3.3	32,871,087	642,330	31,162,901	1,065,768	2.0	94.8	8.2
	1914	24	19	9	2,333	53	2,220	60	2.3	95.2	2.5	7,174,703	180,478	6,714,898	270,390	2.6	93.6	3.8
ASHTABULA.....	1919	32	25	5	4,172	101	3,977	4	4.5	95.3	0.1	28,098,509	826,847	22,236,028	35,634	3.0	96.3	0.2
	1914	25	26	6	1,868	133	1,093	42	7.1	90.6	2.2	5,020,961	481,578	4,440,431	98,982	9.0	90.3	2.0
BARBERTON.....	1919	14	16	2	4,762	44	4,718	.....	0.9	99.1	.....	27,713,229	382,495	27,330,731	.....	1.4	98.6	.....
	1914	17	10	7	3,118	50	3,050	18	1.0	97.8	0.6	8,843,422	188,073	8,539,623	115,726	2.1	96.6	1.3
BELLAIRE.....	1919	16	19	10	2,277	25	2,197	55	1.1	96.5	2.4	14,502,401	142,719	13,967,311	392,371	1.0	96.3	2.7
	1914	21	13	6	2,003	303	2,281	55	11.0	90.6	0.7	12,170,206	401,225	11,608,030	160,951	3.3	95.4	1.3
BUCYRUS.....	1919	20	16	7	1,861	48	1,769	44	2.6	95.1	2.4	8,435,746	367,176	7,555,168	483,402	4.7	89.0	5.7
CAMBRIDGE.....	1919	10	17	5	1,782	51	1,714	17	2.9	96.2	1.0	11,226,809	302,952	10,855,458	68,399	2.7	96.7	0.6
	1914	12	18	9	1,455	30	1,394	25	2.5	95.8	1.7	3,923,786	107,104	3,609,907	146,775	2.7	93.5	3.7
CANTON.....	1919	103	148	36	20,336	408	19,694	174	2.3	96.8	0.9	124,202,024	2,680,600	120,623,011	980,223	2.2	97.0	0.8
	1914	107	140	29	12,255	510	11,545	200	4.2	94.2	1.0	43,718,440	1,141,767	42,005,773	565,016	2.6	90.1	1.3
CHILLICOTHE.....	1919	10	14	11	1,038	47	1,519	72	2.0	92.7	4.4	7,667,182	273,363	6,975,560	418,206	3.6	91.0	5.5
	1914	21	18	7	1,557	90	1,315	152	5.7	84.5	9.8	4,083,486	400,470	3,369,200	274,316	10.0	83.2	6.7
CINCINNATI.....	1919	912	882	445	69,680	5,723	37,155	6,802	8.2	82.0	9.8	500,040,096	32,376,332	422,405,952	45,258,712	6.5	84.5	9.1
	1914	935	786	414	50,861	6,002	46,079	7,280	11.5	76.3	12.2	210,860,386	20,172,013	168,157,011	22,581,362	9.0	79.7	10.7
CLEVELAND.....	1919	1,091	1,461	394	157,730	5,196	148,764	3,770	3.3	94.3	2.4	1,091,577,490	29,576,933	1,032,038,042	29,362,515	2.7	94.6	2.7
	1914	1,005	1,032	308	100,317	6,421	91,218	5,678	6.2	88.3	5.5	352,418,052	14,847,379	318,827,846	13,742,830	4.2	90.6	5.3
COLUMBUS.....	1919	272	321	97	26,751	1,439	24,234	1,078	5.4	90.6	4.0	184,021,849	8,137,653	170,676,035	5,208,158	4.4	92.7	2.8
	1914	266	268	109	17,236	1,232	15,108	890	7.1	87.7	5.2	57,008,084	3,781,953	50,521,905	3,304,220	6.6	87.7	5.7
COSHOCOTON.....	1919	10	27	8	1,959	12	1,852	95	0.6	94.5	4.8	7,084,702	51,743	6,987,344	645,675	0.7	90.9	8.4
	1914	21	24	2	1,614	54	1,529	31	3.3	94.7	1.9	3,476,686	101,670	3,220,540	55,576	5.5	92.9	1.0
CUYAHOGA FALLS.....	1919	11	11	8	784	64	680	31	8.2	87.9	4.0	5,820,347	400,182	5,260,659	162,506	7.0	90.2	2.8
DAYTON.....	1919	186	204	91	31,131	907	28,900	1,264	3.1	92.8	4.1	174,990,607	4,502,728	164,346,727	6,081,152	2.6	93.9	3.5
	1914	214	210	90	24,061	1,219	21,542	1,800	5.1	89.5	5.4	71,071,374	3,440,523	64,466,376	2,682,475	4.8	91.4	3.8
EAST CLEVELAND.....	1919	7	7	2	88	38	40	10	43.2	45.5	11.4	420,505	102,082	211,403	47,020	38.5	50.3	11.2
	1914	3	2	2	120	.....	120	.....	100.0	.....	.....	205,780	.....	205,780	.....	.....	.....	.....
EAST LIVERPOOL.....	1919	20	36	11	4,311	99	4,090	122	2.3	94.9	2.8	12,501,181	1,110,738	10,920,511	400,932	8.9	87.4	3.7
	1914	30	36	14	4,830	100	4,555	166	2.3	94.3	3.4	7,002,949	336,290	6,456,349	300,258	4.7	91.0	4.2
ELYRIA.....	1919	22	44	9	4,590	114	4,456	20	2.5	97.1	0.4	25,101,454	820,787	24,248,261	122,406	3.3	96.3	0.5
	1914	23	34	6	2,735	140	2,580	9	5.1	94.6	0.3	8,791,734	550,191	8,108,421	67,122	6.3	92.9	0.8
FINDLAY.....	1919	27	30	18	1,715	58	1,553	104	3.4	90.6	6.1	7,924,282	437,792	7,037,085	448,805	5.5	88.8	5.7
	1914	25	37	16	1,737	74	1,557	100	4.3	89.0	6.1	4,662,778	235,748	4,060,630	360,394	5.1	87.2	7.7
FREMONT.....	1919	14	32	7	2,099	50	2,883	66	1.7	96.1	2.2	12,915,095	102,807	12,399,358	352,930	1.3	96.0	2.7
	1914	10	36	13	2,063	30	1,978	49	1.7	95.9	2.4	4,770,982	144,794	4,526,378	108,810	3.0	94.7	2.3
HAMILTON.....	1919	52	54	24	8,553	143	8,020	390	1.7	93.8	4.6	47,024,031	716,433	44,850,681	1,450,031	1.5	95.4	3.1
	1914	59	63	17	6,043	303	5,424	316	5.0	89.8	5.2	10,877,260	958,393	10,181,042	787,825	5.7	89.6	4.7
IRONTON.....	1919	9	31	12	1,071	79	1,035	257	4.0	83.0	13.0	14,071,850	251,935	12,895,963	923,052	1.8	91.6	6.6
	1914	14	31	14	1,420	94	1,143	183	6.6	80.5	12.9	4,060,185	143,964	4,307,442	214,789	3.1	92.3	4.6
KENMORE.....	1919	3	2	2	135	.....	135	.....	100.0	.....	.....	844,303	.....	844,303	.....	.....	.....	.....
LAKEWOOD.....	1919	20	11	2	1,821	56	1,765	.....	3.1	96.9	.....	7,962,803	341,776	7,261,027	.....	4.5	95.5	.....
	1914	14	7	1	1,774	434	1,840	.....	24.5	75.5	.....	3,606,498	594,773	3,011,714	.....	16.5	83.5	.....
LANCASTER.....	1919	15	22	0	2,024	135	1,848	41	0.7	91.3	2.0	11,478,883	486,156	10,629,009	903,718	4.2	92.6	3.2
	1914	23	19	11	1,583	87	1,430	60	5.5	90.7	3.8	4,602,615	251,656	3,894,283	456,076	5.5	84.6	9.9
LIMA.....	1919	36	48	24	4,901	154	4,432	315	3.1	90.4	6.4	23,638,764	742,848	21,817,237	1,079,179	3.1	92.3	4.6
	1914	41	42	14	4,876	120	4,619	137	2.5	94.7	2.8	11,598,568	506,718	10,826,368	265,494	4.4	93.3	2.3
LORAIN.....	1919	14	29	12	11,677	40	11,594	43	0.3	99.3	0.4	116,908,616	264,610	116,270,233	373,764	0.2	99.5	0.3
	1914	28	32	0	6,436	40	6,336	00	0.6	98.4	0.9	29,110,037	144,220	28,965,193	50,018	0.5	99.3	0.2
MANSFIELD.....	1919	58	48	20	4,711	244	4,323	144	5.2	91.8	3.1	31,877,551	1,495,843	29,393,908	987,800	4.7	92.2	3.1
	1914	46	37	20	3,398	208	2,862	328	6.1	84.2	9.7	10,281,968	455,594	9,857,109	969,326	4.4	80.1	9.4
MARIETTA.....	1919	23	23	13	1,285	117	1,124	44	9.1	87.5	3.4	5,917,469	469,596	5,243,924	203,949	7.0	88.6	3.4
	1914	24	33	14	1,401	90	1,153	158	6.4	82.3	11.3	4,128,618	204,425	3,645,653	278,540	5.0	88.3	6.7
MARION.....	1919	28	35	7	4,125	107	3,924	94	2.6	95.1	2.3	20,712,973	641,808	19,701,159	370,000	3.1	95.1	1.8
	1914	27	27	12	2,577	74	2,479	24	2.9	90.2	0.9	6,884,804	212,432	6,082,327	90,105	3.3	95.3	1.4
MARTINS FERRY.....	1919	24	13	3	1,517	64	1,445	8	4.2	95.3	0.5	15,402,280	382,437	14,986,777	33,066	2.5	97.3	0.2
MASSILLON.....	1919	27	33	20	2,153	39	2,023	91	1.8	94.0	4.2	13,984,871	273,772	13,245,830	465,269	2.0	94.7	3.3
	1914	37	30	3	1,708	177	1,580	11	10.0	89.4	0.6	5,293,124	374,073	4,882,357	36,094	7.1	92.2	0.7

¹ Excludes Cleveland Heights and East Youngstown, to avoid disclosure of individual operations.² Includes the group, "All other."³ Includes the groups, "Individuals" and "All other."

TABLE 14.—CHARACTER OF OWNERSHIP, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914—Continued.

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
		Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.						
						Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Indi- vid- uals.	Cor- pora- tions.	All oth- ers.		Indi- vid- uals.	Corpora- tions.	All others.	Indi- vid- uals.	Corpora- tions.	All oth- ers.				
MIDDLETOWN.....	1919	18	30	8	6,442	78	6,347	17	1.2	98.5	0.3	\$62,838,289	\$419,050	\$62,180,586	\$232,047	0.7	99.0	0.4				
	1914	24	29	10	4,003	87	3,883	33	2.2	97.0	0.8	21,787,151	213,240	21,497,753	76,158	1.0	98.7	0.3				
NEWARK.....	1919	30	34	15	4,570	250	4,261	59	5.5	93.2	1.3	16,563,149	1,266,076	13,982,829	1,314,244	7.6	84.4	7.9				
	1914	34	25	20	4,583	220	3,858	505	4.8	84.2	11.0	9,276,762	465,720	7,857,081	953,952	5.0	84.7	10.3				
NEW PHILADELPHIA.....	1919	25	14	4	1,247	95	1,145	7	7.6	91.8	0.6	8,445,038	448,767	7,927,927	68,904	5.3	93.0	0.8				
NILES.....	1919	7	26	7	2,045	27	2,809	19	0.9	98.4	0.6	18,358,773	130,455	18,111,348	116,970	0.7	98.7	0.0				
NORWOOD.....	1919	23	40	7	8,283	71	8,188	24	0.0	98.9	0.3	47,947,183	341,081	47,445,750	160,343	0.7	99.0	0.3				
	1914	23	30	5	5,808	75	5,091	42	1.3	98.0	0.7	16,724,360	180,051	16,456,088	87,621	1.1	98.4	0.5				
PIQUA.....	1919	28	33	5	3,293	259	3,016	18	7.9	91.0	0.5	19,021,345	1,643,497	18,125,110	152,738	8.2	91.0	0.8				
	1914	34	30	14	2,777	122	2,544	111	4.4	91.6	4.0	7,988,279	501,810	7,229,095	257,374	6.3	90.5	3.2				
PORTSMOUTH.....	1919	25	27	8	5,914	110	5,771	33	1.9	97.6	0.6	36,645,730	1,118,288	35,292,188	235,260	3.1	96.3	0.6				
	1914	31	33	12	3,597	77	3,468	52	2.1	96.4	1.4	7,982,145	411,158	7,119,008	151,379	5.4	92.7	2.0				
SALEM.....	1919	11	22	3	2,237	37	2,190	10	1.7	97.0	0.4	11,090,550	268,065	10,760,585	34,300	2.4	97.3	0.3				
SANDUSKY.....	1919	44	57	14	3,447	207	3,063	177	0.0	88.9	5.1	19,248,571	1,230,751	17,179,147	832,073	6.4	89.2	4.3				
	1914	41	53	13	2,727	157	2,415	155	5.8	88.6	5.7	8,284,865	504,681	7,273,361	506,823	0.1	87.8	0.1				
SPRINGFIELD.....	1919	75	96	35	12,264	722	11,101	381	5.9	91.0	3.1	67,750,001	4,143,163	61,105,295	2,510,543	6.1	90.2	3.7				
	1914	111	91	51	7,868	439	7,003	420	5.6	89.0	5.4	27,721,789	1,300,218	24,088,487	1,034,084	5.0	89.1	5.9				
STEUBENVILLE.....	1919	23	22	12	3,855	87	3,725	43	2.3	96.6	1.1	30,903,344	505,746	30,091,041	306,557	1.6	97.4	1.0				
	1914	23	22	15	4,506	78	4,375	53	1.7	97.1	1.2	16,958,987	220,060	16,510,323	228,001	1.3	97.4	1.3				
TIFFIN.....	1919	20	22	24	2,213	286	1,800	67	12.9	84.0	3.0	10,510,369	1,162,006	8,043,414	710,949	11.0	82.2	6.8				
	1914	33	22	21	2,177	317	1,757	103	14.6	80.7	4.7	4,995,880	932,100	3,821,406	242,374	18.7	70.5	4.8				
TOLEDO.....	1919	244	336	91	42,090	1,180	40,054	856	2.8	95.2	2.0	293,520,900	8,537,745	281,196,519	3,786,030	2.9	95.8	1.3				
	1914	200	303	120	27,076	1,041	24,632	1,403	3.8	91.0	5.2	115,040,426	3,240,273	107,234,068	4,569,085	2.8	93.2	4.0				
WARREN.....	1919	31	47	18	2,433	70	2,286	77	2.9	94.0	3.2	19,747,365	451,148	18,704,812	501,435	2.3	95.2	2.5				
	1914	33	39	10	2,892	86	2,097	70	3.0	94.2	2.8	10,399,737	208,895	9,904,379	220,493	2.0	95.8	2.2				
YOUNGSTOWN.....	1919	91	107	41	19,414	345	19,001	98	1.8	97.9	0.4	241,458,370	2,482,657	238,330,112	636,601	1.0	98.7	0.3				
	1914	86	82	33	15,861	278	15,439	144	1.8	97.3	0.9	92,111,272	771,844	90,770,424	563,004	0.8	98.6	0.6				
ZANESVILLE.....	1919	35	44	18	3,014	543	2,343	128	18.0	77.7	4.2	13,437,777	1,283,716	11,119,929	1,634,132	9.0	82.8	7.7				
	1914	44	40	13	3,035	558	1,639	838	18.4	54.0	27.6	8,390,231	875,880	4,205,411	3,218,940	10.0	50.7	38.8				

TABLE 15.—MANUFACTURES, BY POPULATION GROUPS, IN CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

	Cen- sus year.	Aggregate.	CITIES HAVING A POPULATION OF 10,000 OR OVER.								THE STATE OUTSIDE OF CITIES HAVING A POPULATION OF 10,000 OR OVER. ¹	
			Total.		10,000 to 25,000.		25,000 to 100,000.		100,000 and over.		Number or amount.	Per cent of aggre- gate.
			Number or amount.	Per cent of aggre- gate.	Numbr or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.		
Number of places.	1919 1914 1909	----- ----- -----	48 42 36	----- ----- -----	27 26 22	----- ----- -----	14 11 9	----- ----- -----	7 6 6	----- ----- -----	----- ----- -----	----- ----- -----
Population ²	1920 1915 1910	5,759,304 5,025,898 4,767,121	3,137,372 2,457,568 2,130,013	54.5 48.9 44.7	429,915 403,733 345,803	7.5 8.0 7.2	535,822 490,742 393,371	9.3 9.0 8.3	2,171,635 1,554,093 1,390,839	37.7 30.9 20.2	2,622,022 2,569,330 2,037,108	45.5 51.1 55.3
Number of establishments.	1919 1914 1909	16,125 15,058 15,138	10,537 9,541 8,703	65.3 60.9 57.9	1,450 1,543 1,396	9.0 9.9 9.0	1,427 1,039 1,207	8.8 10.5 8.0	7,660 6,359 6,190	47.5 40.6 40.0	5,583 6,117 6,375	34.7 39.1 42.1
Average number of wage earners. . .	1919 1914 1909	730,733 510,435 446,934	577,271 386,380 323,181	79.0 75.7 72.3	77,150 61,089 53,624	10.6 12.0 12.0	88,262 93,740 67,742	12.1 18.4 15.2	411,850 231,551 201,765	56.4 45.4 45.1	153,462 121,055 123,893	21.0 24.3 27.7
Value of products.	1919 1914 1909	\$5,100,308,728 1,782,893,279 1,437,935,817	\$4,050,713,323 1,374,412,770 1,074,492,188	79.6 77.1 74.7	\$457,606,475 181,763,339 156,321,801	9.0 10.2 10.0	\$557,534,560 385,642,100 283,054,022	10.9 21.6 19.7	\$3,044,572,279 807,007,322 635,110,315	59.7 45.3 44.2	\$1,040,595,405 408,395,599 363,443,079	20.4 22.9 25.3
Value added by manufacture.	1919 1914 1909	2,188,360,857 762,026,264 613,733,870	1,776,674,525 602,497,903 468,104,822	81.2 79.1 76.3	222,538,121 84,827,904 68,825,220	10.2 11.1 11.2	261,231,649 157,346,303 107,350,766	11.9 20.6 17.5	1,292,904,755 360,323,636 291,970,827	59.1 47.3 47.6	411,080,332 159,528,391 145,599,048	18.8 20.9 23.7

¹ Includes Cleveland Heights and East Youngstown, to avoid disclosure of individual operations.² Population of 1920, as of Jan. 1, 1920; 1915, estimated population as of July 1, 1914 (per reports census of manufactures, 1914); 1910, as of Apr. 15, 1910.

MANUFACTURES—OHIO.

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TABLE 16.—PRINCIPAL INDUSTRIES IN CITIES OF 50,000 INHABITANTS OR MORE, WITH PER CENT OF TOTAL FOR STATE: 1919.

CITY AND INDUSTRY.	VALUE OF PRODUCTS.				CITY AND INDUSTRY.	VALUE OF PRODUCTS.				
	Amount, 1919.	Per cent of total for the state.	Increase over 1914. ¹			Amount, 1919.	Per cent of total for the state.	Increase over 1914. ¹		
			Amount.	Per cent.				Amount.	Per cent.	
AKRON.					CLEVELAND.					
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	\$462,002,527	83.8	\$309,545,031	399.3	Foundry and machine-shop products ²	\$120,423,404	28.3	\$85,463,841	244.5	
Foundry and machine-shop products.....	14,624,783	4.2	11,764,144	411.2	Automobiles.....	110,254,504	38.4	87,510,770	384.8	
Bread and other bakery products.....	4,212,193	5.3	3,493,319	485.9	Iron and steel, steel works and rolling mills.....	84,424,721	13.5	51,035,892	152.0	
Printing and publishing, book and job.....	3,280,029	8.4	(²)	(²)	Slaughtering and meat packing.....	71,061,098	41.7	47,860,775	206.2	
Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	2,684,177	8.3	(²)	(²)	Electrical machinery, apparatus, and supplies.....	52,324,151	33.3	40,906,613	360.7	
Stoves and hot-air furnaces.....	1,814,480	7.3	920,974	104.4	Automobile bodies and parts.....	44,312,932	48.0	39,040,065	918.4	
Liquors, malt.....	1,775,773	7.1	423,728	31.3	Clothing, women's.....	35,307,741	72.5	10,004,449	117.4	
Printing and publishing, newspapers and periodicals.....	1,701,104	2.0	(²)	(²)	Stoves, gas and oil.....	19,489,305	32.7	12,282,587	170.4	
Brick and tile, terra-cotta, and fire-clay products.....	1,580,000	4.0	595,170	59.0	Clothing, men's.....	19,433,496	33.4	10,916,618	128.2	
Automobile bodies and parts.....	(²)	(²)	(²)	(²)	Bread and other bakery products.....	19,413,040	24.6	12,505,438	181.0	
Automobiles.....	(²)	(²)	(²)	(²)	Tools, not elsewhere specified.....	17,002,520	54.1	(²)	(²)	
Butter.....	(²)	(²)	(²)	(²)	Paints.....	17,430,225	47.3	9,900,527	131.4	
Confectionery and ice cream.....	(²)	(²)	(²)	(²)	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	17,264,120	73.0	13,722,192	387.4	
Flour-mill and gristmill products.....	(²)	(²)	(²)	(²)	Printing and publishing, newspapers and periodicals.....	15,570,029	26.0	9,271,749	147.2	
Food preparations, not elsewhere specified.....	(²)	(²)	(²)	(²)	Printing and publishing, book and job.....	13,382,254	34.1	7,520,906	128.7	
Oilcloth and linoleum.....	(²)	(²)	(²)	(²)	Iron and steel forgings, not made in steel works or rolling mills.....	13,373,130	33.8	11,619,109	602.4	
Structural ironwork, not made in steel works or rolling mills.....	(²)	(²)	(²)	(²)	Structural ironwork, not made in steel works or rolling mills.....	11,721,132	28.0	5,085,403	94.2	
Tools, not elsewhere specified.....	(²)	(²)	(²)	(²)	Cars and general shop construction and repairs by steam-railroad companies.....	11,571,425	12.0	0,013,557	133.4	
CANTON.					Confectionery and ice cream.....	11,375,042	29.0	(²)	(²)	
Iron and steel, steel works and rolling mills.....	63,373,084	10.1	46,486,715	275.3	Knit goods.....	10,003,277	53.3	8,952,125	146.9	
Foundry and machine-shop products ³	8,592,801	2.5	2,832,088	49.2	Varnishes.....	9,050,542	66.4	0,493,261	253.9	
Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	2,643,835	8.2	2,531,854	2,261.0	Chemicals.....	7,593,467	23.2	4,463,467	142.6	
Structural ironwork, not made in steel works or rolling mills.....	2,594,878	0.2	1,550,074	149.8	Wirework, including wire-rope and cable, not elsewhere specified.....	7,071,852	81.2	4,585,391	184.5	
Bread and other bakery products.....	1,500,551	2.0	1,139,835	270.9	Brass and bronze products.....	6,922,238	23.8	4,131,114	165.8	
Agricultural implements.....	1,454,073	5.5	(²)	(²)	Coffee, roasting and grinding.....	6,171,420	21.1	(²)	(²)	
Printing and publishing.....	1,142,874	1.2	307,159	47.3	Oil, not elsewhere specified.....	5,900,763	65.7	4,332,937	275.2	
Automobiles.....	(²)	(²)	(²)	(²)	Liquors, malt.....	5,774,228	22.9	—753,940	—11.5	
Brass and bronze products.....	(²)	(²)	(²)	(²)	Plumbers' supplies, not elsewhere speci- fied.....	5,393,331	60.7	3,172,878	142.9	
Brick and tile, building brick, fancy, ornamental, vitrified, glazed, and en- ameled.....	(²)	(²)	(²)	(²)	Aluminum manufactures.....	(²)	(²)	(²)	(²)	
Electrical machinery apparatus, and sup- plies.....	(²)	(²)	(²)	(²)	Bags, other than paper, not including bags made in textile mills.....	(²)	(²)	(²)	(²)	
Electroplating.....	(²)	(²)	(²)	(²)	Coke, not including gas-house coke.....	(²)	(²)	(²)	(²)	
Furniture.....	(²)	(²)	(²)	(²)	Hardware.....	(²)	(²)	(²)	(²)	
Iron and steel forgings, not made in steel works or rolling mills.....	(²)	(²)	(²)	(²)	Iron and steel, blast furnaces.....	(²)	(²)	(²)	(²)	
Safes and vaults, safes.....	(²)	(²)	(²)	(²)	Iron and steel, wrought pipe.....	(²)	(²)	(²)	(²)	
Slaughtering and meat packing, wholesale. Springs, steel.....	(²)	(²)	(²)	(²)	Petroleum, refining.....	(²)	(²)	(²)	(²)	
Stamped and enameled ware, not else- where specified, enameled ware.....	(²)	(²)	(²)	(²)	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	(²)	(²)	(²)	(²)	
CINCINNATI.					Screws, machine.....	(²)	(²)	(²)	(²)	
Slaughtering and meat packing.....	62,428,358	36.0	39,183,473	108.6	Shipbuilding, steel.....	(²)	(²)	(²)	(²)	
Foundry and machine-shop products ⁴	50,717,708	12.3	36,398,296	231.1	Wire.....	(²)	(²)	(²)	(²)	
Clothing, men's.....	32,254,217	55.4	18,921,107	141.9	Worsted goods.....	(²)	(²)	(²)	(²)	
Boots and shoes.....	31,223,081	43.8	16,068,003	116.0	COLUMBUS.					
Bread and other bakery products.....	14,140,223	17.9	7,754,547	121.4	Foundry and machine-shop products.....	18,032,901	5.4	12,912,994	225.8	
Printing and publishing, book and job.....	10,678,735	27.2	4,884,401	84.3	Cars and general shop construction and repairs by steam-railroad companies.....	15,213,739	15.8	9,812,235	181.7	
Printing and publishing, newspapers and periodicals.....	10,567,143	18.0	4,542,249	75.4	Boots and shoes.....	10,198,135	14.8	4,973,787	95.2	
Paints.....	10,333,139	28.0	6,531,577	171.8	Slaughtering and meat packing.....	6,510,428	3.8	(²)	(²)	
Leather, tanned, curried, and finished.....	10,093,097	40.4	4,068,272	85.0	Bread and other bakery products.....	5,203,881	0.0	3,084,955	145.0	
Confectionery and ice cream.....	9,428,209	24.1	(²)	(²)	Printing and publishing, newspapers and periodicals.....	4,004,919	7.0	1,973,107	93.0	
Butter.....	8,824,102	21.5	(²)	(²)	Automobile bodies and parts.....	3,608,580	4.0	(²)	(²)	
Liquors, malt.....	7,789,700	31.0	—2,503,107	—24.8	Fertilizers.....	2,832,017	20.2	(²)	(²)	
Coffee and spice, roasting and grinding.....	6,611,929	22.0	4,325,372	159.2	Confectionery and ice cream.....	2,575,127	6.6	1,685,520	189.5	
Furniture.....	5,890,337	16.7	(²)	(²)	Printing and publishing, book and job.....	2,185,610	5.0	1,148,878	110.8	
Stoves and hot-air furnaces.....	5,882,781	20.4	(²)	(²)	Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	1,001,012	5.2	858,208	103.0	
Tobacco, cigars.....	5,251,557	21.0	(²)	(²)	Stoves, ranges, and hot-air furnaces, in- cluding gas and oil stoves.....	1,133,068	2.3	281,085	33.1	
Automobile bodies and parts.....	5,207,453	5.0	(²)	(²)	Automobiles.....	(²)	(²)	(²)	(²)	
Clothing, women's.....	5,135,218	10.5	2,508,049	100.1	Butter.....	(²)	(²)	(²)	(²)	
Copper, tin, and sheet-iron work.....	4,805,403	30.4	2,026,385	72.9	Cars, steam-railroad, not including opera- tions of railroad companies.....	(²)	(²)	(²)	(²)	
Shirts.....	4,248,835	57.5	2,477,107	139.8	Dental goods.....	(²)	(²)	(²)	(²)	
Cars and general shop construction and repairs by steam-railroad companies.....	4,026,932	4.2	3,056,276	314.9	Flour-mill and gristmill products.....	(²)	(²)	(²)	(²)	
Brass, bronze, and copper products.....	3,641,519	13.1	2,454,817	206.9	Furniture.....	(²)	(²)	(²)	(²)	
Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	3,122,558	9.0	1,650,202	112.1	Glass.....	(²)	(²)	(²)	(²)	
Automobiles.....	(²)	(²)	(²)	(²)	Iron and steel, blast furnaces.....	(²)	(²)	(²)	(²)	
Bags, paper, exclusive of those made in paper mills.....	(²)	(²)	(²)	(²)	Iron and steel, steel works and rolling mills.....	(²)	(²)	(²)	(²)	
Baking powders and yeast.....	(²)	(²)	(²)	(²)	Iron and steel, bolts, nuts, washers, and rivets.....	(²)	(²)	(²)	(²)	
Glass.....	(²)	(²)	(²)	(²)	Iron and steel forgings.....	(²)	(²)	(²)	(²)	
Ink, printing.....	(²)	(²)	(²)	(²)	Liquors, malt.....	(²)	(²)	(²)	(²)	
Lamps.....	(²)	(²)	(²)	(²)	Oilcloth, enameled.....	(²)	(²)	(²)	(²)	
Oil and cake, cottonseed.....	(²)	(²)	(²)	(²)	Oleomargarine.....	(²)	(²)	(²)	(²)	
Oleomargarine.....	(²)	(²)	(²)	(²)	Paints.....	(²)	(²)	(²)	(²)	
Pickles, preserves, and sauces.....	(²)	(²)	(²)	(²)	Regalia, and society badges and emblems.....	(²)	(²)	(²)	(²)	
Soap.....	(²)	(²)	(²)	(²)	Tobacco, cigars.....	(²)	(²)	(²)	(²)	
Steam fittings and steam and hot-water heating apparatus.....	(²)	(²)	(²)	(²)	Wool pulling.....	(²)	(²)	(²)	(²)	
Waste.....	(²)	(²)	(²)	(²)	DAYTON.					
					Foundry and machine-shop products ⁵	10,085,150	3.8	10,499,522	188.0	
					Slaughtering and meat packing.....	8,414,683	4.9	3,584,030	74.2	
					Bread and other bakery products.....	4,522,347	5.7	2,509,570	124.7	

¹ A minus sign (—) denotes decrease.² Figures can not be shown without disclosing individual operations.³ Includes "iron and steel, welding."⁴ Includes "iron and steel, tempering and welding" and "machine tools."⁵ Includes "iron and steel, tempering and welding"; "machine tools"; and "steel barrels, drums, and tanks, portable."

TABLE 16.—PRINCIPAL INDUSTRIES IN CITIES OF 50,000 INHABITANTS OR MORE, WITH PER CENT OF TOTAL FOR STATE: 1919—Continued.

CITY AND INDUSTRY.	VALUE OF PRODUCTS.				CITY AND INDUSTRY.	VALUE OF PRODUCTS.			
	Amount, 1919.	Per cent of total for the state.	Increase over 1914.			Amount, 1919.	Per cent of total for the state.	Increase over 1914.	
			Amount.	Per cent.				Amount.	Per cent.
DAYTON—Continued.					TOLEDO—Continued.				
Tools, not elsewhere specified.....	\$3,785,457	11.1	\$3,709,655	4,893.9	Bread and other bakery products.....	\$5,774,946	7.3	\$3,467,735	150.3
Tobacco, cigars and cigarettes.....	3,057,848	10.6	1,002,417	48.8	Butter.....	4,324,608	10.5	(1)	(1)
Printing and publishing, newspapers and periodicals.....	2,630,616	4.5	1,523,089	137.5	Clothing, women's.....	4,163,468	8.5	1,729,898	71.1
Stationery goods, not elsewhere specified.	2,504,132	55.2	(1)	(1)	Printing and publishing, newspapers and periodicals.....	3,514,811	6.0	1,680,506	91.6
Pumps, steam and other power.....	2,004,211	60.7	(1)	(1)	Gloves and mittens, cloth, not including those made in textile mills.....	2,840,984	37.5	(1)	(1)
Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	2,036,429	6.3	(1)	(1)	Confectionery and ice cream.....	2,776,615	7.1	(1)	(1)
Clothing, men's.....	1,787,391	3.1	(1)	(1)	Cars and general shop construction and repairs by steam-railroad companies.....	2,609,557	2.7	1,407,628	117.1
Furniture.....	1,488,981	4.2	664,158	80.5	Printing and publishing, book and job.....	2,279,574	5.8	1,310,787	136.8
Confectionery and ice cream.....	1,473,323	3.8	(1)	(1)	Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	2,238,600	6.9	757,073	51.2
Brass, bronze, and copper products.....	1,271,610	4.6	939,140	282.5	Automobiles.....				
Boxes, paper and other, not elsewhere specified.....	1,256,869	12.5	393,372	45.6	Awning, tents, and sails.....				
Printing and publishing, book and job.....	1,012,880	2.6	540,038	114.2	Bags, paper, exclusive of those made in paper mills.....				
Automobile bodies and parts.....					Brass, bronze, and copper products.....				
Cash registers and calculating machines.....					Carriages and sleds, children's.....				
Chemicals.....					Coffee and spice, roasting and grinding.....				
Coffee, roasting and grinding.....					Coke, not including gas-house coke.....				
Electrical machinery, apparatus, and supplies.....					Fancy articles, not elsewhere specified.....				
Envelopes.....					Glass.....				
Iron and steel, steel works and rolling mills.....	(1)	(1)	(1)	(1)	Iron and steel, blast furnaces.....				
Liquors, malt.....					Iron and steel, wrought pipe.....				
Motorcycles, bicycles, and parts.....					Liquors, malt.....				
Ordnance and accessories.....					Oil, linseed.....				
Paints.....					Pens, fountain and stylographic.....	(1)	(1)	(1)	(1)
Paper and wood pulp.....					Petroleum, refining.....				
Patent medicines and compounds.....					Pickles and sauces.....				
Rubber tires, tubes, and rubber goods, not elsewhere specified.....					Rubber tires, tubes, and rubber goods, not elsewhere specified.....				
Scales and balances.....					Scales and balances.....				
Soap.....					Shipbuilding, steel.....				
SPRINGFIELD.					Slaughtering and meat packing.....				
Agricultural implements.....	7,205,752	27.1	1,444,241	25.1	Springs, steel, automobile.....				
Foundry and machine-shop products.....	7,166,220	2.1	3,372,172	88.9	Stoves and hot-air furnaces.....				
Engines, steam, gas, and water.....	4,180,910	9.8	2,866,848	218.2	Structural ironwork, not made in steel works or rolling mills.....				
Musical instruments, piano materials.....	2,036,594	65.9	1,279,044	168.8	Thimble, not elsewhere specified.....				
Automobiles.....					Tobacco, chewing and smoking, and snuff.....				
Coffins, burial cases, and undertakers' goods.....					Toys and games.....				
Electrical machinery, apparatus, and supplies.....					Wood preserving.....				
Flour-mill and gristmill products.....	(1)	(1)	(1)	(1)	YOUNGSTOWN.				
Iron and steel, steel works and rolling mills.....					Foundry and machine-shop products.....	9,604,195	2.8	6,526,250	212.0
Printing and publishing, newspapers and periodicals.....					Bread and other bakery products.....	2,712,504	3.4	2,092,618	337.5
Signs and advertising novelties.....					Printing and publishing.....	2,082,236	2.1	1,290,450	163.0
Slaughtering and meat packing.....					Coke, not including gas-house coke.....				
TOLEDO.					Electrical machinery, apparatus, and supplies.....				
Foundry and machine-shop products.....	27,468,943	6.5	20,924,341	310.7	Furniture.....				
Electrical machinery, apparatus, and supplies.....	19,245,500	12.3	16,015,618	495.9	Iron and steel, blast furnaces.....				
Flour-mill and gristmill products.....	13,432,512	15.0	7,617,124	131.0	Iron and steel, steel works and rolling mills.....	(1)	(1)	(1)	(1)
Automobile bodies and parts.....	5,922,578	6.4	(1)	(1)	Iron and steel, wrought pipe.....				
					Rubber tires, tubes, and rubber goods, not elsewhere specified.....				
					Structural ironwork, not made in steel works or rolling mills.....				

¹ Figures can not be shown without disclosing individual operations.

² Includes "iron and steel, tempering and welding" and "machine tools."

³ Includes "iron and steel, tempering and welding"; "machine tools"; and "steel barrels, drums, and tanks, portable."

⁴ Not reported for 1914.

TABLE 17.—NUMBER AND HORSEPOWER OF TYPES OF PRIME MOVERS: 1919, 1914, AND 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
	1919	1914	1909	Amount.			Per cent distribution.		
				1919	1914	1909	1919	1914	1909
Primary power, total.....	93,713	44,188	25,970	2,897,497	1,993,080	1,583,155	100.0	100.0	100.0
Owned.....	10,814	12,738	13,012	1,939,666	1,712,136	1,483,628	66.9	85.9	93.7
Steam.....	7,722	8,348	9,246	1,782,512	1,541,212	1,303,720	61.5	77.3	86.1
Engines.....	7,150	(2)	(2)	1,407,558	(2)	(2)	48.0		
Turbines.....	572	(2)	(2)	374,954	(2)	(2)	12.9		
Internal-combustion engines.....	2,707	4,059	3,354	147,089	156,481	103,801	5.1	7.9	6.0
Water.....	205	333	412	10,115	14,443	10,107	0.3	0.7	1.0
Water wheels and turbines.....	227	284	373	9,401	13,930	15,777	0.3	0.7	1.0
Water motors.....	68	49	39	654	513	330	(2)	(2)	(2)
Rented.....	82,899	31,450	12,958	957,831	280,944	99,527	33.1	14.1	6.3
Electric.....	82,899	31,450	12,958	945,341	273,814	93,592	32.6	13.7	5.9
Other.....				12,490	7,130	5,935	0.4	0.4	0.4
Electric.....	129,118	66,137	34,237	1,764,724	823,000	417,844	100.0	100.0	100.0
Rented.....	82,899	31,450	12,958	945,341	273,814	93,592	53.7	33.3	22.4
Generated by establishments reporting.....	46,219	34,687	21,279	819,383	549,186	324,252	46.4	66.7	77.6

¹ Figures for horsepower include for 1909 the amount reported under the head of "Other" owned power.

² Not reported separately.

³ Less than one-tenth of 1 per cent.

TABLE 18.—FUEL CONSUMED, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRY AND CITY.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
	Anthracite (tons, 2,400 pounds).	Bituminous (tons, 2,000 pounds).				
All industries.....	1919..... 108,006	25,483,800	8,040,711	1,837,053	188,553	45,014,790
Per cent of increase ¹	1914..... 43,198 151.4	13,027,612 83.0	6,267,733 37.9	678,230 108.7	(¹).....	50,092,157 —10.1
Agricultural implements.....	27	42,777	11,523	10,525	281	174,734
Automobile bodies and parts.....	579	97,210	5,230	33,113	5,031	225,321
Automobiles.....	—	200,434	213	93,098	26,529	189,379
Automobile repairing.....	135	10,485	57	88	290	60,590
Boots and shoes, not including rubber boots and shoes.....	8	77,340	—	6	22	58,620
Boxes, paper and other, not elsewhere specified.....	145	8,582	—	3	2	17,725
Brass, bronze, and copper products.....	2,154	52,011	10,634	42,118	3,808	102,092
Bread and other bakery products.....	4,841	36,490	17,386	149	3,620	1,528,607
Brick and tile, terra-cotta, and fire-clay products.....	2,453	1,493,487	947	7,742	2,064	886,210
Cars and general shop construction and repairs by steam-railroad companies.....	10,153	715,394	5,005	61,945	1,090	33,449
Cars, steam-railroad, not including operations of railroad companies.....	—	22,444	582	8,360	2	98,448
Cash registers and calculating machines.....	70	42,297	2,050	2,633	1,009	19,739
Chemicals.....	506	714,592	96,108	220	8,424	75,086
Clothing, men's.....	104	6,059	3	60	53	59,532
Clothing, women's.....	470	11,197	—	—	1	90,374
Coke, not including gas-house coke.....	—	7,995,880	53	—	—	37,951
Confectionery and ice cream.....	517	34,302	392	64	1,366	226,468
Copper, tin, and sheet-iron work.....	199	4,712	552	252	—	62,346
Cutlery and edge tools.....	402	5,232	12	56,474	385	14,864
Electrical machinery, apparatus, and supplies.....	2,355	104,243	12,850	31,553	1,860	611,664
Engines, steam, gas, and water.....	339	34,407	6,778	3,498	2,725	282,852
Flour-mill and gristmill products.....	106	105,017	135	2,315	2,554	212,076
Foundry and machine-shop products.....	5,312	764,873	232,524	209,231	21,050	7,140,061
Furniture.....	27	94,753	6	—	134	108,881
Gas, illuminating and heating.....	1,610	48,067	2,692	12,754	96	18,680
Glass.....	905	339,738	85	16,994	325	5,800,995
Gloves and mittens, cloth, not including gloves made in textile mills.....	300	2,214	9	—	—	2,146
Hardware.....	—	59,341	2,052	8,803	30	1,123,413
Ice, manufactured.....	250	251,359	—	2	1,645	422,734
Iron and steel, blast furnaces.....	—	660,212	7,743,804	1,266	6,066	72,842
Iron and steel, steel works and rolling mills.....	1,175	5,090,601	284,874	565,075	9,854	15,294,674
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	2,040	42,840	716	36,534	309	200,885
Iron and steel forgings, not made in steel works or rolling mills.....	48	250,571	22,987	244,301	868	552,495
Iron and steel, wrought pipe.....	2,002	138,220	12,013	10,804	104	100,789
Knit goods.....	2	11,777	9	—	—	4,626
Liquors, malt.....	135	292,081	—	200	823	229,396
Lumber and timber products.....	100	9,605	—	—	182	3,518
Lumber, planing-mill products, not including planing mills connected with saw-mills.....	268	197,873	124	225	841	75,123
Machine tools.....	290	61,004	2,955	23,059	734	75,223
Marble and stone work, except slate.....	35	22,103	68	124	598	43,514
Mineral and soda waters.....	112	10,431	74	0	1,325	17,709
Motorcycles, bicycles, and parts.....	—	10,532	3,000	4,534	198	76,982
Paints.....	—	22,441	3,312	—	—	50,169
Paper and wood pulp.....	275	700,985	—	5,126	—	—
Patent medicines and compounds.....	217	5,184	21	331	11	20,378
Petroleum, refining.....	39,198	418,777	1,060	52,248	31	137,170
Plumbers' supplies, not elsewhere specified.....	632	5,234	2,006	3,775	240	52,863
Potters.....	810	225,764	—	24	221	3,882,784
Printing and publishing, book and job.....	224	9,645	157	6	172	136,495
Printing and publishing, newspapers and periodicals.....	98	18,430	47	15	469	217,270
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	3,730	1,150,810	—	58,769	23,920	236,352
Safes and vaults.....	943	6,641	398	6,300	104	16,348
Saws, machine.....	15	19,880	8	9,299	106	59,854
Shipbuilding, steel, new vessels and repair work.....	759	68,271	4,338	839	33,073	442,076
Slaughtering and meat packing.....	—	148,512	204	1,054	2,397	71,483
Springs, steel, automobile.....	—	13,385	—	39,945	300	635,030
Stamped and enameled ware, not elsewhere specified.....	4	89,525	1,532	3,020	1	117,555
Steam fittings and steam and hot-water heating apparatus.....	—	15,664	5,823	14,104	—	15,834
Stoves and hot-air furnaces.....	110	26,760	20,939	3	4,182	50,557
Stoves, gas and oil.....	36	27,540	650	4,710	618	77,668
Structural ironwork, not made in steel works or rolling mills.....	205	42,091	1,793	9,312	456	58,799
Tinware, not elsewhere specified.....	8	13,669	131	35	7	46,780
Tobacco, cigars and cigarettes.....	306	4,719	—	1	24	45,401
Tools, not elsewhere specified.....	449	19,808	969	18,663	148	154,243
Wirework, including wire rope and cable, not elsewhere specified.....	3	13,998	1,190	1,307	388	34,885
All other industries.....	20,336	2,320,236	120,522	52,571	14,260	2,008,903
Total for cities ²	96,564	15,742,736	5,818,163	1,403,769	129,015	30,628,258
AKRON.....	3,724	1,160,213	12,413	81,208	27,883	329,410
ALLIANCE.....	7,030	168,716	3,091	12,167	443	16,461
ASHTABULA.....	806	44,142	1,305	6,685	470	377,861
BARBERTON.....	—	430,856	40,126	17,025	623	84,385
BELLAIRE.....	3	77,059	130,554	121	—	457,157
BUYTRUS.....	435	72,067	881	4,789	112	34,916
CAMBRIDGE.....	—	93,914	—	—	12	99,242
CANTON.....	1,793	667,932	15,802	208,314	1,452	2,504,947
CHILLICOTHE.....	—	76,008	25	1,264	—	44,844
CINCINNATI.....	1,602	545,582	21,248	15,109	11,526	1,406,856

¹ Included in figures for fuel oils.² A minus sign (—) denotes decrease.³ Excludes Cleveland Heights and East Youngstown, to avoid disclosure of individual operations.

TABLE 18.—FUEL CONSUMED, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919—Continued.

INDUSTRY AND CITY.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
	Anthracite (tons, 2,240 pounds).	Bituminous (tons, 2,000 pounds).				
CLEVELAND.....	20,604	3,536,718	1,407,347	581,889	43,588	7,040,842
COLUMBUS.....	286	340,702	189,629	62,054	6,525	1,531,402
COSHOCOTON.....		29,047	3,375		157	117,439
CUYAHOGA FALLS.....		10,090	2,290	1,567	2	8,328
DAYTON.....	430	354,049	22,904	20,042	3,099	375,253
EAST CLEVELAND.....	10	420	3			4,067
EAST LIVERPOOL.....	562	34,601	600		44	2,140,231
ELYRIA.....	515	68,475	2,022	5,488	5,348	235,780
FINDLAY.....	73	20,260	409	434	384	96,238
FREMONT.....	95	32,622	709	38,704	476	91,067
HAMILTON.....	7	174,637	15,857	7,501	270	76,468
IRONTON.....	5	404,848	205,107			268,400
KENMORE.....		404				68
LAKEWOOD.....	60	35,302	5,179	5,278	288	19,625
LANCASTER.....		22,314	602	161	83	219,405
LIMA.....	330	73,140	4,035	15,237	1,714	25,910
LORAIN.....	171	1,989,054	848,575	118,140	6,208	205,895
MANSFIELD.....	1,613	22,315	3,301	14,909	1,524	290,040
MARIETTA.....		6,017	360		19	201,845
MARION.....	1,121	63,370	4,283	37,110	509	360,885
MARTINS FERRY.....		84,051	60,765		1	12,381
MASSILLON.....	2,000	87,085	2,007	2,395	388	20,329
MIDDLETOWN.....	228	389,883	3,000	61,243	1,846	1,015,611
NEWARK.....	110	165,380	5,700	6,508	4,529	1,908,306
NEW PHILADELPHIA.....		74,472	536		4	0,824
NILES.....	0	134,302	30,641	8,582	95	47,858
NORWOOD.....	487	75,109	1,083	6,434	994	70,452
PIQUA.....	25	31,261	2,313	72	6	14,239
PORTSMOUTH.....	4	686,995	29,042			136,066
SALEM.....	503	25,579	2,943	1	314	130,470
SANDUSKY.....	3,101	141,242	3,710	5,715	1,474	3,302,614
SPRINGFIELD.....	7	92,121	12,509	11,210	255	1,712,043
STUEBENVILLE.....	510	105,609	231,061		60	681,066
Tiffin.....	1,414	30,283	2,369	6,521	4	294,814
TOLEDO.....	46,653	1,072,109	266,740	98,945	4,896	1,026,020
WARREN.....	190	31,592	1,135	1,152	561	197,546
YOUNGSTOWN.....	72	1,741,842	2,082,024	29,324	513	212,138
ZANESVILLE.....		90,187	10,739	405	107	410,645

SPECIAL STATISTICS.

For a number of important industries the Census Bureau collects, by means of special schedules, certain details which do not appear on the general schedule. Data for 20 of these industries in Ohio are here presented.

Iron and steel—blast furnaces (Table 19).—This table presents the statistics for the pig-iron industry of the state for 1919, 1914, and 1909. The state ranks second in the industry (Pennsylvania first) and produced 23.2 per cent of the tonnage of the country in 1919, 22.7 per cent in 1914, and 21.2 per cent in 1909. All but one-half of 1 per cent was coke iron in 1919, as compared with 1.1 per cent in 1914 and 1.3 per cent in 1909. The small production made with fuel other than coke in 1919 was made with mixed bituminous coal and coke.

The production in 1919 was an increase of 34 per cent over that of 1914 and 29.9 per cent over 1909, with increases in values of 146.3 per cent and 115.2 per cent, respectively. Iron for steel making—the basic and Bessemer grades—constituted 83.5 per cent of the production in 1919, 84.4 per cent in 1914, and 78.8 per cent in 1909, not including the ferroalloys; while foundry iron constituted 9.2 per cent in 1919, 10.4 per cent in 1914, and 13.2 per cent in 1909. Of the pig-iron output, 57.1 per cent was handled molten in 1919 and 29.4 per cent was machine cast; 53 per cent molten and 31 per cent machine cast in 1914; and 50 per cent molten and 17.3 per cent machine cast in 1909.

TABLE 19.—IRON AND STEEL—BLAST FURNACES: 1919, 1914, AND 1909.

[Ton of 2,240 pounds, except as otherwise stated.]

	1919	1914	1909
MATERIALS.			
Total cost.....	\$137,686,107	\$60,738,524	\$68,424,722
Iron ore:			
Tons.....	12,440,500	9,624,750	9,884,358
Cost.....	\$71,456,065	\$30,348,602	\$41,830,045
Average per ton.....	\$5.75	\$3.10	\$4.25
Scrap, mill cinder, scale, slag, flue dust, etc.:			
Tons.....	759,719	353,518	368,931
Cost.....	\$3,071,192	\$806,739	\$1,041,384
Average per ton.....	\$5.25	\$2.30	\$2.80
Fluxing material:			
Tons.....	3,484,609	2,752,381	2,603,423
Cost.....	\$6,054,043	\$2,706,342	\$2,597,107
Average per ton.....	\$1.75	\$1.00	\$0.95
Fuel for smelting:			
Coke—			
Tons (2,000 lbs.).....	7,715,245	5,816,200	6,050,491
Cost.....	\$46,600,139	\$18,750,140	\$20,433,686
Average per ton.....	\$6.00	\$3.20	\$3.40
Other (bituminous coal, 1919; coal and charcoal, 1914 and 1909).....	\$70,133	\$102,538	\$159,444
All other materials, cost.....	\$9,534,535	\$1,034,103	\$2,362,456
PRODUCTS.			
Total value.....	\$179,233,435	\$72,969,368	\$83,069,238
Pig iron:			
Tons.....	7,073,337	5,279,045	5,440,071
Value.....	\$176,592,680	\$71,088,701	\$82,048,712
Average unit value, ton.....	\$24.95	\$13.60	\$15.05
For consumption in works of company producing—			
Tons.....	5,327,132	3,877,188	3,504,358
Per cent of total.....	75.3	73.4	65.4
Assigned value.....	\$126,343,702	\$52,469,007	\$53,108,580
For sale—			
Tons.....	1,746,205	1,401,857	1,882,613
Per cent of total.....	24.7	26.6	34.6
Value.....	\$50,248,988	\$19,217,694	\$28,940,123
<i>Classified according to smelting fuel.</i>			
Coke:			
Tons.....	7,037,592	5,219,564	5,376,368
Value.....	\$175,267,027	\$70,769,573	\$80,813,570
Other fuel:			
Tons.....	35,745	59,481	70,578
Value.....	\$1,385,663	\$927,128	\$1,235,142
<i>Classified by grades.</i>			
Bessemer..... tons.....	3,356,796	2,880,750	3,456,131
Basic..... tons.....	2,550,134	1,516,905	798,173
Foundry..... tons.....	849,019	541,354	714,322
Malleable..... tons.....	364,614	194,606	364,067
Forge or mill..... tons.....	122,032	75,095	80,805
All other, including direct castings..... tons.....	20,542	4,548	6,121
Ferroalloys..... tons.....	(1)	65,778	47,352
<i>Classified by method of delivery or casting.</i>			
Molten to steel works, etc..... tons.....	4,036,452	2,797,254	2,723,700
Machine cast..... tons.....	2,078,210	1,635,242	945,036
Sand cast..... tons.....	677,167	630,639	1,625,073
Chill cast and direct castings..... tons.....	281,512	299,910	153,102
All other products, value.....	\$2,040,745	\$1,282,667	\$1,650,526

¹ Not included in the blast-furnace industry in 1919: See "Ferroalloys"—Production of blast furnace ferroalloys 30,038 tons of ferrosilicon, value \$1,464,831.

Iron and steel—steel works and rolling mills.—Table 20 presents the state statistics for steel furnaces and hot-rolling mills. The plants produced 24.7 per cent of the rolled, forged, and other classified products of the country in 1919 and in 1914 and 22.1 per cent in 1909. There was an increase of 42.1 per cent in tonnage in 1919, as compared with 1914, and 51.8 per cent with respect to 1909. The total value of the rolled, forged, or other classified products increased 217.5 per cent during the five-year period 1914–1919, and 222.2 per cent from 1909 to 1919. The figures show an average unit value of approximately \$62 per ton in 1919, \$28 in 1914, and \$29 in 1909.

The steel production in 1919, 8,175,960 tons, was approximately 68 per cent of the capacity of the furnaces operating on double turn for 300 working days, as compared with 65.6 per cent in 1914, and 72.3 per cent in 1909.

TABLE 20.—IRON AND STEEL—STEEL WORKS AND ROLLING MILLS: 1919, 1914, AND 1909.

[Ton of 2,240 pounds.]

	1919	1914	1909
MATERIALS.¹			
Total cost.....	\$381,050,673	\$139,670,491	\$139,243,155
Pig iron:			
Tons.....	5,784,072	4,341,857	4,172,114
Cost.....	\$137,071,040	\$59,180,555	\$62,747,851
Ferroalloys—spiegeleisen, ferromanganese, etc.:			
Tons.....	100,027	40,166	37,035
Cost.....	\$18,417,595	\$2,028,818	\$1,694,127
Scrap (not produced in establishment reporting):			
Tons.....	1,365,876	855,103	530,408
Cost.....	\$25,982,418	\$9,452,349	\$8,093,044
Steel, crude and semifinished (not produced in establishment reporting):			
Tons.....	2,812,008	1,902,828	1,858,171
Cost.....	\$115,948,407	\$38,370,551	\$40,368,367
Rolled forms for further manufacture (not produced in establishment reporting):			
Tons.....	9,630	102,081	154,683
Cost.....	\$550,385	\$2,732,071	\$1,438,205
Iron ore:			
Tons.....	157,033	147,464	75,857
Cost.....	\$1,304,302	\$455,440	\$384,303
All other materials, including fuel and rent of power, cost.....	\$80,795,400	\$20,550,707	\$21,527,258
PRODUCTS.			
Total value.....	\$626,370,025	\$205,023,391	\$197,780,043
Rolled, forged, and other classified iron and steel products:			
Tons.....	8,050,138	6,303,890	5,808,090
Value.....	\$554,490,290	\$174,038,132	\$172,105,247
Finished rolled products and forgings—			
Plates and sheets—			
Tons.....	1,076,048	988,997	755,010
Value.....	\$143,180,210	\$38,892,309	\$33,800,004
Black plates or sheets for tinning—			
Tons.....	190,004	176,835	111,150
Value.....	\$16,713,002	\$7,424,689	\$5,808,089
Skelp—			
Tons.....	1,281,747	955,597	739,761
Value.....	\$74,905,772	\$24,478,568	\$22,198,305
Bars for reinforced concrete—			
Tons.....	45,037	77,309	70,078
Value.....	\$2,700,025	\$2,233,658	\$2,003,084
Merchant bars—			
Tons.....	1,005,738		
Value.....	\$89,538,326		
All other—			
Tons.....	725,450	1,250,614	1,424,049
Value.....	\$46,234,330	\$40,319,111	\$42,888,567
Semifinished rolled products (sold or transferred to other works of same company):			
Blooms, billets, and slabs—			
Tons.....	2,493,271	1,708,862	1,075,730
Value.....	\$102,727,062	\$33,187,270	\$42,301,808
Sheet and tin-plate bars—			
Tons.....	1,258,180	1,033,972	995,857
Value.....	\$53,023,077	\$20,877,350	\$16,027,396
Unrolled steel (sold or transferred to other works of same company):			
Ingots—			
Tons.....	62,849	8,369	32,223
Value.....	\$3,049,795	\$146,679	\$613,540
Direct castings—			
Tons.....	127,715	103,335	93,026
Value.....	\$22,343,371	\$7,078,409	\$6,343,186
All other products, including scrap and value added to steel or iron rolling mill products by further manufacture, value.....	\$71,873,726	\$30,385,259	\$25,074,706
<i>Steel production.</i>			
Total..... tons.....	8,175,960	5,449,981	4,705,337
Ingots..... tons.....	8,045,245	5,346,646	4,611,411
Castings..... tons.....	127,715	103,335	93,926
<i>Classified according to process:</i>			
Open hearth..... tons.....	5,078,637	2,589,535	1,377,216
Basic..... tons.....	5,028,689	2,554,056	1,306,094
Acid..... tons.....	49,948	34,579	70,622
Bessemer..... tons.....	3,039,293	2,890,129	3,327,351
Crucible and electric..... tons.....	58,030	317	770

¹ Includes material purchased and the quantity and assigned value of that transferred to the establishment reporting from other works of the same company.

² Includes 15,875 tons of muck and scrap bar.

Rubber tires, tubes, and rubber goods (Table 21).—This table presents the quantities and values of the various classes of rubber goods for 1919 and 1914. It shows a remarkable growth in the industry during the five-year period 1914–1919, particularly in the production of automobile tires; pneumatic tires and tubes alone show an increase of 330.7 per cent in the number manufactured. In addition to the statistics contained in the table one establishment in Ohio was engaged exclusively in the manufacture of rubber belting and hose, for which statistics could not be included without the possibility of disclosing individual operations.

TABLE 21.—RUBBER TIRES, TUBES, AND RUBBER GOODS: 1919 AND 1914.

	1919	1914
Number of establishments.....	96	54
Products, total value.....	\$551,118,488	\$109,658,605
Tires:		
Pneumatic—		
Automobile—		
Casings—		
Number.....	19,728,062	
Value.....	\$362,932,865	8,850,625
Inner tubes—		\$71,776,078
Number.....	18,391,065	
Value.....	\$41,430,711	
Motorcycle and bicycle—		
Casings—		
Number.....	1,758,832	
Value.....	\$5,743,923	643,419
Inner tubes—		\$1,670,244
Number.....	301,394	
Value.....	\$417,370	
Solid—		
Truck—		
Number.....	1,072,627	
Value.....	\$36,599,616	(¹)
All other—		\$11,897,710
Number.....	1,606,137	
Value.....	\$3,581,131	
Boots and shoes:		
Heels—		
Pairs.....	89,269,519	(¹)
Value.....	\$10,265,011	(¹)
Rubberized fabrics:		
Automobile and carriage—		
Yards.....	6,877,538	(²)
Value.....	\$783,254	(²)
All other—		
Yards.....	20,661,538	(²)
Value.....	\$4,346,991	(²)
Belting, value.....	\$5,730,341	\$2,154,696
Hose, value.....	\$7,654,285	\$4,194,676
Packing, value.....	\$2,794,768	\$351,807
Druggists' and stationers' sundries, value.....	\$5,061,572	\$2,513,940
Hard rubber goods, value.....	\$12,861,621	(³)
All other manufactures of rubber, value.....	\$47,136,950	\$13,541,450
All other products, value.....	\$3,288,091	\$1,153,086

¹ Figures not available.

² Not reported separately.

Automobiles, including bodies and parts (Table 22).—The following table shows the number and value of the different classes of automobiles manufactured during 1919, 1914, and 1909. The total number of automobiles of all kinds manufactured increased 143,005, or 211.9 per cent, while the total value of all products, including bodies and parts, increased \$293,725,893, or 342.7 per cent, during the five-year period 1914–1919. Of the automobiles manufactured in 1919, 93.9 per cent were pleasure vehicles, 79.6 per cent of which were touring cars. Trucks, which represent 78.9 per cent of the business vehicles manu-

factured in the state during 1919, show an increase in number of 2,533, or 33.3 per cent.

TABLE 22.—AUTOMOBILES, INCLUDING BODIES AND PARTS: 1919, 1914, AND 1909.

PRODUCT.	1919		1914		1909	
	Num-ber.	Value.	Num-ber.	Value.	Num-ber.	Value.
Total value ¹.....	.....	\$370,436,478	.....	\$85,710,685	.....	\$38,338,754
Automobiles, total.....	210,488	198,916,202	67,483	60,465,370	14,290	23,550,112
Pleasure vehicles.....	197,647	170,025,986	58,548	53,835,446	13,403	22,630,562
Touring cars.....	157,354	123,097,625	49,421	44,800,434	6,470	14,307,360
Closed cars.....	22,349	30,913,944	2,010	4,251,172	1,072	2,526,891
Runabouts.....	12,137	8,673,108	7,117	4,783,840	2,900	2,048,583
Roadsters.....	5,807	7,341,309	(²)	(²)	3,042	2,848,023
Business vehicles.....	12,841	28,890,306	8,935	15,620,024	806	919,250
Trucks.....	10,131	22,958,704	7,598	13,611,631	202	386,045
All other ⁴	2,710	5,931,602	1,337	2,018,293	604	532,303
Chassis.....	30,002	45,670,445	(⁵)	(⁵)	(⁵)	(⁵)
Trailers.....	4,327	2,741,960	(⁵)	(⁵)	(⁵)	(⁵)
All other products, including bodies and parts and repairs.....	.....	132,107,781	.....	16,245,215	.....	15,288,642

¹ In addition, 531 automobiles, valued at \$944,283 in 1919, and 102 automobiles valued at \$159,850 in 1914, were manufactured by establishments engaged primarily in other industries.

² Included with "Runabouts" in 1914.

³ Reported as "All other" in 1909.

⁴ Includes delivery wagons, to avoid disclosure of individual operations.

⁵ Not reported separately in 1914 and 1909.

Slaughtering and meat packing (Table 23).—This table presents, for the census years 1919, 1914, and 1909, data as to the kind, number, and cost of animals slaughtered; the cost of all other materials, which includes that for poultry, horses, goats and kids, dressed meat purchased for curing, cottonseed oil for making lard compounds and substitutes, curing materials, seasoning, refrigeration, containers, whole milk and butter for making oleomargarine, fuel, rent of power, mill supplies, and freight; and the quantity and value of the principal products that can be shown without disclosing the operations of individual establishments. The value of minor specified products are grouped under "All other products" and include canned beef and pork, canned sausage, lard compounds and substitutes, oleo oil, oleomargarine, hoofs, horns, and horn tips, strips and waste, skins (other than cattle, calf, and sheep), hog and cattle hair, and stock food. The value of goat meat, dressed poultry, and horse meat is included in "Edible offal and all other fresh meat."

The actual growth of the industry is measured by the increase of 31.9 per cent in the number of animals slaughtered in 1919 over 1914. This increase was in all classes, except sheep and lambs, the largest being 630,696, or 33 per cent, in the number of hogs. The abnormal increase in the total cost of animals in this period—\$83,636,764, or 159.2 per cent—was due to the high prices prevailing as a result of the World War. The production of fresh meat was 109,966,632 pounds more in 1919 than in 1914, and that of cured meat was 56,450,247 pounds more. The total meat production, including sausage, in 1919, was 575,933,554 pounds, and including canned meat and sausage, 580,484,484 pounds.

TABLE 23.—SLAUGHTERING AND MEAT PACKING: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$150,598,439	\$58,296,970	\$43,639,913
Animals slaughtered, cost.....	\$139,105,871	\$52,529,107	\$38,633,858
Beefes—			
Number.....	410,080	269,719	265,191
Cost.....	\$35,531,201	\$10,375,082	\$11,613,314
Calves—			
Number.....	249,487	141,358	150,223
Cost.....	\$5,579,538	\$1,931,710	\$1,599,585
Sheep and lambs—			
Number.....	258,201	300,337	229,985
Cost.....	\$2,103,814	\$1,418,726	\$872,989
Hogs—			
Number.....	2,542,304	1,911,008	1,725,285
Cost.....	\$92,051,318	\$32,802,989	\$24,547,970
All other materials, cost.....	\$14,432,568	\$5,767,863	\$5,000,055
PRODUCTS.			
Total value.....	\$170,337,892	\$64,960,396	\$40,795,868
Fresh meat, value.....	\$75,899,849	\$20,255,155	\$19,753,089
Beef—			
Pounds.....	164,018,954	118,627,111	119,597,666
Value.....	\$27,876,043	\$13,000,863	\$10,047,217
Veal—			
Pounds.....	20,548,843	11,157,758	12,021,896
Value.....	\$4,708,452	\$1,569,471	\$1,498,687
Mutton and lamb—			
Pounds.....	8,583,313	9,245,870	7,738,777
Value.....	\$1,877,852	\$1,169,054	\$763,364
Pork—			
Pounds.....	157,378,994	101,775,391	60,820,259
Value.....	\$39,853,273	\$12,669,369	\$6,950,354
Edible offal and all other fresh meat—			
Pounds.....	11,674,845	11,432,187	6,728,033
Value.....	\$1,623,629	\$837,898	\$493,467
Cured meat:			
Beef, pickled and other cured—			
Pounds.....	1,278,410	1,095,084	4,450,976
Value.....	\$287,209	\$245,076	\$328,334
Pork, pickled and other cured—			
Pounds.....	178,055,163	121,188,242	121,088,353
Value.....	\$52,910,363	\$10,632,373	\$10,202,666
Sausage:			
Pounds.....	34,395,032	31,047,288	24,240,181
Value.....	\$7,424,495	\$3,092,691	\$2,337,761
Meat puddings, scrapple, etc.:			
Pounds.....	3,309,651	3,592,848	(¹)
Value.....	\$573,665	\$328,865	(¹)
Lard:			
Pounds.....	64,513,888	67,135,365	58,518,712
Value.....	\$18,053,472	\$7,147,098	\$6,566,798
Tallow, oleo stock, and stearin:			
Pounds.....	9,482,201	24,845,291	11,088,893
Value.....	\$1,338,112	\$1,083,720	\$640,001
Grease and soap stock:			
Pounds.....	5,950,317	4,821,543	(¹)
Value.....	\$722,089	\$244,193	(¹)
Castings:			
Pounds.....	1,364,408	855,544	(¹)
Value.....	\$336,071	\$90,136	(¹)
Fertilizers and fertilizer materials:			
Tons (2,000 lbs.).....	10,654	6,602	9,103
Value.....	\$500,736	\$170,422	\$166,354
Hides and pelts:			
Cattle—			
Number.....	410,080	269,719	
Pounds.....	21,707,026	16,146,170	
Value.....	\$9,043,486	\$2,391,107	410,573
Calves—			
Number.....	238,194	140,608	
Pounds.....	3,031,426	1,680,454	
Value.....	\$1,552,068	\$290,575	\$1,970,069
Sheep—			
Number.....	256,740	300,259	232,775
Value.....	\$573,312	\$292,851	\$194,720
All other products, value.....	\$3,506,465	\$2,496,134	\$1,635,606

¹ Not reported separately.

Electrical machinery, apparatus, and supplies (Table 24).—This table presents statistics of the various kinds of electrical machinery, apparatus, and supplies manufactured in Ohio for 1919. Certain classes of products, among which were incandescent lamps and carbons, were reported to a greater value than some of those for which statistics are presented in the table, but could not be shown separately without the

possibility of disclosing the operations of individual establishments.

Ohio ranked second in the industry in the value of products, reporting 15.8 per cent of the electrical products of the United States. It led all states in the production of generating apparatus and batteries, furnishing 45 per cent and 32.2 per cent of the respective totals for the United States.

TABLE 24.—ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES: 1919.

PRODUCT.	Value of products.
Total value ¹	\$156,924,143
Generating apparatus and parts.....	37,741,003
Batteries.....	29,694,720
Household and industrial apparatus and devices.....	21,726,024
Motors.....	19,760,215
Magnetoelectric apparatus.....	11,121,179
Transformers and feeder potential regulators.....	3,879,236
Switchboards, panel boards, and cut-out cabinets for light and power.....	772,083
Electric measuring instruments.....	640,477
Pole line hardware.....	432,689
Circuit fittings.....	397,926
Therapeutic apparatus and X-ray tubes.....	378,624
Telephone apparatus.....	378,150
Telegraph apparatus.....	358,104
Rectifying apparatus.....	312,238
All other electrical machinery, apparatus, and supplies.....	22,970,139
All other products.....	4,697,487
Amount received for custom work and repairing.....	1,672,543

¹ In addition, electrical machinery, apparatus, and supplies to the value of \$1,082,661 were reported by establishments engaged primarily in other industries.

Printing and publishing (Tables 25 and 26).—Table 25 gives the number and aggregate circulation per issue for all classes of newspaper and periodical publications reported for the census years 1919, 1914, and 1909.

Of the 165 dailies reported, 128, with a circulation of 1,933,072, were published in the afternoon, an increase of 29.8 per cent over the afternoon circulation in 1914. The circulation of Sunday newspapers during the same period increased 31 per cent.

TABLE 25.—PRINTING AND PUBLISHING: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1919	1914	1909	1919	1914	1909
Total.....	1,080	1,173	1,181	16,101,202	15,707,597	10,753,143
Daily.....	165	181	184	2,497,955	2,484,548	1,542,855
Sunday.....	29	28	25	1,087,733	830,219	645,869
Semiweekly.....	41	47	54	76,071	171,215	122,106
Triweekly.....	8	6	6	18,640	13,925	9,700
Weekly.....	543	641	699	3,252,812	3,110,883	2,913,730
Semi-monthly.....	10	18	14	314,298	609,734	510,064
Monthly.....	179	183	152	6,082,211	5,501,906	2,685,470
Quarterly.....	44	57	37	2,097,832	2,874,057	2,288,194
All other classes ¹	11	12	10	43,650	50,510	28,215

¹ Includes, in 1919, 11 bimonthly publications; in 1914, 11 bimonthly publications and 1 semiannual; in 1909, 8 bimonthly publications and 2 "All other."

Table 26 shows the number and circulation of foreign-language publications, in comparison with publications in English, by period of issue. The marked decreases shown in both number and circulation are due chiefly to the discontinuance of a number of German papers. The increase shown in the circulation of

foreign-language dailies is due to the reported circulation of a newspaper printed in Rumanian. Of the 84 publications, with a circulation of 573,441, printed in foreign languages in 1919, 46 were German, 8 Polish, 6 Italian, 5 Hungarian, 5 Slovenian, 4 Rumanian, 3 Bohemian, 1 Greek, 1 Lithuanian, 1 Serbo-Croatian, 1 English and German, 1 English and Italian, 1 English and Slovenian, and 1 Yiddish.

TABLE 26.—FOREIGN-LANGUAGE PUBLICATIONS COMPARED WITH ENGLISH, BY PERIOD OF ISSUE: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	Cen- sus year.	TOTAL.		IN ENGLISH.		IN FOREIGN LANGUAGES.	
		Num- ber.	Aggregate circulation per issue.	Num- ber.	Aggregate circulation per issue.	Num- ber.	Aggregate circulation per issue.
Total.....	1919	1,030	16,101,202	940	15,527,761	84	573,441
	1914	1,173	15,707,597	1,055	14,879,708	118	827,889
	1909	1,181	10,753,143	1,052	9,919,063	129	834,080
Daily.....	1919	165	2,497,955	153	2,308,227	12	180,728
	1914	181	2,484,548	169	2,353,583	12	130,965
	1909	184	1,542,855	173	1,453,190	11	89,665
Sunday.....	1919	29	1,087,733	28	1,031,994	3	55,739
	1914	28	830,219	23	742,519	5	87,700
	1909	25	645,869	18	588,729	7	57,140
Semiweekly and triweekly.	1919	49	94,711	42	76,811	7	17,900
	1914	53	185,140	45	104,144	8	20,996
	1909	60	131,806	52	111,438	8	20,368
Weekly.....	1919	543	3,282,812	500	3,114,338	43	168,474
	1914	641	3,110,833	579	2,783,531	62	327,352
	1909	699	2,913,730	630	2,543,916	69	369,814
Monthly.....	1919	179	6,082,211	169	6,042,584	10	39,627
	1914	183	5,501,906	167	5,391,453	16	110,448
	1909	152	2,685,470	133	2,550,482	19	134,988
Quarterly ¹	1919	65	3,055,780	56	2,963,897	9	101,973
	1914	87	3,594,901	72	3,444,473	15	150,428
	1909	61	2,833,413	46	2,671,303	15	162,105

¹ Includes, in 1919, 10 semimonthly and 11 bimonthly publications, 1 of each in a foreign language; in 1914, 18 semimonthly and 11 bimonthly publications and 1 semimonthly, of which, 3 semimonthly and 2 bimonthly publications were in foreign languages; in 1909, 14 semimonthly and 8 bimonthly publications and 2 "All other," of which, 5 semimonthlies, 1 bimonthly, and 1 "All other" were in foreign languages.

Flour-mill and gristmill products (Table 27).—This table shows the chief products of the industry in Ohio at the censuses of 1919, 1914, and 1909.

TABLE 27.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILES): 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$89,396,619	\$45,171,200	\$48,063,353
Wheat flour:			
Barrels.....	5,773,328	5,707,781	5,723,536
Value.....	\$63,201,713	\$27,852,222	\$30,508,109
Rye flour:			
Barrels.....	22,044	43,674	33,215
Value.....	\$189,374	\$220,344	\$146,786
Buckwheat flour:			
Pounds.....	3,853,140	5,848,216	7,436,813
Value.....	\$220,015	\$171,359	\$180,267
Corn meal and corn flour:			
Barrels.....	370,810	524,941	865,250
Value.....	\$2,714,357	\$1,696,817	\$2,528,843
Hominy and Grits:			
Pounds.....	268,000	33,822,260	80,855,375
Value.....	\$9,380	\$1,380,905	\$1,247,605
Bran and middlings:			
Tons.....	223,892	255,720	(¹)
Value.....	\$10,535,906	\$5,836,947	(¹)
Feed and offal:			
Tons.....	192,610	249,551	502,301
Value.....	\$12,063,914	\$7,536,048	\$12,406,370
All other cereal products, value.....	\$132,727	\$88,671	\$931,283
All other products, value.....	\$329,233	\$337,887	\$144,090

¹ Included in "Feed and offal."

Of the total value of products for the industry in the state, wheat flour formed 70.7 per cent in 1919 and 61.6 per cent in 1914. Bran and middlings and feed and offal combined formed 25.3 per cent and 29.7 per cent, respectively, for the two years. Illustrative of the high prices of commodities in 1919 as compared with 1914, the value of wheat flour increased 126.9 per cent while the quantity increased only 1.1 per cent during the five-year period.

Boots and shoes (Tables 28 and 29).—Table 28 gives the number of pairs and value of the various kinds of boots and shoes manufactured in the state in 1919, 1914, and 1909. The total number of pairs of boots and shoes reported in 1919 shows a small increase as compared with 1914 and a slight decrease as compared with 1909. Women's shoes constituted 69.2 per cent of the total output for the state and outnumbered by far all other kinds. Ohio ranked fifth in the industry in value of products among the states in 1919 and 1914.

TABLE 28.—BOOTS AND SHOES, BY CLASSES: 1919, 1914, AND 1909.

KIND.	1919	1914	1909
Aggregate value.....	\$71,354,850	\$32,773,922	\$30,529,408
Boots and shoes:			
Total number of pairs.....	17,571,593	17,161,199	17,683,316
Total value.....	\$70,349,255	\$31,572,556	(¹)
Men's—			
Number of pairs.....	808,507	1,419,925	1,702,104
Value.....	\$3,680,495	\$3,375,001	(¹)
Boys' and youths'—			
Number of pairs.....	1,804,099	1,734,957	1,372,330
Value.....	\$4,695,926	\$2,724,537	(¹)
Women's—			
Number of pairs.....	12,157,284	10,900,825	11,154,083
Value.....	\$56,783,280	\$21,078,519	(¹)
Misses' and children's—			
Number of pairs.....	2,711,103	3,030,402	3,464,709
Value.....	\$5,180,554	\$3,494,490	(¹)
All other footwear:			
Number of pairs.....	298,555	812,242	1,215,599
Value.....	\$630,245	\$1,052,362	(¹)
All other products, including amount received for work done for others, value.....	\$375,850	\$149,004	(¹)

¹ Figures not available.

TABLE 29.—BOOTS AND SHOES—NUMBER OF PAIRS, BY METHOD OF MANUFACTURE: 1919 AND 1914.

KIND.	Cen- sus year.	NUMBER OF PAIRS, BY METHOD OF MANUFACTURE.			
		Total.	Wetted.	McKay.	Turned and wood or metal fastened.
Boots and shoes.....	1919	17,571,593	5,255,955	10,871,298	1,444,340
	1914	17,161,199	6,027,083	9,914,087	1,218,429
Men's, boys', and youths'.....	1919	2,703,206	630,758	2,060,448	.....
	1914	3,154,882	1,217,220	1,790,438	141,218
Women's.....	1919	12,157,284	4,530,980	6,181,964	1,444,340
	1914	10,966,825	4,003,637	5,332,200	1,630,988
Misses' and children's.....	1919	2,711,103	88,217	2,622,886	.....
	1914	3,089,492	209,220	2,786,049	47,223
All other footwear.....	1919	298,555	.....	112,410	186,136
	1914	812,242	.....	470,055	342,187

¹ Includes "Turned" and "Wood or metal fastened" to avoid disclosure of individual operation.

² Includes "Wetted."

Table 29 shows that more boots and shoes were produced in Ohio by the McKay method than by any other. The number of pairs of boots and shoes manufactured by this method increased from 57.8 per cent of the total in 1914 to 61.9 per cent in 1919; while the number of those of the welted type decreased from 35.1 per cent in 1914 to 29.9 per cent in 1919.

Machine tools (Table 30).—This table shows in detail the different kinds of machine tools manufactured in Ohio in 1919. At previous censuses these have been classified as "Foundry and machine-shop products," and 1919 is the first year for which the statistics were presented separately. Ohio ranked first in this industry, reporting 24.9 per cent of the production in the United States. Lathes formed the product of chief value within the industry, representing 25.2 per cent of the total value of machine tools produced.

TABLE 30.—MACHINE TOOLS: 1919.

	Number.	Value.
Total value ¹		\$62,554,109
Lathes:		
Engines.....	6,775	12,604,232
Bench, turret, and other.....	2,763	3,143,263
Milling machines:		
Plain.....	1,926	2,620,301
Universal.....	1,155	1,800,215
Vertical, automatic, and other.....	1,274	1,180,037
Drilling machines:		
Radial.....	2,410	4,635,130
Multiple spindle, sensitive and upright.....	1,722	724,624
Screw machines, automatic and hand:		
Planers.....	3,114	4,450,210
Boring machines:		
Horizontal.....	343	1,448,449
Vertical.....	248	2,410,446
Shapers.....	1,875	1,662,301
Grinding machines:		
Plain.....	993	925,229
Universal.....	241	354,843
Cutter and tool.....	349	237,076
Hammers, all kinds.....	7,348	807,077
Pipe machines.....	1,048	585,572
Portable tools, all kinds.....		2,660,146
Other machine tools.....		12,014,548
All other products.....		4,075,049

¹ In addition, machine tools to the value of \$3,142,856 were reported by establishments engaged primarily in other industries.

Butter, cheese, and condensed milk (Table 31).—This table gives the quantities and values of the principal products for 1919, 1914, and 1909. Ohio is one of the leading states in this industry, ranking fourth in the production of butter, eighth in cheese, and seventh in condensed and evaporated milk. Butter was the product of chief value at each of the three censuses. In 1919 it formed 61.5 per cent of the total value of products, cheese 2.7 per cent, and condensed and evaporated milk 25.2 per cent.

There was an increase of 48.3 per cent in the quantity of butter, and a decrease of 40.1 per cent in the production of cheese during the five-year period 1914-1919. The remarkable increase, amounting to 136 per cent, in the quantity of condensed and evaporated milk, was due almost entirely to the increase in the output of evaporated milk, which formed 72 per cent of the total production in 1919.

TABLE 31.—BUTTER, CHEESE, AND CONDENSED MILK: 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$90,012,831	\$10,325,077	\$9,689,670
Butter:			
Pounds.....	63,882,101	43,064,562	17,491,251
Values.....	\$30,804,179	\$12,620,138	\$4,985,273
Packed solid—			
Pounds.....	30,404,045	23,616,040	11,265,341
Values.....	\$17,275,751	\$9,719,206	\$3,162,518
Prints or rolls—			
Pounds.....	33,477,456	19,447,913	6,225,910
Values.....	\$13,518,428	\$3,800,872	\$1,822,755
Cream sold:			
Pounds.....	5,862,590	13,012,456	4,735,900
Values.....	\$1,777,711	\$1,810,242	\$500,628
Cheese:			
Pounds.....	5,229,545	8,717,996	11,860,001
Values.....	\$1,634,118	\$1,051,795	\$1,533,517
Full cream—			
Pounds.....	2,672,289	6,104,862	9,768,970
Values.....	\$802,074	\$881,300	\$1,305,461
Other kinds—			
Pounds.....	2,548,256	2,613,134	2,091,031
Values.....	\$831,144	\$170,420	\$228,056
Condensed milk:			
Pounds.....	33,386,182	28,119,638	37,655,347
Values.....	\$3,983,694	\$1,458,006	\$2,409,959
Sweetened—			
Pounds.....	18,729,848	3,436,823	4,232,160
Values.....	\$2,956,539	\$109,962	\$256,529
Unsweetened—			
Pounds.....	14,656,334	24,682,815	
Values.....	\$1,027,155	\$1,258,044	\$3,423,187
Evaporated milk:			
Pounds.....	85,767,526	22,890,210	\$2,153,430
Values.....	\$11,158,618	\$1,608,025	
All other butter, cheese, and condensed-milk factory products, value.....	\$2,995,452	\$972,407	\$161,537
All other products, value.....	\$1,574,059	\$404,074	\$68,856

¹ In addition, in 1919, butter valued at \$375,270, cheese valued at \$875, and condensed and evaporated milk valued at \$100,985 were reported as subsidiary products by establishments engaged primarily in the manufacture of other products.

Brick, tile, pottery, and other clay products (Table 32).—This table presents the product statistics for the clay-working industries for 1919, 1914, and 1909. The detailed figures for quantities and values are taken from the report of the United States Geological Survey, and represent sales during the year. Ohio ranks first among the states in the clay-working industries.

TABLE 32.—BRICK, TILE, POTTERY, AND OTHER CLAY PRODUCTS: 1919, 1914, AND 1909.

	1919	1914	1909
Products, total value.....	\$60,847,937	\$38,667,374	\$30,531,002
The classified industries:			
Brick, tile, terra-cotta, and fire-clay products.....	32,172,570	23,375,689	¹ 9,357,730
Pottery.....	28,075,361	15,291,685	² 21,173,272
Brick:			
Common or building—			
Thousands.....	293,757	430,117	420,999
Value.....	\$4,083,877	\$2,862,109	\$2,420,879
Face—			
Thousands.....	148,747	188,074	130,684
Value.....	\$2,937,282	\$1,944,480	\$1,303,787
Fire—			
Thousands.....	154,922	102,735	103,148
Value.....	\$4,958,219	\$1,833,740	\$1,730,401
Vitrified—			
Thousands.....	125,491	293,381	324,530
Value.....	\$3,135,710	\$3,682,230	\$3,113,128

¹ Brick and tile.

² Pottery, terra-cotta, and fire-clay products.

TABLE 32.—BRICK, TILE, POTTERY, AND OTHER CLAY PRODUCTS: 1919, 1914, AND 1909—Continued.

	1919	1914	1909
Drain tile:			
Net tons.....	246, 158	(¹)	(¹)
Value.....	\$2, 042, 452	\$1, 589, 565	\$2, 032, 528
Sewer pipe:			
Net tons.....	481, 219	(¹)	(¹)
Value.....	\$6, 198, 580	\$4, 691, 719	\$3, 069, 798
Tile:			
Building, hollow—			
Net tons.....	664, 744	(¹)	(¹)
Value.....	\$4, 755, 610	\$2, 200, 544	\$804, 637
Ceramic mosaic—			
Square feet.....	2, 258, 018		
Value.....	\$565, 220		
Talence—			
Square feet.....	729, 717		
Value.....	\$461, 048		
Flooring—			
Square feet.....	2, 298, 344	(¹)	(¹)
Value.....	\$570, 627	\$2, 331, 079	\$1, 912, 343
Roofing—			
Squares.....	48, 334		
Value.....	\$645, 438		
Wall—			
Square feet.....	2, 450, 306		
Value.....	\$833, 013		
Pottery:			
Red earthenware.....	\$293, 240		
Red and brown, white-lined cooking ware.....	\$632, 844	\$300, 453	\$145, 137
Stoneware and yellow and Rockingham ware.....	\$2, 050, 864	\$1, 592, 102	\$1, 806, 798
White ware, semiporcelain, and semivitreous porcelain.....	\$18, 664, 031	\$10, 227, 806	\$8, 884, 189
China, bone china, delft, and belleek ware.....	\$817, 105		
Sanitary ware, including bathtubs, laundry tubs, etc.....	\$1, 301, 024	\$819, 931	\$310, 254
Porcelain electrical supplies.....	\$3, 717, 207	\$1, 472, 359	\$1, 146, 694
All other products.....	\$2, 184, 432	\$3, 319, 251	\$1, 811, 429

¹ Figures not available.

The large increase in 1919, as compared with 1914, was an increase in values and not in quantity production, the number of brick manufactured in 1919 showing a decided decrease, as compared with 1914.

The average number of wage earners in 1919—23,399—was 14.4 per cent less than the average number in 1914. This decrease, however, was confined to the "brick, tile, terra-cotta, and fire-clay" branch of the industry, the "pottery" branch showing an increase of 2.2 per cent.

Paper and wood pulp (Table 33).—This table shows the quantity and cost of materials used, the quantity and value of products, and detailed information regarding equipment for 1919, 1914, and 1909.

Ohio ranked seventh among the states in 1919 in the value of paper and wood pulp produced. Boards were the principal product of the industry in the state, forming 26.5 per cent of the total value of paper and wood pulp products in 1919. Book paper represented 23.8 per cent and fine paper 22 per cent of all products of this industry at the last census. Building, roofing, and sheathing paper, tissue paper, blotting paper, and other grades, amounting to \$4,948,781, and other products, principally paper bags and boxes, to the amount of \$4,835,851, have been included in the item "All other products," in order to avoid disclosing the operations of individual establishments.

TABLE 33.—PAPER AND WOOD PULP: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$35, 710, 348	\$16, 109, 274	\$10, 898, 285
Pulp wood:			
Cords.....	26, 967	29, 352	(¹)
Cost.....	\$247, 157	\$187, 000	\$443, 296
Wood pulp, purchased, total:			
Tons.....	² 151, 467	² 130, 451	80, 201
Cost.....	\$13, 904, 166	\$6, 392, 759	\$3, 743, 972
Ground—			
Tons.....	10, 683	0, 383	4, 778
Cost.....	\$512, 755	\$196, 447	\$110, 372
Soda fiber—			
Tons.....	25, 827	33, 555	27, 326
Cost.....	\$2, 244, 624	\$1, 490, 053	\$1, 303, 282
Sulphite fiber—			
Tons.....	99, 384	86, 559	47, 107
Cost.....	\$9, 883, 543	\$4, 335, 536	\$2, 292, 178
Sulphate fiber—			
Tons.....	13, 729	9, 017	³ 930
Cost.....	\$1, 173, 094	\$340, 218	³ \$38, 130
Screenings, mechanical and chemical, cost.....	\$80, 150	\$21, 505	(¹)
Rags, including cotton and flax waste and sweepings:			
Tons.....	29, 544	37, 303	33, 744
Cost.....	\$1, 979, 338	\$978, 771	\$893, 509
Paper stock, including high-grade shavings, and old and waste paper:			
Tons.....	180, 803	200, 906	93, 239
Cost.....	\$4, 439, 189	\$2, 307, 643	\$1, 250, 182
Manila stock, including jute bagging, rope, waste, thread, etc.:			
Tons.....	18, 802	39, 230	25, 949
Cost.....	\$1, 257, 347	\$854, 851	\$359, 420
Straw:			
Tons.....	79, 448	97, 007	70, 322
Cost.....	\$1, 051, 585	\$473, 599	\$334, 051
China clay:			
Tons.....	17, 782	(¹)	(¹)
Cost.....	\$238, 016	(¹)	(¹)
Bleaching powder:			
Tons.....	5, 342	(¹)	(¹)
Cost.....	\$213, 750	(¹)	(¹)
Fuel and rent of power, cost.....	\$2, 047, 471	\$1, 280, 584	\$1, 049, 097
All other materials, cost.....	\$9, 431, 729	\$3, 637, 977	\$2, 289, 858
PRODUCTS.			
Total value.....	\$55, 008, 190	\$23, 284, 102	\$16, 965, 260
Book, cover, plate, and coated paper:			
Tons.....	81, 101	89, 006	75, 007
Value.....	\$13, 136, 652	\$7, 712, 459	\$4, 762, 103
Fine paper:			
Tons.....	55, 006	24, 155	19, 579
Value.....	\$12, 000, 730	\$2, 597, 340	\$2, 306, 016
Wrapping paper:			
Tons.....	32, 922	34, 837	42, 548
Value.....	\$5, 488, 802	\$1, 054, 766	\$2, 389, 232
Boards:			
Tons.....	211, 335	171, 726	106, 016
Value.....	\$14, 501, 380	\$5, 637, 694	\$3, 159, 296
Straw—			
Tons.....	48, 618	39, 496	37, 710
Value.....	\$3, 347, 752	\$1, 075, 535	\$853, 100
All other—			
Tons.....	162, 717	132, 230	84, 366
Value.....	\$11, 243, 028	\$4, 402, 159	\$2, 301, 190
All other products, value.....	\$9, 784, 632	\$5, 481, 024	\$2, 358, 619
Wood pulp produced (including that used in mills where manufactured), tons.....	13, 490	14, 399	25, 935
EQUIPMENT.			
Paper machines:			
Total number.....	109	99	118
Capacity, yearly, tons.....	557, 850	478, 244	414, 650
Fourdrinier—			
Number.....	43	44	63
Capacity per 24 hours, tons.....	774	659	575
Cylinder—			
Number.....	60	55	55
Capacity per 24 hours, tons.....	1, 114	968	717
Pulp equipment:			
Grinders, number.....	4	7	5
Digesters, total number.....	4	7	11
Soda fiber, number.....	4	4	3
Sulphite fiber, number.....	3	3	8
Sulphate fiber, number.....	1		
Capacity, yearly, tons of pulp, total.	10, 678	20, 032	61, 449
Ground, tons.....		6, 552	7, 800
Soda, tons.....	5, 528	4, 600	3, 000
Sulphite, tons.....	4, 160	9, 100	43, 600
Sulphate, tons.....	1, 000		

¹ Not reported.² Includes 1,844 tons of mechanical and chemical screenings in 1919 and 637 tons in 1914.³ Reported as "Other chemical fiber."⁴ Not reported separately.

Paint and varnish (Table 34).—This table presents the statistics of products for the paint and varnish industries, 1919, 1914, and 1909. They represent 94 establishments in 1919, 61 primarily engaged in the manufacture of paints and 33 in the manufacture of varnishes, as compared with 95 (65 paint and 30 varnish) in 1914 and 87 in 1909.

TABLE 34.—PAINT AND VARNISH, 1919, 1914 AND 1909.

PRODUCT.	1919	1914	1909
Total value.....	\$50,477,810	\$19,320,576	\$13,617,180
Paint industry.....	\$36,848,364	\$14,824,073	\$13,617,180
Varnish industry.....	\$13,629,446	\$4,502,503	
Pigments.....	\$1,324,268	\$717,352	\$949,013
Paints.....	\$31,331,603	\$11,401,735	\$7,074,867
In paste form, ground in oil—			
White lead—			
Pounds.....	35,408,775	28,941,498	24,057,520
Value.....	\$4,140,545	\$1,005,492	\$1,532,797
All other—			
Pounds.....	18,074,246	13,219,598	12,237,952
Value.....	\$3,254,743	\$1,085,400	\$807,156
In oil, ready mixed for use—			
Gallons.....	11,785,606	8,187,973	6,769,267
Value.....	\$23,936,315	\$8,411,143	\$5,334,014
Varnishes and japans.....	\$11,637,510	\$5,255,127	\$3,721,880
Oleoresinous varnishes—			
Gallons.....	4,815,175	3,268,124	3,700,073
Value.....	\$7,038,545	\$2,887,022	\$2,413,323
Spirit varnishes, not turpentine—			
Gallons.....	95,800	90,309	77,768
Value.....	\$209,003	\$83,236	\$106,848
Damar and similar turpentine and benzine varnishes—			
Gallons.....	1,045,715	150,659	309,080
Value.....	\$1,867,080	\$171,309	\$250,204
Drying japans and dryers—			
Gallons.....	842,920	1,227,184	1,715,173
Value.....	\$708,887	\$550,181	
Baking japans and lacquers—			
Gallons.....	970,760	644,902	\$672,448
Value.....	\$1,046,705	\$340,961	
All other varnishes and japans, value	\$777,200	\$1,215,818	\$270,071
Fillers:			
Liquid—			
Gallons.....	270,850	281,063	202,867
Value.....	\$321,810	\$183,538	\$155,800
Dry or in paste—			
Pounds.....	2,709,141	2,970,795	4,023,364
Value.....	\$243,726	\$175,981	\$150,570
Putty—			
Pounds.....	4,060,210	1,875,714	\$955,381
Value.....	\$104,089	\$40,393	
Water paints and kalsomine, dry or in paste—			
Pounds.....	2,648,260	1,500,616	
Value.....	\$156,465	\$45,599	
All other products, value.....	\$5,268,333	\$1,520,881	

¹ In addition, products within the scope of these industries to the value of \$1,005,385 in 1919 and \$146,005 in 1914 were reported as subsidiary products by establishments engaged primarily in the manufacture of other products.

Chemicals (Table 35).—This table gives the statistics for the chemical industries for 1919, 1914, and 1909. The production shown for 1919 comprises all products reported by 57 establishments primarily engaged in the manufacture of chemicals—including those of coal-tar origin, and sulphuric, nitric, and mixed acids—amounting to \$44,181,018 and chemicals of the value of \$5,904,572 manufactured by establishments included under other industry classifications. In 1914 there were 33 establishments in the industries constituting the group, and in 1909, 37 establishments. The increase of 300 per cent in the value of all products for the period 1914–1919, as compared with 50 per cent for the 1909–1914 period, can not be accepted as a measure of growth for the industry owing to the abnormal prices prevailing in 1919.

TABLE 35.—CHEMICALS: 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$50,985,590	\$12,400,300	\$8,361,985
The classified industries:			
Chemicals.....	32,710,406	11,388,140	7,742,045
Coal-tar products.....	9,494,588		
Sulphuric, nitric, and mixed acids.....	1,969,666		
Subsidiary chemical products from other industries.....	5,904,572	1,102,229	619,940
Acids.....	7,547,185	2,435,302	1,664,157
Sodas, sodium, and compounds.....	15,074,794	4,530,911	2,285,759
Compressed and liquefied gases.....	3,330,742	501,248	245,541
Glycerin.....	4,364,434	1,246,795	1,140,639
Other chemicals.....	17,433,841	2,810,810	2,532,033
All other products.....	2,334,594	875,303	493,266

Engines, steam, gas, and water (Table 36).—This table shows the number, by groups of indicated horsepower capacity, and the value of engines of the various types manufactured in 1919 and 1914. A notable development in this industry is indicated, not only by the general increase in the number and total rated horsepower capacity of engines reported, but by the obvious trend toward the construction of larger units of power.

TABLE 36.—ENGINES, STEAM, GAS, AND WATER: 1919 AND 1914.

PRODUCT.	NUMBER BY INDICATED HORSEPOWER CAPACITY.						Indicated horsepower capacity.	Value.
	Under 10.	10 but under 50.	50 but under 100.	100 but under 500.	500 but under 1,000.	1,000 and over.		
Total:								
1919.....	6,499	41,159	663	574	34	118	1,051,014	\$44,750,880
1914.....	27,496	5,231	1,160	329	48	33	498,430	9,471,281
The engine industry:								
1919.....	3,702	40,570	663	509	34	118	1,533,000	42,850,877
1914.....	24,980	4,233	589	289	35	21	334,504	6,861,351
Subsidiary products from other industries:								
1919.....	2,797	583	65	65	.....	.....	117,414	1,900,203
1914.....	2,486	998	571	40	13	12	133,020	2,600,590
Steam engines:								
1919.....	151	716	37	188	34	118	403,138	12,760,736
1914.....	102	135	31	100	29	15	84,902	1,199,169
Internal-combustion engines:								
1919.....	5,445	7,045	196	1,300	.....	.....	332,604	7,528,724
1914.....	10,038	4,533	200	111	11	7	202,284	3,224,263
Automobile:								
1919.....	.....	4,648	.....	.....	.....	.....	92,727	1,155,004
1914.....	.....	2,016	.....	.....	.....	.....	67,005	209,122
Marine:								
1919.....	450	40	10	4	.....	.....	5,860	209,219
1914.....	2,934	580	32	14	.....	.....	26,177	534,747
Stationary:								
1919.....	2,268	2,357	180	1,184	.....	.....	113,461	4,768,079
1914.....	7,104	1,937	108	97	11	7	108,502	2,480,394
Portable and other:								
1919.....	2,727	.....	.....	112	.....	.....	120,556	1,395,522
1914.....	.....	.....	.....	.....	.....	.....	.....	.....
Traction engines (not locomotive):								
1919.....	663	22,967	.....	.....	.....	.....	748,071	15,351,101
1914.....	.....	4,542	712	7	.....	.....	63,081	2,114,053
Water wheels, motors, and turbines:								
1919.....	240	10,431	460	86	.....	.....	167,151	713,834
1914.....	17,326	21	217	111	8	11	118,163	832,029
Parts of engines:								
1919.....	.....	.....	.....	.....	.....	.....	2,460,025	619,535
1914.....	.....	.....	.....	.....	.....	.....	.....	.....
Other foundry and machine-shop products:								
1919.....	.....	.....	.....	.....	.....	.....	2,768,899	799,144
1914.....	.....	.....	.....	.....	.....	.....	.....	.....
All other products:								
1919.....	.....	.....	.....	.....	.....	.....	3,162,561	888,188
1914.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Includes group "500 but under 1,000."

Includes group "Under 10."

Petroleum, refining (Table 37).—This table presents the statistics for the various products of the petroleum-refining industry for 1919, 1914, and 1909. The figures show an increase for the period 1914 to 1919 of 46.5 per cent in quantity and 288 per cent in value of products. The average value of these oils, as a whole, was \$7 per barrel in 1919 as compared with \$2.65 in 1914, and \$2.30 in 1909. Gasoline and the naphthas constituted 46.4 per cent of the quantity of gas and oil produced; the fuel oils, 24.9 per cent; illuminating oils 18.2 per cent; and lubricating oils 10.6 per cent.

TABLE 37.—PETROLEUM, REFINING: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$31,958,077	\$9,024,445	\$3,144,583
Crude petroleum:			
Barrels (42 gallons).....	7,364,034	5,026,251	4,833,675
Cost.....	\$23,525,792	\$7,991,948	\$4,987,558
Distillates purchased and rerun:			
Barrels.....	215,299	(1)	(1)
Cost.....	\$1,880,950	(1)	(1)
Casing-head gasoline purchased:			
Barrels.....	60,055	(1)	(1)
Cost.....	\$921,149	(1)	(1)
Chemicals and filtering material, cost....	\$386,854	(1)	(1)
Containers and materials therefor, cost....	\$928,764	\$410,286	\$652,487
All other materials, cost.....	\$4,614,568	\$1,546,211	\$2,504,538
PRODUCTS.			
Total value.....	\$43,282,801	\$11,169,189	\$10,753,738
Naphthas and lighter products:			
Gasoline.....	112,624,051	41,076,200	26,991,400
Value.....	\$21,212,560	\$3,598,834	
Naphtha, benzine, etc.—			
Gallons.....	12,918,803	3,307,200	\$2,224,283
Value.....	\$2,537,857	\$167,483	
Illuminating oils:			
Gallons.....	49,228,787	50,652,900	60,209,300
Value.....	\$4,795,592	\$2,072,015	\$2,618,762
Fuel oils:			
Distillates—			
Gallons.....	17,114,604		
Value.....	\$981,324		
Gas oils—			
Gallons.....	20,984,326	64,900,800	62,897,500
Value.....	\$1,293,446	\$1,844,644	\$1,302,720
Residual fuel oils—			
Gallons.....	29,220,972		
Value.....	\$1,737,366		
Lubricating oils:			
Gallons.....	28,745,834	21,042,150	27,176,300
Value.....	\$5,503,207	\$1,900,185	\$2,062,387
Greases:			
Gallons.....	3,532,166	816,550	903,800
Value.....	\$1,404,675	\$185,951	\$207,225
Paraffin wax:			
Gallons.....	5,136,396	2,819,750	2,726,800
Value.....	\$1,385,244	\$410,929	\$470,760
Other refinery products, value.....	\$1,006,102	\$322,272	
All other products, value.....	\$1,427,429	\$606,876	\$1,867,601
EQUIPMENT (CAPACITY, GALLONS).			
Stills:			
Steam—			
Number.....	37	23	38
Capacity.....	1,386,760	921,242	1,116,738
Fire—			
Number.....	168	151	190
Capacity.....	5,135,245	4,460,446	3,330,264
Pressure—			
Number.....	73	(1)	(1)
Capacity.....	905,664	(1)	(1)
Storage tanks for:			
Crude petroleum—			
Number.....	47	20	61
Capacity.....	18,757,000	14,126,000	21,521,000
Refined petroleum—			
Number.....	561	321	
Capacity.....	45,393,000	26,905,000	
Fuel oil—			
Number.....	93	80	614
Capacity.....	32,446,000	26,771,000	78,612,000
Other—			
Number.....	569	531	
Capacity.....	57,538,000	49,754,000	

¹ Figures not available.

The corresponding distribution percentages for 1914 and 1909 indicate the steadily increasing proportion of gasoline and naphthas produced, exceeding that of fuel oil for the first time at the census of 1919.

Glass (Table 38).—This table shows the value of the various classes of glass products, and the kind and quantity of the principal varieties of pressed and blown glass and bottles and jars for 1919, 1914, and 1909. Of the establishments engaged in the manufacturing of glass in Ohio in 1919, 16 produced building glass, 20 pressed and blown glass, and 11 bottles and jars. Pressed and blown glass was the most important product of the glass industry in this state, forming 47.5 per cent of the total value of products in 1919.

Ohio ranks first among the states in the production of electric bulbs, shades, globes, and other gas and electrical goods, and beer, soda, and mineral water bottles; second in the production of tableware, jelly glasses, tumblers, and goblets, lamps, chimneys, blown tumblers, stem ware, and bar goods, and liquor bottles and flasks; and third in the manufacture of window glass and fruit jars.

TABLE 38.—GLASS: 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$36,240,877	\$19,101,342	\$14,358,274
Building glass.....	7,204,826	3,805,668	2,741,513
Pressed and blown glass.....	16,740,016	6,490,498	6,160,707
Bottles and jars.....	8,570,001	7,422,402	4,717,633
All other products.....	2,710,374	1,472,773	735,396
<i>Kind and quantity of pressed and blown glass and bottles and jars.</i>			
Pressed and blown glass:			
Tableware, 100 pieces.....	670,427	525,573	248,815
Jellies, tumblers, and goblets, dozens....	3,997,554	8,050,506	4,133,100
Lamps, dozens.....	226,392	182,433	58,197
Chimneys, dozens.....	1,401,600	1,102,380	1,215,815
Lantern globes, dozens.....	970,107	318,880	213,483
Shades, globes, and other gas and electrical goods (excluding electric bulbs) dozens.....	6,081,251	625,010	641,896
Blown tumblers, stem ware, and bar goods, dozens.....	2,820,660	1,730,548	2,255,805
Cut ware, dozens.....	240,176	15,333	0,000
Bottles and jars:			
Beer, soda, and mineral, dozens.....	1,116,857	1,220,253	585,624
Liquors and flasks, dozens.....	257,503	545,511	222,764
Fruit jars, gross.....	240,707	73,645	21,620
Packers' and preservers', gross.....	204,542	299,673	138,290

Agricultural implements (Table 39).—This table gives the value of the principal classes of agricultural implements manufactured in the state for 1919, 1914, and 1909.

TABLE 39.—AGRICULTURAL IMPLEMENTS: 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$26,556,031	\$17,484,615	\$14,440,461
Plows and cultivators.....	6,791,888	4,627,101	3,662,194
Harvesting implements.....	2,223,127	2,573,725	2,615,721
Seed separators.....	1,195,874	1,364,209	838,166
Planters and seeders and all other agricultural implements, including parts.....	12,606,934	6,156,170	7,536,830
All other products.....	2,670,472	2,379,464	
Amount received for repair work.....	1,140,236	383,855	307,694

The figures do not indicate any particular growth in this industry during the five-year period, although the total value of products increased 51.9 per cent. Plows and cultivators were the products of chief value,

forming 25.2 per cent of the total value of product in 1919. Ohio ranked fourth among the states in the manufacture of agricultural implements in 1919 and third in 1914.

Leather, tanned, curried, and finished (Table 40).—This table shows the quantity and cost of materials used and the quantity and value of the principal products for 1919, 1914, and 1909.

There was an increase of 29 per cent in the number, and 100.7 per cent in the cost of cattle hides treated in 1919, as compared with 1914. The value of products during the same period more than doubled. Upholstery leather for furniture, automobiles, and carriages was the product of chief value at each census. Sole and upper leather are shown in combination to avoid the possibility of disclosing the operations of individual establishments. Upper leather includes case, bag, and strap, rough, bookbinder's, belting, welting, saddlery, and finished splits.

Although the value has increased, due to the prevalence of higher prices at each succeeding census, the statistics indicate a steadily diminishing output of harness leather.

TABLE 40.—LEATHER, TANNED, CURRIED, AND FINISHED: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$18,817,701	\$8,506,253	\$7,719,604
Cattle hides:			
Number.....	594,193	490,521	514,226
Cost.....	\$11,096,508	\$5,530,059	\$5,179,537
All other raw stock, cost.....	\$4,283,842	\$1,608,208	\$1,157,205
Fuel and rent of power, cost.....	\$193,028	\$105,086	\$89,269
All other materials, cost.....	\$3,244,413	\$1,202,902	\$1,263,593
PRODUCTS.			
Total value.....	\$25,008,070	\$11,627,016	\$10,127,836
Sole and upper leather, value.....	\$9,771,961	\$3,789,369	¹ \$1,003,510
Upholstery leather (automobile, furniture, and carriage), value.....	\$7,820,184	\$3,404,500	\$3,734,827
Harness leather:			
Sides.....	219,455	335,127	363,081
Value.....	\$3,157,361	\$2,802,957	\$2,540,892
All other leather, value.....	\$3,840,187	\$1,135,467	\$1,082,630
All other products, value.....	\$284,237	\$486,763	\$265,277
Work on materials for others, value.....	\$125,140	\$8,770	\$700

¹ Does not include upper leather made from skins.

Laundries (Table 41).—Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. Table 41, however, summarizes the statistics for such laundries in the state of Ohio for 1919 and 1914.

TABLE 41.—POWER LAUNDRIES: 1919 AND 1914.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1914-1919.
	1919	1914	
Number of establishments.....	277	236	-6.4
Persons engaged.....	8,316	8,434	-1.4
Proprietors and firm members.....	273	309	-11.7
Salaried employees.....	1,003	800	16.6
Wage earners (average number).....	7,040	7,265	-3.1
Primary horsepower.....	12,107	10,009	11.0
Capital.....	\$8,209,599	\$5,066,162	62.0
Salaries and wages.....	6,122,025	3,996,649	53.2
Salaries.....	1,418,357	839,455	69.0
Wages.....	4,703,668	3,157,194	49.0
Paid for contract work.....	64,089	2,555	2,408.4
Rent and taxes.....	315,093	180,002	75.0
Cost of materials.....	2,874,537	1,361,546	111.1
Amount received for work done.....	12,528,344	7,822,401	60.2

¹ A minus sign (-) denotes decrease.

Dyeing and cleaning (Table 42).—Statistics for dyeing and cleaning establishments that were operated by mechanical power in 1919 are presented in this table. Statistics for such establishments are not included in the general tables nor in the totals for manufacturing industries for censuses since 1900. This presentation is the first of its kind that has been made since the census statistics were confined to manufacturing industries as distinguished from the hand trades, household industries, etc.

TABLE 42.—DYEING AND CLEANING: 1919.

	Number or amount.
Number of establishments.....	173
Persons engaged.....	2,113
Proprietors and firm members.....	165
Salaried employees.....	354
Wage earners (average number).....	1,594
Primary horsepower.....	2,714
Capital.....	\$2,630,374
Salaries and wages.....	2,011,590
Salaries.....	483,306
Wages.....	1,528,284
Paid for contract work.....	10,518
Rent and taxes.....	180,742
Cost of materials.....	803,846
Amount received for work done.....	4,657,055

Custom sawmills and custom gristmills (Tables 43 and 44).—Statistics for custom sawmills and custom gristmills are not included in the general tables nor in the totals for manufacturing industries. Data for these custom mills were not collected at the census of 1914.

Tables 43 and 44, however, summarize the statistics for such mills for 1919 and 1909. The value of products for custom sawmills represents the amount charged for work performed, and that for custom gristmills the selling value of the grain milled.

TABLE 43.—CUSTOM SAWMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	262	262	.....
Persons engaged.....	478	732	-34.7
Proprietors and firm members.....	337	340	-0.9
Salaried employees.....	1	1	.....
Wage earners (average number).....	141	391	-63.9
Primary horsepower.....	5,898	5,398	9.3
Capital.....	\$325,159	\$336,846	-3.5
Salaries.....	150	150	.....
Wages.....	107,626	107,849	-0.2
Rent and taxes.....	3,292	(²)	.....
Cost of materials.....	31,668	3,980	695.7
Amount received for work done.....	290,022	286,189	1.3

¹ A minus sign (-) denotes decrease; percentages are omitted where base is less than 100.

² Figures not available.

TABLE 44.—CUSTOM GRISTMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	171	152	12.5
Persons engaged.....	350	301	16.3
Proprietors and firm members.....	190	190	-4.5
Salaried employees.....	47	7	.....
Wage earners (average number).....	113	95	.....
Primary horsepower.....	5,737	5,125	11.9
Capital.....	\$1,001,188	\$503,988	217.7
Salaries and wages.....	153,065	32,860	365.8
Salaries.....	33,887	2,842	1,092.4
Wages.....	119,178	30,018	297.0
Rent and taxes.....	18,579	(²)	.....
Cost of materials ³	2,464,123	981,496	151.1
Value of products ³	2,989,096	1,180,853	151.2

¹ A minus sign (-) denotes decrease; percentages are omitted where base is less than 100.

² Figures not available.

³ Includes estimate of all grain ground.

GENERAL TABLES.

Table 45 gives, for 1919, 1914, and 1909, the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products for selected industries in the state and in the cities of Akron, Canton, Cincinnati, Cleveland, Columbus, Dayton, Springfield, Toledo, and Youngstown, and for each of the cities in the state having from 10,000 to 50,000 inhabitants, for which comparative figures are available, similar data for all industries combined.

Table 46 presents, for 1919, for the state as a whole and for Akron, Canton, Cincinnati, Cleveland, Columbus, Dayton, Springfield, Toledo, and Youngstown, statistics in detail for each industry for which figures can be shown without disclosing the operations of individual establishments, and the statistics for all industries combined for each of the cities in the state having from 10,000 to 50,000 inhabitants.

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.															
Expressed in thousands.																														
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.																														
All industries.....	1919	16,125	780,733	2,897,497	\$944,652	\$2,911,948	\$5,100,809	Butter, cheese, and con- densed milk.	1919	267	2,132	10,401	\$2,290	\$50,415	\$90,013															
	1914	15,058	510,435	1,993,080	817,924	1,020,752	1,782,808		1914	280	1,480	6,077	1,049	15,968	19,325															
	1909	15,138	446,034	1,583,155	245,450	824,202	1,437,936		1909	325	1,007	3,388	557	7,085	9,690															
Agricultural implements	1919	46	4,931	10,470	5,675	12,967	20,550	Canning and preserving ¹	1919	124	2,051	7,105	2,065	11,515	17,290															
	1914	59	5,464	11,077	3,826	7,810	17,485		1914	135	2,507	7,079	946	5,897	8,951															
	1909	55	5,997	9,807	3,155	6,319	14,440		1909	107	2,000	4,244	532	3,102	4,680															
Aluminum manufac- tures.	1919	20	1,840	4,721	2,747	6,673	11,132	Carriages ² and wagons and materials.	1919	152	2,213	5,361	2,255	5,654	10,946															
	1914	8	216	592	122	245	515		1914	341	5,097	13,381	3,839	8,561	16,192															
	1909	8	216	592	122	245	515		1909	407	8,815	14,771	4,647	11,414	21,049															
Artificial stone products	1919	339	721	1,932	830	1,405	2,993	Cars and general shop construction and re- pairs by electric rail- road companies.	1919	60	1,903	2,545	2,270	2,116	4,725															
	1914	403	954	2,949	535	763	1,940		1914	43	1,879	3,687	1,223	1,077	2,388															
	1909	290	802	1,325	404	499	1,378		1909	40	1,318	3,035	722	801	1,691															
Automobiles, including bodies and parts.	1919	281	45,882	70,039	63,410	250,981	379,436	Cars and general shop construction and re- pairs by steam rail- road companies.	1919	117	85,245	50,650	50,694	39,590	66,484															
	1914	102	18,752	30,249	18,411	55,330	85,711		1914	88	21,639	31,389	9,471	10,054	33,288															
	1909	75	12,130	14,433	7,746	18,522	35,839		1909	71	20,728	19,422	12,726	14,266	28,690															
Awnings, tents, and sails	1919	41	851	1,732	754	3,736	9,937	Cars, steam-railroad, not including opera- tions of railroad com- panies.	1919	8	2,177	12,085	3,336	21,315	28,146															
	1914	38	615	948	269	1,270	2,131		1914	5	2,885	6,420	2,434	8,553	11,795															
	1909	30	392	260	163	853	1,387		1909	6	2,282	4,410	1,804	4,195	6,451															
Bags, paper, exclusive of those made in paper mills.	1919	11	694	785	654	9,139	12,610	Cement.....	1919	6	655	13,514	975	1,514	3,339															
	1914	9	646	853	305	1,831	2,803		1914	7	849	6,975	521	890	2,112															
	1909	8	567	508	240	1,638	2,393		1909	9	887	12,085	544	638	1,465															
Belting, leather.....	1919	10	102	166	107	1,138	1,550	Chemicals.....	1919	87	3,670	35,049	5,474	15,296	32,719															
	1914	10	78	216	56	543	730		1914	29	2,017	18,751	1,460	6,726	11,888															
	1909	8	107	405	80	705	1,080		1909	33	1,132	11,715	749	4,748	7,742															
Blacking and cleansing and polishing prepara- tions.	1919	67	171	258	161	1,093	2,469	Clothing, men's, includ- ing shirts.	1919	278	11,830	3,038	10,070	33,830	65,559															
	1914	54	104	237	53	330	798		1914	257	10,758	2,948	4,908	13,758	27,622															
	1909	49	103	297	50	297	672		1909	342	9,950	1,794	4,050	12,920	24,369															
Boots and shoes, includ- ing cut stock. ³	1919	67	14,360	0,463	12,743	41,913	72,970	Clothing, women's.....	1919	175	8,258	2,008	8,642	26,077	48,704															
	1914	73	14,674	0,045	7,132	19,833	33,642		1914	170	9,775	1,719	6,137	12,090	22,882															
	1909	72	16,026	8,025	0,040	18,872	31,551		1909	153	8,848	1,605	4,272	10,291	19,493															
Boxes, paper and other, not elsewhere speci- fied.	1919	58	2,952	2,893	2,035	4,805	10,030	Coffee and spice, roast- ing and grinding.	1919	43	1,088	3,105	934	22,877	29,271															
	1914	49	2,453	1,941	961	2,087	4,060		1914	35	822	2,032	385	10,184	13,312															
	1909	46	2,530	1,825	830	1,931	3,635		1909	39	762	2,186	352	8,277	11,224															
Brass, bronze, and cop- per products.	1919	92	4,264	10,915	5,894	16,178	27,802	Coffins, burial cases, and undertakers' goods.	1919	20	1,148	1,983	1,182	2,840	6,475															
	1914	84	2,277	4,393	1,557	4,190	7,843		1914	19	1,252	2,203	702	1,294	2,966															
	1909	82	2,232	4,214	1,372	3,533	6,572		1909	24	1,245	2,289	525	1,324	3,061															
Bread and other bakery products.	1919	1,621	9,091	12,582	9,906	49,956	78,819	Coke, not including gas- house coke.	1919	13	3,407	43,119	6,559	33,172	46,514															
	1914	1,634	7,065	8,978	4,783	17,295	38,501		1914	5	489	2,825	352	1,607	2,157															
	1909	1,467	5,972	5,398	3,371	13,666	23,007		1909	4	240	1,250	120	640	851															
Brick, tile, pottery, and other clay products. ⁴	1919	436	23,399	78,894	24,490	18,973	60,848	Confectionery and ice cream. ⁵	1919	350	5,451	14,885	4,571	21,822	30,185															
	1914	549	27,334	76,432	16,487	12,176	38,067		1914	292	3,905	8,882	1,784	8,363	14,342															
	1909	703	23,985	64,520	12,155	8,665	30,531	Cooperage and wooden goods, not elsewhere specified.	1919	74	1,032	3,000	1,054	4,081	6,183															
Brooms, from broom corn.	1919	79	341	352	313	635	1,706		1914	95	1,516	4,037	818	2,547	3,946															
	1914	77	345	377	155	464	840		1909	113	1,663	3,453	803	2,210	3,516															
	1909	82	393	328	172	662	1,070																							
Brushes.....	1919	19	816	1,124	954	1,676	3,904																							
	1914	16	677	848	298	732	1,544																							
	1909	22	425	675	158	625	1,219																							

¹ Includes "boot and shoe findings" in 1914 and 1909.

² Excludes "sand-lime brick" in 1919 and 1914.

³ Includes "canning and preserving, fruits and vegetables," and "pickles, preserves and sauces" for all years; but excludes "canning and preserving, fish," for 1919 and 1914, to avoid disclosure of individual operations.

⁴ Includes "chewing gum" in 1914.

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.			INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.		
					Expressed in thousands.								Expressed in thousands.		
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
Copper, tin, and sheet-iron products. ¹	1919	325	9,092	11,246	\$9,338	\$26,550	\$48,256	House-furnishing goods, not elsewhere specified.	1919	29	340	793	\$245	\$1,427	\$2,165
	1914	288	7,448	8,483	4,500	14,450	25,059		1914	26	320	895	162	990	1,430
	1909	221	6,598	6,352	8,163	11,622	19,086		1909	22	304	1,009	143	924	1,566
Cordials and flavoring sirups.	1919	8	106	89	100	1,403	2,090	Ice, manufactured.....	1919	141	1,052	34,930	2,618	2,898	10,208
	1914	8	110	96	46	536	890		1914	132	1,277	27,978	904	876	3,134
	1909	8	110	96	46	536	890		1909	97	892	19,058	559	504	2,270
Cutlery and tools, not elsewhere specified.	1919	168	8,024	16,236	11,430	11,696	36,782	Ink, printing.....	1919	8	397	2,184	515	3,574	5,515
	1914	81	3,199	8,079	1,898	1,961	6,612		1914	7	254	1,013	190	1,354	2,764
	1909	70	2,820	6,567	1,518	1,650	5,036		1909	8	183	1,437	131	800	1,907
Dairymen's, poultrymen's, and apiculturists' supplies.	1919	14	445	696	430	2,056	3,471	Instruments, professional and scientific.	1919	20	601	415	534	338	1,424
	1914	18	442	1,002	233	722	1,277		1914	28	457	436	254	247	803
	1909	18	479	916	202	827	1,149								
Dyeing and finishing textiles, exclusive of that done in textile mills.	1919	6	339	3,551	384	744	1,514	Iron and steel, blast furnaces.	1919	42	9,793	359,224	20,224	137,686	179,233
	1914	5	382	4,100	191	444	706		1914	33	5,780	232,179	5,171	60,730	72,960
	1909	5	382	4,100	191	444	706		1909	40	7,295	215,739	5,090	68,425	83,099
Electrical machinery, apparatus, and supplies.	1919	189	20,672	42,753	30,652	72,297	150,924	Iron and steel, steel works and rolling mills.	1919	86	73,025	865,036	137,281	381,090	620,370
	1914	119	12,695	17,771	7,409	17,432	30,121		1914	70	46,307	642,958	38,004	139,676	205,022
	1909	115	8,073	11,959	3,847	7,220	15,777		1909	75	38,586	515,813	28,614	139,243	197,780
Explosives.....	1919	12	304	4,088	417	1,474	2,790	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.	1919	23	4,778	11,053	6,020	10,349	23,451
	1914	11	311	5,646	188	972	1,439		1914	15	2,395	6,167	1,323	2,602	4,851
	1909	11	358	2,692	204	1,104	1,719		1909	17	2,797	4,782	1,336	3,421	6,267
Fertilizers.....	1919	23	1,167	7,179	1,501	8,071	14,042	Iron and steel forgings, not made in steel works or rolling mills.	1919	38	5,931	21,030	7,623	18,686	39,563
	1914	24	1,005	4,739	590	4,827	7,240		1914	29	2,308	7,440	1,570	3,837	9,762
	1909	27	841	3,059	368	2,535	4,435		1909	30	2,002	4,912	1,117	2,221	4,044
Flags, banners, regalia, society badges, and emblems.	1919	21	1,017	552	813	1,937	4,420	Iron and steel, wrought pipe.	1919	8	4,434	10,289	7,210	23,730	37,968
	1914	17	1,074	487	531	1,203	2,005		1914	5	2,285	3,193	1,535	9,152	9,368
	1909	13	1,202	508	523	1,500	3,026		1909	5	1,081	3,770	640	2,507	3,418
Flavoring extracts.....	1919	44	325	419	347	4,800	6,590	Jewelry.....	1919	52	658	297	619	1,769	3,350
	1914	34	109	183	47	417	908		1914	57	477	348	337	403	1,265
	1909	34	109	183	47	417	908		1909	35	356	116	252	619	1,255
Flour-mill and gristmill products.	1919	577	2,122	47,830	2,439	77,102	89,397	Knit goods.....	1919	34	4,407	2,688	3,083	11,079	18,779
	1914	649	2,363	53,524	1,506	38,957	45,171		1914	38	3,411	2,749	1,502	5,033	8,654
	1909	673	2,585	52,250	1,415	41,353	48,093		1909	39	3,140	1,013	1,072	3,851	6,433
Food preparations, not elsewhere specified.	1919	98	1,857	10,256	2,107	37,414	46,340	Labels and tags.....	1919	9	228	244	216	550	1,156
	1914	76	1,523	5,709	827	20,035	27,346		1914	7	92	63	44	122	250
	1909	61	1,020	3,254	455	8,271	10,837	Leather goods.....	1919	141	1,241	946	1,067	4,461	7,771
Foundry and machine-shop products. ²	1919	2,001	114,299	266,208	148,032	246,275	572,079		1914	137	1,743	1,437	966	3,473	5,728
	1914	1,379	73,103	159,172	48,318	77,503	178,855		1909	86	1,890	1,399	879	2,860	4,939
	1909	1,218	64,317	112,588	38,015	64,560	145,837	Leather, tanned, curried, and finished.	1919	24	1,565	5,063	2,172	18,818	25,008
Foundry supplies.....	1919	28	213	2,008	234	1,963	3,259		1914	28	1,605	4,450	1,054	8,506	11,628
	1914	15	120	1,016	57	241	549		1909	36	1,884	4,244	1,083	7,720	10,128
Fur goods.....	1919	36	297	236	258	579	1,201	Lime.....	1919	30	1,191	9,175	1,262	1,701	4,021
	1914	25	136	41	100	149	423		1914	38	1,416	7,374	777	706	2,334
	1909	18	167	12	74	206	411		1909	39	1,273	3,872	553	598	1,620
Furnishing goods, men's. ³	1919	19	553	212	390	2,171	3,599	Liquors, malt.....	1919	73	3,327	35,924	4,453	7,096	25,161
	1914	51	2,667	867	723	2,700	4,236		1914	101	5,340	38,048	4,416	9,190	31,990
	1909	63	2,568	917	668	3,054	4,623		1909	105	4,356	31,690	3,267	6,563	25,332
Furniture and refrigerators.	1919	167	8,481	17,287	8,662	14,899	35,823	Looking-glass and picture frames.	1919	18	519	663	462	852	2,050
	1914	213	7,831	16,317	4,460	7,429	16,687		1914	14	410	835	258	331	913
	1909	228	8,232	15,951	4,142	7,242	16,259	Lubricating greases.....	1919	8	70	232	82	915	2,030
Gas and electric fixtures and lamps and reflectors.	1919	49	1,934	4,013	2,260	5,912	10,552		1914	8	73	134	46	356	703
	1914	52	1,832	2,863	1,021	2,600	4,899	Lumber and timber products. ⁴	1919	1,005	9,685	56,296	10,225	31,250	54,144
	1909	56	1,437	2,356	748	1,777	3,563		1914	1,188	11,921	61,162	7,104	18,017	31,853
Glass.....	1919	44	10,935	37,831	12,112	12,652	35,241		1909	1,390	13,456	69,255	6,701	19,072	34,597
	1914	39	10,997	34,871	7,053	7,046	19,191	Marble and stone work, except slate.	1919	191	1,504	8,179	1,912	2,513	7,202
	1909	45	10,169	16,198	5,977	4,688	14,358		1914	213	2,523	10,353	1,636	2,049	5,264
Glass, cutting, staining, and ornamenting.	1919	37	532	405	472	1,400	2,566		1909	198	2,012	7,070	1,161	1,450	3,847
	1914	40	481	360	295	428	979	Mattresses and spring beds, not elsewhere specified.	1919	40	553	1,054	565	2,595	4,199
	1914	34	400	2,010	270	671	1,216		1914	43	934	2,228	500	1,993	3,427
	1909	23	300	1,264	171	591	1,017		1909	38	961	2,069	435	1,682	3,307
Grindstones.....	1919	17	529	2,950	477	200	1,090	Millinery and lace goods, not elsewhere specified.	1919	41	1,033	464	762	1,893	3,632
	1914	10	546	1,866	255	61	488		1914	30	911	409	433	1,005	1,913
	1909	9	1,277	5,228	597	385	1,498		1909	31	1,357	603	478	1,459	2,744
Hats and caps, other than felt, straw, and wool.	1919	31	492	92	471	1,667	2,916	Mineral and soda waters	1919	217	867	2,199	989	3,255	6,769
	1914	28	431	58	224	574	1,040		1914	202	575	1,059	342	860	2,004
	1909	25	406	83	174	422	804		1909	174	457	1,080	287	452	1,395

¹ Includes "stamped and enameled ware, not elsewhere specified," and "tinware, not elsewhere specified."² Includes "automobile repairing"; "bells"; "engines, steam, gas, and water"; "gas machines and gas and water meters"; "hardware"; "hardware, saddlery"; "iron and steel, cast-iron pipe"; "iron and steel, tempering and welding"; "machine tools"; "plumbers' supplies, not elsewhere specified"; "pumps, steam and other power"; "steam fittings and steam and hot-water heating apparatus"; "steel barrels, drums, and tanks, portable"; and "structural ironwork, not made in steel works or rolling mills."³ Includes "suspenders, garters, and elastic woven goods," but excludes "collars and cuffs," to avoid disclosure of individual operations.⁴ Includes "saddlery and harness" and "trunks and valises," but excludes "pocketbooks," to avoid disclosure of individual operations.⁵ Includes "boxes, wooden packing, except cigar boxes"; "lumber, planing-mill products, not including planing mills connected with sawmills"; and "window and door screens and weather strips."

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.	INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.				
					Expressed in thousands.								Expressed in thousands.						
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.																			
Minerals and earths, ground or otherwise treated.	1919	44	1,900	24,006	\$2,348	\$2,219	\$0,861	Salt.....	1919	5	535	8,259	\$675	\$1,380	\$2,068				
	1914	19	433	3,967	227	352	780		1914	8	813	4,937	441	1,204	2,197				
	1909	4	64	1,340	34	223	331		1909	8	648	4,034	361	1,090	1,807				
Mirrors, framed and unframed, not elsewhere specified.	1919	10	243	312	148	712	1,099	Screws, machine.....	1919	19	4,226	10,504	5,043	5,309	16,599				
	1914	11	115	246	76	163	361		1914	7	1,404	2,885	942	1,368	3,275				
	1909	8	94	198	56	182	291		1909	6	324	915	204	178	598				
Models and patterns, not including paper patterns.	1919	138	1,192	6,731	1,915	1,704	5,400	Shipbuilding, including boat building.	1919	28	11,412	14,219	19,668	23,902	57,483				
	1914	98	619	1,036	893	183	896		1914	29	2,379	9,661	1,639	1,909	4,717				
	1909	74	441	673	294	159	670		1909	39	3,200	8,125	1,705	2,462	5,676				
Motorcycles, bicycles, and parts.	1919	9	2,480	4,289	3,339	5,130	10,874	Show cases.....	1919	13	273	804	278	557	1,177				
	1914	9	752	1,951	618	1,634	2,031		1914	11	302	711	178	280	619				
	1909	6	942	1,895	686	1,066	2,308		1909	14	349	569	173	307	668				
Musical instruments, pianos and organs, and materials.	1919	22	1,820	2,747	1,840	3,154	6,797	Signs and advertising novelties.	1919	70	1,907	2,161	1,605	3,167	7,904				
	1914	27	1,745	2,201	1,022	1,673	3,645		1914	50	1,372	1,800	734	1,744	3,561				
	1909	30	1,841	2,264	1,092	1,922	3,926		1909	28	1,096	1,125	505	941	2,598				
Oil, linseed.....	1919	3	270	1,516	275	7,761	9,369	Slaughtering and meat packing. ⁴	1919	171	5,005	21,205	7,116	154,706	175,692				
	1914	3	150	1,608	116	3,642	3,958		1914	169	3,619	13,037	1,488	59,681	66,674				
	1909	4	213	1,347	83	3,081	3,627		1909	168	3,086	9,873	1,867	44,847	50,804				
Oil, not elsewhere specified.	1919	21	302	597	366	6,546	8,986	Smelting and refining, not from the ore.	1919	7	88	130	109	1,682	2,288				
	1914	26	138	495	105	1,888	2,676		1914	8	89	697	86	311	578				
	1909	21	157	380	102	1,252	2,087		1909	6	57	280	41	174	379				
Optical goods.....	1919	31	365	176	371	806	1,885	Sporting and athletic goods.	1919	11	762	590	662	1,198	2,854				
	1914	26	175	102	103	216	617		1914	9	531	411	264	432	986				
	1909	17	67	43	42	109	274	Stationery goods, not elsewhere specified.	1919	12	766	764	769	2,162	4,646				
Paint and varnish.....	1919	94	2,929	10,450	3,186	32,307	50,478		1914	15	708	1,118	394	906	2,174				
	1914	95	2,107	8,721	1,205	11,339	19,327		1909	14	982	2,130	388	996	2,434				
	1909	87	1,535	5,672	904	8,570	13,617	Stereotyping and electrotyping.	1919	17	488	1,850	544	822	1,075				
Paper and wood pulp...	1919	49	6,899	64,420	8,094	35,710	55,098		1914	16	806	952	238	223	747				
	1914	48	5,430	50,013	3,378	16,109	23,284		1909	14	207	323	148	171	475				
	1909	47	4,073	51,402	2,419	10,898	16,965	Stoves and hot-air furnaces, including gas and oil stoves.	1919	101	10,398	13,065	12,951	21,628	48,587				
Paper goods, not elsewhere specified. ¹	1919	20	2,776	4,919	2,507	11,888	21,261		1914	105	8,575	10,648	5,761	8,415	10,982				
	1914	20	2,269	3,702	1,179	4,197	8,148		1909	102	7,274	9,478	4,217	6,300	15,858				
	1909	28	2,040	1,009	882	3,434	6,307	Sugar, beet.....	1919	5	630	7,180	1,127	5,108	7,249				
Patent medicines and compounds and druggists' preparations. ²	1919	267	1,695	1,670	1,297	7,415	18,922		1914	3	282	3,520	209	877	2,051				
	1914	252	1,032	1,049	479	3,018	7,734	Surgical appliances and artificial limbs.	1919	34	291	142	228	505	1,139				
	1909	261	905	1,568	385	1,888	5,859		1914	32	162	59	93	180	528				
Paving materials.....	1919	77	966	23,303	896	1,041	2,952		1909	23	112	58	50	82	284				
	1914	66	1,957	23,885	1,169	723	3,507	Tobacco, cigars and cigarettes. ⁵	1919	676	10,905	696	7,182	13,116	28,854				
	1909	5	56	374	83	68	210		1914	937	12,025	581	4,709	7,129	17,239				
Petroleum, refining.....	1919	11	2,431	7,383	3,246	31,958	43,283		1909	1,146	12,631	1,401	4,505	12,075	28,907				
	1914	7	1,519	4,920	1,026	9,924	11,169	Toys and games.....	1919	59	1,525	2,246	1,225	1,918	4,716				
	1909	10	1,659	4,324	1,028	8,145	10,764		1914	36	1,103	941	520	799	1,909				
Photo-engraving.....	1919	30	417	280	647	277	1,813		1909	19	367	253	175	879	768				
	1914	26	411	366	396	170	974	Umbrellas and canes...	1919	10	208	58	133	918	1,345				
	1909	20	277	215	242	109	576		1914	13	267	184	101	480	836				
Poultry, killing and dressing, not done in slaughtering and meat-packing establishments.	1919	13	105	105	112	1,681	1,917		1909	15	287	82	105	607	1,005				
	1914	5	46	45	26	440	498	Wall plaster and composition flooring.	1919	16	689	3,776	908	2,257	4,431				
Printing and publishing. ³	1919	1,780	19,174	27,268	21,665	38,817	112,029		1914	22	626	3,617	370	770	1,714				
	1914	1,783	18,070	24,308	12,800	17,070	55,609		1909	23	259	1,823	106	434	935				
	1909	1,655	15,756	18,417	9,355	11,904	41,657	Washing machines and clothes wringers.	1919	15	477	767	511	2,038	2,946				
Pumps, not including power pumps.	1919	20	1,265	2,127	1,401	2,767	7,393		1914	11	171	416	91	348	713				
	1914	17	1,014	1,403	639	1,404	3,277	Wirework, including wire rope and cable, not elsewhere specified.	1919	47	1,822	3,631	2,110	4,335	8,710				
	1909	20	897	1,322	517	1,271	2,747		1914	43	810	1,281	456	2,167	3,435				
Roofing materials.....	1919	20	1,138	7,249	1,432	7,909	12,785		1909	60	1,455	2,511	823	1,806	3,620				
	1914	18	715	2,076	429	2,319	3,906	Wood preserving.....	1919	6	444	1,330	504	2,313	3,498				
	1909	11	428	3,229	251	3,147	3,900		1914	5	163	446	119	585	937				
Rubber tires, tubes, and rubber goods, not elsewhere specified.	1919	96	63,637	170,402	90,981	299,363	551,118	Wood, turned and carved.	1919	47	892	4,610	874	1,981	3,722				
	1914	54	21,705	58,672	14,578	58,737	109,659		1914	61	965	4,250	520	1,286	2,284				
	1909	37	10,382	25,885	5,660	32,442	53,911		1909	83	1,208	4,811	538	1,063	2,460				
Safes and vaults.....	1919	18	1,821	2,704	1,907	3,440	9,478	All other industries.....	1919	787	49,746	110,100	55,098	239,579	398,894				
	1914	10	1,760	5,903	1,153	1,483	4,337		1914	759	38,949	82,515	22,801	84,678	157,600				
	1909	10	2,014	3,177	1,321	2,162	5,488		1909	986	38,583	70,108	19,664	75,273	143,510				

¹ Includes "envelopes."² Includes "perfumery and cosmetics."³ Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithographing."⁴ Includes "sausage."⁵ Includes "tobacco, chewing and smoking, and snuff" in 1909.

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.	INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.								Expressed in thousands.		
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
AKRON.....	1919	304	65,054	174,812	\$94,779	\$314,372	\$558,962	CINCINNATI.....	1919	2,289	69,680	121,526	\$68,650	\$206,280	\$500,041
All industries.	1914	305	24,080	65,942	17,310	66,062	122,292	All industries.	1914	2,135	59,861	108,689	33,159	114,107	210,860
	1909	246	15,831	36,263	8,936	43,071	73,158		1909	2,183	60,182	88,522	31,097	101,407	192,516
Artificial stone products	1919	16	49	96	61	73	172	Boots and shoes, including cut stock and findings.	1919	32	6,777	3,048	6,314	17,928	32,694
	1914	15	19	37	13	16	44		1914	34	7,295	4,195	3,716	8,322	15,329
	1909	10	30	16	15	15	41		1909	32	7,089	4,031	3,518	8,584	14,009
Bread and other bakery products.	1919	50	434	483	529	2,731	4,212	Boxes, cigar.....	1919	5	127	152	80	154	344
	1914	41	183	280	126	443	710		1914	5	139	203	62	106	226
	1909	25	90	105	58	255	417		1909	8	222	405	82	177	347
Brick and tile, pottery, and other clay products.	1919	13	872	3,367	982	805	2,402	Boxes, paper and other, not elsewhere specified.	1919	19	808	761	526	1,243	2,645
	1914	15	1,048	2,966	612	515	1,488		1914	17	753	570	263	487	1,016
	1909	18	1,172	2,902	600	443	1,491		1909	15	660	218	185	292	679
Copper, tin, and sheet-iron work.	1919	14	145	68	189	394	780	Boxes, wooden packing, except cigar boxes.	1919	10	360	1,103	330	1,097	1,791
	1914	5	53	27	43	90	132		1914	8	244	973	133	375	647
Foundry and machine-shop products. ¹	1919	44	3,269	11,457	4,671	5,909	16,147	Brass, bronze, and copper products.	1919	13	816	1,039	856	1,477	3,642
	1914	34	1,552	4,352	1,133	1,099	3,947		1914	12	556	708	346	506	1,187
	1909	26	969	2,015	650	1,062	2,248		1909	14	563	424	329	385	996
Liquors, malt.....	1919	3	185	2,662	264	391	1,776	Bread and other bakery products.	1919	182	1,745	1,426	1,579	8,919	14,140
	1914	3	184	1,732	136	308	1,352		1914	177	1,660	1,524	925	3,690	6,380
	1909	3	81	1,522	57	170	645		1909	187	1,340	909	723	3,034	5,103
Lumber, planing-mill products, not including planing mills connected with sawmills. ²	1919	8	253	991	407	1,728	2,684	Carriages and wagons and materials.	1919	28	458	921	439	1,560	2,527
	1914	13	367	1,280	245	883	1,320		1914	75	1,701	2,788	1,203	3,126	5,565
	1909	10	319	989	191	487	792		1909	74	2,250	2,788	1,296	3,702	6,825
Printing and publishing. ³	1919	33	807	1,370	969	2,415	4,990	Cars and general shop construction and repairs by steam-railroad companies.	1919	10	1,523	1,022	2,448	1,293	4,027
	1914	37	800	1,027	534	685	1,938		1914	6	747	1,023	564	341	971
	1909	27	734	934	452	597	2,353		1909	3	814	690	203	111	328
Rubber tires, tubes, and rubber goods, not elsewhere specified.	1919	22	53,806	134,609	78,577	257,333	462,093	Chemicals.....	1919	9	174	1,292	167	553	1,518
	1914	18	17,468	43,880	12,296	49,063	92,547		1914	11	81	403	51	302	618
	1909	14	9,015	20,225	5,065	29,630	49,320		1909	11	122	508	70	474	869
Stoves and hot-air furnaces.	1919	3	400	1,105	610	625	1,814	Cleansing and polishing preparations.	1919	12	29	46	24	238	478
	1914	4	362	900	264	228	888		1914	7	20	86	8	73	205
	1909	5	334	610	228	245	754	Clothing, men's, including shirts.	1919	117	6,260	1,996	5,104	19,272	36,503
All other industries.....	1919	98	4,834	18,604	7,520	41,968	61,892		1914	116	5,477	1,628	2,608	7,421	15,105
	1914	120	2,644	9,455	1,908	12,102	17,911		1909	183	5,718	559	2,612	8,680	10,976
	1909	108	3,087	6,945	1,620	10,217	15,088	Clothing, women's.....	1919	34	908	100	960	2,908	5,135
CANTON	1919	287	20,336	52,933	29,122	65,078	124,293		1914	26	1,137	107	616	1,370	2,507
All industries.	1914	276	12,255	43,071	8,550	21,808	43,713		1909	26	1,325	176	619	1,514	2,913
	1909	204	9,904	27,010	5,719	14,644	28,583	Coffee and spice, roasting and grinding.	1919	12	351	954	280	4,027	6,012
Agricultural implements.	1919	4	301	449	371	572	1,455		1914	7	227	657	107	1,782	2,286
	1914	4	271	326	194	543	1,105		1909	8	221	601	91	1,595	2,110
	1909	5	283	442	127	401	819	Copper, tin, and sheet-iron products. ⁵	1919	39	1,407	1,855	1,382	0,236	9,633
Bread and other bakery products.	1919	33	165	281	201	1,042	1,561		1914	48	1,139	1,405	712	3,548	5,570
	1914	25	131	116	66	203	421		1909	37	833	1,154	413	1,033	2,775
	1909	19	59	38	34	147	253	Electrical machinery, apparatus, and supplies.	1919	24	542	922	573	1,054	2,613
Confectionery and ice cream.	1919	13	120	289	96	371	711		1914	16	310	329	191	469	902
	1914	12	57	114	35	65	180		1909	13	313	307	260	333	836
Foundry and machine-shop products. ⁴	1919	61	2,083	6,118	3,122	7,211	15,442	Flavoring extracts.....	1919	14	135	224	137	1,901	2,644
	1914	47	2,153	3,420	1,400	2,634	8,042		1914	10	43	57	22	190	439
	1909	32	1,748	3,409	1,005	2,267	4,891	Flour-mill and gristmill products.	1919	0	38	690	47	1,010	1,208
Iron and steel, steel works and rolling mills.	1919	6	10,128	30,846	16,861	35,307	63,374		1914	7	43	725	35	1,030	1,153
	1914	6	3,799	28,428	3,245	10,209	16,887		1909	0	52	685	38	957	1,083
Lumber and timber products.	1919	12	109	531	231	1,845	2,644	Food preparations, not elsewhere specified.	1919	14	149	550	130	713	1,093
	1914	10	46	272	34	52	128		1914	12	60	187	32	218	313
	1909	3	46	180	29	95	185	Foundry and machine-shop products. ⁶	1919	278	14,118	25,574	15,642	22,291	63,385
Printing and publishing.	1919	19	199	276	282	331	1,143		1914	228	9,065	17,578	5,739	7,741	21,122
	1914	21	251	275	193	305	775		1909	200	8,534	12,590	4,985	7,044	18,380
	1909	17	161	185	88	78	293	Grease and tallow, not including lubricating greases.	1919	8	242	624	286	1,437	2,105
Signs and advertising novelties.	1919	7	85	3	33	26	92		1914	6	158	397	104	158	319
	1914	7	42	5	24	18	71	Hats and caps, other than felt, straw, and wool.	1919	12	247	29	131	729	1,271
Tobacco, cigars and cigarettes.	1919	9	14	1	9	13	29		1914	14	239	29	121	344	608
	1914	16	40	.....	16	27	65		1909	12	260	53	112	284	532
	1909	19	70	.....	27	42	106	Ice, manufactured.....	1919	16	206	5,355	267	323	1,364
All other industries.....	1919	123	6,472	14,139	7,916	18,300	37,842		1914	14	230	5,048	155	172	472
	1914	128	5,465	10,115	3,343	7,762	16,039		1909	8	129	3,229	81	124	355
	1909	109	7,597	22,762	4,409	11,614	22,086								

¹ Includes "automobile repairing" and "iron and steel, welding," in all years; "structural ironwork, not made in steel works or rolling mills," in 1919 and 1914; and "engines, steam, gas and water"; "hardware"; and "hardware, saddlery," in 1914.

² Includes "lumber and timber products" in 1914 and "window and door screens" in 1914 and 1909.

³ Includes "bookbinding and blank-book making" and "lithographing" in 1914 and 1909.

⁴ Includes "automobile repairing"; "bells"; "engines, steam, gas, and water"; "hardware, saddlery"; "pumps, steam and other power"; "iron and steel, welding"; "steam fittings and steam and hot-water heating apparatus"; and "structural ironwork, not made in steel works or rolling mills" in all years; and "hardware," and "plumbers' supplies, not elsewhere specified," in 1914 and 1909.

⁵ Includes "stamped and enameled ware, not elsewhere specified," and "tinware, not elsewhere specified."

⁶ Includes "automobile repairing"; "engines, steam, gas, and water"; "gas machines and gas and water meters"; "hardware"; "iron and steel, welding"; "machine tools"; "plumbers' supplies, not elsewhere specified"; "steam fittings and steam and hot-water heating apparatus"; "steel barrels, drums, and tanks, portable"; and "structural ironwork, not made in steel works or rolling mills," in all years; "pumps, steam and other power," in 1919; and "bells," in 1914 and 1909.

MANUFACTURES—OHIO.

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TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.	INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.														
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.																													
CINCINNATI—Continued.								CLEVELAND—Continued.																					
Jewelry.....	1919	24	324	133	\$324	\$1,305	\$2,204	Automobiles, including bodies and parts.	1919	85	18,873	32,250	\$23,047	\$97,219	\$154,567														
	1914	24	288	213	193	223	720		1914	80	7,006	10,807	5,371	14,732	27,117														
	1909	15	210	88	150	518	930		1909	32	6,408	9,135	4,023	10,417	21,404														
Leather goods ¹	1919	11	101	135	90	501	824	Awning, tents, and sails.	1919	9	329	318	329	1,258	1,061														
	1914	13	416	233	193	928	1,648		1914	8	233	94	119	458	721														
	1909	16	533	230	277	790	1,490	Blackening and cleansing and polishing preparations.	1919	25	93	112	94	524	1,119														
Leather, tanned, cured, and finished.	1919	13	682	2,187	786	7,145	10,004		1914	18	46	97	26	162	375														
	1914	12	755	2,382	474	3,054	5,426		1909	19	51	55	29	159	355														
	1909	13	907	2,369	570	3,077	8,059	Boxes, cigar.....	1919	4	51	54	23	51	108														
Liquors, malt.....	1919	17	1,002	11,973	1,310	2,448	7,790		1914	4	54	35	21	44	82														
	1914	20	1,727	13,114	1,549	2,944	10,353		1909	5	69	27	19	43	97														
	1909	22	1,578	11,410	1,108	2,173	8,874	Boxes, paper and other, not elsewhere specified.	1919	9	886	785	673	1,449	3,135														
Lumber, planing-mill products, not including planing mills connected with sawmills.	1919	22	412	2,099	495	2,052	3,123		1914	9	708	489	323	772	1,488														
	1914	23	375	1,504	202	818	1,472		1909	6	739	647	266	627	1,141														
Marble and stone work..	1919	25	136	789	105	273	668	Brass and bronze products.	1919	22	947	831	1,297	4,452	6,622														
	1914	27	327	1,171	214	268	750		1914	28	789	870	534	1,418	2,491														
	1909	25	269	854	181	262	632		1909	28	801	872	518	1,363	2,568														
Mattresses and spring beds, not elsewhere specified.	1919	11	154	232	134	608	1,009	Bread and other bakery products.	1919	238	2,184	2,513	2,697	11,812	19,413														
	1914	10	84	200	50	181	306		1914	224	1,012	1,787	1,222	3,917	6,908														
	1909	9	165	227	74	223	394		1909	108	1,229	14	804	2,732	4,731														
Millinery and lace goods.	1919	15	398	89	196	487	889	Brooms, from broom corn.	1919	10	67	41	71	209	352														
	1914	9	293	31	105	203	443		1914	7	34	21	23	64	102														
	1909	11	428	59	120	204	547	Butter.....	1919	7	114	246	94	2,415	2,744														
Mineral and soda waters.	1919	12	104	144	122	370	980		1914	6	32	145	22	926	1,004														
	1914	12	116	92	68	79	246	Carriages and wagons, including repairs. ²	1919	18	186	425	271	354	891														
Models and patterns, not including paper patterns.	1919	24	234	353	288	145	891		1914	30	289	347	219	271	696														
	1914	19	140	235	92	48	239		1909	33	267	175	182	142	402														
	1909	9	89	65	63	54	151	Cars and general shop construction and repairs by steam-rail-road companies.	1919	8	4,081	6,040	6,144	4,834	11,571														
Optical goods.....	1919	13	104	53	105	147	419		1914	9	2,877	7,338	2,362	2,297	4,958														
	1914	5	36	22	23	32	100		1909	6	1,372	1,640	843	1,077	2,056														
Paint and varnish.....	1919	26	544	2,319	372	7,783	11,533	Chemicals.....	1919	9	1,021	5,305	1,495	3,598	7,593														
	1914	25	417	2,229	204	2,784	4,517		1914	6	653	2,773	438	1,044	3,130														
	1909	24	408	1,366	215	2,486	3,880		1909	5	469	1,840	307	978	1,806														
Patent medicines and compounds and druggists' preparations. ³	1919	46	402	226	257	1,234	3,214	Clothing, men's ⁴	1919	73	8,174	748	3,452	9,632	19,433														
	1914	37	228	308	116	705	1,365		1914	68	3,590	646	1,696	4,516	9,546														
	1909	50	202	404	90	497	1,280		1909	93	2,745	346	1,096	3,203	5,953														
Photo-engraving.....	1919	11	136	51	163	72	427	Clothing, women's.....	1919	103	5,026	1,291	6,337	17,964	35,308														
	1914	8	191	169	150	78	358		1914	106	6,055	1,074	3,717	8,266	16,243														
Printing and publishing. ⁵	1919	304	4,354	6,622	4,499	8,263	23,471		1909	96	5,418	771	2,903	6,496	12,789														
	1914	307	4,074	6,056	2,883	4,105	13,387	Confectionery and ice cream. ⁷	1919	41	1,395	5,019	1,333	5,409	11,375														
	1909	280	3,866	4,671	2,480	3,349	11,519		1914	31	1,206	2,410	517	2,837	4,965														
Signs and advertising novelties.	1919	13	142	292	135	174	428	Cooperage ⁸	1919	5	287	1,086	338	1,611	2,159														
	1914	7	159	210	84	145	294		1914	7	301	1,035	138	623	855														
Slaughtering and meat packing. ⁴	1919	42	1,624	6,838	1,839	54,441	62,428		1909	10	261	633	136	471	708														
	1914	47	1,126	4,928	706	21,597	23,245	Copper, tin and sheet-iron products. ⁹	1919	122	1,418	1,403	1,820	2,779	6,164														
	1909	55	1,116	3,710	609	10,974	10,320		1914	71	1,542	1,422	919	1,854	3,805														
Wirework, not elsewhere specified.	1919	8	79	101	68	199	433		1909	37	1,364	1,281	640	1,628	2,966														
	1914	9	97	140	61	105	250	Electrical machinery, apparatus, and supplies.	1919	78	8,113	14,196	10,026	25,102	52,324														
All other industries.....	1919	708	21,238	35,917	19,630	111,220	171,784		1914	40	8,326	4,831	1,943	5,892	11,358														
	1914	606	17,620	32,517	7,729	33,100	62,826	Food preparations.....	1919	24	507	953	488	2,405	4,099														
	1909	817	19,467	33,451	9,572	31,197	62,310		1914	12	282	521	111	593	1,021														
CLEVELAND.....	1919	2,946	157,780	460,108	211,206	618,449	1,061,577	Foundry and machine-shop products. ¹⁰	1919	421	33,324	64,594	45,029	64,028	157,024														
All industries.	1914	2,345	103,317	277,066	67,351	198,493	352,418		1914	267	22,301	39,107	15,180	20,869	50,951														
	1909	2,148	84,728	199,898	43,053	154,915	271,961	Fur goods.....	1919	24	145	30	185	461	940														
Artificial stone products	1919	11	70	130	108	225	423		1914	14	76	14	93	107	290														
	1914	15	118	177	68	102	241	Furniture.....	1919	25	677	1,125	942	1,385	3,208														
	1909	18	121	158	76	92	233		1914	23	525	788	406	717	1,595														
									1909	25	467	578	285	491	1,069														

¹ Includes "trunks and valises" in all years and "saddlery and harness" in 1914 and 1909.² Includes "perfumery and cosmetics."³ Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithography" in all years. Excludes "printing and publishing, music," in 1919, to avoid disclosure of individual operations.⁴ Includes "sausage, not made in slaughtering and meat-packing establishments" in 1909.⁵ Includes "carriage and wagon materials" in 1914 and 1909.⁶ Includes "shirts" in 1914 and 1909.⁷ Includes "chewing gum" in 1914.⁸ Includes "wooden goods, not elsewhere specified," in 1914 and 1909.⁹ Includes "stamped and enameled ware, not elsewhere specified," in all years and "tinware, not elsewhere specified," in 1914 and 1909.¹⁰ Includes "automobile repairing"; "gas machines, and gas and water meters"; "hardware"; "iron and steel, cast-iron pipe"; "machine tools"; "plumbers' supplies, not elsewhere specified"; "steam fittings and steam and hot-water heating apparatus"; "steel barrels, drums, and tanks, portable"; "structural ironwork, not made in steel works or rolling mills"; "iron and steel, tempering and welding" in all years; "engines, steam, gas, and water," in 1919 and 1914; "pumps, power, other than steam," in 1914; and "bells" and "hardware, saddlery," in 1919.

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.	INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
CLEVELAND—Continued.								CLEVELAND—Continued.							
Gas and electric fixtures. ¹	1919	18	345	412	\$407	\$925	\$1,703	Printing and publishing. ⁶	1919	337	4,935	4,069	\$0,763	\$10,808	\$33,333
	1914	19	323	347	222	529	974		1914	272	4,002	5,154	3,439	4,155	13,986
	1909	17	326	199	193	229	654		1909	245	3,104	3,328	2,000	2,780	9,035
Glass, cutting, staining, and ornamenting.	1919	11	67	52	69	253	471	Slaughtering and meat packing. ⁶	1919	40	2,605	7,904	3,583	68,078	75,728
	1914	8	55	26	39	46	125		1914	39	1,400	3,220	953	22,303	24,737
	1909								1909	35	1,070	2,570	509	15,390	17,192
Hats and caps, other than felt, straw, and wool.	1919	14	191	48	236	708	1,353	Stoves and hot-air furnaces, including gas and oil stoves.	1919	27	3,964	3,814	5,244	10,115	21,907
	1914	8	122	17	63	168	303		1914	27	2,911	2,981	1,871	4,261	8,621
	1909	9	97	11	43	102	199		1909	20	1,843	1,899	1,155	2,286	4,977
Iron and steel, steel works and rolling mills.	1919	16	9,719	125,302	15,847	60,142	84,425	Tobacco, cigars. ⁷	1919	158	1,046	71	880	1,058	3,753
	1914	15	8,149	70,844	9,050	24,552	33,389		1914	233	1,540	42	775	1,093	2,066
	1909	14	7,538	60,575	5,150	28,039	38,463		1909	254	1,806	20	734	1,047	2,709
Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.	1919	11	3,603	5,758	4,610	7,573	17,264	Tools, not elsewhere specified. ⁸	1919	47	3,387	6,495	4,619	6,001	17,003
	1914	7	1,675	4,393	969	2,009	3,542		1914	12	1,592	4,031	952	831	3,684
	1909								1909	15	1,444	3,246	750	665	2,305
Iron and steel forgings, not made in steel works or rolling mills.	1919	13	1,801	6,044	2,866	5,063	13,373	Wirework, not elsewhere specified.	1919	16	1,477	2,868	1,833	3,476	7,071
	1914	11	593	2,438	416	765	1,764		1914	13	501	979	307	1,585	2,486
Jewelry.....	1919	17	70	49	106	110	290	All other industries.....	1919	475	32,016	135,066	44,145	144,743	245,713
	1914	21	105	71	79	74	232		1914	320	19,237	86,594	11,520	47,826	74,638
	1909	15	102	34	66	62	208		1909	425	20,738	70,616	10,968	45,709	73,637
Knit goods.....	1919	16	2,453	1,003	1,771	5,527	10,003	COLUMBUS.	1919	600	26,751	66,292	30,979	112,719	184,022
	1914	16	1,341	523	672	2,334	4,051	All industries.	1914	643	17,230	35,522	11,177	30,630	57,008
	1909	13	1,234	407	485	1,813	2,957		1909	586	16,428	35,780	8,892	25,204	46,032
Leather goods ²	1919	19	117	31	156	307	678	Awnings, tents, and sails.	1919	3	21	17	23	62	145
	1914	30	145	91	97	186	382		1914	3	27	10	21	65	111
	1909	14	125	84	68	133	271	Boots and shoes.....	1919	9	1,872	1,264	1,700	6,152	10,108
Liquors, malt.....	1919	8	758	7,037	1,005	1,713	5,774		1914	7	1,725	889	876	3,637	5,224
	1914	12	1,056	6,554	805	1,858	6,528	Bread and other bakery products.	1919	64	617	1,057	600	3,092	5,204
	1909	11	744	3,395	594	1,484	5,124		1914	75	545	1,100	351	1,153	2,119
Lumber, and timber products. ³	1919	55	1,222	5,097	1,460	4,640	7,908		1909	58	435	76	222	1,092	1,705
	1914	50	1,501	5,280	1,010	3,053	4,916	Brooms, from broom corn.	1919	6	10	22	10	38	67
	1909	51	1,147	5,203	699	2,732	4,021		1914	9	11	22	5	15	33
Marble and stone work.	1919	20	194	997	280	405	1,086	Cars and general shop construction and repairs by steam-railroad companies.	1919	5	4,856	7,826	5,873	8,353	15,214
	1914	19	206	684	159	207	475		1914	4	2,763	3,281	2,195	3,166	5,401
	1909	18	315	780	192	197	468	Confectionery and ice cream.	1919	10	513	1,637	483	1,368	2,575
Mattresses and spring beds.	1919	6	124	262	148	502	854		1914	13	214	754	137	570	800
	1914	7	171	398	102	248	485	Electroplating.....	1919	3	21	93	22	13	56
	1909	6	150	178	71	208	305		1914	4	34	111	19	7	48
Millinery and lace goods.	1919	20	538	357	540	1,178	2,354	Food preparations, not elsewhere specified.	1919	8	23	53	18	190	243
	1914	12	496	350	278	630	1,150		1914	6	10	23	6	27	49
	1909	6	472	143	100	726	1,206	Foundry and machine-shop products. ⁹	1919	91	4,327	7,080	5,867	9,786	21,580
Mineral and soda waters	1919	29	152	208	199	528	1,096		1914	59	2,477	4,272	1,088	3,153	6,959
	1914	25	89	112	50	144	290		1909	58	3,012	4,148	1,841	3,465	7,744
Models and patterns, not including paper patterns.	1919	41	408	416	704	223	1,534	Lumber and timber products. ¹⁰	1919	20	394	1,093	387	1,329	2,243
	1914	24	166	252	135	59	279		1914	21	358	1,910	246	613	1,088
	1909	21	190	213	123	51	251		1909	27	431	1,808	264	758	1,240
Optical goods.....	1919	7	74	46	96	226	542	Marble and stone work.	1919	0	29	50	46	64	163
	1914	7	50	24	32	97	245		1914	7	42	75	42	85	135
Paint and varnish.....	1919	35	1,555	5,274	1,654	16,629	20,487		1909	6	70	445	47	75	160
	1914	33	1,062	3,544	645	5,766	10,093	Models and patterns, not including paper patterns.	1919	9	44	57	51	22	134
	1909	24	760	2,624	468	3,889	6,138		1914	8	34	89	29	9	59
Patent medicines and compounds. ⁴	1919	56	348	277	313	2,172	6,167		1909	8	34	58	23	11	70
	1914	52	228	677	110	640	2,140	Patent medicines and compounds and druggists' preparations. ¹¹	1919	28	157	172	109	599	1,603
	1909	50	125	66	62	316	1,010		1914	23	137	184	59	311	1,088
Photo-engraving.....	1919	7	113	61	208	76	511		1909	13	140	285	61	239	946
	1914	5	67	31	79	23	196	Printing and publishing. ¹²	1919	110	1,140	1,333	1,176	2,407	6,983
	1909	3	53	23	50	36	144		1914	107	1,026	1,283	712	950	3,528
									1909	91	901	879	592	689	2,600

¹ Includes "lamps and reflectors" in 1914 and 1909.² Comprises "saddlery and harness" and "trunks and valises."³ Comprises "boxes, wooden packing, except cigar boxes"; "lumber, planing-mill products, not including planing mills connected with sawmills"; and "window and door screens" in all years; and "lumber and timber products," in 1914 and 1909.⁴ Includes "perfumery and cosmetics" in all years, and "druggists' preparations" in 1914 and 1909, the latter was omitted in 1919 to avoid disclosure of individual operations.⁵ Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithographing."⁶ Includes "sausage."⁷ Includes "tobacco, chewing and smoking, and snuff," in 1914 and 1909.⁸ Includes "cutlery and edge tools" in 1914 and 1909, excluded in 1919 to avoid disclosure of individual operations.⁹ Includes "automobile repairing"; "gas machines and gas and water meters"; "hardware"; "iron and steel, cast-iron pipe"; "iron and steel, welding"; "plumbers' supplies, not elsewhere specified"; "pumps, steam and other power"; "steam fittings and steam and hot-water heating apparatus"; and "structural ironwork, not made in steel works or rolling mills."¹⁰ Includes "boxes, wooden packing, except cigar boxes," and "lumber, planing-mill products, not including planing mills connected with sawmills," for all years; and "window and door screens and weather strips," for 1919.¹¹ Includes "perfumery and cosmetics."¹² Includes "bookbinding and blank-book making" and "lithographing" for all years; and "engraving, steel and copper plate, including plate printing," for 1919.

MANUFACTURES—OHIO.

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TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage ear- ners (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage ear- ners (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
					Expressed in thousands.								Expressed in thousands.		
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
COLUMBUS— Continued.								DAYTON— Continued.							
Shirts.....	1919	5	29	10	\$21	\$61	\$117	Tobacco, cigars.....	1919	20	1,102	124	\$764	\$1,454	\$3,058
	1914	4	33	6	13	24	60		1914	44	1,582	115	533	905	2,055
									1909	56	1,428	52	487	831	1,803
Slaughtering and meat packing. ¹	1919	7	241	1,110	241	5,857	6,516	Tools, not elsewhere specified.	1919	36	1,200	993	1,890	715	3,785
	1914	7	204	606	121	2,084	3,211		1914	8	52	112	34	13	76
	1909	6	130	365	101	1,004	2,354		1909	4	40	59	21	7	62
Stoves and hot-air fur- naces, including gas and oil stoves.	1919	12	268	380	330	610	1,134	Toys and games.....	1919	8	220	240	184	280	639
	1914	7	234	261	190	371	852		1914	5	242	102	116	245	470
	1909	10	294	377	173	310	722	All other industries.....	1919	189	19,684	32,206	26,276	51,115	120,262
All other industries.....	1919	285	12,240	41,029	13,662	72,716	109,751		1914	177	15,170	20,384	9,137	20,485	47,775
	1914	279	7,363	20,635	4,467	13,636	20,764		1909	205	13,255	20,391	8,158	17,660	41,155
	1909	301	8,400	26,405	4,462	13,377	25,920	SPRINGFIELD— All industries.							
DAYTON..... All industries.									1919	206	12,264	20,191	13,372	33,890	67,759
	1914	523	24,061	42,109	14,076	32,054	71,071	Agricultural imple- ments.	1914	253	7,868	13,113	5,328	13,704	27,722
	1909	513	21,549	31,501	12,451	27,528	60,378		1919	6	1,575	3,081	1,633	3,301	7,200
Boxes, set-up paper boxes and cartons.	1919	5	439	364	274	518	1,257	Artificial stone products	1919	4	15	29	14	18	40
	1914	5	518	408	106	400	803		1914	0	24	68	17	18	53
	1909	5	540	376	106	486	932	Bread and other bakery products.	1919	14	102	208	118	552	818
Brass, bronze, and cop- per products.	1919	9	216	318	274	734	1,272		1914	27	103	134	60	236	308
	1914	8	05	115	69	207	332	Copper, tin, and sheet- iron work.	1919	7	28	12	34	70	134
	1909	7	210	340	145	213	481		1914	6	38	40	25	33	70
Bread and other bakery products.	1919	57	530	912	575	2,028	4,522	Foundry and machine- shop products. ²	1919	44	2,674	4,952	3,275	5,600	12,072
	1914	64	491	651	290	1,213	2,013		1914	45	2,100	4,230	1,467	2,088	5,700
	1909	65	350	401	187	949	1,531	Models and patterns, not including paper patterns.	1919	6	10	22	30	5	58
Carriages and wagons, including repairs.	1919	3	14	43	18	21	50		1914	6	0	16	8	2	18
	1914	12	67	206	52	02	145	Musical instruments, piano materials.	1919	3	508	975	660	596	2,037
Clothing, men's ³	1919	7	283	73	184	815	1,787		1914	3	540	478	203	240	753
	1914	4	147	148	03	138	277	Printing and publish- ing, book and job.	1919	16	176	195	172	208	607
	1909	4	196	125	71	209	354		1914	18	140	110	88	92	280
Confectionery and ice cream.	1919	20	261	590	218	920	1,473	Tobacco, cigars.....	1919	7	20	.....	10	20	43
	1914	16	197	351	01	302	528		1914	14	51	10	23	23	72
Copper, tin, and sheet- iron work.	1919	6	38	.....	48	101	152	All other industries.....	1919	69	7,147	10,717	7,426	23,614	43,845
	1914	11	72	51	43	81	178		1914	118	3,416	5,591	2,130	7,683	14,515
	1909	11	63	50	44	88	178	TOLEDO..... All industries.							
Foundry and machine- shop products. ³	1919	98	5,053	11,281	6,093	7,764	19,766		1919	671	42,090	93,227	53,363	173,288	293,521
	1914	71	3,424	5,862	2,119	2,044	6,850		1914	713	27,070	53,369	18,124	70,494	115,049
	1909	69	3,585	5,576	2,033	2,800	6,778		1909	760	18,878	43,046	9,911	34,084	61,230
Furniture.....	1919	7	432	754	308	502	1,480	Artificial stone prod- ucts.	1919	11	51	80	71	153	293
	1914	10	400	667	210	285	825		1914	12	20	60	17	37	82
	1909	10	423	705	200	287	744	Bread and other bakery products.	1919	79	661	943	757	3,550	5,775
Lumber and timber products. ⁴	1919	10	465	1,930	545	1,558	2,044		1914	70	579	541	370	1,253	2,307
	1914	12	576	1,799	410	1,151	1,899		1909	88	408	314	200	959	1,598
	1909	11	512	1,650	325	878	1,417	Brooms, from broom corn.	1919	5	14	12	18	48	80
Marble and stone work.	1919	6	52	98	43	243	266		1914	5	25	24	15	31	57
	1914	4	14	30	11	14	36	Cars and general shop construction and re- pairs by steam-rail- road companies.	1919	5	1,022	1,660	1,592	768	2,610
	1909	6	41	80	33	39	95		1914	6	814	1,254	590	594	1,202
Mineral and soda waters	1919	7	24	72	29	149	288	Clothing, women's.....	1909	4	1,198	935	634	674	1,427
	1914	6	22	56	18	35	79		1919	8	673	163	720	2,335	4,163
Models and patterns, not including paper patterns.	1919	12	65	95	105	31	223		1914	13	892	200	515	1,410	2,434
	1914	7	37	100	26	8	50	Confectionery and ice cream. ⁷	1909	13	1,150	155	492	1,375	2,323
	1909	5	31	44	20	5	35		1919	12	300	599	246	1,748	2,777
Printing and publishing ⁵	1919	50	763	1,300	809	1,088	3,643		1914	12	184	290	81	507	778
	1914	50	680	1,045	459	560	1,774	Cooperage and wooden goods, not elsewhere specified.	1919	5	76	151	76	235	395
	1909	45	630	1,078	386	440	1,552		1914	8	85	75	38	104	189
Slaughtering and meat packing.	1919	12	290	1,352	347	7,479	8,415		1909	10	116	145	52	106	195
	1914	9	275	669	193	3,846	4,831								
	1909	10	245	484	145	2,036	3,171								

¹ Includes "sausage" in 1914 and 1909.² Includes "shirts" for 1914 and 1909.³ Includes "automobile repairing"; "gas machines and gas and water meters"; "hardware"; "iron and steel, tempering and welding"; "machine tools"; "plumbers' supplies, not elsewhere specified"; steam fittings and steam and hot-water heating apparatus; steel barrels, drums, and tanks, portable; and structural ironwork, not made in steel works or rolling mills" in all years; and "engines, steam, gas, and water" and "pumps, steam and other power," in 1919 and 1914.⁴ Includes "boxes, wooden packing, except cigar boxes," and "lumber, planing-mill products, not including planing mills connected with sawmills."⁵ Includes "bookbinding and blank-book making" and "lithographing" in 1914 and 1909.⁶ Includes "automobile repairing"; "engines, steam, gas, and water"; "iron and steel, welding"; "machine tools"; "plumbers' supplies, not elsewhere specified";⁷ Includes "steam fittings and steam and hot-water heating apparatus"; and "structural ironwork, not made in steel works or rolling mills."⁸ Includes "chewing gum" in 1914.

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
TOLEDO— Continued.								TOLEDO— Continued.							
Copper, tin, and sheet- iron products. ¹	1919	20	753	984	\$790	\$2,340	\$4,298	Patent medicines and compounds and drug- gists' preparations. ⁵	1919	25	41	93	\$45	\$138	\$469
	1914	35	698	713	465	1,020	2,029		1914	31	51	102	29	125	453
	1909	37	547	265	282	649	1,303		1909	51	76	154	36	140	540
Electrical machinery, apparatus, and sup- plies.	1919	13	3,365	5,413	3,187	8,871	19,246	Printing and publish- ing. ⁶	1919	86	867	1,278	1,097	1,991	5,999
	1914	11	918	1,155	897	1,821	3,230		1914	88	889	1,095	670	858	2,991
	1909	7	416	248	168	289	932		1909	72	793	866	480	523	2,004
Flour-mill and grist- mill products.	1919	6	236	2,723	291	11,510	13,433	Tools, not elsewhere specified.	1919	9	231	213	304	103	596
	1914	6	234	3,345	187	5,277	5,815		1914	4	15	30	12	5	33
	1909	7	204	3,510	140	4,931	5,662	All other industries.....	1909	253	26,447	61,605	33,883	124,331	107,304
Foundry and machine- shop products. ²	1919	71	6,390	13,972	9,118	11,915	30,235		1914	272	16,823	34,339	11,351	52,585	82,199
	1914	67	3,796	6,679	2,674	3,137	7,855		1909	327	9,472	26,738	4,801	19,341	34,808
	1909	75	3,191	6,931	1,005	3,161	7,024								
Furniture.....	1919	9	199	370	215	296	763	YOUNGSTOWN..	1919	239	19,414	303,887	38,319	163,099	241,458
	1914	16	374	740	231	299	734	All industries.	1914	201	15,861	196,665	12,349	69,077	92,111
	1909	23	580	884	303	545	1,128		1909	115	10,498	140,907	7,835	62,292	81,271
House-furnishing goods.	1919	5	29	7	29	116	202	Artificial stone prod- ucts.	1919	7	14	66	17	20	70
	1914	3	19	12	15	59	128		1914	9	48	95	23	20	55
Lumber and timber products. ³	1919	20	444	2,332	484	1,728	2,694	Bread and other bakery products.	1919	44	238	319	362	1,700	2,713
	1914	21	486	2,141	333	1,054	1,747		1914	43	130	115	83	316	620
	1909	28	585	2,480	286	1,111	1,793		1909	22	65	23	38	133	249
Marble and stone work, except slate.	1919	6	85	167	166	282	659	Confectionery and ice cream.	1919	11	68	579	110	418	834
	1914	8	63	227	57	197	331		1914	7	70	265	37	84	189
	1909	6	62	142	43	108	217	Foundry and machine- shop products. ⁷	1919	36	2,461	11,216	4,265	13,191	23,082
Mineral and soda waters	1919	8	48	125	66	186	338		1914	19	2,040	8,492	1,580	4,442	7,235
	1914	8	40	119	33	65	159		1909	15	1,153	2,074	800	2,702	4,865
Models and patterns, not including paper patterns.	1919	9	97	78	169	58	323	Printing and publish- ing.	1919	28	295	482	425	525	2,082
	1914	6	16	33	15	4	29		1914	21	243	303	181	178	762
	1909	7	16	29	9	5	24		1909	13	164	188	109	128	454
Paints ⁴	1919	6	55	259	60	571	809	All other industries.....	1919	113	16,338	291,225	33,140	147,238	212,077
	1919	5	40	186	23	122	267		1914	102	13,324	187,395	10,445	64,037	83,220
	1909	5	34	160	20	168	252		1909	65	9,116	138,022	6,888	59,329	75,703

¹ Includes "stamped ware, not elsewhere specified," and "tinware, not elsewhere specified."² Includes "automobile repairing"; "iron and steel, welding"; "machine tools"; "plumber's supplies, not elsewhere specified"; "steel barrels, drums, and tanks, portable"; and "structural ironwork, not made in steel works or rolling mills," in all years; "engines, steam, gas, and water," and "hardware" in 1919 and 1914; and "steam fittings and steam and hot-water heating apparatus" in 1919 and 1909.³ Comprises "boxes, wooden packing"; "lumber, planing-mill products, not including planing mills connected with sawmills"; and "window and door screens."⁴ Includes "varnishes" in 1919.⁵ Includes "perfumery and cosmetics."⁶ Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithographing."⁷ Includes "automobile repairing"; "hardware"; "iron and steel, welding"; and "structural ironwork, not made in steel works or rolling mills."

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.			INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.						
					Expressed in thousands.								Expressed in thousands.						
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																			
ALLIANCE.....	1919	74	5,117	12,481	\$5,769	\$14,789	\$32,871	LORAIN.....	1910	55	11,677	148,258	\$22,955	\$65,995	\$110,900				
	1914	52	2,333	4,678	1,617	3,656	7,175		1914	66	6,436	211,182	4,660	17,929	29,110				
	1909	44	2,524	3,463	1,462	2,863	6,135		1909	57	6,667	208,992	4,788	24,359	35,987				
ASHTABULA.....	1919	62	4,172	9,013	5,813	10,969	23,099	MANSFIELD.....	1910	132	4,711	9,123	5,570	17,322	31,878				
	1914	57	1,898	7,327	1,345	2,825	5,021		1914	103	3,398	6,637	2,029	4,772	10,283				
	1909	44	1,471	2,379	814	2,084	3,459		1909	121	3,204	5,077	1,472	4,356	8,173				
BARBERTON.....	1919	32	4,762	29,000	8,261	14,696	27,713	MARIETTA.....	1910	59	1,285	3,716	1,218	2,852	5,917				
	1914	34	3,118	7,211	1,734	4,106	8,844		1914	71	1,401	3,117	844	2,383	4,129				
	1909	27	2,277	15,387	2,729	9,929	14,502		1909	66	1,288	2,742	594	1,787	3,215				
BELLAIRE.....	1919	45	2,317	14,390	1,566	9,278	12,170	MARION.....	1910	70	4,125	9,601	4,831	10,374	20,713				
	1914	40	2,003	14,390	1,566	9,278	12,170		1914	66	2,577	5,575	1,612	2,582	5,385				
	1909	36	2,597	17,790	1,412	7,159	10,092		1909	55	2,019	3,696	1,405	2,577	5,667				
CAMBRIDGE.....	1919	32	1,782	5,100	3,038	5,853	11,227	MASSILLON.....	1910	80	2,153	9,981	2,715	7,074	13,085				
	1914	39	1,455	5,742	1,112	2,340	3,924		1914	70	1,768	5,544	1,168	2,710	5,293				
	1909	32	1,230	5,055	919	2,885	4,291		1909	56	1,934	4,730	1,127	2,200	4,788				
CHILLICOTHE.....	1919	35	1,638	5,036	1,840	4,340	7,667	MIDDLETOWN.....	1910	56	6,442	56,386	8,720	35,687	62,838				
	1914	46	1,557	4,765	862	2,571	4,083		1914	63	4,008	35,328	2,838	10,580	21,787				
	1909	57	1,674	3,558	707	3,038	4,345		1909	41	2,576	9,304	1,389	7,950	16,517				
COSHOCTON.....	1919	45	1,959	5,439	1,652	3,873	7,685	NEWARK.....	1910	70	4,570	10,314	4,632	8,272	16,533				
	1914	47	1,614	3,501	805	1,814	3,477		1914	79	4,683	8,071	2,969	3,574	9,277				
	1909	47	1,614	3,501	805	1,814	3,477		1909	72	3,913	8,630	1,958	3,982	7,851				
EAST CLEVELAND.....	1919	17	88	217	104	191	421	NORWOOD.....	1910	70	8,283	16,218	8,149	20,223	47,947				
	1914	7	129	397	81	147	296		1914	58	5,808	9,805	3,614	7,217	16,724				
	1909	82	4,873	5,528	2,704	2,521	6,029		1909	49	3,007	6,381	2,081	4,021	9,684				
EAST LIVERPOOL.....	1919	67	4,311	5,911	4,546	4,891	12,501	PIQUA.....	1910	66	3,298	7,212	3,037	10,955	19,921				
	1914	80	4,830	6,051	2,935	2,842	7,093		1914	78	2,777	5,721	1,508	4,554	7,988				
	1909	82	4,873	5,528	2,704	2,521	6,029		1909	82	2,688	5,002	1,292	3,852	6,931				
ELYRIA.....	1919	75	4,590	14,481	6,029	10,228	25,101	PORTSMOUTH.....	1910	60	5,014	22,392	6,907	20,178	36,646				
	1914	63	2,735	10,814	1,759	5,016	8,792		1914	76	3,597	5,009	1,751	4,079	7,682				
	1909	58	2,673	9,058	1,573	4,495	8,065		1909	75	3,728	4,028	1,459	3,894	7,277				
FINDLAY.....	1919	75	1,715	4,098	1,543	4,828	7,924	SANDUSKY.....	1910	115	3,447	15,949	3,666	10,680	19,249				
	1914	78	1,737	3,561	778	2,791	4,663		1914	107	2,727	7,415	1,686	4,059	8,285				
	1909	74	1,376	2,574	574	2,094	3,487		1909	91	2,118	4,856	1,000	2,885	5,047				
FREMONT.....	1919	53	2,099	5,752	3,114	5,438	12,915	STREUBENVILLE.....	1910	57	3,855	44,531	6,689	16,876	30,903				
	1914	65	2,063	3,664	1,097	2,296	4,780		1914	60	4,506	30,731	3,430	11,432	16,959				
	1909	125	6,805	22,668	3,798	9,640	18,184		1909	55	4,207	37,748	3,203	14,443	21,187				
HAMILTON.....	1919	130	8,553	27,590	10,004	23,637	47,024	TIFFIN.....	1910	75	2,213	3,748	2,439	4,780	10,516				
	1914	120	6,043	16,767	8,595	9,015	16,577		1914	78	2,177	4,464	1,410	2,392	4,906				
	1909	125	6,805	22,668	3,798	9,640	18,184		1909	75	1,632	3,257	828	1,252	3,254				
IRONTON.....	1919	52	1,971	16,968	2,252	3,837	14,072	WARREN.....	1910	66	2,433	6,083	3,274	11,931	19,747				
	1914	50	1,420	16,147	721	3,294	4,696		1914	82	2,862	5,747	1,938	6,355	10,400				
	1909	63	1,920	16,548	888	4,994	7,118		1909	68	1,793	5,530	911	3,064	5,988				
LAKEWOOD.....	1919	33	1,821	2,435	2,254	3,858	7,603	ZANESVILLE.....	1910	97	3,014	7,557	2,942	7,427	13,438				
	1914	22	1,774	2,909	1,022	1,604	3,606		1914	97	3,035	7,064	1,685	5,246	8,300				
	1909	42	1,532	2,453	677	3,051	4,074		1909	108	2,932	7,783	1,582	5,056	8,020				
LANCASTER.....	1919	43	2,024	3,189	2,033	6,739	11,479												
	1914	53	1,683	2,874	790	3,287	4,003												
	1909	42	1,532	2,453	677	3,051	4,074												
LIMA.....	1919	108	4,901	11,075	5,293	12,743	23,639												
	1914	97	4,876	7,518	3,173	6,309	11,590												
	1909	85	3,607	3,264	2,024	3,869	7,764												

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.										WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	10 and over.		Under 10.				
						Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.	Female.			
									Maximum month.	Minimum month.								
THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																		
1	All industries.....	16,125	882,018	12,823	30,265	71,636	37,461	730,733	De 700,681	My 687,683	(*)	(*)	(*)	(*)	(*)	Dollars. 3,748,743,996		
2	Agricultural implements.....	46	5,991	27	240	585	208	4,931	Mh 5,411	Ja 4,406	5,283	5,216	07	.....	.....	27,884,087
3	Aluminum manufactures.....	20	2,382	4	143	243	152	1,840	De 2,300	Ja 1,405	2,269	2,080	180	.....	.....	7,001,815
4	Artificial flowers.....	6	33	0	3	.....	.....	22	Ja 24	Oc 19	21	21	5	10	.....	33,708
5	Artificial limbs.....	17	66	18	8	.....	.....	34	Oc 30	Ap 32	35	33	2	.....	.....	83,294
6	Artificial stone products.....	339	1,205	384	65	10	25	721	Au 988	Ja 841	895	895	.....	.....	.....	2,521,108
7	Automobile bodies and parts.....	237	19,561	161	727	1,244	759	16,670	De 21,679	Fe 12,635	21,607	20,263	1,319	81	4	65,425,652		
8	Automobiles.....	44	33,760	2	715	2,407	1,424	29,212	De 35,931	My 20,274	36,997	35,661	1,343	.....	.....	191,041,010
9	Automobile repairing.....	540	3,463	623	144	100	166	2,430	Oc 2,798	Ja 2,156	2,503	2,407	26	10	.....	6,811,464	
10	Awnings, tents, and sails.....	41	1,040	29	46	69	45	851	Ja 1,000	Fe 642	865	373	489	.....	.....	5,468,880
11	Bags, paper, exclusive of those made in paper mills.....	11	924	1	57	117	55	604	De 704	Mh 604	704	363	351	.....	.....	4,575,170
12	Baskets, and rattan and willow ware.....	29	383	40	15	4	5	319	Au 359	My 280	315	199	115	1	.....	232,216	
13	Belting, leather.....	10	184	10	26	42	14	102	De 118	Ja 94	109	107	2	.....	.....	1,072,266
14	Blacking, stains, and dressings.....	13	81	16	13	7	5	40	Ja 50	Ja 31	46	25	20	.....	.....	244,079
15	Bookbinding and blank-book making.....	54	1,301	56	44	255	112	834	De 1,004	Fe 762	967	620	404	4	.....	3,242,432	
16	Boot and shoe cut stock.....	7	810	3	22	11	6	268	No 208	Ja 243	289	190	93	.....	.....	813,282
17	Boots and shoes, not including rubber boots and shoes.....	60	15,753	13	428	620	600	14,062	De 14,063	Ap 13,473	14,623	8,718	6,088	92	25	40,178,881		
18	Boxes, cigar.....	19	410	18	12	5	5	379	De 404	Au 354	405	155	250	.....	.....	394,767
19	Boxes, paper and other, not elsewhere specified.....	58	3,275	24	151	69	70	2,652	.....	.....	3,202	1,152	2,027	3	20	6,118,841
20	Shipping containers, corrugated and fiber.....	10	432	.....	38	8	17	369	De 428	My 287	433	267	165	1	.....	1,037,065
21	Set-up paper boxes.....	38	2,335	22	65	49	45	2,134	No 2,340	Ja 2,000	2,281	624	1,630	1	20	3,816,706		
22	Cartons.....	10	508	2	28	12	17	449	No 485	Ja 406	488	261	226	1	.....	1,204,480	
23	Boxes, wooden packing, except cigar boxes.....	98	2,148	99	99	49	27	1,874	De 1,909	Ap 1,746	2,008	1,883	122	3	.....	4,846,740	
24	Brass, bronze, and copper products.....	92	5,019	57	230	318	150	4,204	.....	.....	4,983	4,773	203	7	.....	16,887,641
25	Brass and bronze products.....	81	4,778	46	209	301	143	4,079	No 4,800	Fe 3,538	4,748	4,560	181	7	.....	10,028,331	
26	All other.....	11	241	11	21	17	7	185	No 236	Fe 143	235	213	22	.....	.....	859,319
27	Bread and other bakery products.....	1,621	13,353	1,803	392	1,358	709	9,091	.....	.....	9,880	7,278	2,531	53	18	57,719,262
28	Biscuit and crackers.....	12	2,140	63	260	94	723	De 1,900	My 1,062	1,613	962	975	1	6	.....	5,632,102	
29	Bakery products, other than biscuit and crackers.....	1,609	11,213	1,803	329	1,098	615	7,368	De 7,897	Fe 6,785	7,917	6,206	1,556	52	13	51,767,162		
30	Brick and tile, terra-cotta, and fire-clay products.....	341	13,548	239	615	404	230	12,060	.....	.....	13,230	12,672	497	61	.....	64,371,025
31	Building brick.....	96	4,250	36	234	134	78	3,768	Au 4,790	Fe 2,319	4,300	4,230	54	7	.....	24,787,690	
32	Fire brick.....	36	2,214	6	97	60	35	2,016	No 2,080	Au 1,725	2,171	2,102	20	43	.....	9,102,274	
33	Sewer pipe and drain tile.....	158	3,474	187	144	64	43	3,036	Au 3,428	De 2,406	3,076	3,034	10	0	.....	12,801,430	
34	Terra-cotta products.....	46	3,321	10	120	139	72	2,980	Se 3,488	Ja 2,407	3,450	3,050	395	6	.....	10,313,665	
35	All other.....	5	289	20	7	2	260	Ja 205	Au 226	233	227	0	.....	.....	1,399,336	
36	Brooms, from broom corn.....	79	489	85	19	32	12	341	Ja 351	Ja 331	363	313	49	1	.....	857,875	
37	Brushes.....	19	1,115	12	55	144	88	816	De 1,018	My 688	1,020	809	211	.....	.....	3,315,972
38	Butter.....	141	2,029	77	167	134	289	1,362	Ja 1,531	Ja 1,148	1,361	1,160	196	5	.....	8,018,205	
39	Buttons.....	6	125	3	5	1	2	114	Ja 139	My 65	145	127	18	.....	.....	182,125
40	Canning and preserving, fruits and vegetables.....	87	1,868	62	157	38	45	1,676	.....	.....	3,011	2,211	1,661	18	31	6,744,352
41	Canned vegetables.....	82	1,801	50	151	37	44	1,619	Se 4,541	De 347	3,740	2,083	1,008	18	31	6,480,158		
42	All other.....	5	87	2	6	1	1	57	Ja 321	Ja 11	171	128	43	.....	.....	258,191
43	Card cutting and designing.....	4	246	1	9	21	12	263	No 252	My 168	233	74	159	.....	.....	321,881
44	Carpets, rag.....	25	144	28	5	4	2	105	Ja 116	Ja 84	106	65	37	4	.....	76,337	
45	Carriage and wagon materials.....	33	1,390	22	68	62	39	1,219	De 1,461	Ja 904	1,450	1,303	146	1	.....	3,632,774	
46	Carriages and wagons, including repairs.....	119	1,317	125	84	62	52	994	.....	.....	940	918	22	.....	.....	3,818,581
47	Carriages and wagons.....	59	1,044	47	71	60	50	816	Ap 880	No 742	754	733	21	.....	.....	3,362,376
48	Repair work only.....	60	273	78	13	2	2	178	No 189	Ja 165	180	185	1	.....	.....	450,208
49	Cars and general shop construction and repairs by electric-railroad companies.....	60	2,006	1	60	19	26	1,903	Mh 1,906	Ja 1,767	1,899	1,804	6	.....	.....	4,942,650
50	Cars and general shop construction and repairs by steam-railroad companies.....	117	38,584	.....	1,177	1,742	420	35,245	De 37,236	Ap 32,688	37,234	36,973	261	.....	.....	42,581,602
51	Cars, steam-railroad, not including operations of railroad companies.....	8	2,576	.....	79	237	83	2,177	De 2,539	Ja 1,847	2,539	2,536	2	1	.....	20,676,710
52	Cement.....	6	721	.....	19	35	12	655	Au 766	Fe 502	646	644	2	.....	.....	4,340,385
53	Cheese.....	96	112	52	1	.....	.....	59	My 93	Ja 21	80	80	.....	.....	.....	270,850
54	Chemicals.....	37	4,410	1	178	357	204	3,670	Oc 4,210	Ap 3,022	4,290	4,012	288	1	.....	20,704,288	
55	Cleansing and polishing preparations.....	54	820	50	42	58	39	131	.....	.....	150	93	56	1	.....	807,002
56	Cleansing preparations.....	33	213	30	30	33	23	97	Fe 113	Ja 77	112	98	43	1	.....	452,000	
57	Metal polish.....	5	23	3	5	5	2	8	(*) 113	Ja 77	.....	.....	.....	.....	.....	38,280
58	All other polishing preparations.....	16	94	17	7	20	14	26	Se 32	Ja 20	30	19	11	.....	.....	319,662
59	Cloth, sponging and refinishing.....	6	76	5	3	1	3	64	Se 00	Ap 61	65	65	.....	.....	.....	85,410
60	Clothing, men's.....	246	12,062	262	380	920	561	9,939	.....	.....	11,597	3,588	7,971	8	30	30,155,535
61	Regular factories.....	148	10,703	142	373	920	558	8,710	.....	.....	10,242	3,240	6,958	7	28	29,967,837
62	Men's, youths', and boys'.....	92	8,464	93	295	758	447	6,861	De 8,104	Ap 6,043	8,057	2,901	5,138	0	12	24,732,426		
63	All other.....	50	2,249	49	78	162	111	1,849	No 2,231	Ap 1,471	2,185	348	1,820	1	10	5,235,631		
64	Contract work.....	98	1,359	120	7	.....	3	1,229	De 1,352	Ap 1,174	1,355	339	1,013	1	2	185,001	
65	Clothing, men's, buttonholes.....	8	101	10	2	.....	3	86	De 98	Ja 78	98	10	70	.....	.....	27,453
66	Clothing, women's.....	175	10,045	133	432	717	505	8,258	.....	.....	8,223	2,593	5,573	8	49	21,780,994
67	Regular factories.....	144	9,541	104	410	716	503	7,808	.....	.....	7,659	2,617	5,120	5	17	21,628,730
68	Suits, skirts, and cloaks.....	70	6,093	60	241	513	382	4,897	Au 5,514	My 4,409	4,853	2,108	2,741	4	.....	16,000,910	
69	Shirt waists and dresses, except house dresses.....	32	2,297	20	97	148	76	1,956	Au 2,147	Ja 1,707	1,782	315	1,407	.....	.....	4,008,346
70	Undergarments and petticoats.....	11	415	2	20	12	20	361	No 396	My 334	380	30	350	.....	.....	1,194,100
71	Wrappers and house dresses.....	11	245	9	15	22	10	189	Ja 228	My 161	212	0	185	1	17	428,561		
72	All other.....	20	491	13	37	21	15	405	No 446	Ja 336	420	49	377	.....	.....	641,735
73	Contract work.....	31	504	29	22	1	2	450	De 558	Ap 372	564	70	453	3	32	161,255		

* Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

† Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

‡ No figures given for reason stated under "Explanation of terms."

COMBINED AND SPECIFIED INDUSTRIES: 1919.

EXPENSES.										POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.		Value of products.	Value added by manufacture.	Primary horsepower.					Electric horsepower generated in establishments reporting.	
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.	Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.		Water power. ¹	Rent.^{2}
Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
114,246,012	169,468,347	1,407,558	374,054	147,039	10,115	957,831	819,383	1								
046,901	1,130,349	5,675,451	1,500	10,480	571,380	12,011,928	354,807	26,556,031	13,589,206	10,470	4,170	1,433	1,685	220	3,082	5,893
601,532	642,674	2,746,873	7,800	8,172	174,882	6,470,030	195,042	11,132,231	4,450,659	4,721			1,090		3,661	770
7,515	2,245	21,765		4,910	553	45,400	177	112,543	66,957							
19,734	8,799	37,206	700	19,727	1,607	52,799	1,159	107,065	143,047	27					23	5
99,601	27,139	830,254	7,009	15,199	19,350	1,365,930	39,122	2,992,977	1,587,025	1,932	286			708	938	8
2,408,535	2,393,441	21,966,409	60,467	272,474	2,110,799	51,448,978	1,092,976	92,300,646	39,848,997	41,560	2,442	40	640		38,435	662
3,513,285	5,147,108	41,443,839	97,560	53,798	9,910,381	196,354,341	2,084,620	287,045,832	88,006,871	37,473	6,113	400	228		30,732	3,001
271,286	230,647	3,311,759	38,475	283,977	80,497	4,344,652	149,745	10,245,408	5,751,011	3,078	180		735		2,763	6
100,830	146,443	753,692	1,552	27,077	289,482	3,689,161	40,659	6,037,359	3,201,539	1,732	225		47		1,460	20
313,736	278,373	653,579	560	27,380	388,106	9,109,811	20,421	12,600,666	3,470,424	785	590				195	591
25,775	8,411	239,450	1,131	2,370	2,932	128,620	6,107	537,898	403,171	639	556			8	75	12
80,623	44,598	107,356		13,367	14,263	1,132,842	5,032	1,549,605	411,821	166					111	13
60,310	23,128	32,432		3,260	8,169	260,601	2,402	588,551	325,308	42					42	14
150,281	685,060	824,540	80,486	40,279	39,489	882,094	20,126	3,836,591	2,928,341	846					86	16
52,791	15,540	197,455		6,084	21,590	1,092,014	18,800	1,615,003	504,093	326	18				303	16
1,682,420	3,208,137	12,545,100	92,931	130,409	1,772,248	40,521,015	281,469	71,354,850	30,552,366	9,137	4,188	155	343		4,451	2,288
28,072	8,070	230,192	251	11,683	7,010	467,700	12,840	950,730	470,130	490	240			91	150	26
454,522	183,829	2,034,000	1,669	196,636	250,177	4,721,322	83,349	10,029,812	5,225,141	2,893	503			265	2,125	140
110,391	20,035	322,903	1,209	52,885	13,482	1,225,503	16,061	2,108,429	866,865	687	40			75	572	5
252,187	121,510	1,398,874		101,375	220,907	2,447,137	46,449	5,975,710	3,482,130	1,449	203			90	1,156	135
85,944	30,281	313,132	400	12,276	21,788	1,048,682	20,839	1,945,067	876,140	757	200			100	897	22
336,416	86,661	1,778,927	3,727	38,246	166,954	5,287,965	66,011	8,936,596	3,583,019	6,738	3,712	15	377		2,634	149
1,001,777	755,044	5,893,721	4,939	43,639	903,828	15,527,757	649,770	27,801,700	11,024,227	10,915	1,792	300	904		7,019	835
925,345	711,251	5,669,984	4,939	40,009	894,939	14,683,819	610,419	26,450,170	11,146,938	9,507	522	300	884		7,801	785
76,432	43,703	223,737		2,640	8,889	843,938	30,357	1,351,584	477,289	1,408	1,270			20	118	50
1,222,366	2,878,991	9,906,004	48,505	666,765	1,234,703	48,744,427	1,211,118	78,819,001	28,863,450	12,582	1,887	53	774	5	10,368	721
296,854	548,410	1,277,465		18,343	618,401	6,204,518	122,844	11,583,100	5,199,038	1,357	451				906	93
925,512	2,330,576	8,028,599	48,505	648,442	616,302	42,470,909	1,088,574	67,236,901	23,607,418	11,225	936	53	774	5	9,457	628
1,583,812	804,322	12,931,241	97,032	38,430	803,983	4,577,945	5,382,726	32,172,570	22,211,905	63,768	40,023	390	4,003		10,347	5,818
527,392	218,175	4,275,500	2,005	19,745	191,867	1,076,396	2,042,884	10,731,413	7,012,183	23,026	17,561		1,104		4,901	1,100
367,012	148,691	2,141,364	13,103	13,059	256,019	1,046,233	816,857	5,813,721	3,730,631	5,449	6,691				1,798	385
319,985	146,509	3,234,076	16,340	4,210	251,809	1,362,778	1,381,544	7,989,373	5,245,056	18,236	15,665	300	760		1,511	2,800
339,214	280,889	2,978,405	65,678	1,410	139,489	955,501	1,049,502	7,005,180	5,000,177	12,105	8,629	30	1,304		2,112	1,252
30,209	10,189	301,771	500		24,699	137,042	61,939	772,889	543,908	1,287	577			655	25	35
37,026	52,156	312,649		8,443	12,627	921,033	13,893	1,706,377	771,451	1,287	577			124	108	36
106,800	261,973	954,083	250	9,728	66,417	1,653,054	22,837	3,909,708	2,227,007	1,124	460			170	494	670
451,478	387,817	1,456,165	4,984	81,048	255,889	34,455,248	271,055	41,081,093	6,334,790	7,405	3,486	3	1,124		2,792	743
7,094	3,679	82,693		1,445	967	72,503	2,257	161,614	116,854	93	25			25	430	39
285,099	67,253	775,723	508	3,785	174,408	4,347,443	64,800	6,839,227	2,420,015	5,103	3,844	123	400		730	282
271,649	65,633	744,014	508	3,195	171,110	4,260,986	92,167	6,662,944	2,339,761	5,024	3,760	123	390		730	282
13,450	1,620	31,709		500	3,298	89,457	2,672	175,383	86,254	70	75					42
43,000	80,547	169,522		12,024	37,817	255,909	3,250	590,123	590,803	112					112	43
5,180	3,630	64,635	3,193	5,070	908	33,207	3,182	169,459	130,010	155				75	80	3
161,642	99,859	1,182,154		15,009	97,342	3,197,742	93,700	5,031,002	2,670,070	3,433	2,841			195	897	593
245,941	123,844	1,072,636	10,082	47,360	174,984	2,334,197	58,455	5,014,008	2,621,356	1,028	1,182			465	1,281	11
221,135	118,031	854,128	3,682	28,096	168,430	2,102,841	48,008	4,344,467	2,193,618	1,600	182			370	1,042	11
22,800	5,213	218,508	6,400	19,254	6,554	231,356	10,447	900,461	427,738	328				89	289	47
173,430	52,735	2,269,996	13,409	3,120	30,412	1,914,056	202,382	4,724,031	2,608,198	2,545	129			2	2,414	874
2,847,966	3,135,954	50,694,380		81,000	89,567	36,997,952	2,562,096	96,483,940	56,893,896	50,650	24,943	5,187	1,010		18,910	22,252
591,454	348,080	3,335,505	8,585	22,835	922,410	21,097,856	217,288	28,145,542	6,830,398	12,685	1,905			460	10,330	300
73,050	60,931	975,029	21,510		43,810	615,907	898,344	3,338,594	1,824,343	13,514	5,225	1,000	80		7,200	3,498
1,097	125,422	2,698	3,698		3,991	1,614,248	11,064	1,753,274	227,962	510	435	72	3			53
693,141	742,760	5,473,508	50,874	34,095	1,740,048	12,146,385	3,149,144	32,719,406	17,423,937	35,049	13,838	10,820	433	20	4,438	10,676
139,434	115,742	128,906	2,100	39,470	19,673	823,182	6,818	1,880,024	1,050,024	210				35	181	55
92,721	55,049	101,469		31,574	9,462	548,441	4,911	1,324,810	770,858	149				15	134	56
3,185	12,735	8,040		4,203	1,126	41,668	383	93								

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.						Capital.		
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.				
						Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.	Female.			
									Maximum month.	Minimum month.								
1	Coal-tar products.....	15	944	2	62	23	23	834	Fe	924	Ja ^a	711	919	912	7	.....	Dollars.
2	Coffee and spice, roasting and grinding.....	43	1,811	17	103	480	123	1,088	Se	1,191	Mh	980	1,002	532	552	8	6,693,570	
3	Coffins, burial cases, and undertakers' goods.....	20	1,377	15	71	100	43	1,148	Mh	1,221	Jy	1,100	1,125	925	200	.....	9,778,988
4	Coke, not including gas-house coke....	13	3,847	.....	109	208	63	3,407	Ja	4,257	Oc	2,256	3,154	2,713	2	439	4,382,095
5	Condensed milk.....	30	806	3	41	24	27	711	Je	783	Ja	647	703	630	64	.....	48,242,369
6	Confectionery and ice cream.....	380	7,248	417	361	494	525	5,451	Oc	5,423	Jy	3,304	6,230	2,652	3,526	37	15	4,403,577
7	Confectionery.....	185	5,297	179	221	382	375	4,137	Jy	1,742	Je	995	4,901	1,533	3,425	18	15	18,347,323
8	Ice cream.....	195	1,951	238	137	112	150	1,314	De	789	Mh	627	1,239	1,119	101	19	11,454,830
9	Cooperage.....	58	797	28	44	11	13	701	De	789	Mh	627	800	795	4	.....	6,892,430
10	Copper, tin, and sheet-iron work.....	262	3,434	265	231	135	153	2,650	De	2,955	Mh	2,288	3,007	2,848	157	2	1	2,800,774
11	Cordials and flavoring sirups.....	8	178	4	15	37	16	106	Jy	139	Ja	89	102	71	31	.....	0,081,220
12	Cutlery and edge tools.....	19	1,849	8	66	75	37	1,603	Je	1,713	Se	1,619	1,658	1,320	329	.....	901,517
13	Dairymen's, poultrymen's, and apiarists' supplies.....	14	617	9	38	74	51	445	Do	480	My	418	485	410	66	.....	3,727,269
14	Druggists' preparations.....	29	835	21	46	142	101	525	Mh	624	No	478	493	219	274	.....	2,359,302
15	Dyeing and finishing textiles, exclusive of that done in textile mills.....	6	367	.....	14	8	6	330	Se	373	Fe	300	377	310	61	.....	2,466,992
16	Electrical machinery, apparatus, and supplies.....	180	32,501	53	925	2,817	2,034	20,072	Do	31,551	My	22,000	35,633	27,377	8,226	24	6	2,108,425
17	Electroplating.....	39	314	40	26	5	7	236	Do	291	Fe	196	201	276	14	1	103,340,897
18	Emery and other abrasive wheels.....	5	245	2	15	16	11	201	Do	226	Ja	193	220	224	2	.....	274,501
19	Engines, steam, gas, and water.....	44	7,554	9	265	782	280	6,218	Au	0,607	My	5,673	6,341	6,301	40	.....	420,618
20	Engraving and die sinking.....	13	56	16	6	1	2	31	De	40	Mh	23	40	34	0	.....	37,221,036
21	Engraving, steel and copper plate, including plate printing.....	22	304	15	14	12	8	255	Jy	271	Fe	224	271	174	97	.....	70,292
22	Engraving, wood.....	5	8	0	.....	.....	.....	2	(1)	2	(1)	2	2	2	.....	.....	225,887
23	Envelopes.....	7	1,100	1	27	13	38	1,021	De	1,108	Ap ^a	960	1,118	413	705	.....	3,085
24	Explosives.....	12	427	1	45	58	19	304	Ja	355	Je	251	317	310	1	.....	2,340,030
25	Fertilizers.....	23	1,539	1	99	100	52	1,197	Se	2,185	De	870	1,312	1,302	10	.....	4,340,334
26	Flags and banners.....	11	153	10	10	9	1	123	Je	144	Mh	111	120	42	77	1	11,640,854
27	Flavoring extracts.....	44	529	42	35	88	39	325	Je	410	Mh	285	322	222	98	.....	272,817
28	Flour-mill and gristmill products.....	577	3,503	717	313	228	183	2,122	Se	2,281	Fe	1,937	2,335	2,318	13	2	2	2,819,206
29	Food preparations, not elsewhere specified.....	98	2,959	85	139	662	216	1,857	Au	2,133	Mh	1,580	1,930	1,474	443	8	5	32,284,502
30	Foundry and machine-shop products.....	1,000	84,753	561	3,538	5,666	2,701	72,227	70,985	78,608	1,840	128	3	19,405,119
31	Boiler shops.....	51	3,156	32	135	361	111	2,517	Ja	3,108	My	2,266	2,831	2,825	6	.....	207,222,356
32	Foundries.....	152	21,325	86	700	650	340	10,480	Do	23,525	My	17,134	23,420	22,847	465	108	19,570,080
33	Machine shops.....	703	43,914	423	1,975	3,571	1,749	36,190	Ja	30,574	Je	34,347	38,571	37,528	1,025	15	3	45,307,999
34	Machine shop and foundry combined.....	94	10,358	20	668	1,075	561	14,034	Do	15,056	Je	13,220	15,163	14,808	350	5	168,984,006
35	Foundry supplies.....	28	353	7	54	43	36	213	No	271	Mh	181	203	259	4	.....	63,360,271
36	Fur goods.....	36	287	38	18	6	18	207	No	278	Mh	159	263	87	176	.....	1,652,556
37	Furnishing goods, men's.....	12	444	9	30	89	24	292	Do	342	My	266	340	46	303	.....	663,500
38	Furniture.....	162	9,723	92	404	511	370	8,346	0,401	8,642	704	55	898,468
39	Wood furniture, other than rattan and willow.....	116	5,601	72	225	237	134	4,933	Do	5,009	Ja	4,157	5,469	5,091	354	24	25,896,058
40	Rattan and willow furniture.....	5	299	4	16	14	5	260	No	318	Ja	204	310	215	70	31	13,950,241
41	Metal furniture.....	11	1,699	.....	101	161	155	1,292	De	1,583	Je	1,032	1,583	1,524	59	.....	431,427
42	Store and office fixtures.....	30	2,124	16	72	99	76	1,861	De	2,032	Ja	1,769	2,033	1,812	221	.....	6,086,589
43	Gas and electric fixtures.....	35	1,012	27	56	53	37	839	962	606	340	16	5,418,591
44	Gas fixtures.....	12	445	5	25	11	12	392	Oc	433	Jy	303	401	154	240	7	2,985,996
45	All other.....	23	567	22	31	42	25	447	No	563	Fe	300	561	452	100	9	1,087,124
46	Gas, illuminating and heating.....	15	221	.....	31	12	16	162	Ja	175	De	152	154	153	1	.....	1,898,772
47	Gas machines and gas and water meters.....	14	335	3	42	49	30	211	Ja	237	My	178	202	200	2	.....	6,500,838
48	Glass.....	44	11,761	297	305	224	10,935	Do	12,085	Jy	9,077	13,346	11,370	1,016	44	10	1,393,005
49	Glass, cutting, staining, and ornamenting.....	37	664	26	49	26	31	532	Do	655	Ja	430	656	402	251	.....	27,690,039
50	Gloves and mittens, cloth, not including gloves made in textile mills.....	35	2,328	22	60	33	51	2,162	Ja	2,745	My	1,733	2,635	317	2,221	27	70	988,143
51	Grease and tallow, not including lubricating greases.....	54	896	44	68	53	20	711	.....	.....	.....	.....	713	706	7	.....	4,384,678
52	Soap stock.....	24	410	19	28	12	5	346	Mh	365	No	318	349	345	4	.....	4,147,277
53	All other.....	30	486	25	40	41	15	365	Au	402	Je	334	364	361	3	.....	1,500,507
54	Grindstones.....	17	574	5	23	10	7	529	Ap	613	De	446	463	440	4	.....	2,646,770
55	Hair work.....	11	48	12	2	2	.....	32	Fe ^a	34	No ^a	29	34	0	28	.....	1,843,285
56	Hand stamps.....	23	148	24	17	10	14	83	De ^a	93	Ja	60	94	84	6	.....	20,539
57	Hardware.....	50	5,047	23	142	145	161	4,570	4,834	4,080	734	11	197,241
58	Locks.....	7	39	4	9	1	2	23	No	32	My	14	33	31	2	.....	11,160,691
59	Builders' hardware.....	10	551	4	16	38	28	470	No	508	Se	441	507	418	89	.....	97,546
60	All other.....	33	4,457	15	117	131	131	4,083	Au	4,427	Ja	3,699	4,294	3,640	643	11	1,906,848
61	Hats and caps, other than felt, straw, and wool.....	31	639	38	54	52	23	492	De	574	Ap	370	587	220	344	.....	9,156,303
62	House-furnishing goods, not elsewhere specified.....	29	459	18	28	42	31	340	Jy	377	Ja	300	346	173	171	2	1,197,761
63	Ice, manufactured.....	141	2,544	85	215	87	205	1,952	Jy	2,959	Ja ^a	1,148	2,176	2,143	33	.....	1,375,056
64	Ink printing.....	8	532	.....	19	67	49	397	No	462	Ap	345	457	428	29	.....	16,990,167
65	Instruments, professional and scientific.....	20	718	11	50	22	34	601	Jy	693	Ja	501	648	332	313	.....	2,799,717
66	Iron and steel, blast furnaces.....	42	11,055	.....	311	747	204	9,793	Ja	12,137	Oc	6,105	11,211	11,203	8	.....	1,062,549
67	Iron and steel, steel works and rolling mills.....	86	80,494	3	1,395	4,618	1,453	73,025	Ja	85,304	Oc	41,747	82,078	81,607	1,010	1	162,007,954
68	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	23	5,274	9	130	207	150	4,778	Ja	5,334	Oc	3,975	4,976	4,030	915	26	5	511,271,910

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rent- ed.^{2}
			Steam engines (not turbines).					Steam turbines.	Internal-combustion engines.		Water power. ¹				

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
211,077	44,872	1,040,539	33,490	23,042	525,693	5,184,305	204,990	9,494,580	4,105,321	4,809	2,387	30	2,482	1,006	1			
432,027	1,413,224	933,090		67,075	271,290	22,700,144	80,757	26,271,332	0,394,431	3,105	160	423	2,522	546	2			
154,324	229,973	1,182,351	100	4,374	415,307	2,784,433	55,324	0,474,900	3,635,141	1,983	1,102	280	591	1,259	3			
425,411	498,458	6,559,947	1,450	72	940,702	2,783,735	30,388,211	46,514,213	13,342,207	43,119	16,007	12,000	870	13,582	24,039	4		
127,310	58,740	708,177	12,577	5,293	119,200	13,925,447	237,503	17,197,564	3,034,614	2,480	1,820	8	202	365	891	5		
1,949,734	1,185,703	4,671,129	4,829	844,820	1,805,337	21,312,276	500,503	39,185,084	17,363,305	14,385	1,964		1,681	10,740	978	6		
1,003,104	934,989	2,980,590	720	279,769	1,492,702	13,587,711	217,449	25,146,428	11,341,288	5,010	1,097		220	3,684	726	7		
340,670	250,774	1,584,230	4,109	65,051	312,575	7,724,565	292,054	14,038,656	6,022,037	9,375	807		1,452	7,050	252	8		
113,030	44,405	790,284	8,250	17,082	44,324	3,347,874	37,888	4,882,780	1,497,018	2,043	1,050		37	850	58	9		
747,556	353,009	2,016,330	9,100	99,564	295,983	8,398,148	91,321	15,809,262	7,319,793	3,105	75		845	2,185	218	10		
45,290	94,481	99,920		22,938	55,170	1,398,842	4,200	2,090,198	687,150	89			2	87		11		
191,345	171,731	1,012,611		8,318	151,432	877,944	82,015	4,254,814	3,294,255	3,320	925		735	1,660	225	12		
112,139	125,981	429,507	1,400	5,072	77,127	2,042,730	13,578	3,471,313	1,415,005	990	505		72	119	104	13		
148,943	359,005	395,284		10,248	56,440	1,773,505	15,990	3,941,307	2,151,803	422	135		7	280	14	14		
37,744	31,666	383,050		5,118	16,494	661,524	82,578	1,513,008	799,200	3,551	3,400			151	511	15		
3,600,310	5,779,003	30,652,032	38,738	373,950	8,177,807	70,633,187	1,664,020	160,924,143	84,620,036	42,753	4,533	8	2,008	36,144	14,150	16		
53,850	7,724	325,822	4,232	20,205	1,820	136,178	22,820	717,924	558,026	834			105	639		17		
49,270	45,035	135,802		1,360	57,072	275,731	28,674	828,801	524,390	378	135		6	237	25	18		
1,012,009	1,377,454	8,032,602	1,246	31,053	1,900,944	19,988,093	355,688	42,850,077	22,600,806	12,961	4,455	81	2,762	5,663	8,954	19		
9,400	1,720	40,375		4,118	338	18,177	889	118,025	98,050	58				58		20		
49,718	26,172	313,953	3,102	18,848	12,462	173,905	4,936	825,800	640,950	103				103		21		
		2,024	192		603	53	4,728	15,012	11,172							22		
170,909	50,430	879,539		318,173	130,607	3,840,974	30,844	5,892,541	2,014,723	1,106	840		230	1,500	220	23		
101,002	116,191	417,024		2,905	170,728	1,387,511	86,151	2,700,301	1,316,639	4,086	2,077	500		3,232	1,076	24		
299,305	318,007	1,600,901	6,910	7,859	489,137	7,909,525	161,718	14,042,055	6,970,812	7,179	3,399		132	3,232	747	25		
30,444	12,027	80,713	500	4,904	13,361	218,506	3,092	432,522	210,924	248	100			93		26		
153,392	231,618	340,677		41,941	114,058	4,775,051	24,935	6,690,338	1,790,352	419	133		19	207		27		
929,762	453,895	2,439,110	1,800	22,811	781,557	76,334,009	767,472	80,399,619	12,291,538	47,830	22,403	75	10,737	8,314	1,236	28		
671,805	1,184,447	2,106,794	277	42,372	1,497,832	37,107,823	240,221	46,340,447	8,920,403	10,256	2,393	6,133	381	1,340	5,508	29		
13,769,091	12,087,471	95,261,522	537,908	605,353	14,005,567	139,362,319	7,035,044	347,635,394	200,337,129	170,872	42,419	2,219	12,267	113,635	59,310	30		
581,775	773,315	3,202,791	9,270	24,507	554,139	9,380,300	427,116	6,055,001	6,838,585	10,220	5,793	720	403	3,302	9,464	31		
2,975,936	1,394,249	27,174,013	46,412	55,848	2,113,046	24,413,410	2,944,401	70,792,433	43,434,650	37,905	5,080	52	2,200	29,677	6,843	32		
7,732,483	7,462,107	40,750,259	473,644	474,412	9,583,255	81,636,487	2,071,078	197,202,913	112,594,448	89,287	10,653	1,337	302	60,453	24,143	33		
2,479,497	2,437,710	18,074,450	8,642	50,588	2,354,527	23,923,116	1,592,391	62,985,047	37,469,540	38,400	10,987	110	2,030	20,303	18,860	34		
182,429	99,303	234,169	23,694	11,884	40,008	1,917,293	45,221	3,259,085	1,296,671	2,008	477		120	1,411	293	35		
50,077	27,214	252,930	303	40,895	7,804	575,718	3,085	1,201,147	622,344	236				236		36		
93,339	185,207	227,802	14,302	16,169	25,504	1,394,750	4,022	2,184,979	785,001	59			20	39		37		
1,470,363	1,109,885	6,518,618	37,737	163,559	991,738	14,200,007	379,440	35,224,313	20,044,770	10,870	10,353	103	770	5,584	5,744	38		
847,657	543,021	5,007,930	6,611	95,444	307,417	8,100,690	220,610	19,441,448	11,090,172	11,241	6,433	103	429	4,216	1,713	39		
40,905	16,375	218,794	188	8,944	17,112	463,541	10,646	1,081,444	607,257	192			89	103		40		
324,219	344,880	1,582,952	5,569	28,785	251,855	2,901,408	70,047	7,564,002	4,353,447	1,397	775		10	582	1,353	41		
257,682	205,003	1,708,930	25,360	30,386	355,354	2,074,482	78,143	7,130,519	4,383,894	4,070	3,145		242	683	2,678	42		
149,261	221,102	717,810	2,998	14,030	28,099	1,090,898	42,058	3,395,205	1,632,240	952	170		120	982	100	43		
54,845	35,358	219,455	1,498	3,610	11,279	704,770	13,848	1,201,492	482,874	399	35		50	314		44		
94,410	185,744	408,364	1,600	11,020	17,420	995,128	28,210	2,103,713	1,140,375	553	135		70	348	100	45		
47,475	27,570	225,483	1,410	1,092	85,618	82,078	274,820	887,298	529,600	822	707		110	5		46		
154,039	121,472	288,207	1,517	10,570	117,500	1,026,000	8,786	1,934,405	890,019	750			540	204	312	47		
1,092,229	783,239	12,111,911	31,279	95,908	1,147,955	8,984,050	3,668,347	35,240,877	22,588,480	37,831	19,105	6,750	3,325	8,580	23,797	48		
119,902	65,227	471,823	344	26,356	46,081	1,384,405	15,808	2,500,134	1,165,861	405	50		39	316		49		
201,944	98,210	1,151,938	8,195	22,179	225,980	4,808,998	40,082	7,567,704	2,658,084	839			51	788		50		
155,488	72,993	850,525	4,985	4,036	92,097	3,425,817	367,203	5,038,572	1,845,552	4,424	2,568	12	118	1,726	453	51		
77,291	33,775	406,803	2,080	725	61,045	1,040,503	177,503	2,076,609	858,513	1,979	1,109		93	777	371	52		
78,197	39,188	452,922	2,905	3,911	30,152	2,385,224	189,700	3,661,993	987,039	2,445	1,459	12	25	949	82	53		
65,307	20,801	476,705		1,752	32,261	147,791	51,851	1,090,317	890,075	2,050	1,038		368	644	170	54		
3,785	1,551	19,359	3,747	5,270	147	17,487	187	78,742	61,088	2				2		55		
46,613	24,884	87,009		17,025	2,811	123,740	2,984	410,294	283,540	87				57		56		
617,802	515,850	4,819,457	28,844	31,451	574,159	6,930,772	591,192	10,694,357	9,172,393	7,818	1,833		340	5,565	857	57		
17,105	2,020	32,383		5,045	755	124,578	1,777	262,410	120,655	70			65	5		58		
50,040	77,714	451,908		6,140	77,055	1,100,049	25,677	2,306,553	1,020,827	1,624	700		50	794	234	59		
550,717	439,118	4,335,166	28,844	19,068	490													

MANUFACTURES—OHIO.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.						WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.						Capital.			
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.					
						Male.	Female.	Average number.	Maximum month.		Minimum month.	Male.	Female.	Male.		Female.		
THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.																		
															Dollars.			
1	Iron and steel forgings, not made in steel works or rolling mills.	38	6,676	5	189	358	193	5,931	Ja	6,663	Se	5,701	6,017	5,992	24	1	23,945,063	
2	Iron and steel, tempering and welding	47	239	59	23	8	9	140	De	170	Ja	103	171	166	5	.....	449,017
3	Iron and steel, wrought pipe	8	4,937	.....	59	298	140	4,434	Au	4,970	Oc	3,415	4,546	4,495	51	.....	39,300,921
4	Jewelry	52	868	67	29	50	64	658	De	829	Se	531	818	535	279	.....	1,716,788
5	Knife goods	34	4,824	13	128	158	118	4,407	De	5,149	Fe	3,586	5,122	1,008	4,060	31	23	13,564,748
6	Labels and tags	9	276	2	26	7	13	228	No	257	Ja	179	249	131	118	.....	864,341
7	Lamps and reflectors	14	1,234	3	42	55	39	1,095	Au	1,307	Ja	777	1,303	1,206	97	.....	3,906,616
8	Leather goods, not elsewhere specified	13	1,187	11	15	14	11	136	De	159	Ja	113	151	80	70	.....	479,039
9	Leather, tanned, curried, and finished	24	1,738	17	80	44	32	1,565	Oc	1,791	Ja	1,303	1,733	1,702	31	.....	26,995,409
10	Lime	30	1,365	13	68	59	34	1,191	Au	1,315	Fe	958	1,197	1,106	1	.....	6,040,374
11	Liquors, malt	73	4,039	9	282	313	78	3,327	Jy	3,935	De	2,770	2,814	2,787	27	.....	47,003,389
12	Lithographing	28	2,312	10	109	126	128	1,939	No	2,103	Ja	1,761	2,091	1,715	374	2	8,364,037	
13	Looking-glass and picture frames	18	609	10	25	31	24	519	No	569	Ja	455	630	410	120	.....	1,563,309
14	Lubricating greases	8	214	2	10	88	35	70	Oc	74	Mh	65	78	70	1	.....	1,266,720
15	Lumber and timber products	514	4,030	653	149	54	48	3,135	De	3,543	Ja	2,850	4,120	4,100	14	0	6,697,031	
16	Lumber, planing-mill products, not including planing mills connected with sawmills.	378	5,802	288	472	300	217	4,495	De	5,021	Ja	3,736	5,497	5,439	56	2	21,702,984	
17	Machine tools	102	16,112	29	663	1,038	527	13,855	De	15,305	My	12,911	15,333	15,064	260	0	50,626,865	
18	Marble and stone work, except slate	191	1,987	199	117	122	48	1,591	.....	.....	.....	1,553	1,550	1	2	7,512,160	
19	Monuments and tombstones	143	739	161	60	21	437	Au	468	Ja	356	465	462	1	2	2,106,066		
20	Other marble and stone work, except slate	48	1,248	35	57	62	27	1,067	Jy	1,185	Fe	861	1,088	1,088	.....	.....	5,406,106
21	Mattresses and spring beds, not elsewhere specified	40	712	22	64	39	34	553	Se	600	Ja	468	588	420	150	3	2,515,818	
22	Millinery and lace goods, not elsewhere specified	41	1,245	52	60	46	45	1,033	.....	.....	.....	1,102	208	813	3	18	1,508,158
23	Embroideries	7	192	5	10	8	6	163	Oc	172	Fe	150	167	46	120	1	290,792
24	Trimmed hats and hat frames	20	908	27	50	31	30	767	Fe	877	Ja	501	822	107	605	2	18	1,101,594
25	All other	14	145	20	9	4	9	103	Jy	113	Ja	87	113	25	88	.....	2,162,772
26	Mineral and soda waters	217	1,313	247	106	71	52	867	.....	.....	.....	844	788	25	30	4,419,267	
27	Mineral and carbonated waters	200	1,239	235	91	68	42	893	Jy	1,060	Ja	569	778	733	14	30	3,094,133	
28	All other	17	104	12	15	3	10	64	Oc	123	Ja	31	66	55	11	.....	725,134
29	Minerals and earths, ground or otherwise treated	44	2,193	6	107	69	51	1,960	Ja	2,223	My	1,795	1,968	1,968	.....	.....	8,881,083
30	Mirrors, framed and unframed, not elsewhere specified	10	288	7	15	12	11	243	De	285	My	218	301	240	61	.....	438,850
31	Models and patterns, not including paper patterns	138	1,525	168	91	39	35	1,192	De	1,533	Fe	890	1,539	1,529	7	3	2,371,064	
32	Motorcycles, bicycles, and parts	9	2,780	1	96	92	111	2,480	Ja	2,995	Ja	2,224	2,747	2,492	255	.....	8,447,379
33	Mucilage, paste, and other adhesives, not elsewhere specified	12	89	6	15	8	7	53	Ja	65	Se	46	90	33	27	.....	216,246
34	Musical instruments, organs	6	75	10	10	.....	2	53	De	60	Mh	45	59	54	5	.....	154,985
35	Musical instruments, pianos	10	902	.....	52	37	26	787	De	979	Ja	595	979	825	152	2	3,054,436
36	Musical instruments, piano and organ materials	6	1,048	1	22	31	14	980	De	1,113	Ja	768	1,117	931	186	.....	2,813,705
37	Oil, linseed	3	357	.....	17	43	27	270	Ja	295	Au	248	250	246	4	.....	3,822,131
38	Oil, not elsewhere specified	21	592	5	54	156	75	302	Ap	325	Mh	280	306	307	9	.....	2,781,066
39	Optical goods	31	519	12	39	40	03	365	De	377	Ja	346	378	300	72	.....	1,078,159
40	Paints	61	3,569	16	228	788	340	2,197	No	2,379	Ja	1,930	2,340	2,098	251	0	23,153,529	
41	Paper and wood pulp	49	7,593	1	269	210	184	6,899	No	7,464	Ap	6,306	7,447	6,408	972	4	74,498,111	
42	Paper goods, not elsewhere specified	22	2,014	7	64	119	69	1,755	No	1,800	Ap	1,716	1,815	1,139	476	4	0,153,684	
43	Patent medicines and compounds	202	1,705	128	171	309	208	889	.....	.....	.....	1,036	512	520	2	2	6,544,000
44	Patent and proprietary medicines	144	1,307	86	126	239	158	698	No	807	Ja	650	821	372	488	2	2	4,904,519
45	Patent and proprietary compounds, not elsewhere specified	58	398	42	45	70	50	191	De	236	Jy	162	212	140	72	.....	1,629,521
46	Paving materials	77	1,212	60	99	70	17	966	Au	1,313	Fe	591	1,226	1,226	.....	.....	4,872,743
47	Perfumery and cosmetics	36	657	30	62	126	158	281	No	364	Ja	196	367	33	272	1	1	1,778,353
48	Petroleum, refining	11	4,890	.....	70	2,044	345	2,431	Au	2,550	Ap	2,331	2,400	2,372	28	.....	46,545,590
49	Phonographs and graphophones	20	1,650	5	46	55	126	1,424	De	1,885	Ja	908	1,889	1,040	243	2	4	3,492,734
50	Photographic materials	12	238	3	19	15	16	185	Ja	224	Au	163	182	82	92	.....	380,241
51	Photo-engraving	30	578	11	62	48	40	417	Se	453	Ja	348	455	428	14	12	687,598	
52	Pickles, preserves, and sauces	37	1,665	25	59	67	39	1,375	.....	.....	.....	1,416	557	552	.....	7	6,599,402
53	Preserves	14	815	11	32	36	17	719	Ja	924	Ja	624	786	236	650	.....	2,807,822
54	Pickles and sauces	23	750	14	27	31	22	656	Se	1,225	My	481	630	321	302	.....	3,791,040
55	Plumbers' supplies, not elsewhere specified	48	2,228	15	135	110	71	1,897	De	2,244	Mh	1,567	2,240	2,091	143	3	7	5,785,918
56	Pottery	95	12,246	25	410	245	227	11,339	.....	.....	.....	12,050	8,506	3,501	22	21	21,576,324
57	China ware	59	10,461	7	331	201	190	9,732	No	10,428	Fe	9,041	10,410	7,240	3,152	11	7	18,055,257
58	All other	36	1,785	18	79	44	37	1,607	Fe	1,687	Se	1,517	1,640	1,269	349	11	14	3,521,067
59	Poultry, killing and dressing, not done in slaughtering or meat-packing establishments	13	142	13	9	7	8	105	Oc	159	Ap	76	153	107	40	.....	405,443
60	Printing and publishing, book and job	871	11,213	709	695	597	707	8,505	.....	.....	.....	9,364	6,400	2,829	62	7	25,482,824
61	Job printing	808	10,335	668	624	483	572	7,988	De	8,767	Ja	7,376	8,762	6,002	2,033	60	7	22,933,987
62	Book publishing and printing	9	447	5	19	23	31	369	No	422	Ja	333	423	241	181	1	1,494,859
63	Book publishing without printing	30	237	17	30	87	99	4	Fe	10	De	3	13	12	.....	.....	641,345
64	Linotype work and typesetting	24	194	19	22	4	5	144	De	166	Ja	124	160	151	14	1	412,033
65	Printing and publishing, music	11	84	9	12	34	15	14	Jy	16	Ja	12	11	9	2	.....	423,634
66	Printing and publishing, newspapers and periodicals	794	13,708	586	790	2,403	2,302	7,627	.....	.....	.....	8,114	6,667	1,368	72	7	37,353,788
67	Printing and publishing	91	6,085	36	235	1,676	693	3,445	No	3,595	Fe	3,272	3,582	3,288	270	24	17,642,121
68	Printing, publishing, and job printing	507	7,057	465	421	612	1,382	4,177	De	4,494	Ja	3,961	4,526	3,374	1,097	48	7	18,931,414
69	Publishing without printing	196	566	85	134	115	227	5	De	6	Ja	4	6	5	1	.....	780,253

1 Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

2 Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.										POWER.					
Salaries and wages.				Rent and taxes.		For materials.		Value of products.	Value added by manufacture.	Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.	For contract work.	Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.	Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

Dollars. 898,509	Dollars. 680,476	Dollars. 7,022,833	Dollars.	Dollars. 71,400	Dollars. 3,003,951	Dollars. 16,581,154	Dollars. 2,104,855	Dollars. 39,563,404	Dollars. 20,877,455	21,030	2,580	625	670	.....	17,155	4,237	1
69,402	16,267	222,852	5,044	17,940	34,532	172,906	36,287	755,415	546,182	491	.....	.....	9	.....	482	50	2
372,417	683,388	7,209,734	.....	1,911,354	23,004,172	725,748	37,968,230	14,238,810	10,289	4,635	800	.....	.....	.....	4,854	11,071	3
95,267	175,452	618,936	18,625	40,529	24,615	1,754,106	15,236	3,349,547	1,580,115	297	.....	.....	.....	.....	297	.....	4
903,914	572,309	3,032,899	14,393	116,051	992,989	10,990,123	89,117	18,778,844	7,699,604	2,688	1,165	.....	85	.....	1,438	5,853	5
73,834	34,100	216,443	1,724	9,946	10,829	540,314	10,142	1,156,023	605,567	244	.....	.....	.....	.....	244	.....	6
211,477	174,287	1,547,742	7,765	5,254	151,099	4,087,891	81,810	7,186,768	3,017,067	3,061	250	.....	43	.....	2,768	82	7
40,578	18,246	104,387	1,000	8,469	8,111	607,059	4,859	992,124	380,706	150	.....	.....	.....	.....	148	.....	8
342,072	139,647	2,171,888	.....	4,005	550,846	18,624,763	193,028	25,008,070	6,190,279	5,063	2,612	607	170	.....	1,614	1,972	9
182,774	125,265	1,261,937	4,008	178	148,550	954,878	746,122	4,021,106	2,320,106	9,175	2,015	807	775	.....	5,578	1,199	10
1,106,783	676,199	4,453,300	3,074	7,225	3,875,969	5,803,500	1,292,012	25,161,227	18,065,655	35,924	30,495	2,275	253	.....	2,901	6,404	11
475,937	405,324	2,007,817	45,482	40,770	147,450	3,491,174	52,583	9,150,614	5,606,857	2,720	995	.....	285	.....	1,440	1,539	12
68,736	91,618	462,248	.....	13,444	41,330	834,740	17,219	2,050,220	1,198,261	603	.....	.....	.....	.....	438	.....	13
80,274	273,499	81,549	.....	1,004	36,580	904,870	10,442	2,039,520	1,114,217	232	100	.....	.....	.....	113	.....	14
348,003	111,336	3,048,798	182,341	10,224	99,077	5,115,721	79,982	12,031,472	6,835,769	20,809	17,001	279	533	85	2,011	135	15
1,093,057	660,105	5,213,136	58,985	135,003	435,391	19,990,630	361,513	32,428,847	12,076,704	28,302	10,268	200	3,889	35	14,410	1,501	16
2,511,242	2,028,768	17,071,620	406,294	119,528	6,294,723	16,731,367	745,468	62,554,169	45,077,334	25,255	4,649	1,035	915	.....	18,056	9,309	17
322,089	240,516	1,912,274	42,141	40,519	90,903	2,362,889	164,804	7,201,876	4,684,123	8,179	3,137	.....	1,517	.....	3,525	2,499	18
140,654	106,676	645,440	12,025	19,416	25,183	1,289,071	40,813	3,156,652	1,826,668	2,690	116	.....	1,114	.....	1,460	.....	19
175,435	133,840	1,206,834	30,116	21,103	65,720	1,073,218	114,551	4,045,224	2,857,455	5,489	3,021	.....	403	.....	2,065	2,469	20
188,832	102,556	504,728	.....	35,742	53,802	2,559,285	35,735	4,109,164	1,604,144	1,054	2	.....	180	.....	872	39	21
190,766	103,517	702,048	260	54,633	90,823	1,874,004	10,214	3,632,168	1,738,950	404	85	.....	.....	.....	379	70	22
25,555	7,205	145,556	.....	11,877	1,525	152,922	2,647	474,850	319,287	41	.....	.....	.....	.....	41	.....	23
161,825	80,547	580,111	260	83,869	88,400	1,560,186	14,145	2,797,142	1,222,800	389	85	.....	.....	.....	304	70	24
13,388	15,765	66,381	.....	8,887	892	160,896	2,422	390,172	196,854	34	.....	.....	.....	.....	34	.....	25
223,266	124,166	989,351	4,992	51,835	271,135	3,176,005	78,678	6,709,394	3,514,711	2,199	655	133	106	2	1,302	37	26
197,905	114,638	935,771	4,893	51,374	243,579	2,847,567	74,013	6,122,895	3,201,315	1,928	648	.....	84	2	1,199	87	27
25,361	9,528	53,580	99	461	27,580	328,438	4,665	646,499	313,390	271	13	133	22	.....	103	.....	28
334,071	170,994	2,348,293	.....	99,079	336,811	1,444,406	774,469	6,860,663	4,641,778	24,006	15,170	.....	688	28	8,120	36	29
60,587	51,151	148,250	.....	6,713	11,008	697,198	14,393	1,099,215	387,624	312	70	.....	86	.....	206	.....	30
329,122	64,204	1,914,688	6,648	58,164	121,256	1,632,508	71,215	5,459,746	3,766,023	6,731	4,500	125	250	.....	1,856	21	31
273,305	238,406	3,339,074	1,036	7,643	513,059	4,965,313	164,483	10,874,030	5,744,234	4,289	1,210	.....	60	.....	3,019	.....	32
42,657	15,606	43,892	.....	9,069	9,264	287,425	5,387	469,072	176,800	94	10	.....	8	1	75	.....	33
14,810	2,012	67,275	2,380	2,464	1,396	91,593	1,505	233,193	140,095	99	.....	.....	20	.....	49	.....	34
135,497	67,090	743,274	.....	43,742	63,078	1,040,773	19,126	3,475,543	1,515,644	935	600	.....	95	.....	240	207	35
102,014	61,551	1,020,368	.....	27,075	123,115	1,068,286	32,764	3,088,393	1,987,353	1,743	.....	.....	340	.....	1,408	.....	36
89,725	96,106	275,212	.....	612	105,992	7,696,538	64,214	9,368,779	1,008,027	1,510	850	.....	.....	.....	666	250	37
254,792	304,364	366,147	1,800	20,112	105,945	6,455,502	90,078	8,985,985	2,439,715	597	206	.....	25	.....	366	.....	38
108,926	100,108	370,945	.....	60,533	47,642	791,859	14,103	1,885,134	1,070,172	176	.....	.....	.....	.....	176	.....	39
1,091,126	1,432,871	2,315,325	24,052	60,091	1,200,986	23,360,149	237,610	30,848,304	13,250,596	8,187	1,520	.....	500	.....	6,167	1,242	40
1,320,891	684,671	8,094,230	12,506	7,644	2,112,475	32,792,877	2,947,471	55,068,106	19,387,848	64,420	47,723	11,579	30	2,105	2,983	25,227	41
435,920	227,308	1,627,664	.....	25,859	2,180,085	7,894,645	115,628	15,368,229	7,357,961	3,813	1,920	.....	47	.....	1,846	1,289	42
550,689	680,054	688,001	8,051	75,092	556,002	4,926,307	60,481	10,860,925	6,514,137	1,099	422	.....	14	1	632	261	43
401,241	486,802	503,849	7,685	54,747	483,302	3,099,535	23,701	7,041,142	4,817,810	699	250	.....	14	1	434	201	44
149,448	193,252	184,752	368	20,345	72,700	1,196,772	20,690	2,019,783	1,666,321	370	172	.....	.....	.....	198	60	45
222,309	103,950	896,304	1,338	14,740	76,472	770,843	269,006	2,951,533	1,910,784	23,308	16,827	.....	422	.....	6,054	271	46
179,050	277,721	213,129	.....	21,160	224,923	1,272,546	6,477	4,119,975	2,840,952	179	45	.....	.....	.....	134	.....	47
359,868	2,441,744	3,245,959	.....	330	3,819,640	29,997,014	1,061,003	43,282,801	11,324,724	7,883	4,176	1,170	155	.....	1,883	192	48
120,472	194,887	1,786,029	23,574	19,813	78,596	2,910,371	45,202	6,220,534	3,264,901	1,498	695	.....	25	.....	778	50	49
52,383	62,329	151,245	.....	11,308	17,007	254,812	7,066	677,958	415,180	116	.....	.....	.....	.....	91	.....	50
170,319	121,908	646,899	38,264	36,998	16,162	261,194	15,918	1,813,310	1,536,208	280	.....	.....	.....	.....	245	10	51
201,898	192,814	1,288,081	712	31,854	159,507	6,999,845	102,556	10,451,455	3,349,054	2,002	1,547	.....	71	.....	384	1,377	52
115,265	116,112	380,261	350	47,875	79,601	3,787,003	29,577	4,807,581	1,020,351	629	404	.....	30	.....	195	.....	53
86,633	76,702	902,720	362	3,979	79,906	3,242,242	72,979	5,643,024	2,328,703	1,873	1,143	.....	41	.....	139	1,377	54
465,899	354,068	2,023,624	21,027	82,933	96,569	3,551,405	184,208	8,083,340	4,397,727	2,893	525	.....	190	.....	2,178	161	55
1,222,746	820,230	11,558,318	78,193	25,640	886,527	6,781,173	2,281,268	28,675,361	19,662,920	10,131	6,695	135	614	.....	2,687	717	56
1,008,358	627,688	10,083,945	77,377	22,534	789,152	6,094,111	1,877,842	24,631,507	16,656,554	6,980	3,930	135	534	.....	2,381	605	57
214,388	192,542	1,474,473	816	3,106	97,375	637,062	403,426	4,043,854	3,003,366	3,151	2,705	.....	80	.....	806	112	58
16,471	10,420	111,020	.....	8,384	3,464	1,675,869	5,348	1,916,574	235,857	106	6	.....	.....	.....	99	.....	59
2,128,365	1,3																

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.			
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Average number.	Wage earners.		Total.	16 and over.		Under 16.				
						Male.	Female.		Maximum month.	Minimum month.		Male.	Female.	Male.		Female.		
																	Number, 15th day of—	
1	Printing materials.....	9	50	6	9	5	4	26	De ^a	28	Ja	21	28	28	7	45	153,731	
2	Pumps, not including power pumps.....	20	1,552	17	76	138	56	1,265	De	1,408	My	1,203	1,405	1,353	11	11	4,585,335	
3	Pumps, steam and other power.....	11	789	4	43	81	46	610	Mh	261	Au	233	774	763	11	11	2,281,133	
4	Steam pumps.....	5	282	3	17	12	8	242	De	543	Mh	199	231	231	11	11	722,401	
5	Other power pumps.....	6	507	1	31	69	38	368	No	151	Ja	113	543	532	11	11	1,558,732	
6	Refrigerators.....	5	182	1	19	18	9	135	No	151	Ja	113	144	144	11	11	602,316	
7	Regalia, and society badges and emblems.....	10	1,115	4	27	116	74	894	Jy	942	Ja	791	943	370	871	2	3,007,041	
8	Roofing materials.....	20	1,550	6	52	159	105	1,138	De	1,209	Ja	1,071	1,213	1,185	28	45	8,023,119	
9	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	96	89,774	15	1,246	17,808	7,008	63,637	Oc	74,720	Ja	53,904	75,300	68,550	6,705	45	398,125,426	
10	Saddlery and harness.....	106	1,052	112	44	77	20	790	De	897	My	675	906	831	74	1	4,100,027	
11	Safes and vaults.....	18	2,225	4	88	210	102	1,821	De	1,855	Fe	1,411	2,078	2,035	43	1	8,329,723	
12	Safes.....	10	1,923	2	70	172	81	1,598	De	1,855	Fe	1,411	1,856	1,823	32	1	7,303,672	
13	Vaults.....	8	302	2	18	38	21	223	Mh	237	Se	213	223	212	11	1	1,028,651	
14	Salt.....	5	601	28	28	49	22	209	Oc ^a	604	Ap	450	570	505	65	1	4,625,920	
15	Sausage, not made in slaughtering and meat-packing establishments.....	30	396	28	28	49	22	209	Oc ^a	604	Ap	450	286	281	6	1	1,049,658	
16	Sausage.....	20	244	18	18	31	10	167	De ^a	182	Ap ^a	157	181	181	5	1	754,195	
17	Sausage casings.....	10	152	10	10	18	12	102	No	106	My	98	105	100	1	1	285,463	
18	Saws.....	9	184	7	8	13	12	144	No	151	Au	130	145	144	1	1	1,208,126	
19	Screws, machine.....	19	4,663	7	158	144	128	4,226	De	4,752	Ja	3,541	4,762	3,967	765	1	27,305,060	
20	Shipbuilding, steel, new vessels and repair work.....	9	11,566	62	205	107	11,192	Mh	12,081	De	9,279	10,407	10,388	10	19	51,177,363		
21	Shipbuilding, wooden, including boat building.....	19	269	20	20	2	7	220	Fe	335	No	60	250	248	2	1	645,261	
22	Shirts.....	32	2,185	36	76	85	88	1,900	No	1,078	Jy	1,816	1,072	1,099	1,773	1	4,040,229	
23	Show cases.....	13	331	6	26	10	7	273	De	1,078	Ja	203	338	326	11	1	997,012	
24	Signs and advertising novelties.....	70	2,678	52	108	337	160	1,007	No	1,040	Ja	702	2,200	1,347	012	1	6,110,483	
25	Electric and other signs.....	53	1,230	45	60	132	65	938	No	1,040	Ja	702	1,003	842	221	1	2,334,480	
26	Advertising novelties.....	17	1,343	7	48	205	104	979	De	1,197	Fe	703	1,197	505	691	1	3,776,091	
27	Slaughtering and meat packing.....	141	6,007	136	244	694	197	5,836	De	5,984	My	4,095	5,820	5,350	460	1	32,340,461	
28	Smelting and refining, not from the ore.....	7	128	23	4	13	88	88	De	100	Mh	68	100	100	1	1	1,334,475	
29	Sporting and athletic goods.....	11	869	9	28	26	44	762	Au	790	Je	728	872	521	351	1	2,052,189	
30	Stamped and enameled ware, not elsewhere specified.....	49	4,285	6	183	120	142	3,834	De	1,485	Mh	995	4,164	3,225	932	7	13,932,064	
31	Stamped ware.....	35	1,408	6	90	58	51	1,197	De	1,485	Mh	995	1,463	1,238	224	1	4,310,239	
32	Enameled ware and bathtubs.....	14	2,877	87	62	91	2,637	Oc	2,880	Ja	2,392	2,701	1,987	708	0	1	9,610,423	
33	Stationery goods, not elsewhere specified.....	12	1,004	3	38	115	82	760	De	847	Ja	705	847	610	237	1	3,259,980	
34	Statuary and art goods.....	10	147	10	11	2	8	110	Oc	134	Ja	80	114	110	4	1	322,177	
35	Steam fittings and steam and hot-water heating apparatus.....	29	3,307	11	106	239	178	2,723	De	1,485	Mh	995	3,110	3,028	81	1	9,734,280	
36	Radiators and cast-iron heating boilers.....	8	517	6	12	21	14	404	De	505	Fe	394	505	500	5	1	1,307,621	
37	All other.....	21	2,790	5	94	208	104	2,259	De	2,556	My	2,074	2,605	2,528	70	1	8,426,639	
38	Steam packing.....	8	87	5	10	7	6	59	Ja	78	De	60	50	41	9	1	164,829	
39	Steel barrels, drums, and tanks, portable.....	13	1,810	5	72	100	52	1,581	De	2,018	My	1,214	2,018	2,015	3	1	11,181,569	
40	Stencils and brands.....	11	115	12	7	7	10	79	De	104	Ja	64	104	87	17	1	244,853	
41	Stereotyping and electrotyping.....	17	570	10	24	31	17	488	De	537	Ja	422	523	520	3	1	708,768	
42	Stoves and hot-air furnaces.....	67	7,204	25	310	602	298	6,060	De	5,000	Jy	4,044	6,060	6,418	177	1	20,050,341	
43	Stoves and ranges, and fireless cookers.....	30	5,345	8	212	287	186	4,652	De	5,000	Jy	4,044	4,882	4,700	172	1	13,448,764	
44	Hot-air furnaces.....	28	1,859	17	98	215	112	1,417	De	1,725	Mh	1,069	1,714	1,709	5	1	6,601,587	
45	Stoves, gas and oil.....	34	5,003	13	114	336	211	4,329	No	5,509	Ap	3,624	5,613	4,884	624	5	18,404,708	
46	Structural ironwork, not made in steel works or rolling mills.....	93	6,676	37	329	773	300	5,231	De	5,971	Ap	4,563	5,057	5,040	16	1	29,326,653	
47	Sugar, beet.....	5	693	25	20	18	630	No	1,472	Fe	188	1,300	1,377	13	1	5,983,000		
48	Surgical appliances.....	17	368	15	12	50	28	257	Ap	206	Jy	236	251	161	89	1	525,329	
49	Suspenders, garters, and elastic woven goods.....	7	309	4	14	14	16	261	Oc	287	Mh	240	281	40	240	1	786,997	
50	Tinware, not elsewhere specified.....	14	3,119	4	48	330	129	2,608	Au	2,912	Ap	2,295	2,744	1,882	860	2	14,426,063	
51	Tobacco, cigars and cigarettes.....	676	12,171	697	249	104	66	10,995	De	12,316	Au	10,529	12,409	2,008	9,541	2	13,879,731	
52	Tools, not elsewhere specified.....	149	8,272	87	339	447	438	6,961	De	12,316	Au	10,529	7,923	7,435	459	29	24,777,519	
53	Shovels, spades, scoops, and hoes.....	6	470	16	13	14	427	Mh	407	Au	367	455	455	434	21	1	2,004,527	
54	Carpenters' and machinists' tools.....	97	5,968	61	231	322	208	5,050	De	5,897	Ap	4,525	5,848	5,465	355	28	17,256,426	
55	All other.....	46	1,834	20	92	112	126	1,478	No	1,635	Ap	1,338	1,620	1,530	83	1	5,510,500	
56	Toys and games.....	59	1,778	37	113	48	55	1,525	No	2,051	Ja	1,007	2,052	1,017	1,014	15	6	3,256,088
57	Trunks and valises.....	22	399	26	20	21	17	300	Au	343	Ja	246	324	205	59	1	1,007,583	
58	Typewriters and supplies.....	4	114	2	5	10	11	80	De	102	Ap	62	90	78	21	1	373,606	
59	Umbrellas and canes.....	10	206	10	0	20	19	208	Jy	230	Ja	182	209	62	147	1	607,334	
60	Varnishes.....	33	1,272	13	107	267	153	732	De	819	Ja	608	819	735	83	1	9,202,919	
61	Vinegar and cider.....	18	49	22	2	2	2	15	Oc	30	Jy	10	45	42	3	1	253,692	
62	Vinegar.....	4	27	6	2	2	2	15	Oc	30	Jy	10	24	24	3	1	224,045	
63	Cider.....	14	22	16	43	100	48	689	Se	22	De	4	21	18	3	1	2,004,782	
64	Wall plaster and composition flooring.....	16	884	4	32	29	20	477	De	638	Ja	342	837	835	2	1	2,004,782	
65	Washing machines and clothes wringers.....	15	502	4	32	29	20	477	De	638	Ja	342	837	835	2	1	1,388,575	
66	Window and door screens and weather strips.....	15	237	11	17	14	14	181	Ap	214	Ja	140	211	183	28	1	404,038	
67	Wirework, including wire rope and cable, not elsewhere specified.....	47	2,184	25	88	196	53	1,822	De	1,822	Ja	1,822	2,005	1,703	301	1	9,726,218	
68	Woven wire fencing.....	7	113	1	12	3	11	86	Je	100	Oc	73	75	75	1	1	623,174	
69	All other.....	40	2,071	24	76	193	42	1,730	Ja	1,952	Je	1,535	1,930	1,628	301	1	9,103,044	

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.	
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rent. ²
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.							
27,468	11,161	31,118	1,592	10,220	12,094	63,859	2,219	271,456	205,378	68	28				40	1	
276,390	274,858	1,400,741		22,350	144,566	2,670,598	96,190	7,302,504	4,626,770	2,127	783		701		643	2	
272,546	126,489	681,666		26,290	241,252	1,656,745	31,134	3,401,276	1,713,397	747	220		130		397	3	
61,116	22,328	257,624		8,670	55,555	350,167	18,635	971,878	608,070	330	220		110		120	4	
211,480	104,161	424,042		17,620	185,897	1,306,578	17,499	2,426,398	1,105,321	417			20		397	5	
38,008	31,879	143,734		4,400	13,046	812,130	7,366	598,861	279,366	417	150	150	87		30	6	
133,181	233,208	732,321		10,768	145,649	1,695,339	19,639	3,087,065	2,272,087	304	260		10		34	7	
254,407	444,047	1,431,951	1,784	18,066	397,165	7,000,906	308,096	12,785,424	4,876,422	7,249	2,781		205		4,263	8	
6,061,668	42,765,855	90,981,414	2,570,350	1,122,977	18,583,624	293,287,709	6,074,822	551,118,488	251,755,957	170,402	32,043	77,657	1,792	329	58,581	9	
132,548	125,248	605,807	921	29,107	457,444	3,019,719	16,558	5,142,703	2,106,426	567	110		24		433	10	
403,134	298,540	1,907,103	43,428	26,138	633,583	3,335,165	105,180	9,477,847	6,037,502	2,704	1,190		150		1,804	11	
350,212	200,635	1,097,336	43,428	25,418	585,434	2,528,439	93,220	7,907,804	5,286,145	2,247	1,190				1,057	12	
49,922	37,905	200,767		720	48,149	806,720	11,960	1,670,043	751,857	457			150		307	13	
139,147	46,275	675,207			109,421	932,047	447,442	2,607,780	1,287,391	8,250	6,930	950	6		374	14	
90,767	98,325	420,305		8,303	68,026	4,160,569	39,575	5,854,630	1,157,386	1,270	155		178		946	15	
61,942	52,691	279,108		3,257	61,793	2,979,424	23,142	3,765,020	762,454		140		133		594	16	
23,245	43,634	147,197		5,046	6,233	1,181,145	13,433	1,889,510	394,632	412	15		45		352	17	
23,683	15,301	161,033		7,600	6,761	6,032,898	8,647	3,639,684	828,126	562			80		432	18	
615,545	357,590	5,042,791	19,565	5,678	2,000,478	5,087,541	221,202	10,699,481	11,260,598	10,504	1,775		166		8,564	19	
762,639	614,044	10,424,226		13,732	1,902,770	22,630,130	723,450	50,481,966	33,128,380	13,717	0,425		16		7,277	20	
38,021	10,810	243,052	27,412	1,895	4,760	538,976	9,090	1,000,638	452,597	502	192	10	82		218	21	
361,025	205,318	1,182,936	31,348	53,055	248,920	3,731,346	27,054	7,389,827	3,930,827	960	570		10		374	22	
61,103	32,973	277,773		6,019	20,845	543,531	13,508	1,177,123	619,994	804	345				459	23	
321,065	630,372	1,604,695	10,224	50,925	194,409	3,066,138	70,748	7,606,625	4,735,739	2,161	1,010		166	10	975	24	
184,383	233,406	921,069	14,224	44,829	98,334	1,398,062	40,554	3,852,530	2,407,024	1,163	625		134	10	424	25	
130,082	390,966	683,026	2,000	12,096	60,075	1,697,186	24,104	4,051,095	2,329,715	968	885		32		551	26	
977,569	1,234,264	6,089,371	42,347	76,891	926,334	149,650,070	941,760	170,837,892	10,739,453	10,926	10,700	850	681		8,219	27	
110,176	17,237	109,400	610	1,750	12,294	1,666,578	25,309	2,285,447	606,566	130			20		110	28	
98,579	85,021	602,114	9,400	6,784	28,820	1,178,006	20,023	2,853,786	1,555,757	500	140		169		281	29	
762,648	358,275	3,903,044	4,183	41,208	525,600	6,914,482	428,048	15,466,101	8,093,631	5,459	1,250		949		8,280	30	
340,922	130,548	1,308,179	328	35,665	141,581	2,535,504	65,211	5,310,327	2,715,552	2,031	400		314		1,317	31	
421,726	227,732	2,054,965	3,865	5,603	384,019	4,408,018	363,837	10,149,835	5,378,079	3,428	850		635		1,943	32	
173,316	309,481	709,230		19,336	100,821	2,129,541	32,168	4,645,805	2,484,150	764	150		100		504	33	
27,055	15,738	120,460		5,500	7,580	212,151	4,588	522,717	305,978	121			55		00	34	
976,270	443,302	3,228,981	9,988	20,011	1,620,104	3,714,281	234,816	11,852,334	7,002,937	5,206	1,015	50	16		8,225	35	
46,981	80,441	635,864		7,990	28,096	911,006	65,071	1,883,227	905,890	1,123	275				848	36	
629,280	362,861	2,593,117	9,988	12,021	1,501,408	2,802,015	169,145	6,068,807	6,097,047	4,083	1,640	50	16		2,377	37	
34,047	14,912	88,731	200	5,510	4,719	163,064	2,904	365,042	198,114	87			29		58	38	
388,906	239,839	2,481,895		13,098	668,431	9,600,773	141,615	14,552,704	4,850,416	6,024	1,100		400		5,124	39	
19,612	13,084	95,027	700	9,310	2,339	72,548	1,612	303,980	229,820	80					80	40	
84,308	53,317	544,449	20,977	32,204	6,481	781,232	40,628	1,975,178	1,158,318	1,350			15		1,335	41	
905,240	987,238	7,423,820	3,743	66,838	502,962	10,417,734	379,109	25,009,260	14,212,387	9,209	8,670		1,489		4,103	42	
607,530	605,997	5,470,368	3,143	38,821	482,045	6,800,042	272,692	17,593,064	10,369,580	7,026	8,040		1,225		2,701	43	
297,701	381,241	1,947,452	600	28,017	80,017	3,550,792	106,577	7,506,190	3,842,827	2,183	630		211		1,342	44	
557,743	909,557	5,529,972		17,484	1,659,275	10,015,451	216,628	23,578,213	12,747,234	3,856	1,179		85		2,592	45	
1,405,075	2,035,231	7,401,021	85,350	40,774	1,084,048	24,309,218	401,714	41,792,720	17,021,788	21,068	5,141		580		16,277	46	
90,179	47,881	1,126,648	5,601		199,529	4,819,409	288,707	7,240,150	2,141,040	7,180	6,650	400	35		05	47	
37,850	35,271	190,678		9,208	45,970	447,223	8,346	941,285	490,710	115			25		00	48	
69,903	33,665	102,381		6,328	20,529	764,724	7,130	1,413,755	641,892	153	20				133	49	
269,016	488,876	2,459,035	174	12,280	717,120	10,593,094	93,633	16,080,620	6,298,102	2,682	1,050	150	398		1,084	50	
696,874	430,903	7,181,003	0,207	191,164	3,616,662	13,043,378	72,258	28,854,444	15,738,813	606			37		659	51	
1,172,163	1,161,131	9,817,509	64,523	125,069	2,937,488	10,326,788	409,017	32,527,873	21,791,568	12,916	2,350		1,531	10	9,025	52	
88,806	39,869	477,406		1,160	318,464	1,052,062	45,021	2,400,202	1,393,269	1,817	250				1,143	53	
786,745	781,250	7,060,592	52,100	88,043	2,300,105	6,096,080	250,213	23,136,971	16,790,672	8,513	2,075		117	10	6,311	54	
310,012	346,012	2,279,508	12,417	36,466	258,869	3,175,700	113,783	6,900,110	3,607,027	2,580			25		1,571	55	
268,883	93,044	1,224,877	6,110	20,030	77,875	1,849,681	68,514	4,715,614	2,797,619	2,246	830		337	11	1,068	56	
116,517	63,745	357,035		20,100	19,735	796,074	7,625	1,036,884	832,785	223	125				98	57	
16,800	43,896	92,718		10,900	8,451	315,520	4,134	714,978	395,324	45					45	58	
53,305	69,982	132,589	100	15,446	4,800	916,749	2,676	1,845,294	420,959				6		47	59	
515,337	624,138	870,632		7,715	222,918	8,009,309	102,774	13,620,446	4,020,303	2,293	565		17		1,681	60	
4,397	5,146	23,600	257	1,429	1,893	204,709	2,693	331,005	123,763	420	220		129	20	51	61	
4,867	5,146	19,548	200	1,300	1,590	185,004	1,824	289,011	102,083	131	60		109		51	62	
		4,061	57	39	294	19,105	1,209	42,054	21,680	289	100		20			63	63
124,304	198,460	908,448		33,926	97,183	2,082,154	175,075	4,430,949	2,173,720	3,776	3,017		95		669	64	
95,256	52,650	511,439	20,141	5,634	30,4												

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital		
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.			Under 16.	
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.		Male.	Female.
								Maximum month.	Minimum month.						

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

															Dollars.
1	Wood preserving.....	6	552	1	22	61	24	444	My	499	Ja	381	454	454	2,463,960
2	Wood, turned and carved.....	47	1,039	42	56	19	30	392	De	973	Ja	806	965	918	2,417,611
3	Wooden goods, not elsewhere specified.....	16	387	9	23	13	11	331	Au	376	Se	301	389	310	732,025
4	All other industries *.....	420	53,341	250	1,700	4,040	2,227	45,124							284,083,042

* All other industries embrace—	Bluing.....	4	Combs and hairpins, except those made from metal or rubber.....	1	Fireworks.....	4
Airplanes, seaplanes, and airships, and parts.....	Boot and shoe findings.....	6	Cordage and twine.....	7	Furs, dressed.....	2
Ammunition.....	Canning and preserving, fish.....	1	Corsets.....	4	Galvanizing.....	6
Artists' materials.....	Carriages and sleds, children's.....	1	Cotton goods.....	5	Gloves and mittens, leather.....	2
Asbestos products, textile-mill products, other than steam packing.....	Cars, electric-railroad, not including operations of railroad companies.....	3	Cotton lace.....	1	Glucose and starch.....	1
Babbitt metal and solder.....	Cash registers and calculating machines.....	0	Cotton small wares.....	1	Glue, other than fish.....	2
Bags, other than paper, not including bags made in textile mills.....	Charcoal, not including production in the lumber and wood distillation industries.....	2	Crucibles, glass house pots.....	3	Gold and silver, reducing and refining, not from the ore.....	4
Baking powders and yeast.....	Chewing gum.....	2	Dental goods.....	13	Hard ware, saddlery.....	2
Bells.....	Chocolate and cocoa products.....	6	Enameling.....	3	Hats, fur-felt.....	3
Belting and hose, rubber.....	Clocks.....	2	Engravers' materials.....	2	Hats, straw.....	2
Belting and hose, other than leather and rubber.....	Clothing, horse.....	3	Fancy articles, not elsewhere specified.....	15	Hats, wool-felt.....	1
Billiard tables and accessories.....	Collars and cuffs, men's.....	1	Felt goods.....	2	Ink, writing.....	8
			Ferroalloys.....	2	Iron and steel, cast-iron pipe.....	6
			Files.....	5	Iron and steel, doors and shutters.....	3
			Fire extinguishers, chemical.....	5	Iron and steel, wire nails and spikes.....	3

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

1	AKRON—All industries.....	304	91,009	194	1,150	17,745	6,916	65,054	Oc	75,929	Ja	55,897	77,324	70,903	6,366	53	2	381,144,319
2	Artificial stone products.....	16	74	20	3	2		49	Jo	70	Ja	14	52	52				191,637
3	Automobile repairing.....	4	58	2	3	4	1	48	Au	53	Ap	41	44	44				122,580
4	Bread and other bakery products.....	50	652	53	30	103	32	434	No	475	Ja	396	482	393	87	2		1,389,537
5	Brick and tile, terra-cotta, and fire-clay products.....	8	555		22	18	8	607	Je ^a	573	De	313	409	409				2,561,961
6	Copper, tin, and sheet-iron work.....	14	189	15	18	4	7	145	Au	182	Fe	106	152	151	1			413,425
7	Foundry and machine-shop products.....	36	3,464	9	119	202	108	3,026	De	3,301	Se	2,263	3,300	3,258	42			13,040,311
8	Liquors, malt.....	3	218		9	20	4	185	Jy	251	Ja	151	153	150	3			1,768,835
9	Lumber, planing-mill products, not including planing mills connected with sawmills.....	8	293	1	11	21	7	253	Au	277	Ja	218	243	236	7			1,557,997
10	Pottery, china, earthen, and stone ware.....	5	395		9	12	0	365	Ja	411	De	300	323	231	92			959,956
11	Printing and publishing, book and job.....	25	736	22	17	48	53	596	De	696	Ja	483	716	467	240			2,638,239
12	Printing and publishing, newspapers and periodicals.....	8	303	4	4	55	29	211	Se	225	Fe	197	213	198	13	2		1,074,047
13	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	22	77,054	4	694	16,222	6,328	53,806	Oc.	64,371	Ja	45,202	64,994	59,550	5,425	19		320,920,202
14	Signs, other than electric.....	5	20	4			1	15	Au ^a	21	Ja ^a	9	16	16				11,239
15	Stoves and hot-air furnaces.....	3	452		13	30	9	400	No	488	Mh	242	471	471				1,481,128
16	Tobacco, cigars.....	7	11	7				4	(^a)	4	(^a)	4	5	5				2,696
17	All other industries *.....	90	6,595	53	198	1,004	320	5,010					5,761	5,272	447	30	2	33,070,833

*All other industries embrace—	Butter.....	3	Confectionery and ice cream.....	7	Flavoring extracts.....	1
Automobile bodies and parts.....	Carpets, rag.....	2	Cooperage, hogsheads and barrels.....	2	Flour-mill and gristmill products.....	1
Automobiles.....	Carriages and wagons.....	1	Electrical machinery, apparatus, and supplies.....	2	Food preparations, not elsewhere specified.....	3
Awnings, tents, and sails.....	Cars and general shop construction and repairs by steam-railroad companies.....	1	Electroplating.....	1	Furniture, store and office fixtures.....	1
Belting, leather.....	Cleansing and polishing preparations, metal polish.....	1	Engraving and diesinking.....	1	Glass, cutting, staining, and ornamenting.....	2
Bookbinding and blank-book making.....	Coffee, roasting and grinding.....	2	Engraving, steel and copper plate, including plate printing.....	1	Grease and tallow, not including lubricating greases.....	2
Boxes, set-up paper boxes.....			Files.....	1		
Brass and bronze products.....						
Brushes.....						

1	CANTON—All industries.....	287	23,425	182	686	1,416	805	20,336	No	21,950	Oc	18,845	22,013	20,007	2,000	6		102,977,458
2	Agricultural implements.....	4	362		21	28	12	301	Mh	323	De	281	310	318	1			1,498,112
3	Automobile bodies and parts.....	4	29	3	1		2	23	Ap	24	Au	22	23	22	1			48,034
4	Automobile repairing.....	21	204	17	14	3	11	159	Mh	169	Ja	144	149	149				452,151
5	Bread and other bakery products.....	33	237	36	7	17	12	165	Au	173	Ja	158	200	160	40			506,554
6	Confectionery and ice cream.....	13	161	13	12	10	6	120	Je	137	Ja	94	125	56	68	1		365,218
7	Foundry and machine-shop products.....	27	1,776	9	83	90	69	1,525	De	1,807	Je	1,337	1,812	1,666	141	5		6,060,118
8	Iron and steel, steel works and rolling mills.....	6	11,775		160	704	283	10,128	Au	11,150	Oc	7,723	11,116	10,658	458			54,570,356
9	Iron and steel, welding.....	3	8	4				4	Oc	5	Ja	3	5	5				33,173
10	Lumber, planing-mill products, not including planing mills connected with sawmills.....	12	216	6	18	12	11	169	Oc	199	Fe	126	174	173	1			1,363,645

* Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

* Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.				
										Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹	Rent- ²	

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.							
102,724	125,829	604,152	.....	3,764	52,527	2,261,625	51,965	3,498,431	1,184,941	1,330	905	.....	.....	.....	335	307
168,368	44,040	873,859	10,000	7,096	133,209	1,901,542	28,973	3,721,708	1,791,193	4,610	2,723	.....	1,180	.....	701	86
48,956	33,873	263,790	113	4,351	22,793	689,135	12,566	1,303,378	607,677	1,017	458	.....	161	.....	398	50
6,074,706	8,937,826	51,672,180	2,958,444	351,091	20,528,093	221,303,071	5,163,816	374,888,568	148,420,781	104,458	51,498	4,906	1,837	00	46,127	30,557

Japanning.....	3	Oil and cake, cottonseed.....	1	Scales and balances.....	5	Wall paper, not made in paper mills.....	3
Jewelry and instrument cases.....	1	Oil, essential.....	1	Screws, wood.....	1	Waste.....	4
Lard, refined, not made in slaughtering and meat-packing establishments.....	1	Oilcloth and linoleum, floor.....	2	Sewing-machine cases.....	1	Watchcases.....	3
Leads.....	5	Oilcloth, enameled.....	1	Sewing machines and attachments.....	3	Watches, watch movements.....	1
Lead, bar, pipe, and sheet.....	3	Oleomargarine.....	5	Silk goods.....	1	Wheelbarrows.....	5
Liquors, distilled.....	1	Ordinance and accessories.....	3	Smelting, lead.....	1	Windmills.....	1
Liquors, vinous.....	5	Paper patterns.....	1	Soap.....	28	Window shades and fixtures.....	12
Locomotives, not made by railroad companies.....	2	Peanuts, grading, roasting, cleaning, and shelling.....	2	Soda-water apparatus.....	2	Wire.....	5
Malt.....	1	Pens, fountain and stylographic.....	5	Springs, steel, automobile.....	7	Wool pulling.....	2
Matches.....	3	Photographic apparatus.....	5	Sulphuric, nitric, and mixed acids.....	5	Wool scouring.....	1
Musical instruments and materials, not specified.....	11	Plated ware, hollow ware.....	1	Tin plate and terneplate.....	3	Wool shoddy.....	3
Needles, pins, and hooks and eyes.....	2	Pocketbooks.....	2	Tobacco, chewing and smoking, and snuff.....	34	Woolen goods.....	10
		Pulp, from fiber, other than wood.....	3	Type founding.....	3	Worsted goods.....	3
		Rules, ivory and wood.....	1	Upholstering materials, excelsior.....	1		
		Sand-lime brick.....	1	Vault lights and ventilators.....	1		

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

6,928,553	42,378,127	94,778,911	46,550	0,810,758	17,865,096	307,966,348	0,405,246	558,962,067	214,590,473	174,812	30,020	79,807	3,214	61,771	12,111	1
2,000	2,200	60,882	1,724	2,030	71,212	2,212	172,147	98,723	90	24				72		2
6,290	4,528	69,746	5,454	1,255	46,990	2,421	146,141	96,730	21					21		3
101,022	168,554	528,520	40,931	44,743	2,672,801	58,509	4,212,106	1,480,796	483	21				455		4
63,104	49,132	603,554	610	50,408	204,897	353,021	1,589,600	1,031,688	2,598	2,888			145	68	595	5
54,230	12,716	189,062	13,411	12,385	390,825	2,962	779,982	380,195	68					68		6
735,504	458,758	4,309,167	16,384	255,970	4,887,096	306,478	14,624,783	9,431,209	11,031	675			1,564	8,792	1,832	7
122,557	30,567	263,529	4,205	98,881	307,549	83,309	1,775,773	1,384,825	2,662	2,641	75		80	10	1,095	8
107,707	48,488	406,857	20,073	22,334	1,714,308	13,737	2,684,177	950,132	961	790			140	61	15	9
58,843	28,033	378,489		26,174	158,224	80,160	812,435	505,042	769	025			86	58	80	10
153,606	131,050	679,487	18,837	15,970	52,195	1,737,668	3,289,029	1,524,415	789	335			137	317	14	11
92,955	85,816	289,649	5,258	4,049	66,695	637,025	1,701,194	1,051,142	581		42			539		12
4,350,953	30,407,574	78,577,002	0,165	0,070,169	15,806,731	252,555,253	462,092,527	204,759,236	134,609	18,708	73,557	37		42,307	2,572	13
2,600	5,522	27,082	1,481	2,603	2,717	17,257	60,209	51,782								14
70,260	48,055	610,165	1,104	32,200	567,418	57,688	1,814,469	1,180,374	1,105	175				930		15
	4,200	4,200	1,030	1,546	0,808	120	20,102	10,177	6							16
907,238	1,889,325	7,781,523	14,224	106,241	1,385,832	41,987,930	63,178,280	20,573,007	10,004	3,765	6,133	1,033		8,073	6,408	17

Hand stamps.....	2	Mattresses and spring beds, not elsewhere specified.....	2	Pickles, preserves, and sauces.....	2	Tools, not elsewhere specified.....	1
Ice, manufactured.....	1	Mineral and carbonated waters.....	5	Saddlery and harness.....	2	Varnishes.....	1
Ink, printing.....	1	Models and patterns, not including paper patterns.....	3	Sausage, not made in slaughtering and meat-packing establishments.....	2	Wheelbarrows.....	1
Iron and steel, steel works and rolling mills.....	1	Oilcloth and linoleum, floor.....	1	Slaughtering and meat packing.....	1	Window and door screens.....	1
Iron and steel, welding.....	1	Optical goods.....	1	Sporting and athletic goods.....	1	Window shades and fixtures.....	1
Lamps.....	1	Paper and wood pulp.....	1	Steam packing.....	1	Wirework, not elsewhere specified.....	1
Marble and stone work, monuments and tombstones.....	1	Petroleum refining.....	1	Structural ironwork, not made in steel works or rolling mills.....	3	Wood, turned and carved.....	1
		Photo-engraving.....	1	Surgical appliances.....	1		

2,727,590	2,786,850	29,122,434	194,519	103,170	2,762,671	60,207,252	4,810,273	124,292,924	59,215,399	52,038	18,550	8,502	992	24,769	10,223	1
65,965	40,078	371,044	480	44,269	549,869	22,168	1,454,673	882,036	449					449		2
2,506	848	28,604	1,020	502	37,833	1,428	100,487	61,226	35					35		3
39,450	15,871	242,355	20,156	8,792	327,038	8,188	816,786	481,560	169				25	144		4
15,712	48,848	200,944	10,359	8,024	1,013,939	28,455	1,660,551	518,157	281					281		5
42,720	16,666	95,842	8,674	37,401	358,156	12,718	711,261	340,387	289				100	169		6
291,250	67,363	1,520,076	7,214	278,579	3,136,894	171,032	8,667,045	5,259,119	2,879	1,035				1,840	1,074	7
773,968	1,288,876	10,861,160	37,567	1,109,985	32,134,191	3,233,085	63,378,984	28,006,708	30,846	10,400	7,667		30	12,749	15,383	8
	5,677		120	141	10,389	741	25,756	14,626	21					21		9
65,878	26,402	230,711	1,840	21,126	1,834,058	11,436	2,643,835	798,341	531	75			80	370		10

* Same number reported for one or more other months.

* Same number reported throughout the year.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Num-ber of estab-lish-ments	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Pro-pri-eters and firm mem-bers.	Sala-ried offi-cers, super-in-tend-ents, and man-agers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		
					Male.	Fe-male.	Aver-age num-ber.	Number, 15th day of—			Male.	Fe-male.	Male.		Fe-male.
								Maximum month.	Minimum month.						

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

CANTON—Continued.															Dollars.
1	Marble and stone work, except state.	4	16	4	.....	.....	12	(*)	12	(*)	12	12	12	.....	27,700
2	Models and patterns, not including paper patterns.	3	33	0	1	.....	24	Au	36	Oc	8	25	25	.....	43,414
3	Printing and publishing.	19	322	23	18	43	39	199	De	200	Ja	190	210	183	631,093
4	Signs and advertising novelties.	7	99	4	6	1	4	85	De	134	My	59	137	21	55,974
5	Structural ironwork, not made in steel works or rolling mills.	5	304	.....	27	54	15	298	De	325	Jy	268	321	321	1,704,504
6	Tobacco, cigars and cigarettes.	9	25	10	1	.....	14	Apr	15	De	13	15	12	3	7,798
7	All other industries *	117	8,268	47	318	454	339	7,110	.....	.....	.....	7,370	6,226	1,144	35,558,982

*All other industries embrace—

Aluminum ware.	2	Carriages and wagons, repair work only.	2	Outlery and edge tools, pocketknives	2	Foundry supplies.	1
Artificial stone products.	4	Cars and general shop construction and repairs by electric-railroad companies.	2	Druggists' preparations.	2	Fur goods.	2
Automobiles.	1	Cleaning and polishing preparations	1	Electrical machinery, apparatus, and supplies.	5	Furniture.	6
Awnings, tents, and sails.	2	Clothing, men's.	3	Electroplating.	2	Gas fixtures.	2
Bells.	1	Clothing, women's.	1	Engines, steam, gas, and water.	1	Hardware, saddlery.	2
Brass and bronze products.	3	Butter.	3	Fancy articles, metal novelties.	1	Ice, manufactured.	1
Brick, building.	1	Carriage and wagon materials.	1	Flour-mill and gristmill products.	2	Instruments, medical and surgical.	1
Brooms, from broom corn.	1			Food preparations, not elsewhere specified.	1	Iron and steel, doors and shutters.	1
Butter.	3					Iron and steel forgings, not made in steel works or rolling mills.	2
Copper, tin, and sheet-iron work.	1						

CINCINNATI—All industries.		2,230	86,169	1,025	3,789	6,694	4,081	69,680	De	77,140	Ap	64,807	77,011	57,029	10,730	150	93	268,015,132
1	Artificial limbs.	6	28	3	4	.....	2	19	De	20	Mh	18	19	17	2	.....	.....	43,486
2	Automobile bodies and parts.	38	1,228	34	62	88	69	975	No	1,353	Fe	607	1,342	1,283	55	3	1	3,339,846
3	Automobile repairing.	48	416	50	26	23	31	280	De	297	Mh	275	317	307	4	6	.....	442,559
4	Bookbinding and blank-book making.	22	217	29	7	5	11	105	No	180	Ja	163	175	86	86	8	.....	238,082
5	Boots and shoes, not including rubber boots and shoes.	22	7,382	5	207	301	300	6,699	De	6,927	Ap	6,218	6,889	4,223	2,613	35	18	10,489,667
6	Boxes, cigar.	5	140	8	3	1	1	127	No	131	Ja	122	130	56	74	.....	.....	115,423
7	Boxes, paper and other, not elsewhere specified.	19	906	8	45	20	25	808	De	893	My	768	870	313	536	2	10	1,614,760
8	Boxes, wooden packing, except cigar boxes.	10	394	13	13	5	3	360	Au	421	Ap	300	384	374	10	.....	.....	730,600
9	Brass, bronze, and copper products.	13	915	14	25	32	28	816	Mh	854	Oc	777	837	703	37	7	.....	2,120,098
10	Bread and other bakery products.	182	2,345	193	60	191	156	1,745	De	1,935	Jy	1,631	1,959	1,374	580	4	1	5,600,979
11	Biscuit and crackers.	4	841	.....	25	77	32	707	De	852	Jy	576	852	432	420	.....	.....	2,345,991
12	Bakery products, other than biscuit and crackers.	178	1,504	198	35	114	124	1,038	De	1,083	Fe	994	1,107	942	160	4	1	3,160,988
13	Brick.	4	99	4	7	1	1	80	Je	111	Fe	59	91	91	.....	.....	.....	281,674
14	Brooms, from broom corn.	0	63	8	2	1	1	52	De	57	Fe	47	57	57	.....	.....	.....	90,534
15	Butter.	9	251	2	27	22	49	151	Jy	183	De	128	146	103	43	.....	.....	921,148
16	Carriage and wagon materials.	9	272	7	10	6	8	242	Au	274	Ja	163	254	239	14	1	.....	717,782
17	Carriages and wagons, including repairs.	19	281	20	16	19	10	216	My	231	Ja	182	200	187	13	.....	.....	592,757
18	Carriages and wagons.	8	209	5	10	17	10	167	My	185	No	147	147	135	12	.....	.....	569,700
19	Repair work only.	11	72	16	6	2	.....	49	De	59	Ja	35	53	52	1	.....	.....	22,067
20	Cars and general shop construction and repairs by steam-railroad companies.	10	1,687	.....	83	112	19	1,523	De	1,660	Ap	1,405	1,660	1,626	34	.....	.....	1,312,936
21	Chemicals.	9	311	1	27	63	46	174	Au	199	Ap	147	195	180	15	.....	.....	1,838,817
22	Cleaning and polishing preparations.	12	88	12	12	21	14	20	My	85	Ja	25	80	21	0	.....	.....	317,727
23	Clothing, men's.	108	6,511	139	172	612	283	5,308	De	6,195	Ap	3,618	6,196	2,067	4,115	3	11	14,097,373
24	Regular factories.	32	5,758	64	167	612	281	4,634	De	5,480	Ap	3,972	5,481	1,911	3,567	2	11	14,028,227
25	Men's, youths', and boys'.	42	4,946	87	149	553	251	3,936	De	4,675	Ap	3,378	4,676	1,764	2,902	2	8	11,495,147
26	All other.	10	812	7	18	59	30	698	De	805	Mh	573	805	147	665	.....	.....	2,531,080
27	Contract work.	59	753	72	5	2	2	674	No	716	My	640	715	156	558	1	.....	71,146
28	Clothing, women's.	34	1,129	43	40	84	54	908	Au	999	My	791	948	305	625	1	17	2,169,931
29	Coffee and spice, roasting and grinding.	12	517	6	20	106	34	351	Se	407	Mh	296	357	165	192	.....	.....	2,508,916
30	Confectionery and ice cream.	58	1,782	68	68	103	145	1,398	Oc	1,615	Mh	1,273	1,567	567	990	5	5	3,598,709
31	Cooperage.	6	133	6	10	2	2	113	De	120	Mh	108	121	120	1	.....	.....	680,005
32	Copper, tin, and sheet-iron work.	32	906	26	40	46	42	732	Ja	994	Jy	945	745	680	76	.....	.....	2,743,304
33	Electrical machinery, apparatus, and supplies.	24	682	13	47	46	34	542	De	616	Jy	494	615	583	32	.....	.....	2,051,351
34	Electroplating.	5	68	5	3	2	2	51	De	64	Fe	42	67	58	9	.....	.....	46,873
35	Engraving and die-sinking.	7	26	9	.....	1	1	10	Ja	17	Au	15	10	10	.....	.....	.....	16,944
36	Engraving, steel and copper plate, including plate printing.	9	130	9	1	1	1	118	Ja	132	Fe	96	118	69	49	.....	.....	59,263
37	Flavoring extracts.	14	224	15	14	42	18	135	Se	142	Fe	120	140	95	43	.....	2	1,245,132
38	Flour-mill and gristmill products.	6	74	14	7	6	9	38	De	46	My	32	46	46	.....	.....	.....	403,749
39	Food preparations, not elsewhere specified.	14	208	8	23	17	11	149	Fe	169	Se	133	189	122	67	.....	.....	601,804
40	Foundry and machine-shop products.	133	6,982	93	358	575	241	5,715	De	6,743	My	4,933	6,073	6,526	145	2	.....	18,262,404
41	Foundry supplies.	7	163	3	20	24	19	87	No	99	Mh	78	95	93	2	.....	.....	453,107
42	Fur goods.	3	25	1	2	1	2	10	Se	25	Ap	14	18	7	11	.....	.....	40,530
43	Furniture.	41	1,703	85	91	58	38	1,481	De	1,600	Ja	1,319	1,600	1,467	101	32	.....	3,555,076
44	Grease and tallow, not including lubricating greases.	8	294	7	10	21	8	242	My	232	Au	260	261	261	.....	.....	.....	948,336
45	Hardware.	10	567	5	20	53	23	460	De	523	Mh	385	519	424	95	.....	.....	1,470,108

1 Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

2 Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

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[illegible][illegible]

Jewelry.....	1	Paints.....	1	Saddlery and harness.....	1	Sulphuric, nitric, and mixed acids.....	1
Lamps.....	1	Patent medicines and compounds.....	2	Safes.....	2	Surgical appliances.....	2
Leather goods, not elsewhere specified.....	1	Photo-engraving.....	4	Shirts.....	2	Tools, not elsewhere specified.....	4
Liquors, malt.....	2	Pickles and preserves.....	1	Slaughtering and meat packing.....	1	Toys and games.....	2
Looking-glass and picture frames.....	1	Pottery.....	1	Sporting and athletic goods.....	1	Trunks and valises.....	1
Mattresses and spring beds, not elsewhere specified.....	1	Pumps, steam.....	1	Springs, steel, automobile.....	1	Umbrellas and canes.....	1
Mineral and carbonated waters.....	3	Roofing materials, metal shingles and ceiling.....	3	Stamped and enameled ware, not elsewhere specified.....	2	Watchcases.....	1
Mucilage, paste, and other adhesives, not elsewhere specified.....	1	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	4	Steam fittings and steam and hot-water heating apparatus.....	1	Watches.....	1

13,892,351	13,927,410	68,650,321	3,474,092	2,429,536	18,130,198	291,711,406	4,569,037	500,040,906	203,760,553	121,520	58,742	2,498	0,137	.....	54,149	30,345	1
12,275	3,445	17,491	200	14,124	1,091	25,504	577	96,071	70,590	15	.....	.....	.....	.....	11	.....	2
213,072	116,484	1,132,913	.....	44,172	72,142	3,123,516	32,498	5,207,453	2,051,439	1,641	500	.....	4	.....	1,133	55	3
40,249	47,953	360,144	.....	40,695	16,452	721,394	18,996	1,510,247	778,857	280	.....	.....	14	.....	270	.....	4
15,008	15,241	124,218	3,373	16,002	2,127	107,200	3,147	942,530	472,189	134	.....	.....	.....	.....	134	.....	5
747,757	1,440,730	0,181,487	.....	93,840	606,984	10,836,987	126,598	31,223,081	14,259,540	3,807	2,148	.....	.....	.....	1,059	1,401	6
10,000	1,820	80,150	251	2,916	3,616	148,128	5,094	843,809	180,987	152	125	.....	.....	.....	27	26	7
103,221	43,402	525,745	.....	53,432	70,065	1,222,775	20,843	2,045,239	1,402,121	701	135	.....	185	.....	491	.....	8
48,120	0,656	329,949	.....	8,120	23,125	1,085,713	11,025	1,790,614	693,870	1,103	935	.....	10	.....	218	139	9
178,914	90,829	855,607	2,941	8,052	331,809	1,410,551	57,329	3,041,519	2,104,639	1,039	297	.....	135	.....	607	304	10
230,603	431,317	1,578,893	1,569	99,597	841,147	3,750,595	108,828	14,140,223	5,220,800	1,420	580	.....	195	.....	651	454	11
114,067	144,991	400,352	.....	2,310	242,106	2,888,402	48,304	4,888,107	1,951,401	173	159	.....	.....	.....	23	93	12
115,630	280,326	1,118,511	1,569	97,287	96,041	5,802,193	120,524	0,252,116	3,200,399	1,253	430	.....	195	.....	028	361	13
21,095	2,259	80,173	.....	518	0,695	38,348	32,709	253,019	181,902	315	215	.....	.....	.....	100	.....	14
.....	4,075	51,731	.....	2,916	578	112,277	1,789	217,780	103,723	35	.....	.....	.....	.....	85	.....	15
80,735	43,387	150,872	.....	5,520	47,012	7,030,875	38,048	8,824,102	1,148,729	2,015	1,544	.....	20	.....	451	58	10
32,909	16,308	210,573	.....	14,567	8,989	575,405	9,119	979,250	894,720	938	580	.....	18	.....	40	.....	17
54,915	33,657	210,822	.....	17,088	12,702	900,592	8,196	1,547,807	572,019	283	75	.....	.....	.....	130	10	18
40,618	30,381	173,272	.....	8,897	11,251	911,213	5,570	1,383,700	470,001	218	75	.....	70	.....	73	10	19
8,297	3,276	46,550	.....	8,191	1,451	55,379	3,620	101,017	102,018	65	.....	.....	8	.....	57	.....	20
90,349	194,705	2,448,257	.....	.....	481	1,234,802	57,955	4,026,932	2,734,115	1,022	434	.....	.....	.....	538	111	21
56,904	115,474	160,975	.....	7,348	99,800	473,891	79,231	1,518,237	955,115	1,292	230	.....	60	.....	1,002	.....	22
49,004	43,298	28,801	.....	4,103	0,809	235,862	1,715	738,224	260,847	40	.....	.....	.....	.....	40	.....	23
1,001,200	1,214,099	4,570,182	2,028,183	205,101	728,352	10,710,957	50,510	32,254,217	15,477,750	947	190	.....	.....	.....	757	52	24
991,405	1,213,315	3,077,768	2,004,877	252,519	720,618	10,697,097	49,254	31,394,174	14,477,823	861	190	.....	.....	.....	671	52	25
812,239	1,123,132	3,497,018	1,867,310	225,460	485,007	12,415,888	38,437	25,084,840	13,231,015	629	100	.....	.....	.....	439	52	26
179,256	90,183	480,750	137,558	27,053	238,551	4,281,709	10,817	5,700,340	1,415,808	232	.....	.....	.....	.....	232	.....	27
0,795	1,684	598,414	23,306	12,582	1,734	22,880	7,256	890,043	829,927	80	.....	.....	.....	.....	86	.....	28
193,355	150,475	960,304	60,095	57,113	60,771	2,957,030	11,356	5,135,218	2,196,826	160	.....	.....	.....	.....	100	.....	29
75,830	270,929	279,848	.....	20,465	82,180	4,904,053	28,127	6,011,920	1,684,740	984	50	.....	350	.....	554	540	30
244,575	208,597	887,273	450	81,671	598,045	5,340,135	77,401	0,428,209	4,010,673	1,491	505	.....	137	.....	789	.....	31
33,742	5,250	119,585	.....	12,300	15,730	599,007	0,883	831,708	815,268	879	802	.....	.....	.....	17	58	32
272,720	109,867	734,172	707	12,087	90,403	2,735,874	28,523	4,805,460	2,040,069	1,054	.....	.....	.....	.....	646	98	33
153,301	76,364	574,848	20,030	27,043	93,390	1,024,751	26,093	2,013,082	1,558,588	922	105	.....	97	.....	720	219	34
7,708	3,488	58,479	232	4,787	590	19,052	2,820	133,714	112,342	101	.....	.....	.....	.....	101	.....	35
.....	320	20,143	.....	2,302	185	5,147	449	44,844	39,248	14	.....	.....	.....	.....	14	.....	36
3,275	3,110	97,110	3,102	5,562	298	44,000	987	215,325	170,172	27	.....	.....	.....	.....	27	.....	37
65,030	78,941	130,774	.....	10,209	27,148	1,884,223	10,512	2,044,334	743,649	224	110	.....	.....	.....	114	.....	38
17,460	14,186	47,355	.....	4,119	4,871	995,533	14,966	1,207,738	197,289	990	200	.....	60	.....	430	.....	39
62,321	34,755	130,018	.....	10,701	12,180	689,202	23,825	1,092,547	379,520	550	205	.....	35	.....	250	29	40
1,324,408	915,083	0,120,097	07,982	144,480	825,524	0,739,133	306,293	25,500,980	15,401,500	0,038	1,797	.....	925	.....	0,916	1,180	41
47,748	37,514	78,020	34	5,048	20,074	431,351	24,027	821,806	365,828	910	847	.....	.....	.....	508	.....	42
4,000	1,251	16,743	277	2,700	144	14,225	207	46,707	32,335	7	.....	.....	.....	.....	7	.....	43
306,321	107,505	1,360,937	0,611	53,547	88,311	2,658,504	78,079	5,890,337	3,153,757	3,338	1,725	.....	378	.....	1,238	754	44
37,236	17,320	288,433	.....	8,036	0,494	1,312,778	124,481	2,104,759	907,500	624	619	.....	.....	.....	5	.....	45
93,791	140,174	414,844	3,448	12,303	83,841	806,483	23,893	1,901,011	1,070,635	350	693	.....	25	.....	142	623	46

4 Same number reported for one or more other months.

MANUFACTURES—OHIO.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES.

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.						

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

CINCINNATI—Con.																Dollars.
1	Hats and caps, other than felt, straw, and wool.	12	308	16	9	22	14	247	No	271	Ap	163	268	05	180	457,631
2	Ice, manufactured.	16	245	2	18	10	9	206	Jy	288	Ja	141	198	197	1	2,105,822
3	Iron and steel, welding.	10	39	13	2	2	2	22	Oc	25	Jy	18	25	20	5	40,181
4	Jewelry.	24	432	43	14	22	29	324	Ja	368	Oc	173	361	279	78	1,104,429
5	Leather goods, not elsewhere specified.	7	93	8	9	4	4	72	Oc	82	Fe	55	82	50	31	343,068
6	Leather, tanned, curried, and finished.	13	751	12	27	24	0	682	Oc	739	Fe	639	732	722	10	15,312,985
7	Liquors, malt.	17	1,205	8	79	116	8	1,002	Jy	1,079	No	842	855	849	6	10,582,180
8	Lithographing.	11	391	8	19	26	19	320	Oc	353	Ja	278	344	292	52	1,090,214
9	Lumber, planing-mill products, not including planing mills connected with sawmills.	22	551	17	44	51	27	412	De	487	Ja	313	918	908	10	2,098,105
10	Machine tools.	46	6,510	18	323	426	170	5,573	De	6,401	My	5,049	6,423	6,327	91	21,183,382
11	Marble and stone work.	25	197	33	12	12	4	136	Au	149	Ja	114	148	148	5	584,056
12	Monuments and tombstones.	16	89	22	6	4	1	57	Oc	61	Ja	50	60	60	0	108,804
13	Other marble and stone work, except slate.	9	108	11	7	8	3	79	Au	89	Ja	64	88	88	0	475,255
14	Mattresses and spring beds, not elsewhere specified.	11	190	8	13	9	6	154	No	175	Ja	122	150	107	50	512,824
15	Millinery and lace goods, not elsewhere specified.	15	403	16	20	12	17	398	Au	490	Mh	345	418	71	346	472,393
16	Mineral and carbonated waters.	12	136	13	8	7	4	104	Au	124	Ja	83	102	100	2	490,008
17	Models and patterns, not including paper patterns.	24	306	31	18	15	8	234	No	287	Fe	192	270	267	2	637,452
18	Optical goods.	13	100	6	14	13	23	104	Oc	109	Ja	98	108	94	14	259,503
19	Paints.	16	751	9	48	141	66	487	Se	555	Fe	405	515	504	11	8,470,623
20	Patent medicines and compounds.	31	238	20	14	19	64	121	De	146	Fe	100	142	57	85	280,058
21	Patent and proprietary medicines.	21	199	10	12	9	59	109	De	131	Fe	89	128	44	84	229,690
22	Patent and proprietary compounds, including compounds not elsewhere specified.	10	39	10	2	10	5	12	De	15	Ja	10	14	13	1	50,368
23	Photographs and graphophones.	7	72	1	9	3	3	56	No	78	Ja	31	74	74	0	130,859
24	Photo-engraving.	11	187	6	21	16	8	136	Oc	156	Ja	108	151	134	6	130,723
25	Poultry, killing and dressing, not done in slaughtering and meat-packing establishments.	4	24	5	2	2	2	15	(*)	15	(*)	15	15	15	0	33,882
26	Printing and publishing, book and job.	172	3,314	150	164	173	190	2,637	No	2,937	Fe	2,883	2,918	1,933	973	7,253,227
27	Printing and publishing, newspapers and periodicals.	90	2,238	56	225	506	337	1,114	De	1,171	Ja	1,062	1,183	1,047	130	6,381,277
28	Printing and publishing.	9	1,450	4	173	399	147	727	De	755	Ja	697	767	720	41	3,714,050
29	Printing, publishing, and job printing.	12	546	12	10	40	82	387	No	424	Ja	305	410	321	95	2,432,462
30	Publishing without printing.	69	242	40	33	61	108	0	Oc	969	Jy	925	950	98	858	234,765
31	Shirts.	9	1,102	4	42	64	40	952	Jy	167	Ja	101	155	111	44	2,363,394
32	Signs and advertising novelties.	13	173	12	8	7	7	142	Ja	1,794	Ja	1,582	1,790	1,684	206	208,931
33	Slaughtering and meat packing.	42	1,922	51	48	143	56	1,624	De	1,794	Jy	1,582	1,790	1,684	206	9,869,041
34	Statuary and art goods.	6	81	6	5	1	4	65	Se	69	Ja	57	66	63	3	139,563
35	Stoves and hot-air furnaces.	11	1,262	3	62	171	103	923	De	1,098	Ap	738	1,089	1,084	5	4,927,589
36	Structural ironwork, not made in steel works or rolling mills.	15	375	11	32	24	14	294	Se	353	My	224	342	328	14	1,011,567
37	Tobacco, cigars.	124	2,146	131	47	65	16	1,887	De	2,105	My	1,748	2,121	840	1,281	2,780,938
38	Tools, not elsewhere specified.	15	145	14	13	3	7	108	Ja	152	Je	80	140	125	13	288,251
39	Machinists' tools.	7	86	6	7	2	2	69	Ja	110	Je	47	90	88	8	77,018
40	All other.	8	59	8	6	1	5	39	Se	48	Fe	32	43	37	7	148,531
41	Toys and games.	5	79	7	1	1	1	70	De	317	Ja	19	318	8	310	31,191
42	Trunks and valises.	4	36	3	2	1	1	29	No	34	Fe	25	32	22	10	77,018
43	Varnishes.	10	118	5	19	27	10	57	Au	66	Fe	40	62	60	3	638,449
44	Wirework, not elsewhere specified.	8	99	7	4	0	3	79	Jy	97	Ja	64	85	85	0	140,596
45	All other industries.*	394	20,698	267	833	1,851	1,059	16,688					18,500	14,272	4,205	72,910,319

*All other industries embrace—	Canning and preserving, vegetables..	2	Dental goods.....	4	Glue, other than fish.....	2	
Aluminum manufactures.....	1	Carpets, rag.....	2	Druggists' preparations.....	7	Gold and silver, reducing and refining, not from the ore.....	2
Artificial flowers.....	1	Cars and general shop construction and repairs by electric-railroad companies.....	2	Dyeing and finishing textiles, exclu- sive of that done in textile mills.....	1	Hair work.....	5
Artificial stone products.....	2	Car, electric-railroad, not including operations of railroad companies.....	2	Emery and other abrasive wheels.....	1	Hand stamps.....	4
Automobiles.....	7	Cash registers and parts.....	1	Enameling.....	1	Hats, fur-felt.....	1
Awnings, tents, and sails.....	6	Chewing gum.....	1	Engines, steam, gas, and water.....	2	Hats, straw.....	1
Babbitt metal.....	1	Clocks.....	3	Engravers' materials.....	2	House-furnishing goods, not else- where specified.....	8
Bags, other than paper, not including bags made in textile mills.....	2	Clothing, men's, buttonholes.....	6	Engraving, wood.....	2	Ink, printing.....	6
Bags, paper, exclusive of those made in paper mills.....	7	Coal-tar products.....	2	Envelopes.....	1	Ink, writing.....	4
Baking powders and yeast.....	3	Coffins, burial cases, and undertakers' goods.....	2	Fancy articles, not elsewhere specified.....	3	Instruments, professional and scien- tific.....	2
Baskets, and rattan and willow ware.....	3	Condensed milk.....	1	Fire extinguishers, chemical.....	1	Iron and steel, steel works and rolling mills.....	1
Belting and hose, other than leather and rubber.....	2	Cordage and twine.....	1	Flags and banners.....	3	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	1
Belting, leather.....	3	Cordials and flavoring sirups.....	2	Furnishing goods, men's, neckwear.....	4	Iron and steel forgings, not made in steel works or rolling mills.....	4
Billiard tables and accessories.....	1	Corsets.....	2	Galvanizing.....	1	Japanning.....	1
Blacking, stains, and dressings.....	3	Cotton goods.....	1	Gas and electric fixtures.....	1	Jewelry and instrument cases.....	1
Bluing.....	3	Cotton small wares.....	1	Gas machines.....	1		
Boot and shoe cut stock.....	5	Cutlery and edge tools.....	2	Glass.....	1		
Boot and shoe findings.....	5			Glass, cutting, staining, and orna- menting.....	7		
Brushes.....	5			Gloves and mittens, leather.....	1		

*Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

*Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants.)

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rent-^{2}
										Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

Dollars. 40,000	Dollars. 50,306	Dollars. 181,300	Dollars. 371	Dollars. 10,570	Dollars. 8,751	Dollars. 720,630	Dollars. 2,528	Dollars. 1,271,187	Dollars. 541,070							
47,508	18,022	267,070	.....	2,700	22,133	51,322	271,920	1,363,501	1,040,849	5,355	4,085	100	.....	1,080	432	2
4,180	1,048	24,452	4,804	4,009	706	42,332	1,701	103,157	59,124	20	.....	.....	.....	20	.....	3
30,647	48,849	323,750	18,425	24,400	4,601	1,387,768	7,721	2,263,840	868,351	133	.....	.....	.....	133	.....	4
27,043	1,965	65,110	1,000	5,654	7,137	420,988	2,902	694,283	270,393	119	.....	.....	.....	119	.....	5
124,900	50,164	786,129	.....	4,005	151,877	7,071,545	73,559	10,038,997	2,948,893	2,187	1,170	007	170	180	1,023	6
356,589	222,389	1,309,935	.....	1,900	1,702,338	2,023,683	424,282	7,789,700	5,341,735	11,073	11,511	.....	152	310	2,216	7
85,270	71,266	354,824	11,615	12,582	18,835	579,183	12,556	1,367,199	775,460	630	120	.....	25	491	31	8
110,875	79,907	415,235	1,035	15,950	29,900	2,022,869	28,900	3,122,558	1,070,699	2,699	1,025	.....	112	962	633	9
1,155,929	752,142	6,549,150	279,700	57,474	2,744,578	6,895,268	268,663	25,047,625	17,883,694	10,229	2,015	.....	245	7,066	802	10
34,347	22,024	165,181	2,583	7,572	10,036	261,483	11,635	667,758	394,040	789	412	.....	168	269	200	11
11,792	4,583	81,531	2,279	2,378	2,335	89,353	2,942	305,635	213,640	208	.....	.....	107	41	.....	12
22,555	17,441	83,650	304	5,194	7,701	172,130	8,093	361,823	181,000	581	412	.....	1	168	200	13
40,679	23,768	134,253	.....	0,172	5,767	599,130	8,675	1,000,064	401,259	232	.....	.....	50	182	35	14
39,813	24,974	196,200	.....	18,567	5,121	483,385	3,858	888,648	401,405	89	.....	.....	.....	89	.....	15
26,180	13,182	121,920	.....	2,388	72,101	360,440	0,362	980,387	610,585	144	20	.....	.....	124	.....	16
43,314	11,139	287,943	.....	0,085	83,277	135,918	8,688	891,434	740,828	363	.....	126	50	178	.....	17
29,340	34,853	105,282	.....	16,744	7,154	142,989	8,834	419,184	272,361	63	.....	.....	.....	63	.....	18
218,782	283,290	307,807	24,000	34,040	408,811	6,987,095	88,147	10,333,139	3,257,897	2,148	1,040	.....	150	958	1,200	19
54,345	47,094	70,499	.....	12,220	8,953	871,298	1,716	770,294	400,290	38	.....	.....	.....	38	.....	20
49,847	25,143	69,551	.....	0,720	8,149	343,387	1,080	686,668	341,651	37	.....	.....	.....	37	.....	21
4,498	21,951	10,948	.....	2,500	804	27,011	89	92,626	64,626	1	.....	.....	.....	1	.....	22
11,892	3,688	50,214	3,680	5,845	6,948	108,937	1,485	252,484	142,002	132	.....	.....	.....	132	.....	23
41,745	30,611	162,613	1,512	9,428	2,869	67,599	4,726	427,867	355,072	51	.....	.....	.....	51	.....	24
3,360	1,725	22,408	.....	4,100	787	712,412	1,260	783,090	69,428	30	.....	.....	.....	30	.....	25
404,055	314,215	2,850,206	220,047	185,351	138,547	4,303,569	88,172	10,678,735	6,286,994	2,905	310	.....	124	2,471	236	26
305,202	920,524	1,572,681	507,560	53,356	369,981	3,011,019	52,887	10,567,143	7,503,237	2,920	1,125	.....	70	1,725	625	27
172,677	660,600	1,186,595	8,347	32,713	343,588	2,357,220	32,703	7,787,103	4,988,090	1,774	75	.....	60	1,089	5	28
63,752	137,303	380,080	800	7,381	20,535	613,099	20,039	2,106,943	1,473,805	1,140	1,050	.....	10	86	620	29
68,773	131,621	.....	498,413	13,202	5,858	40,700	55	1,082,007	1,041,842	.....	.....	.....	.....	.....	.....	30
229,722	120,090	527,633	31,348	43,250	160,002	2,470,182	10,131	4,248,835	1,753,522	719	.....	.....	.....	149	105	31
20,370	17,410	135,205	3,747	9,461	3,602	107,938	5,703	427,974	254,333	262	.....	.....	.....	182	.....	32
203,904	274,401	1,830,161	500	50,635	262,852	54,188,381	252,361	62,428,358	7,987,610	6,838	4,008	300	285	2,245	1,418	33
8,760	3,820	68,002	.....	4,960	1,445	40,944	2,671	137,418	64,501	73	.....	.....	.....	18	28	34
227,608	288,593	1,203,352	300	30,165	128,472	2,607,744	46,818	5,251,557	2,633,995	909	570	.....	.....	330	605	35
89,010	38,155	807,078	13,247	19,808	28,338	915,131	20,962	1,626,329	690,236	770	400	.....	60	316	425	36
127,374	137,873	1,418,327	172	50,054	587,365	2,733,122	14,099	5,882,781	3,135,560	112	.....	.....	.....	112	.....	37
42,359	9,223	128,805	.....	14,683	4,406	97,086	3,840	398,166	297,740	167	.....	.....	.....	102	15	38
30,204	4,555	98,267	.....	6,703	2,725	26,828	1,809	211,847	184,710	121	.....	.....	.....	121	.....	39
12,155	4,668	35,038	.....	7,980	1,581	45,758	1,631	156,319	113,080	40	.....	.....	.....	41	15	40
1,600	966	15,632	.....	1,244	236	30,069	368	64,073	33,668	155	150	.....	.....	5	.....	41
5,227	1,184	25,297	.....	3,723	1,351	70,201	583	120,952	53,078	16	.....	.....	.....	16	.....	42
73,475	75,594	63,687	.....	3,303	15,061	701,820	5,518	1,199,624	492,280	171	95	.....	17	59	.....	43
7,105	12,186	68,132	5,000	3,937	6,284	195,775	3,345	432,767	233,647	101	.....	.....	.....	70	28	44
3,607,921	3,866,516	15,635,266	143,055	499,020	6,731,214	91,214,514	1,234,203	143,602,061	51,153,314	28,977	14,524	1,216	1,187	12,050	13,404	45

Knit goods.....	3	Paper goods, not elsewhere specified.....	4
Labels and tags.....	2	Paper patterns.....	1
Lamps.....	5	Pens, fountain and stylographic.....	2
Lasts.....	3	Perfumery and cosmetics.....	8
Lead, bar, pipe, and sheet.....	1	Photographic apparatus.....	1
Liquors, distilled, grain alcohol.....	1	Photographic materials.....	1
Liquors, vinous.....	1	Pickles, preserves, and sauces.....	8
Looking-glass and picture frames.....	4	Plated ware, hollow ware.....	1
Lubricating greases.....	1	Plumbers' supplies, not elsewhere specified.....	3
Lumber and timber products.....	1	Pottery.....	4
Mirrors, framed and unframed, not elsewhere specified.....	4	Printing and publishing, music.....	5
Mucilage, paste, and other adhesives, not elsewhere specified.....	2	Printing materials.....	4
Musical instruments and materials, not specified.....	2	Pumps, not including power pumps.....	2
Musical instruments, organs.....	7	Pumps, steam.....	1
Musical instruments, pianos.....	1	Refrigerators.....	1
Musical instruments, piano materials.....	2	Regalia, and society badges and emblems.....	5
Oil and cake, cottonseed.....	2	Roofing materials.....	3
Oil, vegetable.....	2	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	2
Oleomargarine.....	2	Saddlery and harness.....	7

Safes.....	3	Surgical appliances.....	5
Sausage casings.....	4	Suspenders, garters and elastic woven goods.....	3
Saws.....	3	Tinware, not elsewhere specified.....	4
Scales and balances.....	1	Tobacco, chewing and smoking.....	9
Screws, machine.....	2	Type founding.....	3
Show cases.....	1	Umbrellas and canes.....	3
Smelting and refining, not from the ore.....	3	Vinegar.....	1
Soap.....	0	Wall plaster and composition flooring.....	1
Sporting and athletic goods.....	2	Washing machines and clothes wringers.....	1
Springs, steel, automobile.....	1	Waste.....	1
Stamped ware.....	3	Watchcases.....	1
Stationery goods, not elsewhere specified.....	2	Window and door screens, and weather strips.....	2
Steam fittings and steam and hot-water heating apparatus.....	3	Window shades and fixtures.....	3
Steam packing.....	2	Wood preserving.....	1
Steel barrels, drums, and tanks, portable.....	3	Wood, turned and carved.....	3
Stencils and brands.....	6	Wooden goods, not elsewhere specified.....	2
Stereotyping and electrotyping.....	4	Wool scouring.....	1
Stoves, gas and oil.....	2	Wool shoddy.....	1

¹ Same number reported for one or more other months.
² Same number reported throughout the year.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.						Capital.
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		
						Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.	Female.	
									Maximum month.	Minimum month.						
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.																
1	CLEVELAND—All industries.	2,946	191,349	1,970	7,515	15,733	8,401	157,730	Do 172,842	Ap 147,365	180,142	151,791	26,043	1,652	56	Dollars. 702,685,305
2	Artificial stone products.	11	93	14	5	2	2	70	Au 99	Ja 35	87	87	—	—	—	427,261
3	Automobile bodies and parts.	75	8,509	28	392	676	319	7,094	De 9,475	Fe 4,655	9,524	9,190	328	—	—	32,242,794
4	Automobiles.	10	13,316	—	275	680	570	11,779	De 13,189	Fe 10,429	13,190	13,017	173	—	—	73,394,511
5	Automobile repairing.	71	576	63	26	22	25	439	No 448	Fe 422	450	440	4	—	—	857,065
6	Awnings, tents, and sails.	9	389	1	18	27	14	329	Jy 420	Ja 242	303	173	130	—	—	1,713,437
7	Blackings, stains, and dressings.	8	61	8	32	5	4	32	Jy 46	Ja 24	36	18	18	—	—	203,593
8	Bookbinding and blank-bookmaking.	17	333	10	14	2	11	200	De 325	Ja 251	321	199	121	1	—	587,618
9	Boxes, cigar.	4	58	3	2	1	1	51	Do 65	Mh 40	65	15	50	—	—	43,537
10	Boxes, paper, shipping containers and set-up paper boxes.	9	935	2	27	17	23	893	No 1,047	My 757	940	314	632	—	—	1,800,465
11	Boxes, wooden packing, except cigar boxes.	13	618	2	34	13	8	561	No 598	Au 409	587	570	15	2	—	1,356,022
12	Brass and bronze products.	22	1,088	12	70	30	20	947	Au 1,126	Ja 702	1,062	1,047	15	—	—	2,266,462
13	Bread and other bakery products.	288	3,198	282	99	518	115	2,184	De 2,357	Fe 1,948	2,408	1,779	621	2	0	6,534,284
14	Brooms, from broom corn.	10	84	7	6	2	2	67	Do 8	Fe 64	60	58	11	—	—	151,331
15	Butter.	7	175	2	9	17	3	114	Jy 131	Ja 98	112	73	39	—	—	842,077
16	Carriages and wagons, including repairs.	18	240	17	23	8	0	186	—	—	190	195	1	—	—	599,581
17	Carriages and wagons.	6	161	5	16	8	5	127	Oc 134	Ja 113	130	120	1	—	—	512,761
18	Repair work only.	12	79	12	7	—	1	50	Ja 64	So 60	60	66	—	—	—	186,320
19	Cars and general shop construction and repairs by steam-railroad companies.	8	4,463	—	216	120	46	4,081	De 4,225	Ap 3,806	4,225	4,197	28	—	—	8,222,056
20	Chemicals.	9	1,309	—	61	150	77	1,021	De 1,311	My 735	1,311	1,123	187	1	—	7,466,647
21	Cleaning and polishing preparations.	17	124	14	18	20	11	61	Ja 75	So 48	60	37	32	—	—	252,408
22	Clothing, men's.	73	3,800	65	145	214	202	3,174	—	—	3,680	1,250	2,415	2	4	13,324,013
23	Regular factories.	52	3,447	38	143	214	201	2,851	No 3,384	Ja 2,415	3,323	1,130	2,178	2	4	13,293,503
24	Contract work.	21	353	27	2	—	1	323	De 364	Ja 288	357	120	237	—	—	29,450
25	Clothing, women's.	103	6,938	79	292	553	388	5,626	—	—	5,494	1,901	3,499	4	—	16,345,308
26	Regular factories.	80	6,755	59	201	553	387	5,465	—	—	5,293	1,927	3,362	4	—	10,278,402
27	Suits, skirts, and cloaks.	44	4,536	33	87	403	305	3,008	So 3,981	No 3,200	3,583	1,633	1,946	4	—	12,335,260
28	Shirt waists and dresses, except house dresses.	26	2,006	17	90	136	68	1,695	Au 1,018	De 1,513	1,525	278	1,247	—	—	3,503,838
29	All other.	10	213	9	14	14	14	162	Au 192	My 128	183	16	169	—	—	430,394
30	Contract work.	23	183	25	1	—	1	161	Jy 205	Ja 120	201	64	137	—	—	64,906
31	Coffee, roasting and grinding.	9	430	—	23	75	28	304	So 349	Ja 267	307	120	187	—	—	2,214,060
32	Confectionery and ice cream.	41	1,763	23	85	134	120	1,395	Oc 1,059	Ap 965	1,700	945	1,061	—	—	5,036,460
33	Cooperage, hogsheds and barrels.	5	307	5	8	5	2	287	Oc 325	Mh 266	317	317	—	—	—	1,054,817
34	Copper, tin, and sheet-iron work.	100	766	109	64	19	20	548	De 643	Ja 444	647	642	3	2	—	1,390,322
35	Electrical machinery, apparatus, and supplies.	78	10,261	15	410	1,035	682	8,113	De 9,202	Fe 7,444	13,301	10,940	2,355	6	—	30,373,821
36	Electroplating.	21	151	18	15	2	4	112	De 141	An 99	141	140	1	—	—	169,295
37	Engines, steam, gas, and water.	9	302	—	35	43	11	213	De 503	Fe 139	508	508	—	—	—	2,885,722
38	Flavoring extracts.	12	227	12	8	34	10	157	Ja 234	Oc 120	147	110	37	—	—	1,370,483
39	Flour-mill and gristmill products.	8	109	2	11	15	7	74	No 36	Jy 60	88	85	3	—	—	1,363,052
40	Food preparations, not elsewhere specified.	24	684	20	42	75	40	507	Au 769	Ap 384	460	204	160	7	5	3,202,473
41	Foundry and machine-shop products.	213	24,163	77	1,053	1,543	757	20,733	—	—	23,378	22,752	622	4	—	70,529,977
42	Boiler shops.	8	336	2	22	23	5	284	Ja 320	Jo 247	304	260	5	—	—	1,070,443
43	Foundries.	27	8,538	1	283	339	170	7,745	De 9,613	Jy 6,797	9,598	9,431	167	—	—	1,870,923
44	Machine shops.	160	12,126	72	589	918	500	10,447	No 10,818	Ap 9,387	10,706	10,255	447	4	—	53,183,319
45	Machine shop and foundry combined.	12	3,163	2	150	263	82	2,657	Oc 2,853	My 2,478	2,770	2,707	3	—	—	14,387,562
46	Fur goods.	24	201	27	12	5	12	145	No 198	Fe 100	186	58	128	—	—	405,390
47	Furnishing goods, men's, neckwear.	4	160	4	12	25	0	113	Oc 133	My 99	133	12	121	—	—	313,392
48	Furniture.	25	794	12	38	41	20	677	—	—	722	674	47	1	—	1,594,850
49	Wood furniture, other than rattan and willow.	15	613	9	21	32	20	531	So 574	Ja 438	506	523	42	1	—	1,214,223
50	Metal furniture and store and office fixtures.	10	181	3	17	9	0	140	Au 100	Ja 102	150	151	5	—	—	380,625
51	Gas and electric fixtures.	18	435	16	19	35	20	345	No 412	Ja 284	400	349	41	10	—	1,568,541
52	Glass, cutting, staining, and ornamenting.	11	93	9	11	3	3	67	De 74	Fe 68	75	67	8	—	—	161,168
53	Hats and caps, other than felt, straw, and wool.	14	255	14	18	24	8	191	De 222	Ja 161	234	130	98	—	—	602,465
54	House-furnishing goods, not elsewhere specified.	7	71	7	9	4	9	42	No 55	Ja 27	54	22	32	—	—	271,339
55	Iron and steel, steel works and rolling mills.	16	10,773	2	254	625	173	9,710	Ja 12,026	Oc 2,821	10,513	10,289	224	—	—	60,891,582
56	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.	11	3,931	—	81	152	95	3,603	Ja 4,137	Oc 2,790	3,617	2,939	600	12	—	14,504,375
57	Iron and steel forgings, not made in steel works or rolling mills.	13	2,013	3	74	93	42	1,801	De 2,145	My 1,482	2,145	2,141	4	—	—	10,727,058
58	Iron and steel, tempering and welding.	12	86	14	11	4	—	57	No 79	Ap 41	74	74	—	—	—	184,967
59	Jewelry.	17	94	14	3	2	5	70	De 82	So 50	84	82	2	—	—	101,514
60	Knit goods.	16	2,090	7	73	94	63	2,453	No 3,090	Ja 1,803	3,002	523	2,432	25	22	8,065,090
61	Liquors, malt.	8	903	—	31	71	43	758	Jy 887	De 642	650	639	11	—	—	9,305,482
62	Lithographing.	9	742	1	40	17	47	637	De 752	Ja 554	752	610	140	2	—	2,734,581
63	Lumber, planing-mill products, not including planing mills connected with sawmills.	38	777	16	54	49	23	635	Oc 748	Mh 502	737	736	1	—	—	2,500,749
64	Machine tools.	27	4,925	8	198	315	232	4,172	De 4,574	Jy 3,853	4,573	4,433	140	—	—	10,545,083
65	Marble and stone work.	26	267	21	23	20	9	194	—	—	198	197	—	—	—	1,003,090
66	Monuments and tombstones.	14	93	10	13	8	4	58	Oc 60	Ja 38	65	64	—	—	—	239,070
67	Other marble and stone work, except slate.	12	174	11	10	12	5	136	Ja 147	Fe 111	133	133	—	—	—	763,429

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.										POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.			Value of products.	Value added by manufacture.	Primary horsepower.				
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.				Total.	Owned.			
												Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹
														Rent- ²	Electric horsepower generated in establishments reporting.

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
29, 896, 420 33, 875, 821	211, 206, 276	5, 814, 329	3, 528, 595	44, 283, 735	581, 705, 611	31, 743, 833	1, 001, 577, 490	478, 128, 040	400, 108	174, 027	44, 841	18, 406	50	222, 094	67, 336	1				
8, 830	3, 447	107, 532	2, 400	2, 204	221, 470	3, 757	422, 808	197, 575	130	40	40	281	150	21, 033	532	3				
1, 160, 654	1, 132, 060	10, 134, 210	58, 570	120, 000	1, 220, 521	25, 345, 801	383, 707	44, 312, 032	18, 583, 304	22, 000	415	40	281	8, 131	1, 524	4				
1, 223, 458	2, 064, 228	17, 012, 854	95, 717	22, 923	4, 282, 077	70, 893, 051	590, 381	110, 254, 504	38, 765, 072	0, 581	1, 300	20	150	455	2	5				
53, 453	51, 167	388, 580	36, 821	89, 001	10, 505	800, 381	18, 126	2, 095, 160	1, 216, 040	492	20	20	17	17	93	6				
58, 057	55, 047	329, 082	200	5, 345	163, 361	1, 103, 338	24, 173	1, 090, 530	833, 025	318	225	225	17	17	19	7				
48, 100	17, 956	25, 505	15	1, 740	7, 840	221, 141	1, 384	479, 778	257, 253	19	19	19	19	19	19	8				
74, 263	9, 706	343, 786	42, 250	19, 392	5, 604	235, 264	0, 490	803, 746	622, 010	222	222	222	222	222	222	9				
2, 372	750	22, 854	3, 735	7, 191	49, 057	1, 830	107, 530	56, 040	54	54	54	54	54	54	54	10				
118, 817	53, 227	673, 018	1, 219	87, 147	124, 747	1, 427, 792	21, 121	3, 135, 027	1, 080, 114	785	208	208	208	577	135					
146, 827	32, 240	614, 954	1, 089	22, 086	101, 380	1, 615, 642	24, 545	2, 885, 137	1, 244, 950	1, 830	600	600	600	1, 230	11					
318, 805	70, 455	1, 206, 066	1, 098	13, 227	91, 275	4, 320, 496	122, 032	6, 622, 233	2, 170, 705	831	371	371	371	2, 138	56	12				
350, 917	1, 198, 288	2, 097, 028	5, 384	174, 870	212, 223	11, 555, 487	250, 512	10, 413, 046	7, 001, 047	2, 513	41	41	41	191	16	13				
10, 200	15, 212	71, 018	1, 800	0, 020	200, 540	1, 903	352, 316	143, 774	143, 774	41	41	41	41	400	16	14				
31, 369	51, 552	93, 940	4, 234	12, 515	20, 565	2, 408, 010	7, 199	2, 744, 456	329, 241	249	25	25	25	400	16	15				
75, 025	17, 417	271, 175	6, 400	17, 075	21, 370	344, 644	0, 941	890, 945	536, 460	425	25	25	25	400	16	16				
61, 110	16, 520	187, 443	10, 780	18, 404	255, 314	8, 037	636, 522	373, 171	321	321	321	321	321	321	321	17				
14, 509	807	83, 732	6, 400	6, 295	2, 000	89, 230	1, 904	254, 423	163, 280	104	104	104	104	79	18	18				
418, 105	158, 451	6, 144, 241	10, 008	16, 008	4, 547, 940	286, 074	11, 671, 425	6, 737, 405	6, 040	6, 040	2, 440	3, 285	3, 285	315	7, 560	19				
200, 529	339, 758	1, 404, 842	17, 200	420, 757	3, 272, 251	320, 292	7, 593, 407	4, 000, 924	5, 305	5, 305	3, 470	11	11	1, 815	332	20				
33, 848	39, 245	68, 505	31, 246	2, 379	298, 579	2, 047	639, 537	338, 311	748	748	60	60	60	688	22	21				
806, 384	665, 070	3, 451, 808	720, 144	169, 630	504, 100	0, 572, 073	50, 872	19, 433, 496	9, 801, 551	707	60	60	60	647	22	22				
801, 084	604, 270	3, 123, 849	159, 836	503, 824	9, 671, 692	55, 823	10, 012, 387	9, 384, 972	707	707	60	60	60	647	22	23				
5, 300	1, 400	327, 959	468	9, 794	270	4, 049	421, 109	410, 570	41	41	41	41	41	41	41	24				
1, 463, 830	1, 778, 066	6, 336, 098	532, 340	309, 203	512, 202	17, 890, 120	74, 132	35, 307, 741	17, 343, 489	1, 201	297	297	297	994	25	25				
1, 462, 830	1, 778, 440	6, 101, 701	524, 345	301, 715	511, 803	17, 888, 453	72, 082	35, 041, 342	17, 080, 807	1, 250	297	297	297	994	26	26				
1, 039, 669	1, 344, 507	4, 481, 354	394, 938	199, 322	400, 537	12, 876, 060	48, 721	25, 231, 355	12, 305, 684	984	297	297	297	987	27	27				
393, 814	406, 240	1, 539, 945	120, 407	88, 548	102, 913	4, 373, 040	18, 514	8, 712, 799	4, 321, 245	217	217	217	217	217	217	28				
29, 347	27, 699	140, 462	13, 845	8, 353	638, 403	4, 847	1, 097, 188	453, 878	55	55	55	55	55	55	55	29				
1, 000	620	174, 937	7, 095	7, 578	469	1, 067	2, 050	202, 080	262, 082	35	35	35	35	35	35	30				
115, 822	487, 364	255, 387	9, 119	33, 107	4, 752, 119	10, 705	6, 171, 429	1, 408, 095	760	760	302	302	302	4, 657	132	31				
450, 675	358, 880	1, 332, 583	105, 551	625, 322	5, 200, 882	118, 229	11, 375, 042	5, 996, 131	5, 019	5, 019	302	302	302	4, 657	132	32				
30, 806	27, 844	337, 537	8, 000	1, 594	16, 582	1, 595, 833	14, 681	2, 159, 088	548, 574	1, 080	930	930	930	1, 080	123	33				
109, 314	49, 061	735, 880	6, 040	46, 237	15, 030	1, 250, 827	12, 063	2, 781, 552	1, 612, 072	888	140	140	140	239	34	34				
1, 550, 440	1, 070, 800	10, 025, 713	10, 514	148, 421	3, 777, 282	24, 006, 883	495, 510	52, 324, 151	27, 221, 732	14, 190	684	8	589	12, 915	045	35				
30, 049	2, 796	169, 146	4, 000	15, 550	877	82, 238	13, 164	371, 790	276, 388	380	200	200	200	362	36	36				
60, 027	52, 629	335, 273	12, 432	70, 590	411, 089	15, 491	1, 050, 614	633, 034	1, 155	1, 155	15	15	15	750	31	37				
57, 769	124, 610	189, 217	23, 016	83, 851	2, 591, 820	0, 715	3, 460, 970	832, 456	148	148	1, 050	1, 050	1, 050	583	120	38				
47, 048	29, 474	101, 388	5, 058	25, 040	4, 008, 524	18, 745	4, 382, 725	855, 456	1, 633	1, 633	1, 050	1, 050	1, 050	583	120	39				
120, 311	127, 803	488, 420	22, 535	82, 835	2, 428, 978	30, 080	4, 098, 800	1, 033, 772	958	958	100	100	100	645	40	40				
4, 197, 171	3, 310, 506	20, 256, 832	282, 998	273, 336	5, 294, 943	37, 701, 947	2, 181, 313	98, 971, 768	50, 028, 508	41, 324	5, 045	930	2, 370	32, 364	7, 655	41				
126, 436	36, 094	419, 335	10, 982	84, 847	967, 227	23, 970	1, 945, 318	964, 112	980	980	405	405	405	245	42	42				
1, 079, 374	743, 648	11, 064, 009	30, 567	28, 872	820, 098	9, 450, 145	1, 090, 628	28, 175, 561	17, 625, 788	13, 803	310	52	630	12, 901	1, 340	43				
2, 347, 612	1, 896, 619	13, 067, 823	252, 431	222, 030	3, 765, 905	21, 705, 574	643, 541	55, 177, 475	32, 828, 360	20, 951	3, 705	887	1, 364	14, 995	4, 509	44				
643, 749	503, 645	3, 476, 005	16, 452	617, 403	5, 640, 001	423, 106	13, 673, 414	7, 610, 248	5, 500	5, 500	1, 225	52	52	4, 223	1, 806	45				
36, 877	23, 091	185, 157	30, 642	6, 550	450, 017	1, 807	940, 103	478, 700	30	30	5	5	5	20	46	46				
45, 104	77, 086	104, 058	2, 394	8, 108	11, 240	587, 954	2, 190	1, 028, 353	433, 200	5	5	5	5	5	5	47				
154, 481	115, 629	942, 427	40, 812	69, 005	1, 358, 825	26, 161	3, 208, 301	1, 823, 315	1, 125	1, 125	525	55	55	505	328	48				
104, 601	87, 301	745, 328	34, 361	54, 285	1, 054, 572	10, 032	2, 629, 170	1, 458, 560	690	690	475	20	20	204	328	49				
49, 820	28, 628	106, 599	12, 451	5, 320	304, 253	10, 120	670, 131	364, 749	426	426	50	75	75	301	50	50				
65, 582	124, 867	407, 025	1, 500	11, 714	9, 731	801, 712	23, 163	1, 763, 819	938, 444	412	135	135	135	277	100	51				
24, 600	11, 340	60, 233	7, 470	8, 103	250, 240	2, 050	470, 024	217, 719	52	52	52	52	52	48	52	52				
56, 511	72, 977	239, 474	16, 460	4, 191	765, 785	2, 205	1, 353, 425	585, 438												

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.		
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.			
						Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.		Female.	
									Maximum month.	Minimum month.							
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.																	
CLEVELAND—Con.																	
1	Mattresses and spring beds, not elsewhere specified.	6	155	3	12	4	12	124	Se	139	Ja	100	133	108	25	542,655	
2	Millinery and lace goods, not elsewhere specified.	20	653	34	35	30	16	538	Mh	619	Je	418	581	189	392	1,033,690	
3	Mineral and soda waters.	29	235	37	15	24	7	152	Jo	202	Fe	106	160	158	2	583,901	
4	Models and patterns, not including paper patterns.	41	514	41	41	14	10	408	Do	536	Ja	208	539	536	3	601,739	
5	Oil, mineral and composite.	11	377	2	34	113	54	174	Ja	185	Ja	165	171	162	9	1,515,912	
6	Optical goods.	7	108	3	6	15	10	74	Fe ^a	70	Oc	71	73	63	10	235,153	
7	Paints.	25	1,821	1	106	431	200	1,077	Jy	1,156	Mh	970	1,170	1,058	118	8,650,478	
8	Patent medicines and compounds.	43	283	28	40	34	30	154					186	94	92	1,757,059	
9	Patent and proprietary medicines.	22	159	13	23	11	18	94	Ja	119	Jy	59	122	54	68	1,284,367	
10	Patent and proprietary compounds, including compounds not elsewhere specified.	21	127	15	17	23	12	60	Oc	65	Fe	49	64	40	21	473,292	
11	Perfumery and cosmetics.	13	418	10	33	47	134	194	De	280	Ja	120	280	92	217	1,352,723	
12	Photo-engraving.	7	143	1	15	5	12	113	Se	123	Ja	101	124	121	3	184,372	
13	Plumbers' supplies, not elsewhere specified.	26	1,475	6	91	81	51	1,246					1,460	1,372	88	3,517,166	
14	Printing and publishing, book and job.	221	3,378	188	233	235	215	2,507					2,753	2,117	615	7,206,158	
15	Job printing and book publishing and printing.	200	3,219	174	213	204	183	2,445	De	2,708	Ja	2,285	2,679	2,052	606	6,905,465	
16	Book publishing without printing.	12	78	9	10	28	31									142,151	
17	Linotype work and typesetting.	9	81	5	10	3	1	62	Do	74	Ja ^a	52	74	65	0	158,542	
18	Printing and publishing, newspapers and periodicals.	82	2,534	31	167	559	350	1,427					1,523	1,364	158	8,434,824	
19	Printing and publishing.	15	1,702	4	48	409	192	1,049	No	1,135	Ja	950	1,111	1,010	101	5,334,308	
20	Printing, publishing, and job printing.	25	689	10	67	125	109	378	Do	400	Fe	362	412	354	57	2,848,128	
21	Publishing without printing.	42	143	17	42	35	49									252,388	
22	Printing materials.	4	26		7	5	2	12	Se ^a	13	Ja ^a	11	12	12		60,394	
23	Saddlery and harness.	10	26	8	2			10	(*)	16	(*)	16	16	16		28,158	
24	Sausage, not made in slaughtering and meat-packing establishments.	19	332	16	26	42	16	232	Do	246	Ja	222	244	240	4	832,100	
25	Shipbuilding, wooden, including boat building.	3	8	4				4	Ap	18	Oc ^a	3	6	6		4,200	
26	Signs and advertising novelties.	16	226	15	20	41	10	140	Au	161	Ja	102	173	156	17	273,995	
27	Slaughtering and meat packing.	21	2,918	15	94	344	92	2,373	Ja	2,898	My	2,100	2,602	2,406	196	13,934,362	
28	Stamped and enameled ware, not elsewhere specified.	22	974	3	54	21	26	870	No	1,017	Ja	723	977	811	105	2,046,754	
29	Steam fittings and steam and hot-water heating apparatus.	13	820	7	35	25	13	740	De	864	My	665	909	900	8	2,574,486	
30	Steel barrels, drums, and tanks, portable.	4	346		26	16	7	297	De	451	Oc	170	451	451		1,120,763	
31	Stereotyping and electrotyping.	6	173	5	11	8	9	140	Do	162	Ja	129	150	147	3	265,059	
32	Stoves and hot-air furnaces.	12	500	0	42	22	22	448					534	529	5	1,707,044	
33	Stoves and ranges.	6	435	1	31	24	15	364	Do	416	Ap ^a	331	417	412	5	1,436,161	
34	Hot-air furnaces.	6	125	5	11	18	7	84	De	117	Ap	64	117	117		220,833	
35	Stoves, gas and oil.	15	4,012		77	246	173	3,510	De	4,473	My	2,904	4,495	3,980	515	14,844,490	
36	Structural ironwork, not made in steel works or rolling mills.	26	1,979	13	68	229	85	1,581	Ja	1,860	My	1,438	1,656	1,656		7,320,313	
37	Surgical appliances.	5	14	0			2	6	Oc	8	Je ^a	5	0	7	2	10,545	
38	Tobacco, cigars and cigarettes.	158	1,268	159	31	24	8	1,046	Mh	1,102	Se	845	1,082	353	720	1,764,767	
39	Tools, not elsewhere specified.	47	4,050	25	111	272	255	3,387					3,048	3,381	250	13,990,619	
40	Machinists' tools.	33	3,448	21	76	243	225	2,883	Ja	3,567	Je	2,519	3,132	2,874	241	12,539,026	
41	All other.	14	602	4	35	29	30	504	Mh	638	Ja	455	516	507	9	1,451,593	
42	Trunks and valises.	9	137	8	13	8	7	101	Je	117	Ja	73	101	92	0	256,806	
43	Varnishes.	10	839	2	57	185	117	478	Do	533	Ja	450	533	463	09	6,421,729	
44	Window and door screens.	4	38	8	3		1	20	Je	37	Ja	11	20	10	1	41,913	
45	Window shades and fixtures.	0	23	7	4	3	2	7	Ja ^a	8	Je ^a	8	5	2	3	57,818	
46	Wirework, not elsewhere specified.	10	1,734	4	50	167	36	1,477	Ja	1,610	Je...	1,356	1,595	1,374	221	8,401,071	
47	All other industries*.	391	44,065	198	1,501	4,802	2,013	35,551					38,460	31,058	5,880	1,523	226,983,468

*All other industries embrace—
 Airplanes, seaplanes, and airships, and parts.
 Agricultural implements.
 Aluminum manufactures.
 Artificial flowers.
 Artificial limbs.
 Artists' materials.
 Asbestos products, textile-mill products, other than steam packing.
 Babbitt metal and solder.
 Bags, other than paper, not including bags made in textile mills.
 Bags, paper, exclusive of those made in paper mills.
 Baskets, and rattan and willow ware.
 Bells.
 Belting and hose, other than leather and rubber.
 Belting, leather.
 Bluing.

Boots and shoes, not including rubber boots and shoes.
 Brick and terra-cotta products.
 Brushes.
 Buttons.
 Canning and preserving, fish.
 Card cutting and designing.
 Carpets, rag.
 Carriage and wagon materials.
 Carriages and sleds, children's.
 Cars and general shop construction and repairs by electric-railroad companies.
 Cars, electric-railroad, not including operations of railroad companies.
 Cash registers and calculating machines.
 Cheese.
 Chewing gum.
 Chocolate and cocoa products.
 Clocks.

Cloth, sponging and refinishing.
 Clothing, men's, buttonholes.
 Coal-tar products.
 Coffins, burial cases, and undertakers' goods.
 Coke, not including gas-house coke.
 Collars and cuffs, men's.
 Cordials and flavoring sirups.
 Cotton goods.
 Crutches, glass house pots.
 Cutlery and edge tools.
 Dental goods.
 Druggists' preparations.
 Dyeing and finishing textiles, exclusive of that done in textile mills.
 Emery and other abrasive wheels.
 Enameling.
 Engraving and diesinking.
 Engraving, steel and copper plate, including plate printing.
 Engraving, wood.
 Envelopes.

Fancy articles, not elsewhere specified.
 Fertilizers.
 Files.
 Flags and banners.
 Foundry supplies.
 Furs, dressed.
 Galvanizing.
 Gas, illuminating and heating.
 Gas machines and gas and water meters.
 Glass.
 Gold and silver, reducing and refining, not from the ore.
 Grease and tallow, not including lubricating greases.
 Hair work.
 Hand stamps.
 Hardware.
 Hard ware, saddlery.
 Hats, fur-felt.
 Hats, straw.
 Hats, wool-felt.
 Ice, manufactured.

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.			Rent- ed. ²	
								Steam en- gines (not tur- bines).	Steam tur- bines.	Inter- nal- com- bus- tion en- gines.	Water pow- er. ¹				

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.							
44,182	18,972	148,128		13,104	21,610	495,090	7,358	854,205	351,751	262					262	1
126,851	70,890	539,557	260	30,943	74,295	1,162,633	15,097	2,353,760	1,176,080	357	85				272	2
51,660	29,992	199,296		14,477	60,061	520,526	7,575	1,096,047	567,946	208					208	3
116,815	20,584	763,618	3,294	25,028	10,352	211,444	11,093	1,534,370	1,311,230	416			14		402	4
141,155	171,056	203,195	1,800	10,320	71,823	4,317,053	12,792	5,906,753	1,576,908	251	74				177	5
27,976	28,927	96,397		19,914	12,218	222,405	8,269	541,687	316,013	40					40	6
585,473	732,030	1,087,288	52	23,750	441,107	10,632,268	112,373	17,436,225	6,601,584	4,323	480			40	3,803	7
137,438	95,099	150,995	200	24,050	250,832	1,130,151	11,131	2,937,378	1,706,096	189					189	8
71,012	35,420	97,690		10,607	245,751	708,530	4,148	2,014,084	1,241,406	77					77	9
66,426	59,670	50,299	200	13,440	5,081	361,621	6,983	923,294	554,600	112					112	10
106,771	179,250	156,092		17,509	165,900	1,026,515	4,432	3,229,193	2,198,246	88	45				43	11
55,346	26,331	208,284	10,449	15,673	4,022	72,086	4,202	1,065,868	434,570	61					61	12
333,668	286,164	1,392,992	21,027	29,895	59,324	2,244,020	85,062	5,393,331	3,003,640	1,518	85		150		1,283	13
818,235	533,607	3,277,040	395,275	223,175	252,852	4,637,077	81,395	13,382,254	8,003,782	2,648	75			00	2,413	14
755,113	489,552	3,175,633	129,583	212,472	246,272	4,570,764	79,315	12,002,751	7,952,672	2,522	75			00	2,387	15
38,662	36,985		261,448	6,423	4,784	51,304		527,475	476,171							16
24,460	7,070	101,407	4,244	4,280	1,796	15,009	2,080	252,028	231,939	26					26	17
598,978	1,353,308	2,308,522	440,017	120,931	604,480	4,836,033	69,461	15,570,020	10,003,935	943	175		30		798	18
297,350	836,926	1,770,407		81,095	551,690	4,034,663	50,453	11,419,323	7,334,207	197					197	19
203,753	359,208	532,115	1,850	10,901	131,376	605,885	10,008	3,108,331	2,393,638	746	175		30		541	20
97,830	157,174		438,167	10,935	11,420	103,085		1,011,875	935,790							21
17,868	9,489	15,234	1,502	5,780	3,640	27,701	1,151	133,153	104,298	19					19	22
4,450		21,653		2,480	711	38,116	324	62,466	54,020	6					6	23
83,207	75,464	361,308		2,060	60,001	3,640,845	30,840	4,667,130	989,461	1,050	155		45		850	24
		2,464		120	15	5,590	94	15,920	10,245	10			5		5	25
59,476	77,050	203,631	8,416	34,753	16,638	274,821	1,809	778,130	501,500	30					30	26
388,932	632,302	3,225,099	13,322	11,424	438,074	63,091,190	409,465	71,061,098	6,060,413	6,914	3,220		70		3,024	27
214,440	95,514	1,083,764	4,183	30,724	87,885	1,435,201	74,781	3,382,026	1,872,044	1,015	320		110		585	28
216,923	36,108	957,738	9,603	12,927	270,590	814,900	107,268	2,806,412	1,944,238	855	305				550	29
99,945	30,211	281,071		7,840	122,531	1,564,156	6,504	2,446,421	875,701	337			50		287	30
33,140	17,239	177,087	15,225	12,129	4,695	125,115	10,262	601,551	466,174	251					251	31
143,535	84,510	518,757	2,196	13,885	58,321	1,212,079	31,569	2,417,750	1,144,102	715	500		40		175	32
111,233	52,221	420,910	2,196	385	50,621	832,292	25,200	1,799,984	912,462	550	375		40		185	33
32,302	32,289	97,841		13,500	1,400	409,787	6,369	617,766	201,610	185	125				40	34
420,150	746,851	4,725,588		13,502	1,316,871	8,061,692	170,870	19,489,305	10,617,743	3,039	710		33		2,356	35
343,059	375,181	2,080,776	23,086	14,720	313,341	7,487,585	80,677	11,721,132	4,146,870	6,529			75		5,454	36
		1,064			1,705	6,590	226	24,396	17,610	14					14	37
96,984	58,226	889,069	1,104	52,975	463,102	1,647,001	11,069	3,752,991	2,064,894	71					71	38
399,787	606,158	4,619,356	3,903	42,200	1,908,190	6,811,219	189,828	17,602,520	11,001,473	6,495	2,000		22		4,473	39
289,306	569,866	3,847,346	3,445	25,870	1,943,702	4,610,287	186,572	15,005,948	10,939,080	5,815	2,000		12		8,303	40
110,487	96,292	772,010	258	10,330	51,488	1,300,832	33,256	1,096,972	602,354	680			10		670	41
56,071	17,421	133,868		13,177	3,590	267,204	1,708	585,373	316,401	25					25	42
277,757	327,067	506,612		2,300	152,712	5,828,825	55,148	9,060,542	3,160,509	951	450				501	43
5,825	2,202	29,490		1,110	318	31,932	800	93,179	60,387	76			25		51	44
9,770	6,027	5,408		2,520	238	47,378	170	75,718	23,170	2					2	45
295,311	302,874	1,832,878	5,928	21,540	3,342	3,378,052	98,262	7,071,352	3,595,038	2,808					1,073	46
5,707,306	8,600,950	47,118,078	2,810,472	374,118	9,988,455	114,201,600	18,805,289	236,289,773	103,284,884	187,644	65,905	8,807	12,096	50	52,426	47

Ink, printing.....	1	Mucilage, paste, and other adhesives, not elsewhere specified.....	2	Roofing materials.....	8	Steam packing.....	3
Ink, writing.....	2	Musical instruments and materials, not specified.....	7	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	6	Stencils and brands.....	4
Instrument, professional and scientific.....	7	Musical instruments, organs.....	4	Rules, ivory and wood.....	2	Thin plate and terneplate.....	2
Iron and steel, blast furnaces.....	5	Needles, pins, and hooks and eyes.....	2	Sales.....	2	Tinware, not elsewhere specified.....	2
Iron and steel, cast-iron pipe.....	1	Oil, kerosene.....	1	Saws.....	2	Tobacco, chewing and smoking, and snuff.....	14
Iron and steel, wire nails and spikes.....	2	Oleomargarine.....	1	Screws, machine.....	9	Toys and games.....	5
Iron and steel, wrought pipe.....	1	Paper and wood pulp, paper mills exclusively.....	1	Sewing-machine cases.....	1	Type founding.....	1
Japaning.....	2	Paper goods, not elsewhere specified.....	3	Sewing-machines and attachments.....	3	Typewriters and supplies, ribbon.....	2
Labels and tags.....	1	Paving materials.....	1	Shipbuilding, steel, new vessels and repair work.....	5	Umbrellas and canes.....	1
Lamps and reflectors.....	4	Peanuts, grading, roasting, cleaning, and shelling.....	1	Shirts.....	5	Wall paper, not made in paper mills.....	2
Lead, bar, pipe, and sheet.....	2	Pens, fountain, and stylographic.....	1	Show cases.....	1	Wall plaster and composition flooring.....	3
Leather goods, not elsewhere specified.....	2	Petroleum, refining.....	2	Smelting, lead.....	1	Washing machines and clothes wringers.....	3
Leather, tanned, curried, and finished.....	2	Photographs and graphophones.....	2	Smelting and refining, not from the ore.....	2	Waste.....	1
Liquors, vinous.....	7	Photographic materials.....	2	Soda-water apparatus.....	2	Wire.....	1
Looking-glass and picture frames.....	1	Pickles, preserves, and sauces.....	5	Sporting and athletic goods.....	2	Wood, turned and carved.....	6
Lubricating greases.....	4	Printing and publishing, music.....	3	Springs, steel, automobile.....	2	Wool shoddy.....	2
Mirrors, framed and unframed, not elsewhere specified.....	1	Pumps, not including power pumps.....	1	Statuary and art goods.....	2	Woolen goods.....	2
Motorcycles, bicycles, and parts.....	2	Refrigerators.....	1			Worsted goods.....	1

* Same number reported for one or more other months.

† Same number reported throughout the year.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.										WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.				Total.	16 and over.		Under 16.			
						Male.	Female.	Average number.	Number, 15th day of—		Male.		Female.	Male.	Female.			
									Maximum month.	Minimum month.								
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.																		
1	COLUMBUS—All industries.....	690	32,560	480	1,278	2,834	1,217	26,751	No 28,673	Ap 25,052	28,960	23,508	5,266	44	52		Dollars. 99,383,222	
2	Automobile bodies and parts.....	13	968	7	43	35	63	820	De 993	Ja 510	1,007	634	373				1,762,264	
3	Automobile repairing.....	23	110	29	4		3	74	Aug 79	Ja 70	78	78					134,640	
4	Awnings, tents, and sails.....	3	31	1	2	6	2	21	Jy 32	Ja 14	18	13	6				57,598	
5	Boots and shoes, not including rubber boots and shoes.....	9	2,050	1	34	96	56	1,872	De 1,973	Ja 1,799	1,961	1,057	904				7,046,498	
6	Bread and other bakery products.....	64	898	64	41	121	55	617	De 646	Fe 575	647	450	183	3	2		1,549,898	
7	Brooms, from broom corn.....	6	21	8		2	1	10	No 11	Ja 8	11	10		1			15,120	
8	Cars and general shop construction and repairs by steam-railroad companies.....	5	5,411		29	492	34	4,856	De 5,187	Mh 4,435	5,187	5,144	43				4,316,648	
9	Clothing, men's.....	4	47	6		7	1	33	No 45	Ja 25	45	9	35	1			31,300	
10	Confectionery and ice cream.....	19	650	15	39	50	39	513			502	357	205				1,379,078	
11	Confectionery.....	13	272	11	18	32	10	201	No 284	Jy 145	266	81	185				570,027	
12	Ice cream.....	6	384	4	21	18	20	312	Je 376	Ja 272	290	276	20				803,051	
13	Copper, tin, and sheet-iron work.....	10	270	8	13	18	20	211	De 283	Se 170	283	279	4				1,098,332	
14	Electrical machinery, apparatus, and supplies.....	6	84	3	8	8	7	58	De 69	Mh 51	70	49	21				162,353	
15	Electroplating.....	3	26	2	2	1		21	() 21	() 21	21	21					11,468	
16	Fertilizers.....	3	282		10	15	5	252	Se 566	Mh 174	191	191					1,954,690	
17	Flavoring extracts.....	4	10	2	2	1	1	4	Je 6	Ja 3	3	3	2				8,350	
18	Food preparations, not elsewhere specified.....	8	35	9	2		1	23	Ma 28	De 14	25	14	11				88,623	
19	Foundry and machine-shop products.....	40	4,555	37	125	467	180	3,737			4,122	4,018	103	1			17,098,828	
20	Boiler shops.....	4	45	3	6		4	32	Mh 40	No 28	34	34					80,449	
21	Foundries.....	9	432	12	16	7	305	De 476	Fe 342		473	473					565,624	
22	Machine shops.....	30	4,078	22	103	460	183	3,310	Ja 3,761	Ap 3,069	3,615	3,511	103	1			10,440,455	
23	Lumber, planing-mill products, not including planing mills connected with sawmills.....	14	294	10	30	24	6	224	No 269	Ja 161	264	262	1	1			1,265,628	
24	Marble and stone work, except slate.....	6	40	4	3	4		20	Ap 34	Mh 20	32	32					128,421	
25	Models and patterns, not including paper patterns.....	9	60	12	3		1	44	Je 51	Ap 36	49	49					65,043	
26	Patent medicines and compounds and druggists' preparations, including perfumery and cosmetics.....	28	350	20	36	93	44	157	No 170	Ja 143	172	58	114				810,098	
27	Printing and publishing, book and job.....	57	743	47	60	21	33	582	De 609	Ja 555	610	408	200	2			1,373,453	
28	Printing and publishing, newspapers and periodicals.....	43	885	11	54	330	84	406	Mh 410	Jy 403	405	358	32	15			3,331,213	
29	Shirts.....	5	40	7	1	2	1	29	Ap 32	Au 26	20	3	20				33,150	
30	Slaughtering and meat packing.....	7	318	5	20	45	7	241	Fe 260	Au 229	244	240	4				1,122,645	
31	Stoves and hot-air furnaces, including gas and oil stoves.....	12	326	12	17	17	12	268	No 326	Ja 219	323	314	9				768,839	
32	Trunks and valises.....	5	37	11	2	3		21	Je 25	Jy 16	20	17	3				31,677	
33	All other industries*.....	275	14,004	149	608	977	552	11,628			12,581	9,523	2,988	20	50		53,700,330	

*All other industries embrace—

Agricultural implements.....	1						3	Dental goods, teeth.....	1	Hair work.....	1
Aluminum manufactures.....	1						1	Engraving, steel and copper plate, including plate printing.....	3	Hand stamps.....	2
Artificial limbs.....	2							Files.....	1	Hardware.....	2
Artificial stone products.....	4						2	Fire extinguishers, chemical.....	1	Hats and caps, other than felt, straw, and wool.....	1
Automobiles.....	4						2	Flags and banners.....	1	House-furnishing goods, mops and dusters.....	1
Bags, other than paper, not including bags made in textile mills.....	1						3	Flour-mill and gristmill products.....	4	Ice, manufactured.....	5
Baskets, and rattan and willow ware.....	1						1	Fur goods.....	2	Instruments, professional and scientific.....	2
Belting, leather.....	1						1	Furnishing goods, men's, neckwear.....	2	Iron and steel, blast furnaces.....	1
Billiard tables and accessories.....	1						1	Furniture.....	5	Iron and steel, steel works and rolling mills.....	1
Bookbinding and blank-book making.....	4						1	Galvanizing.....	1	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	1
Boot and shoe-cut stock.....	1						1	Gas and electric fixtures.....	5	Iron and steel, cast-iron pipe.....	1
Boot and shoe findings.....	1						1	Gas, illuminating and heating.....	1	Iron and steel, doors and shutters.....	1
Boxes, cigar.....	1						4	Gas machines and gas and water meters.....	1	Iron and steel forgings, not made in steel works or rolling mills.....	5
Boxes, shipping containers and set-up paper boxes.....	3						5	Glass.....	2	Iron and steel, welding.....	3
Boxes, wooden packing, except cigar boxes.....	2						2	Glass, cutting, staining, and ornamenting.....	3		
Brass and bronze products.....	4						3	Gloves and mittens, leather.....	1		
								Gloves and mittens, cloth, not including gloves made in textile mills.....	1		

DAYTON—All industries.....	571	36,495	394	733	2,604	1,633	31,131	De 35,110	Fe 26,887	35,370	29,650	5,670	42	8		121,658,316
1 Automobile repairing.....	18	155	10	7	8	10	120	De 171	Fe 88	144	144					202,891
2 Awnings, tents, and sails.....	5	26	6			1	19	Je 28	Ja 11	18	8	10				43,671
3 Boxes, set-up paper boxes and cartons.....	5	479		12	19	9	439	Ap 471	Ja 308	430	119	317				1,062,773
4 Brass, bronze, and copper products.....	9	245	4	11	10	4	216	De 242	Fe 102	244	230	14				510,602
5 Bread and other bakery products.....	57	732	67	16	75	44	530	No 608	Ja 367	592	379	212	1			2,016,833
6 Carriages and wagons, including repairs.....	3	19	3	1			14	My 17	No 12	12	12					19,032
7 Cars and general shop construction and repairs by electric-railroad companies.....	4	56			1		55	Fe 60	Je 51	56	56					97,497
8 Clothing, men's.....	7	356	2	8	16	47	283	De 335	Ap 244	335	40	288				542,719

1 Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

2 Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

[illegible]

Dollars. 4,686,532	Dollars. 6,315,585	Dollars. 30,978,540	Dollars. 200,773	Dollars. 520,088	Dollars. 6,704,347	Dollars. 108,739,276	Dollars. 3,970,963	Dollars. 184,021,840	Dollars. 71,302,010	06,292	25,906	565	4,488	35,893	7,289
161,755	118,617	685,645	1,491	24,830	108,706	2,121,974	20,427	3,968,580	1,520,179	821			53		768	
7,100	3,164	96,112		10,335	3,612	132,874	7,170	320,513	180,463	148			33		115	
6,021	10,354	23,012		2,040	3,027	61,245	864	145,335	83,226	17					17	
227,771	534,481	1,700,171		26,217	317,730	0,103,637	47,927	10,198,135	4,046,571	1,204					1,204	
125,130	255,320	500,500	20,285	32,829	187,748	3,021,503	70,030	5,203,881	2,112,258	1,057	140		40		877	149
75,278	2,212	10,327		600	289	37,731	831	67,037	28,075	22			19		3	
	911,571	5,873,400				7,091,083	361,608	15,213,720	6,800,348	7,820	1,778	500	1,150		4,308	3,446
	8,104	35,232		1,650	117	88,710	620	160,000	71,570	6					6	
102,486	116,569	483,422		17,946	77,018	1,302,162	66,130	2,575,127	1,200,835	1,837	300		580		807	114
50,940	54,281	141,698		12,130	46,438	620,319	0,057	1,112,374	476,008	180					180	
51,496	02,288	341,724		5,816	31,580	672,843	50,173	1,462,753	730,737	1,051	300		580		081	114
39,383	40,001	223,214		6,119	12,767	555,123	12,330	848,260	280,813	403			30		427	
18,647	15,311	67,557	1,030	1,530	6,279	160,706	1,748	338,575	170,121	44					44	
3,640	540	22,475		1,620	124	11,872	900	55,604	42,832	93			93			
54,159	37,010	301,091		87,543	1,573,851	20,553	2,832,017	1,220,513	1,220,513	1,342	345				907	422
3,120	600	4,829		1,320	72	16,731	22	42,532	26,779	6			5		1	
3,120	720	18,152		3,975	747	188,013	1,572	242,672	52,187	53			10		43	
677,445	1,261,508	5,219,686	4,732	20,313	1,346,442	7,898,582	478,218	18,032,001	10,256,101	6,215	1,595	55	064		3,901	793
11,480	3,260	34,304	4,237	680	2,219	5,517	1,028	143,271	88,326	105	40				65	
40,348	16,900	581,846		1,500	109,150	437,563	41,028	1,487,067	1,008,476	200					200	
616,617	1,242,346	6,603,536	495	18,163	1,235,073	7,408,062	434,362	17,001,083	9,159,299	5,820	1,655	55	064		3,546	793
66,972	37,921	281,382		10,310	21,438	974,080	18,592	1,001,612	608,060	1,709	340		90		1,279	
4,560	4,980	45,910		1,041	1,225	62,674	1,500	162,732	98,540	50			6		44	
5,086	800	50,531		2,910	2,500	20,597	1,142	133,604	111,025	57					57	
101,464	198,670	109,026	1,583	14,010	80,105	590,580	8,028	1,093,121	1,094							

Jewelry.....	0	Musical instruments, pianos.....	1	Saddlery and harness.....	3	Tobacco, cigars.....	16
Lamps, automobile.....	2	Oil, composite.....	1	Safes and vaults.....	1	Tools, not elsewhere specified.....	0
Leather goods, not elsewhere specified.....	1	Oil, kerosene.....	1	Sausage, not made in slaughtering and meat-packing establishments.....	1	Toys and games.....	1
Liquors, malt.....	5	Optical goods.....	4	Saws.....	1	Toy founding.....	2
Lithographing.....	2	Paints.....	4	Scales and balances.....	2	Varnishes.....	1
Looking-glass and picture frames.....	1	Paper goods, not elsewhere specified.....	2	Show cases.....	4	Wall plaster and composition flooring.....	2
Lubricating greases.....	1	Paving materials.....	1	Signs, electric and other.....	1	Washing machines and clothes wringers.....	2
Lumber and timber products.....	1	Petroleum, refining.....	1	Smelling and refining, not from the ore.....	1	Window and door screens and weather strips.....	2
Mattresses and spring beds, not elsewhere specified.....	3	Phonographs and graphophones.....	1	Soap.....	2	Window shades and fixtures.....	2
Millinery, lace goods, not elsewhere specified.....	4	Photographic materials.....	3	Stationery goods, not elsewhere specified.....	2	Wirework, not elsewhere specified.....	2
Mineral and carbonated waters.....	4	Photo-engraving.....	1	Statuary and art goods.....	1	Wood, turned and carved.....	2
Mineral, framed and unframed, not elsewhere specified.....	1	Plumbers' supplies, not elsewhere specified.....	1	Steam fittings and steam and hot-water heating apparatus.....	2	Wooden goods, not elsewhere specified.....	2
Mucilage, paste, and other adhesives, not elsewhere specified.....	2	Printing and publishing, music.....	1	Steam heating apparatus.....	2	Wool pulling.....	2
Musical instruments and materials, not specified.....	1	Pumps, not including power pumps.....	1	Steaming and drying apparatus.....	0		
Musical instruments, organs.....	1	Pumps, steam and other power.....	3	Structural ironwork, not made in steel works or rolling mills.....	0		
		Refrigerators.....	1	Surgical appliances.....	2		
		Regalia, and society badges and emblems.....	3				

4, 990, 567	5, 304, 287	30, 080, 372	236, 569	836, 480	6, 308, 615	70, 193, 383	2, 207, 085	174, 990, 007	96, 530, 139	52, 749	16, 507	2, 395	848	38	32, 871	17, 262
27, 030	13, 818	150, 023	50	10, 137	8, 228	315, 817	7, 530	017, 403	204, 110	172			10		162	
-----	1, 700	14, 404	175	1, 236	488	44, 846	0, 680	78, 031	32, 505	14					14	
59, 496	39, 872	274, 233	400	4, 800	32, 753	508, 275	9, 425	1, 256, 890	739, 160	304	100				264	
80, 731	17, 203	273, 794	-----	11, 062	3, 889	704, 701	29, 517	1, 271, 610	537, 392	318			8		310	
76, 839	156, 801	574, 702	3, 500	16, 060	176, 208	2, 855, 319	07, 304	4, 522, 347	1, 599, 724	012					012	
1, 347	807	18, 294		1, 830	160	20, 660	718	49, 656	28, 278	43			24		19	
2, 979	1, 160	53, 938	-----		6, 000	20, 905	8, 116	88, 098	64, 077	104					104	
57, 438	67, 608	184, 495	-----	10, 224	30, 812	811, 310	3, 980	1, 787, 391	972, 095	73					73	

⁴ Same number reported throughout the year.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.		
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.			Under 16.	
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.		Male.	Female.
								Maximum month.	Minimum month.						

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

DAYTON—Continued.																	Dollars.
1	Confectionery and ice cream.....	20	355	22	12	30	21	261	Se	344	Fe	216	323	135	173	15	985,591
2	Confectionery.....	12	252	14	9	35	10	178	Oc	256	Je	122	247	84	163		557,235
3	Ice cream.....	8	103	8	3	4	5	83	Jy	111	Do	45	76	51	10	15	428,356
4	Copper, tin, and sheet-iron work.....	6	47	5	2	1	1	38	Ja	53	Ap	25	43	43			93,581
5	Foundry and machine-shop products.....	60	4,814	32	91	282	112	4,297	De	4,884	Fe	3,804	4,804	4,798	95	1	16,100,540
6	Furniture.....	7	483	3	12	20	10	432	De	488	Ja	354	488	420	50	3	1,087,347
7	Ice, manufactured.....	4	78	2	4	3	3	60	Jy	85	Ja	50	68				722,128
8	Iron and steel, tempering and welding.....	5	29	8	3	2	1	15	Ma	20	Ja	9	18	18			42,890
9	Lumber, planing-mill products, not including planing mills connected with sawmills.....	7	390	4	13	29	8	336	Oc	394	Ja	274	385	383	1	1	1,254,925
10	Marble and stone work, except slate.....	6	70	12	3	2	1	52	De	61	Ma	41	54	54			163,739
11	Mattresses and spring beds, not elsewhere specified.....	3	21	1	4		1	15	No	20	Ja	12	16	14	2		40,480
12	Mineral and carbonated waters.....	7	47	5	4	13	1	24	Jy	37	Ja	13	27	27			162,628
13	Models and patterns, not including paper patterns.....	12	84	15			4	65	De	98	Ja	34	99	99			80,322
14	Printing and publishing, book and job.....	30	340	25	18	16	18	263	De	285	Fe	249	288	188	98	2	558,101
15	Printing and publishing, newspapers and periodicals.....	20	792	11	22	155	104	500	De	527	Je	470	527	440	87		2,831,498
16	Pumps, power, other than steam.....	3	411		11	58	34	308	De	467	Ja	150	467	459	8		1,303,935
17	Slaughtering and meat packing.....	12	304	10	8	53	3	200	Ja	301	Oc	282	294	279	15		1,089,261
18	Stationery goods, not elsewhere specified.....	4	548		7	87	56	308	No	434	Ja	356	437	305	132		2,045,416
19	Tobacco, cigars.....	29	1,164	27	12	14	0	1,102	Oc	1,198	Je	1,027	1,171	104	1,067		1,602,534
20	Tools, not elsewhere specified.....	36	1,336	20	41	40	35	1,200	De	1,475	Fe	900	1,473	1,404	58	11	2,048,802
21	Toys and games.....	8	242	4	11	4	3	220	Oc	337	Ja	34	305	134	164	0	368,883
22	Varnishes.....	4	77		5	15	8	49	Oc	58	Fe	42	54	54			637,719
23	All other industries*.....	180	22,735	96	395	1,641	1,079	19,534					22,108	19,224	2,875	2	82,975,559

*All other industries embrace—	Brick, building.....	1	Dairymen's supplies, cream separators.....	1	Flags and banners.....	2
Airplanes, seaplanes, and airships, and parts.....	Brooms, from broom corn.....	2	Dental goods.....	2	Flavoring extracts.....	1
Agricultural implements.....	Carriage and wagon materials.....	1	Druggists' preparations.....	2	Flour-mill and gristmill products.....	1
Aluminum ware.....	Cars and general shop construction and repairs by steam-railroad companies.....	3	Electric machinery, apparatus, and supplies.....	0	Food preparations, not elsewhere specified.....	5
Artificial stone products.....	Cash registers and parts.....	1	Electroplating.....	1	Fur goods.....	2
Automobile bodies and parts.....	Chemicals.....	1	Emery and other abrasive wheels.....	1	Gas machines.....	1
Bags, other than paper, not including bags made in textile mills.....	Cheating gum.....	1	Engines, steam, gas, and water.....	3	Glass, cutting, staining, and ornamenting.....	2
Baskets, and rattan and willow ware.....	Cleansing and polishing preparations.....	2	Engraving, steel, and copper plate, including plate printing.....	1	Gloves and mittens, cloth, not including gloves made in textile mills.....	2
Blackings, stains, and dressings.....	Clothing, women's.....	1	Envelopes.....	2	Hand stamps.....	3
Bookbinding and blank-book making.....	Coffee, roasting and grinding.....	3	Fertilizers.....	1	Hardware.....	2
Boxes, cigar.....	Coffins, burial cases, and undertakers' goods.....	1	Files.....	1	Instruments, professional and scientific.....	1
Boxes, wooden packing, except cigar boxes.....			Fire extinguishers, chemical.....	1		

SPRINGFIELD—All Industries..		266	15,459	152	537	1,155	1,351	12,204	Do	13,153	Ap	11,549	13,143	11,117	2,013	6	7	54,582,930
1	Agricultural implements.....	6	1,947	1	80	234	57	1,575	Mh	1,719	Jy	1,443	1,654	1,625	29			10,823,782
2	Artificial stone products.....	4	20	5				15	Se	21	Ja	10	15	15				19,100
3	Automobile repairing.....	8	31	11				20	Se	21	Mh	19	20	20				18,930
4	Bread and other bakery products.....	14	138	15	8	8	5	102	My	104	Fe	97	104	87	17			274,951
5	Brooms, from broom corn.....	3	8	3	1			4	(*)	4	(*)	4	4	4				11,620
6	Cars and general shop construction and repairs by electric-railroad companies.....	3	49		2	1		46	No	60	My	32	58	58				128,702
7	Copper, tin, and sheet-iron work.....	7	42	11	1		2	28	Je	36	Fe	10	33	33				52,126
8	Engines, steam, gas, and water.....	5	957	1	18	54	31	853	De	969	Ap	722	969	961	8			3,673,757
9	Foundry and machine-shop products.....	22	1,648	15	60	87	43	1,337	De	1,462	Ap	1,260	1,460	1,447	13			4,394,505
10	Models and patterns, not including paper patterns.....	6	28	8			1	10	De	22	Mh	16	22	22				14,931
11	Musical instruments, piano materials.....	3	543		18	13	4	508	De	587	Ja	391	587	584	3			1,998,632
12	Patent medicines and compounds.....	5	26	2	3	5	3	13	No	15	Mh	10	15	3	10	1	1	145,217
13	Printing and publishing, book and job.....	16	220	15	15	7	7	176	De	194	Je	167	195	147	48			459,232
14	Tobacco, cigars.....	7	28	8				20	De	22	Mh	18	22	14	8			21,287
15	All other industries*.....	97	9,874	57	325	746	1,108	7,548					7,985	6,097	1,877	5	6	32,611,166

*All other industries embrace—	Carriages and wagons.....	1	Dairymen's and poultrymen's supplies.....	1	Gloves and mittens, cloth, not including gloves made in textile mills.....	1
Automobile bodies and parts.....	Cars and general shop construction and repairs by steam-railroad companies.....	2	Electrical machinery, apparatus, and supplies.....	4	Hand stamps.....	1
Awning, tents, and sails.....	Clothing, men's.....	1	Emery and other abrasive wheels.....	1	Ice, manufactured.....	2
Bookbinding and blank-book making.....	Coffee, roasting and grinding.....	2	Fancy articles, metal novelties.....	2	Instruments, professional and scientific.....	1
Boots and shoes, not including rubber boots and shoes.....	Coffins, burial cases, and undertakers' goods.....	3	Flour-mill and gristmill products.....	3	Iron and steel, steel works and rolling mills.....	2
Boxes, set-up paper boxes.....	Condensed milk.....	1	Furniture, wood, other than rattan and willow.....	1	Iron and steel, welding.....	2
Brass and bronze products.....	Confectionery.....	1				
Carpets, rag.....						

1 Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

2 Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

[illegible][illegible]

Iron and steel, steel works and rolling mills.....	1	Patent medicines and compounds.....	12	Sausage, not made in slaughtering and meat-packing establishments.....	1	Stoves and hot-air furnaces.....	4
Jewelry.....	1	Perfumery and cosmetics.....	3	Saws.....	2	Structural iron work, not made in steel works or rolling mills.....	1
Labels and tags.....	5	Photographs and graphophones.....	2	Scales and balances.....	2	Surgical appliances.....	1
Lasts.....	1	Photographic materials.....	2	Screws, machine.....	2	Typewriters and supplies, carbon paper.....	2
Liquors, malt.....	3	Pickles and preserves.....	1	Screws, wood.....	1	Umbrellas and canes.....	1
Lumber and timber products.....	2	Plumbers' supplies, not elsewhere specified.....	1	Shirts.....	1	Vault lights and ventilators.....	4
Machine tools.....	2	Pottery, earthen and stone ware.....	1	Show cases.....	1	Washing machines and clothes wringers.....	4
Motorcycles, bicycles, and parts.....	1	Poultry, killing and dressing, not done in slaughtering and meat-packing establishments.....	1	Signs, other than electric.....	4	Wood, turned and carved.....	1
Musical instruments and materials, not specified.....	1	Pumps, not including power pumps.....	2	Soap.....	1		
Ordnance and accessories.....	2	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	4	Steam fittings and steam and hot-water heating apparatus.....	1		
Paints.....	4	Saddlery and harness.....	1	Steel barrels, drums, and tanks, portable.....	1		
Paper and wood pulp.....	2			Stereotyping and electrotyping.....	2		
Paper goods, not elsewhere specified.....	1						

1,925,478	2,381,004	13,371,667	218,033	70,883	2,107,575	33,123,629	766,670	67,750,001	33,808,702	20,101	4,515	1,053	1,072	.....	12,051	4,490
226,327	231,058	1,633,240		1,200	257,504	3,198,015	102,493	7,205,752	3,004,614	8,081	1,120	1,333			628	2,329
		14,310			164	17,440	408	40,481	22,624	29			14		15	
		30,990		3,100	323	11,107	1,453	02,581	50,021	18			6		12	
16,381	16,111	118,075		6,435	3,584	538,746	12,889	818,379	256,744	208		50	15		143	11
1,500		2,400		803	23	18,956	249	29,351	10,146	4					4	
3,950	1,050	56,463			3,145	22,589	4,817	92,014	64,008	230					230	
8,050	1,346	34,003		1,606	514	69,215	715	133,816	63,885	12					12	
74,562	91,327	1,091,224			138,71	1,486,983	72,089	4,180,010	2,621,841	1,934	180				1,189	345
282,974	197,568	1,537,010	26,888	5,005	230,958	2,771,464	111,204	6,554,071	3,071,403	2,166	375			595	1,409	100
	250	29,332		1,524	322	4,209	472	58,261	53,580	22			4	322	18	1
96,352	35,937	660,205			118,818	563,744	32,598	2,030,594	1,440,344	975			340		635	1
13,900	7,872	9,795		1,170	5,806	60,170	950	180,828	111,008	13					13	1
55,597	13,653	172,188	524	13,402	10,803	107,804	10,455	607,180	398,790	195					195	1
		10,230		840	6,318	19,451	240	42,520	22,829	.....						1
1,150,915	1,785,522	7,970,903	101,521	40,238	1,384,572	24,134,037	416,024	45,710,200	21,106,235	11,304	2,870	270	079	.....	7,488	1,705

Leather, tanned, curried, and finished.....	1	Photo-engraving.....	1	Saddlery and harness.....	2	Structural ironwork, not made in steel works or rolling mills.....	1
Liquors, malt.....	2	Pickles and sauces.....	1	Safes and vaults.....	1	Suspenders, garters, and elastic	
Lumber and timber products.....	1	Plumbers' supplies, not elsewhere specified.....	1	Signs and advertising novelties.....	1	woven goods.....	2
Lumber, planing-mill products, not including planing mills connected with sawmills.....	2	Pocketbooks.....	1	Slaughtering and meat packing.....	1	Tools, not elsewhere specified.....	
Machine tools.....	3	Printing and publishing, newspapers and periodicals.....	7	Stationery goods, not elsewhere specified.....	1	Toys and games.....	
Mattresses and spring beds, not elsewhere specified.....	1	Printing materials.....	3	Steam fittings and steam and hot-water heating apparatus.....	2	Washing machines and clothes wringers.....	
Mineral and carbonated waters.....	2	Pumps, not including power pumps.....	3	Stereotyping and electrotyping.....	1	Wirework, not elsewhere specified.....	
		Rubber tires, tubes, and rubber goods, not elsewhere specified.....	1	Stoves and hot-air furnaces.....	1		

‡ Same number reported for one or more other months.

* Same number reported for one of more other
 † Same number reported throughout the year.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.						

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

1	TOLEDO—All industries.....	671	48,776	417	1,451	3,051	1,767	42,090	Do	48,141	My	31,205	47,688	40,493	7,041	138	16	Dollars. 200,032,674
2	Artificial stone products.....	11	68	8	5	1	3	51	Se	79	Ja ^s	27	61	61	.....	.....	.....	199,468
3	Automobile bodies and parts.....	10	1,452	1	58	40	50	1,291	Do	1,037	Je	875	1,638	1,502	136	.....	.....	5,730,330
4	Automobile repairing.....	3	40	1	4	3	.....	32	Je	34	Fe	30	31	31	.....	.....	.....	61,135
5	Bread and other bakery products.....	79	1,002	86	34	155	60	661	Do	722	Mh	611	725	545	178	.....	2	2,098,818
6	Rooms, from broom corn.....	5	20	0	.....	.....	.....	14	Ja	16	Do	10	14	12	2	.....	.....	19,200
7	Butter.....	4	204	14	14	20	.....	150	Je	171	Fe	119	165	147	18	.....	.....	1,088,552
8	Carriages and wagons, including repairs.....	3	17	5	1	.....	.....	11	No ^s	13	Ja ^s	10	11	11	.....	.....	.....	13,050
9	Cars and general shop construction and repairs, by steam-railroad companies.....	5	1,111	.....	56	30	3	1,022	Oe	1,082	Je	950	1,125	1,125	.....	.....	.....	1,833,762
10	Clothing, women's.....	8	796	.....	31	60	32	673	An	794	My	508	620	217	403	.....	.....	1,390,676
11	Confectionery and ice cream.....	12	445	0	24	55	54	306	No	304	My	254	335	107	220	.....	2	936,718
12	Copper, tin, and sheet-iron work.....	14	116	1	14	2	7	92	Oe	120	Fe	67	105	105	.....	.....	.....	276,250
13	Electrical machinery, apparatus, and supplies.....	13	3,897	1	100	281	150	3,365	No	4,018	Fe	1,465	3,903	2,429	1,622	12	.....	14,406,052
14	Flour-mill and gristmill products.....	6	283	.....	18	19	10	236	Se	284	Fe	194	235	235	.....	.....	.....	3,805,684
15	Foundry and machine-shop products.....	50	6,076	36	245	316	174	5,305	Do	5,757	Ja	5,021	5,685	5,411	168	100	.....	12,799,730
16	Furniture.....	9	246	8	17	12	10	199	Do	218	Ap	173	222	220	2	.....	.....	581,176
17	Gloves and mittens, cloth, not including gloves made in textile mills.....	5	886	.....	19	19	27	821	Ja	1,126	My	643	1,087	141	946	.....	.....	1,993,544
18	Groase and tallow, not including lubricating greases.....	3	47	2	4	6	.....	35	Do ^s	40	Ap	32	40	40	.....	.....	.....	371,210
19	House-furnishing goods, not elsewhere specified.....	5	48	1	7	3	8	29	Jy	41	Ja	18	26	20	0	.....	.....	94,027
20	Lumber, planing-mill products, not including planing mills connected with sawmills.....	15	399	6	31	27	7	328	Oe	360	Ja	283	340	340	.....	.....	.....	1,451,104
21	Marble and stone work, except slate.....	6	120	4	10	18	3	85	Do	99	Se	70	99	99	.....	.....	.....	301,957
22	Mineral and carbonated waters.....	8	60	1	5	4	2	48	Au ^s	54	My	42	49	49	.....	.....	.....	169,830
23	Models and patterns, not including paper patterns.....	9	110	1	7	3	2	97	Do	145	Ja	65	146	144	2	.....	.....	98,382
24	Patent medicines and compounds.....	19	84	15	7	17	11	34	Je	37	Mh	31	34	24	10	.....	.....	171,588
25	Printing and publishing, book and job.....	19	683	50	53	44	58	478	No	517	Ja	441	508	394	110	4	.....	1,441,468
26	Printing and publishing, newspapers and periodicals.....	19	607	7	35	177	110	338	Oe	357	Fe	314	352	332	20	.....	.....	1,001,272
27	Tobacco, cigars.....	22	202	23	1	.....	.....	178	Mh	200	No	150	154	51	103	.....	.....	117,062
28	Tools, not elsewhere specified.....	0	265	6	16	0	3	231	Fe	278	Je	189	238	237	1	.....	.....	420,038
29	All other industries*.....	260	29,432	142	636	1,720	945	25,080	.....	.....	.....	.....	29,674	26,458	8,189	15	12	152,520,955

*All other industries embrace—
 Agricultural implements..... 1
 Artificial flowers..... 1
 Artificial limbs..... 1
 Automobiles..... 2
 Awnings, tents, and sails..... 4
 Bags, paper, exclusive of those made in paper mills..... 1
 Baking powders..... 1
 Belting, leather..... 2
 Bookbinding and blank-book making..... 1
 Boxes, cigar..... 1
 Boxes, paper and other, not elsewhere specified..... 5
 Boxes, wooden packing, except cigar boxes..... 4
 Brass, bronze, and copper products..... 8
 Brick and tile, building brick, sewer pipe, and drain tile..... 2
 Brushes, toilet..... 2

Canning and preserving, vegetables..... 1
 Card cutting and designing..... 1
 Carpets, rag..... 1
 Carriage and wagon materials..... 1
 Carriages and sleds, children's..... 3
 Cars and general shop construction and repairs by electric-railroad companies..... 1
 Chemicals..... 2
 Chewing gum..... 2
 Cleansing and polishing preparations..... 3
 Clothing, horse..... 1
 Clothing, men's..... 1
 Coal-tar products..... 1
 Coffee and spice, roasting and grinding..... 5
 Coke, not including gas-house coke..... 1
 Cooperage, hogsheds and barrels..... 2
 Corsets..... 2
 Cotton goods..... 1

Crucibles..... 1
 Cutlery and edge tools, axes and hatchets..... 1
 Druggists' preparations..... 1
 Dyeing and finishing textiles, exclusive of that done in textile mills..... 2
 Electroplating..... 2
 Engines, steam, gas, and water..... 1
 Engraving, steel and copper plate, including plate printing..... 1
 Engraving, wood..... 1
 Fancy articles, not elsewhere specified..... 1
 Fertilizers..... 1
 Flags and banners..... 1
 Flavoring extracts..... 1
 Food preparations, not elsewhere specified..... 2
 Fur goods..... 2
 Gas and electric fixtures..... 3

Gas, illuminating and heating..... 1
 Glass..... 3
 Glass, cutting, staining, and ornamenting..... 4
 Hair work..... 1
 Hand stamps..... 2
 Hardware, locks..... 1
 Hats and caps, other than felt, straw, and wool..... 2
 Ice, manufactured..... 3
 Instruments, professional and scientific..... 3
 Iron and steel, blast furnaces..... 1
 Iron and steel, steel works and rolling mills..... 2
 Iron and steel forgings, not made in steel works or rolling mills..... 1
 Iron and steel, welding..... 2
 Iron and steel, wrought pipe..... 3
 Jewelry..... 2

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.	
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rent-ed. ²
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.							
6,885,853	7,551,320	53,363,067	982,205	547,117	10,053,292	164,529,733	8,757,890	293,520,900	120,233,281	93,227	28,323	5,605	2,523	400	50,316	14,387	1
9,017	2,561	70,504	.....	693	1,451	148,086	3,567	293,280	140,733	80	.....	.....	22	.....	58	.....	2
179,609	115,378	1,040,738	.....	4,720	51,845	2,878,082	157,103	5,922,578	2,889,703	1,023	.....	.....	17	.....	1,906	.....	3
0,035	2,310	42,860	.....	5,570	875	62,708	1,953	139,975	75,219	45	.....	.....	.....	.....	45	.....	4
135,339	211,788	756,817	560	35,170	111,465	3,452,024	90,729	5,774,940	2,225,203	943	60	.....	.....	4	870	24	5
.....	.....	17,700	.....	.....	153	47,420	317	80,412	32,675	12	.....	.....	2	.....	10	.....	6
60,805	50,652	221,536	.....	20,686	19,589	3,423,387	46,500	4,324,008	854,715	354	95	.....	.....	.....	250	438	7
.....	1,196	16,497	386	1,500	307	22,009	1,112	54,035	31,814	30	.....	.....	.....	.....	30	.....	8
139,007	44,382	1,501,857	.....	.....	2,577	650,445	117,105	2,609,557	1,841,017	1,680	375	.....	.....	.....	1,285	883	9
190,345	216,456	720,170	6,000	18,590	57,408	2,325,405	9,706	4,163,408	1,828,237	163	.....	.....	.....	.....	163	.....	10
131,672	141,575	240,408	.....	27,779	108,033	1,704,752	43,309	2,770,615	1,028,557	599	.....	.....	.....	.....	599	.....	11
25,207	5,283	105,035	100	8,162	5,904	230,078	2,404	513,413	274,331	43	.....	.....	.....	.....	43	.....	12
580,798	676,632	3,186,553	.....	22,270	1,548,505	8,748,527	122,441	19,245,500	10,374,532	5,413	.....	.....	25	.....	5,388	.....	13
153,087	38,531	201,394	.....	120	104,725	11,430,618	85,418	13,432,512	1,916,476	2,723	2,340	35	.....	120	228	340	14
783,242	593,037	7,602,902	3,708	30,661	354,479	8,128,906	789,387	22,416,002	13,437,850	10,987	2,501	.....	379	.....	8,017	1,044	15
38,728	30,436	215,283	.....	5,459	5,533	285,406	11,018	703,160	460,072	370	60	.....	132	.....	178	.....	16
81,269	55,368	480,936	1,501	13,034	128,037	1,672,149	16,720	2,840,984	1,252,115	190	.....	.....	.....	.....	190	.....	17
10,239	7,042	53,849	.....	.....	13,124	145,882	37,213	359,040	176,551	256	280	.....	.....	.....	26	.....	18
15,085	11,155	20,165	.....	2,880	2,025	115,350	1,065	202,035	85,020	7	.....	.....	.....	.....	7	.....	19
110,041	40,741	368,227	.....	3,018	28,583	1,490,799	23,059	2,238,009	724,754	1,814	675	.....	20	.....	1,119	.....	20
22,703	34,037	165,739	530	3,061	3,238	278,134	3,435	659,032	377,408	167	.....	.....	70	.....	97	.....	21
9,550	8,730	66,112	.....	3,080	6,215	193,035	3,128	337,838	151,075	125	20	.....	.....	.....	105	.....	22
21,910	4,210	168,884	.....	7,362	605	54,076	3,086	323,158	205,396	78	.....	.....	.....	.....	78	.....	23
16,736	57,540	30,100	.....	9,406	3,437	111,302	2,080	408,420	204,138	91	.....	.....	.....	.....	91	.....	24
148,981	90,706	547,713	48,893	55,568	16,751	851,770	22,290	2,279,574	1,405,514	578	.....	.....	2	.....	576	.....	25
107,204	360,787	493,896	672,893	17,363	141,756	1,032,241	18,780	3,514,811	2,463,790	621	.....	.....	.....	.....	621	.....	26
8,950	.....	137,330	.....	4,144	55,491	203,419	1,220	470,719	272,080	9	.....	.....	.....	.....	9	.....	27
59,239	10,808	303,828	.....	10,167	8,960	95,394	7,025	596,299	492,980	213	.....	.....	.....	.....	184	.....	28
3,436,339	4,730,320	33,875,401	247,724	229,724	7,210,501	114,840,222	7,128,158	190,772,752	74,705,372	63,738	21,877	5,570	1,825	336	34,125	10,758	29

Knit goods.....	1	Paving materials.....	2	Saws.....	1	Stoves and hot-air furnaces.....	3
Liquors, malt.....	4	Peanuts, grading, roasting, cleaning, and shelling.....	1	Scales and balances.....	1	Structural ironwork, not made in steel works or rolling mills.....	6
Lithographing.....	3	Pens, fountain and stylographic.....	2	Screws, machine.....	1	Surgical appliances.....	2
Looking-glass and picture frames.....	1	Perfumery and cosmetics.....	3	Shipbuilding, steel.....	1	Tinware, not elsewhere specified.....	2
Machine tools.....	8	Petroleum, refining.....	2	Shipbuilding, wooden, repair work only.....	3	Tobacco, chewing and smoking.....	1
Mattresses and spring beds, not elsewhere specified.....	2	Photographic materials.....	1	Shirts.....	2	Toys and games.....	5
Millinery, trimmed hats and hat frames, etc.....	1	Photo-engraving.....	5	Show cases.....	1	Trunks and valises.....	1
Mirrors, framed and unframed.....	2	Pickles and sauces.....	3	Signs and advertising novelties.....	3	Umbrellas and canes.....	1
Motorcycles, bicycles, and parts.....	1	Plumbers' supplies, not elsewhere specified.....	2	Slaughtering and meat packing.....	6	Varnishes.....	8
Mucilage and paste.....	1	Pottery, earthen and stone ware.....	2	Soap.....	1	Vinegar and elder.....	2
Musical instruments and materials, not specified.....	1	Refrigerators.....	1	Springs, steel, automobile.....	1	Wall plaster and composition flooring.....	2
Musical instruments, organ materials.....	1	Roofing materials.....	1	Stampel ware.....	5	Waste.....	1
Oil, linseed.....	2	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	4	Steam fittings and steam and hot-water heating apparatus.....	2	Wheelbarrows.....	1
Oil, composite.....	3	Saddlery and harness.....	4	Steel barrels, drums, and tanks, portable.....	1	Window and door screens.....	1
Optical goods.....	2	Safes.....	1	Stencils and brands.....	1	Wirework, not elsewhere specified.....	2
Paints.....	3	Sausage, not made in slaughtering and meat-packing establishments.....	1	Stereotyping and electrotyping.....	2	Wood preserving.....	2
Paper goods, not elsewhere specified.....	2					Wooden goods, not elsewhere specified.....	8

* Same number reported for one or more other months.

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON

FOURTEENTH CENSUS OF THE UNITED STATES
MANUFACTURES: 1919

OKLAHOMA

Prepared under the supervision of EUGENE F. HARTLEY, Chief Statistician for Manufactures

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EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census did not cover establishments which were idle during the entire year or for which products were valued at less than \$500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1919, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city, county, or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city, county, or state in which it was located. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products different from those covered by the class designation, and, on the other hand, may not represent the total product covered by this designation, because some of this class of product may be made in establishments in which it is not the product of chief value.

As a rule, the same designation is used for the industry wherever it appears, although all of the products indicated by this designation were not manufactured in the state or city for which these statistics are presented. In some instances the wording is changed so as to more correctly describe the products represented. For a number of industries subclasses are shown which indicate more definitely the kind of products.

Selected industries.—The general tables at the end of this bulletin give the principal facts separately for the industries of the state. A selection has been made of certain leading industries of the state for more detailed consideration. Sometimes an industry of great importance has to be omitted because it comprises so few establishments that a detailed presentation would reveal the operations of individual concerns.

Comparisons with previous censuses.—Owing to changes in industrial conditions it is not always possible to classify establishments by industries in such a way as to permit accurate comparison with preceding censuses. At the census of 1909 the figures for kindred industries were combined. This practice has been followed in compiling the statistics for 1919 and 1914 when placed in comparison with those for 1909 and prior years. The comparative summary for 1919, 1914, and 1909, therefore, does not show separately all the industries given for 1919 in the detailed statement for the state.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1919 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the manufacturing industries were distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners. In the reports for the censuses of 1904 and 1909 these five classes were shown according to the three main groups: (1) Proprietors and firm members, (2) salaried officials, clerks, etc., and (3) wage earners. In comparative tables covering the census of 1904 it is of course necessary to group the figures according to the classification that was employed at the earlier censuses.

The number of persons engaged in each industry, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where this date was not a representative day an earlier date was chosen.

In the case of employees other than wage earners the number thus reported for the representative date has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, by sex, without distinction of age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given in certain tables for each separate industry, is not totaled for all industries combined for any state, because, in view of the variations of date, such a total is not believed to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation. This total, however, is shown for the different cities, because the limited area and greater regularity of employment largely overcame the objection incident to its publication for the separate states or the United States.

In order to determine as nearly as possible the age distribution of the average number of wage earners for a given state as a whole, the per cent distribution by age of the wage earners in each industry for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. The percentages thus obtained have been applied to the average number of wage earners for the year in that industry to determine the average numbers 16 years and over, and under 16, employed. These calculated averages for the several industries have been added to give the average distribution for each state as a whole and for the entire country.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number of wage earners fluctuates from month to month in every industry, and in some cases to a very great extent. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month, and while representing the number according to the pay rolls to whom wages were paid on that date, no doubt represent a larger number than would be required to perform the work in any industry if all were continuously employed during the year.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a few wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital.—The instructions on the schedule for securing data relating to capital were as follows:

"The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises."

These instructions were identical with those employed at the censuses of 1914 and 1909. The data compiled in respect to capital, however, at both censuses, as well as at all preceding censuses of manufactures, have been so defective as to be of little value except as indicating very general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include certain Federal taxes and state, county, and local taxes. Under "Federal taxes" there are included the internal revenue tax on manufactures (tobacco, beverages, etc.), excise taxes when included in values reported for products, corporation capital stock tax, and corporation income tax, but not the income tax for individuals and partners.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of depreciation or interest, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power generated by the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, fuel oils, gasoline and other volatile oils, and gas—natural and manufactured, and represent the quantity used during the year. As only the principal kinds of fuel are shown, comparison as to the total cost of all fuel is impracticable. A comparison, however, of the total quantities of the several kinds of fuel used in 1919 and 1914 is given.

OKLAHOMA.

GENERAL STATISTICS.

General character of the state.—Oklahoma has a gross area of 70,057 square miles, of which 69,414 represent land surface. The inhabitants of the state in 1900 numbered 790,391; in 1910, 1,657,155; and in 1920, 2,028,283. In total population Oklahoma ranked twenty-first among the states in 1920. The number of inhabitants per square mile in 1910 was 23.9, the corresponding figures for 1920 being 29.2.

In 1920 there were 12 cities in the state—Ardmore, Bartlesville, Chickasha, Enid, Guthrie, McAlester, Muskogee, Oklahoma City, Okmulgee, Sapulpa, Shawnee, and Tulsa—having more than 10,000 inhabitants. These 12 cities, the combined population of which in that year was 317,264, formed 15.6 per cent of the total for Oklahoma, and in 1919 reported 33.3 per cent of the value of the state's manufactured products.

Importance and growth of manufactures (Table 1).—The large increases in salaries and wages, cost of materials, and the value of products, from 1914 to 1919, as presented in Table 1, are chiefly due to the change in industrial conditions brought about by the World War, and therefore can not properly be used to measure the growth of manufactures during the census period 1914-1919. The increases shown, however, in number of wage earners and horsepower are indicative of a decided growth in the manufacturing activities of the state. The addition of the Federal income tax since 1914 will account for the large increase in "Rent and taxes."

Statistics for the state, by counties (Table 2).—Figures are not available for comparison of county totals for 1919 with those for prior censuses.

Principal industries, ranked by value of products (Table 3).—The ranking of industries by value of products is not always satisfactory as indicating their importance from a manufacturing standpoint. In some instances their ranking would change materially if based upon the average number of wage earners or value added by manufacture.

Persons engaged in manufacturing industries (Table 4).—The age classification of the average number of wage earners in this and other tables is an estimate obtained by the method described in the "Explanation of terms." The classification by sex for 1919 was reported separately, but for 1914 and 1909 was obtained in the same manner as the distribution by age. Figures for individual industries will be found in Table 26.

Average number of wage earners for selected industries (Table 5).—The industries covered by this table are those which employed more than 500 wage

earners in 1919, and for which statistics can be shown without the possibility of disclosing the operations of individual establishments.

Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more (Table 6).—In general, increases from 1914 to 1919 are shown in all of the details for the 12 cities included in this table.

Wage earners, by months (Table 7).—The statistics for wage earners are intended to show the steadiness of employment, or the reverse, in accordance with the industrial conditions existing during the several census years.

Wage earners, by months, for selected industries and for cities (Table 8).—In addition to the number of wage earners employed by months, similar data are given for males and females for all industries combined, and also for each of the 12 cities having more than 10,000 inhabitants. There were a number of industries in the state in 1919 in which the number of female wage earners predominated. The 12 cities combined reported a somewhat larger proportion of female wage earners than the state as a whole, 11.2 per cent, as compared with 6.3 per cent for the state.

Prevailing hours of labor (Table 9).—Since 1914 there has been a marked shortening of the working-day in Oklahoma. In that year 25 per cent of the wage earners were included in the group "48 and under," as against 44.2 per cent in 1919. In 1914 the "60" and "over 60" groups constituted 45.1 per cent of the total wage earners, as compared with 25.4 per cent in 1919.

Size of establishments, by average number of wage earners, for selected industries and for cities (Table 10).—The predominance of the number of small establishments, when based on the number of wage earners employed, is evidenced in this table by the fact that of the total number of establishments in the state, 97.8 per cent were in the several classes having less than 101 wage earners, while such establishments employed but 48.9 per cent of the total number of wage earners. On the other hand, the establishments employing an average of more than 100 wage earners represented only 2.2 per cent of the total number of manufacturing establishments in the state, but reported 51.1 per cent of the total number of wage earners.

Size of establishments, by value of products (Table 11).—At the censuses of 1909 and 1914 establishments with products valued at "\$100,000 to \$1,000,000" constituted one group, but at the census of 1919 this

group was subdivided into "\$100,000 to \$500,000" and "\$500,000 to \$1,000,000." Separate figures for the number of establishments and value of products have been compiled, however, from the returns for 1914. The table, therefore, gives combined figures for these two groups in the case of all items for 1909, and in the case of average number of wage earners and value added by manufacture for 1914.

Size of establishments, by value of products, for selected industries (Table 12).—In the preparation of this table it was necessary in several instances to combine the establishments of one group of the industry with those of some other group of that industry, to avoid the possibility of disclosing the operations of individual establishments.

Size of establishments, by value of products, for cities of 10,000 inhabitants or more (Table 13).—This table strikingly illustrates the fact that the number of establishments of itself is no real index of manufacturing activities.

Character of ownership (Table 14).—The preponderance of corporate ownership is clearly brought out in this table. Although corporations owned but 29 per cent of the number of establishments in the state in 1919, they reported 85.6 per cent of the average number of wage earners and 91.6 per cent of the total value of products. During the five-year period 1914-1919, the average number of wage earners in corporations increased 12,230, or 93.8 per cent, and the value of products \$278,772,155, or 314.3 per cent.

Manufactures, by population groups, in cities of 10,000 inhabitants or more (Table 15).—This table shows that the combined number of establishments in the 12 cities in 1919 represented 30.5 per cent of

the total in the state. They reported in that year 38.8 per cent of the average number of wage earners and 33.3 per cent of the total value of products.

Principal industries in Oklahoma City and Tulsa, with per cent of total for the state (Table 16).—This table includes all industries in Oklahoma City and Tulsa having products of \$500,000 and over, the figures being given for those which can be shown without disclosing the operations of individual establishments.

It is deemed of first importance to present the statistics of the state as a whole for all industries which can be shown without disclosing the operations of individual establishments. In so doing, however, it sometimes happens that quite important industries can not be shown in the city, since to do so might disclose the operations of establishments located outside, by the simple deduction of the totals shown for the industry in the city from that given in the detailed state table.

Number and horsepower of types of prime movers (Table 17).—The total horsepower reported in 1919, as compared with that for 1914, shows an increase of 42,675 horsepower, or 43.9 per cent. This increase, however, is chiefly due to the gain of 25,595 horsepower, or 249.1 per cent, in rented power. The owned power increased 17,080 horsepower, or 19.6 per cent, during the five-year period.

Fuel consumed (Table 18).—This table shows the principal kinds of fuel used by the manufacturing plants in the state in 1919 and 1914, and gives separately for 1919 the amounts consumed by a number of important industries which use considerable quantities of fuel.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

	MANUFACTURING INDUSTRIES.					PER CENT OF INCREASE. ¹			
	1919	1914	1909	1904	1899	1914-1919	1909-1914	1904-1909	1899-1904
Number of establishments.....	2,445	2,518	2,310	1,123	495	-2.9	9.0	105.7	126.9
Persons engaged.....	38,314	22,700	18,031	7,450	(2)	68.8	25.0	141.9	.....
Proprietors and firm members.....	2,320	2,464	2,098	1,187	(2)	-5.8	-8.7	127.3	.....
Salaried employees.....	6,491	2,793	2,193	813	260	132.4	27.4	169.7	262.2
Wage earners (average number).....	29,503	17,443	13,143	5,450	2,381	60.1	32.7	140.9	123.1
Primary horsepower.....	139,983	97,398	71,130	29,608	11,572	43.9	36.8	140.3	155.9
Capital.....	\$277,034,318	\$65,477,654	\$38,872,938	\$16,124,417	\$4,061,391	323.1	68.4	141.1	297.7
Salaries and wages.....	46,987,133	14,213,375	9,285,472	3,517,822	1,112,729	230.6	53.1	164.0	216.1
Salaries.....	11,961,191	3,202,332	2,015,295	718,420	218,632	273.6	50.6	184.7	228.6
Wages.....	35,025,942	11,011,043	7,240,177	2,799,402	894,097	218.1	52.1	158.6	213.1
Paid for contract work.....	475,181	307,885	373,954	91,140	(2)	51.3	-17.7	310.3	.....
Rent and taxes.....	5,008,944	909,729	562,037	188,848	(2)	516.6	61.7	.....	.....
Cost of materials.....	312,605,829	70,969,750	34,152,804	10,393,052	5,430,447	340.5	107.8	168.3	201.9
Value of products.....	401,362,899	102,005,693	53,682,405	24,466,107	8,133,936	293.5	90.0	119.5	200.7
Value added by manufacture.....	88,757,040	31,035,943	19,529,511	8,065,165	2,703,480	186.0	68.9	142.1	193.3

¹ A minus sign (—) denotes decrease.

² Figures not available.

³ Exclusive of internal revenue.

⁴ Value of products less cost of materials.

MANUFACTURES—OKLAHOMA.

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TABLE 2.—STATISTICS FOR THE STATE, BY COUNTIES: 1919.

COUNTY.	Number of establishments.	WAGE EARNERS.		Rent and taxes.	Cost of materials.	Value of products.	Value added by manufacture.	Primary horse-power.
		Average number.	Wages.					
The state.....	2,445	20,508	\$35,025,942	\$5,008,944	\$312,005,820	\$401,362,839	\$38,757,040	130,983
Adair.....	17	87	92,893	3,561	163,450	338,002	172,600	225
Alfalfa.....	25	59	59,781	47,232	1,004,766	1,251,515	246,749	733
Atoka.....	20	32	64,908	5,800	91,589	234,750	143,170	338
Beaver.....	9	12	15,215	936	81,068	72,500	40,841	71
Bookham.....	21	43	40,207	13,639	673,027	820,451	146,824	1,061
Blaine.....	22	115	131,400	21,162	1,603,318	1,690,048	389,782	709
Dryan.....	33	88	85,049	14,892	902,500	1,170,548	267,968	887
Caddo.....	36	75	53,318	9,400	837,183	1,030,733	173,550	1,030
Canadian.....	27	534	748,127	201,804	10,393,260	12,221,827	1,828,528	3,386
Carter.....	49	484	493,942	128,052	7,824,160	10,590,990	2,772,881	2,083
Cherokee.....	8	14	10,586	2,615	111,017	147,040	36,028	239
Choctaw.....	35	497	599,075	56,108	1,449,648	2,551,527	1,101,879	2,894
Cleveland.....	13	49	67,293	13,140	870,276	519,157	148,881	524
Coal.....	5	7	7,086	1,718	11,476	29,688	18,512	103
Comanche.....	28	145	180,902	26,934	534,294	1,491,038	966,764	1,517
Cotton.....	15	19	17,848	2,749	68,500	126,704	58,204	168
Craig.....	20	238	364,476	30,581	7,468,350	8,703,450	1,241,100	887
Creek.....	84	1,450	1,645,212	100,653	9,865,974	9,970,940	3,114,906	4,206
Custer.....	84	88	83,496	65,280	2,119,923	2,615,070	502,147	1,424
Delaware.....	19	17	16,088	1,683	263,584	276,700	73,185	320
Dewey.....	7	4	3,996	885	5,289	23,193	17,904	21
Ellis.....	12	10	17,289	3,415	255,187	335,864	77,677	283
Garfield.....	73	560	704,088	129,745	11,793,240	14,259,500	2,490,954	2,789
Garvin.....	29	68	68,928	22,430	1,065,287	1,428,140	332,853	1,061
Grady.....	81	610	748,374	67,708	3,868,244	5,210,092	1,347,848	2,541
Grant.....	20	38	45,492	9,826	1,424,912	1,573,042	149,030	519
Greer.....	15	72	72,114	12,823	441,074	643,202	202,128	336
Harmon.....	8	13	10,088	4,787	125,513	195,110	60,300	265
Harper.....	14	17	17,424	3,011	63,905	79,515	45,010	148
Haskell.....	11	72	40,978	6,701	229,485	318,960	85,575	385
Hughes.....	24	50	50,462	10,711	327,977	484,755	139,778	615
Jackson.....	20	120	136,140	20,710	1,043,004	1,481,917	493,013	1,111
Jefferson.....	14	105	129,037	32,942	825,810	1,139,027	274,217	593
Johnston.....	10	5	6,030	960	17,374	39,437	21,963	25
Kay.....	70	1,120	1,369,762	198,599	13,179,944	16,843,510	3,603,500	5,081
Kingfisher.....	17	64	56,038	41,382	1,504,008	1,706,829	262,821	690
Kiowa.....	30	81	74,400	11,052	472,573	663,475	190,890	1,249
Latimer.....	13	93	66,188	5,772	69,143	231,465	138,322	642
Le Flore.....	31	413	525,413	15,228	707,451	1,006,874	399,423	2,032
Lincoln.....	29	100	88,142	20,004	1,345,304	1,633,343	320,039	1,038
Logan.....	53	409	326,223	60,517	4,265,998	5,320,317	1,000,319	2,126
Love.....	4	5	4,790	2,498	17,949	35,704	17,755	42
McClain.....	13	33	36,686	5,782	550,519	649,330	98,811	461
McClintock.....	35	1,271	1,210,689	175,810	984,302	3,030,140	2,145,838	4,149
McIntosh.....	19	155	140,281	17,997	479,535	754,024	278,089	840
Major.....	12	19	17,606	3,314	75,389	134,593	59,204	142
Marshall.....	12	43	35,100	9,678	689,050	770,254	87,195	399
Mayes.....	23	15	12,708	3,256	98,155	153,263	55,108	287
Murray.....	12	109	50,553	12,790	85,710	243,311	158,101	579
Muskogee.....	96	1,595	1,612,335	156,806	6,469,360	10,108,040	3,645,289	5,508
Noble.....	19	49	62,253	9,932	1,331,635	1,544,014	213,270	394
Nowata.....	17	48	55,585	9,243	75,029	250,571	175,542	168
Okfuskee.....	21	57	87,475	11,866	494,242	631,074	166,332	461
Oklahoma.....	251	5,822	6,469,625	1,410,683	37,567,959	101,688,647	14,120,688	16,312
Oklmulgee.....	65	1,630	2,220,689	242,704	11,128,009	15,156,854	4,028,345	3,249
Osage.....	51	214	209,601	42,363	1,049,597	1,760,427	710,830	1,080
Ottawa.....	55	228	259,527	38,786	1,810,017	2,504,964	664,947	1,377
Pawnee.....	25	102	169,462	19,083	1,732,252	2,230,089	497,837	204
Payne.....	67	981	1,019,636	222,230	27,583,669	30,431,653	2,947,984	3,000
Pittsburg.....	55	488	541,525	53,619	2,065,648	3,038,089	1,002,441	7,801
Pontotoc.....	34	493	597,827	75,495	2,072,408	4,510,079	1,837,581	1,887
Pottawatomie.....	60	1,171	1,517,773	61,994	4,245,782	6,568,205	2,322,483	3,051
Pushmataha.....	24	112	127,804	5,343	202,079	394,717	191,741	870
Roger Mills.....	3	2	1,134	297	10,282	15,418	5,130	39
Rogers.....	17	77	63,840	6,848	234,923	332,476	147,553	427
Seminole.....	12	7	6,501	1,678	10,575	38,989	22,414	100
Squoyah.....	12	36	35,260	14,693	482,510	493,816	101,800	439
Stephens.....	15	27	28,349	5,750	221,018	90,409	90,409	219
Texas.....	16	22	24,098	3,806	52,817	110,283	57,496	168
Tillman.....	16	37	45,031	8,009	120,804	270,140	143,345	372
Tulsa.....	194	4,765	6,605,749	1,306,591	63,966,212	86,727,224	22,761,012	27,216
Wagoner.....	22	117	118,420	8,376	1,198,567	1,559,299	300,732	756
Washington.....	48	1,356	1,805,714	108,780	6,771,020	10,073,724	3,302,704	7,639
Washita.....	15	30	32,967	5,000	248,158	331,165	83,007	301
Woods.....	24	102	223,854	50,209	2,007,408	2,464,807	456,899	1,155
Woodward.....	24	49	45,021	7,951	335,421	459,209	123,848	546

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TABLE 3.—PRINCIPAL INDUSTRIES, RANKED BY VALUE OF PRODUCTS: 1919.

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.			Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.
All industries.....	2,445	29,503	100.0	\$401,363	100.0	\$88,757	100.0	Printing and publishing, book and job.....	97	505	1.7	\$2,507	0.6	\$1,050	1.9
Petroleum, refining.....	66	4,612	15.6	159,673	37.5	23,524	26.5	Coffee, roasting and grinding.....	7	168	0.6	2,402	0.6	434	0.5
Flour-mill and grist-mill products.....	227	953	3.3	49,844	12.4	5,664	6.4	Confectionery, ice cream.....	45	187	0.6	2,246	0.6	921	1.0
Smelting and refining, zinc.....	11	2,272	7.7	19,518	4.9	4,968	5.6	Automobile repairing.....	129	455	1.5	2,108	0.5	1,200	1.4
Oil and cake, cottonseed.....	51	930	3.2	18,907	4.7	2,575	2.9	Brick and burnt-clay ballast.....	22	628	2.1	1,679	0.4	1,036	1.2
Foundry and machine-shop products.....	114	1,717	5.8	13,510	3.4	7,257	8.2	Confectionery.....	28	194	0.7	1,345	0.3	370	0.4
Bread and other bakery products.....	288	993	3.4	8,129	2.0	3,088	3.5	Mineral and carbonated waters.....	79	156	0.5	1,292	0.3	742	0.8
Butter.....	20	391	1.0	7,718	1.9	991	1.1	Explosives.....	9	76	0.3	1,063	0.3	515	0.6
Printing and publishing, newspapers and periodicals.....	410	1,415	4.8	7,705	1.9	5,522	6.2	Saddlery and harness.....	36	92	0.3	1,042	0.3	392	0.4
Cars and general shop construction and repairs by steam-railroad companies.....	12	2,687	9.1	6,149	1.5	4,094	4.6	Copper, tin, and sheet-iron work.....	75	187	0.6	984	0.2	552	0.6
Lumber and timber products.....	145	1,947	6.6	4,904	1.2	3,592	4.0	Mattresses and spring beds.....	13	99	0.3	700	0.2	322	0.4
Glass.....	16	1,692	5.7	4,751	1.2	2,839	3.2	Brooms, from broom corn.....	32	110	0.4	696	0.2	350	0.4
Ice, manufactured.....	115	831	2.8	3,574	0.9	2,539	2.9	Marble and stone work.....	48	117	0.4	688	0.2	383	0.4
Lumber, planing-mill products, not including planing mills connected with sawmills.....	56	546	1.9	3,150	0.8	1,548	1.7	Oil, mineral and composite.....	3	42	0.1	681	0.2	136	0.2
								Paving materials.....	13	295	1.0	579	0.1	414	0.5
								Shirts.....	4	69	0.2	573	0.1	188	0.2
								All other industries.....	274	5,222	17.7	82,246	20.5	10,942	12.3

¹ Among the industries for which statistics can not be shown separately without the possibility of disclosing the operations of individual establishments are a number having products in excess of some for which figures are shown in the table. Of these industries the most important are the following: "Automobiles"; "cement"; "cordage and twine"; "slaughtering and meat packing"; and "smelting and refining, lead."

TABLE 4.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES: 1919, 1914, AND 1909.

CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL.		CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL.	
					Male.	Female.						Male.	Female.
All classes.....	1919	38,314	35,134	3,180	91.7	8.3	Clerks and other subordinate salaried employees.....	1919	4,315	3,100	1,215	71.8	28.2
	1914	22,700	21,295	1,405	93.8	6.2		1914	1,688	1,353	335	80.2	19.8
	1909	18,034	17,071	963	94.7	5.3		1909	1,261	1,059	202	84.0	16.0
Proprietors and officials.....	1919	4,496	4,388	108	97.6	2.4	Wage earners (average number).....	1919	29,503	27,646	1,857	93.7	6.3
	1914	3,569	3,493	76	97.9	2.1		1914	17,443	16,449	994	94.3	5.7
	1909	3,630	3,547	83	97.7	2.3		1909	13,143	12,465	678	94.8	5.2
Proprietors and firm members.....	1919	2,320	2,244	76	96.7	3.3	16 years of age and over.....	1919	29,347	27,508	1,839	93.7	6.3
	1914	2,464	2,394	70	97.2	2.8		1914	17,309	16,320	989	94.3	5.7
	1909	2,698	2,628	70	97.4	2.6		1909	13,020	12,345	675	94.8	5.2
Salaried officers of corporations...	1919	628	609	19	97.0	3.0	Under 16 years of age.....	1919	156	138	18	88.5	11.5
	1914	355	353	2	99.4	0.6		1914	134	120	14	90.3	9.7
	1909	284	278	6	97.9	2.1		1909	123	120	3	97.6	2.4
Superintendents and managers...	1919	1,548	1,535	13	99.2	0.8							
	1914	750	746	4	99.5	0.5							
	1909	648	641	7	98.9	1.1							

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TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48. ¹	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
All industries.....	1919	29,503	917	915	11,197	717	3,342	4,913	4,326	3,176
	1914	17,443	(2)	(2)	4,369	2,247	2,277	687	3,996	3,867
	1909	13,143	(2)	(2)	2,965	303	1,949	526	4,711	2,689
Bread and other bakery products.....	1919	693	5	275	100	55	296	10	159	63
	1914	697	(2)	(2)	83	5	283	22	220	84
Brick and burnt-clay ballast.....	1919	628		15	110		27	19	330	118
	1914	402					49		353	
Cars and general shop construction and repairs by steam-railroad companies.....	1919	2,687		383	1,205		29	1,070		
	1914	1,718	(2)	(2)	748		314	14		642
Flour-mill and gristmill products.....	1919	958	1		331	1	31	7	214	373
	1914	700	(2)	(2)	27	3	30		252	388
Foundry and machine-shop products ²	1919	1,737	51	64	153	109	985	10	335	
	1914	785	(2)	(2)	56		215	29	485	
Glass.....	1919	1,692	258	126	1,241	67				
	1914	1,270	(2)	(2)	856	159	258			
Ice, manufactured.....	1919	831			27	18	126	149	53	458
	1914	528	(2)	(2)	7		10	16	41	454
Lumber and timber products.....	1919	1,947	99	9	53	56	18		1,712	
	1914	2,245	(2)	(2)	62	17	215	210	1,335	409
Lumber, planing-mill products, not including planing mills connected with saw mills.....	1919	546	8		40	22	415		61	
	1914	372	(2)	(2)	62		166		134	10
Oil and cake, cottonseed.....	1919	930			66				67	797
	1914	851					2		8	841
Petroleum, refining.....	1919	4,612			2,006		112	1,766	314	414
	1914	516	(2)	(2)	1		76	14	64	361
Printing and publishing, book and job.....	1919	505	3		493		9			
	1914	292	(2)	(2)	280		12			
Printing and publishing, newspapers and periodicals.....	1919	1,415	7	3	1,109	31	113	138	13	1
	1914	1,318	(2)	(2)	889	50	281	22	68	8
Smelting and refining, zinc.....	1919	2,272	160		677			1,435		
	1914	1,641				1,359		282		
All other industries.....	1919	7,750	325	40	3,616	358	1,181	309	999	922
	1914	4,108	(2)	(2)	1,298	657	866	78	1,036	673
Total for cities.....	1919	11,433	310	806	4,943	529	2,088	1,255	802	700
	1914	6,153	(2)	(2)	2,117	798	1,056	100	643	1,139
ARDMORE.....	1919	305	5	22	116		43	48	34	37
BARTLESVILLE.....	1919	246			63		44	14	92	33
CHICKASHA.....	1919	548		383	54		48	2	16	45
	1914	337	(2)	(2)	225		2		41	69
ENID.....	1919	478			72		128	25	135	118
	1914	283	(2)	(2)	35	16	39	28	106	59
GUTHRIE.....	1919	214			163	27	15		23	16
	1914	185	(2)	(2)	96	8	12		9	60
MCALISTER.....	1919	149	3		24		56	7	30	20
	1914	171	(2)	(2)	56		25	9	16	65
MUSKOGEE.....	1919	1,218		2	584	48	140	357	21	66
	1914	828	(2)	(2)	157	6	370	12	63	220
OKLAHOMA CITY.....	1919	4,375	188	272	2,504	330	594	173	182	132
	1914	2,226	(2)	(2)	600	603	521	34	256	212
OKMULGEE.....	1919	455	1		137		106	145	66	
SAPULPA.....	1919	552	3	126	68	38		200	14	4
	1914	433	(2)	(2)	46	74	6		29	278
SHAWNEE.....	1919	1,114	56	1	908		44		15	90
	1914	845	(2)	(2)	725	5	18	8	9	80
TULSA.....	1919	1,749	54		250	86	870	185	174	130
	1914	845	(2)	(2)	177	86	63	9	414	96

¹ Includes 48 and under for 1914 and 1909.

² Corresponding figures not available.

³ Includes "iron and steel, welding."

MANUFACTURES—OKLAHOMA.

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

(The month of maximum employment for each industry is indicated by bold-faced figures and that of minimum employment by italic figures.)

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
All industries.....	20,503	28,279	28,209	28,518	27,897	28,236	28,020	28,648	30,090	30,810	31,482	31,582	32,259	86.5
Males.....	27,646	28,556	28,522	28,825	28,808	28,470	28,217	28,933	28,284	28,827	29,347	29,443	30,120	87.0
Females.....	1,857	1,723	<i>1,687</i>	1,693	1,689	1,766	1,803	1,715	1,812	1,983	2,135	2,139	2,139	78.9
Bread and other bakery products.....	993	887	897	917	910	955	1,019	951	980	1,058	1,074	1,126	1,142	77.7
Brick and burnt-clay ballast.....	628	<i>540</i>	502	543	618	710	689	706	758	711	679	641	633	45.6
Cars and general shop construction and repairs by steam-railroad companies.....	2,657	2,677	2,688	2,676	2,472	2,477	2,491	2,588	2,638	2,649	2,801	2,985	3,012	82.1
Flour-mill and gristmill products.....	958	911	896	870	856	763	772	989	1,098	1,092	1,070	1,084	1,089	69.6
Foundry and machine-shop products.....	1,717	1,462	<i>1,417</i>	1,525	1,550	1,631	1,688	1,768	1,865	1,941	1,930	1,933	1,894	73.0
Glass.....	1,692	1,303	2,142	2,235	2,297	1,971	1,400	987	1,033	1,502	1,713	1,653	2,068	43.0
Ice, manufactured.....	831	<i>469</i>	487	559	712	895	1,081	1,294	1,338	1,172	827	500	548	35.1
Lumber and timber products.....	1,947	1,883	1,889	1,892	1,927	1,884	<i>1,693</i>	1,786	1,900	1,929	2,132	2,207	2,309	67.8
Lumber, planing-mill products, not including planing mills connected with sawmills.....	546	<i>384</i>	403	454	454	486	600	623	644	685	615	598	618	59.2
Oil and cake, cottonseed.....	930	1,379	986	801	329	237	366	424	519	954	1,072	1,733	1,700	16.6
Petroleum, refining.....	4,612	4,482	4,280	4,421	4,404	4,560	4,573	4,077	4,823	4,770	4,699	4,714	4,781	90.8
Printing and publishing, book and job.....	505	<i>481</i>	492	499	516	497	492	503	516	514	513	511	528	91.4
Printing and publishing, newspapers and periodicals.....	1,415	1,248	<i>1,335</i>	1,343	1,370	1,378	1,387	1,411	1,440	1,486	1,593	1,492	1,487	88.8
Smelting and refining, zinc.....	2,272	2,956	2,789	2,457	2,637	2,098	2,000	<i>1,972</i>	2,149	2,032	2,021	2,312	2,531	98.7
All other industries.....	7,770	7,301	<i>6,826</i>	7,320	7,365	7,734	7,896	7,959	8,335	8,325	8,143	8,003	7,923	83.1
<i>Industries showing large proportion of females.</i>														
Bread and other bakery products.....	301	<i>272</i>	278	285	278	305	330	278	278	298	324	348	340	76.6
Glass.....	179	166	181	202	192	139	193	117	123	140	201	194	241	48.5
Printing and publishing, book and job.....	128	126	123	128	135	127	<i>123</i>	120	136	<i>123</i>	127	127	135	90.4
Printing and publishing, newspapers and periodicals.....	214	205	209	<i>204</i>	213	207	211	213	217	218	210	226	223	90.3
Total for cities.....	11,433	10,581	<i>10,311</i>	10,770	10,590	10,897	11,288	11,689	11,901	12,053	12,417	12,315	12,384	83.0
Males.....	10,150	9,398	<i>9,149</i>	9,681	9,570	9,651	10,050	10,425	10,613	10,718	10,917	10,801	10,965	83.3
Females.....	1,283	1,183	<i>1,162</i>	1,189	1,190	1,238	1,238	1,264	1,288	1,335	1,438	1,424	1,419	86.9
ARDMORE.....	305	206	<i>250</i>	250	230	277	209	328	348	365	380	343	304	60.5
Males.....	280	209	<i>202</i>	206	208	254	247	307	325	342	352	313	335	57.4
Females.....	25	27	28	24	22	23	22	21	23	23	28	30	29	70.0
BARTLESVILLE.....	246	203	<i>199</i>	213	222	240	263	206	269	274	271	262	270	72.6
Males.....	236	193	<i>189</i>	202	211	229	251	255	260	287	264	252	259	70.8
Females.....	10	10	10	11	11	11	12	11	9	7	7	10	11	58.3
CHICKASHA.....	548	545	555	566	502	478	506	531	545	540	627	583	593	76.2
Males.....	537	537	546	557	492	468	494	510	533	528	615	576	581	75.8
Females.....	11	8	9	9	10	12	12	12	12	12	12	12	12	66.7
END.....	478	388	394	397	425	447	455	485	540	576	509	548	512	67.4
Males.....	414	<i>345</i>	351	354	372	393	401	422	459	483	462	480	445	71.4
Females.....	64	43	43	43	53	54	54	63	81	93	107	68	66	40.2
GUTHRIE.....	244	245	234	242	243	197	200	226	278	271	274	266	252	70.9
Males.....	182	187	175	180	177	137	140	161	210	205	212	206	194	64.6
Females.....	62	58	59	62	66	60	60	65	68	66	62	60	58	85.3
MCALISTER.....	140	150	94	<i>91</i>	108	130	151	172	187	182	179	169	168	46.2
Males.....	140	141	88	83	99	121	143	164	187	172	168	156	158	44.4
Females.....	9	9	6	8	9	9	8	8	10	10	8	13	10	46.2
MUSKOGEE.....	1,218	<i>1,124</i>	1,192	1,171	1,170	1,176	1,179	1,207	1,203	1,215	1,303	1,317	1,353	83.1
Males.....	1,129	<i>1,046</i>	1,115	1,089	1,089	1,090	1,094	1,123	1,110	1,115	1,203	1,217	1,257	83.2
Females.....	89	78	77	82	87	89	85	84	93	100	100	100	96	77.0
OKLAHOMA CITY.....	4,375	4,107	<i>3,983</i>	4,270	4,120	4,220	4,370	4,358	4,505	4,599	4,652	4,645	4,862	85.4
Males.....	3,619	3,866	<i>3,890</i>	3,582	3,453	3,505	3,645	3,627	3,777	3,788	3,799	3,786	3,810	86.4
Females.....	756	741	693	688	678	715	725	731	728	811	853	859	852	78.7
OKMULGEE.....	455	378	409	449	455	472	462	500	486	458	445	461	485	75.5
Males.....	434	363	390	416	429	449	441	476	462	447	430	444	461	76.3
Females.....	21	15	19	33	26	23	21	24	24	11	15	17	24	33.3
SAPULPA.....	552	<i>501</i>	523	556	554	618	602	599	503	505	579	519	505	81.1
Males.....	517	470	485	518	516	579	564	555	470	477	544	493	539	81.3
Females.....	35	31	38	38	38	39	38	44	33	28	35	26	66	69.1
SHAWNEE.....	1,114	1,177	1,065	1,062	939	<i>855</i>	1,013	1,110	1,131	1,157	1,222	1,296	1,263	72.0
Males.....	1,032	1,114	993	990	866	855	944	1,030	1,040	1,066	1,127	1,198	1,158	72.3
Females.....	82	<i>63</i>	72	72	73	70	69	80	91	91	95	103	105	60.0
TULSA.....	1,749	1,487	<i>1,433</i>	1,523	1,577	1,709	1,813	1,907	1,896	1,941	1,919	1,901	1,807	73.8
Males.....	1,630	1,367	<i>1,355</i>	1,404	1,458	1,573	1,686	1,786	1,780	1,828	1,805	1,775	1,773	72.5
Females.....	119	<i>100</i>	108	119	119	136	132	121	116	113	114	126	124	73.5

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TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48.1	Between 49 and 54.	54.	Between 54 and 60.	60.	Over 60.
All industries.....	1919	29,503	917	915	11,187	717	3,842	4,013	4,326	3,176
	1914	17,443	(2)	(2)	4,369	2,247	2,277	887	3,996	3,867
	1909	13,143	(2)	(2)	2,965	903	1,949	526	4,711	2,680
Bread and other bakery products.....	1919	983	5	275	100	55	296	19	159	93
	1914	607	(2)	(2)	83	5	283	22	220	84
Brick and burnt-clay ballast.....	1919	628		15	110		27	19	339	118
	1914	402					49		353	
Cars and general shop construction and repairs by steam-railroad companies.....	1919	2,087		383	1,205		29	1,070		
	1914	1,718	(2)	(2)	748		314	14		642
Flour-mill and gristmill products.....	1919	958	1		331	1	31	7	214	373
	1914	700	(2)	(2)	27	3	30		252	338
Foundry and machine-shop products *.....	1919	1,737	51	64	123	109	985	10	326	
	1914	785	(2)	(2)	56		215	29	486	
Glass.....	1919	1,692	258	126	241	67				
	1914	1,270	(2)	(2)	856	150	258			
Ice, manufactured.....	1919	831			27	18	126	149	53	458
	1914	528	(2)	(2)	7		10	16	41	454
Lumber and timber products.....	1919	1,947	99	9	53	56	18		1,752	
	1914	2,245	(2)	(2)	62	17	215	210	1,335	406
Lumber, planing-mill products, not including planing mills connected with saw mills.....	1919	540	8		40	22	415		61	
	1914	372	(2)	(2)	62		166		134	10
Oil and cake, cottonseed.....	1919	930			66				67	797
	1914	851					2		8	841
Petroleum, refining.....	1919	4,012			2,006		112	1,760	314	414
	1914	516	(2)	(2)	1		76	14	64	361
Printing and publishing, book and job.....	1919	505	3		493		9			
	1914	292	(2)	(2)	280		12			
Printing and publishing, newspapers and periodicals.....	1919	1,415	7	3	1,109	31	113	138	13	1
	1914	1,318	(2)	(2)	889	50	281	22	68	8
Smelting and refining, zinc.....	1919	2,272	160		677			1,435		
	1914	1,641				1,359		282		
All other industries.....	1919	7,750	325	40	3,616	358	1,151	309	999	922
	1914	4,108	(2)	(2)	1,298	657	300	78	1,036	673
Total for cities.....	1919	11,433	310	803	4,943	520	2,088	1,255	802	700
	1914	6,153	(2)	(2)	2,117	798	1,056	100	943	1,139
ARDMORE.....	1919	305	5	22	116		43	48	34	37
BARTLESVILLE.....	1919	246			68		44	14	92	33
CHICKASAW.....	1919	543		383	54		48	2	16	45
	1914	337	(2)	(2)	225		2		41	69
ENID.....	1919	478			72		128	25	135	118
	1914	283	(2)	(2)	35	16	39	28	106	59
GUTHRIE.....	1919	244			163	27	15		23	16
	1914	185	(2)	(2)	96	8	12		9	60
MCALISTER.....	1919	149	3		24		56	7	30	29
	1914	171	(2)	(2)	56		25	9	16	65
MUSKOGEE.....	1919	1,218		2	524	48	140	357	21	66
	1914	828	(2)	(2)	157	6	370	12	63	220
OKLAHOMA CITY.....	1919	4,375	188	272	2,504	330	594	173	182	132
	1914	2,226	(2)	(2)	630	603	521	34	256	212
OKMULGEE.....	1919	453	1		137		106	145	66	
PAPULPA.....	1919	552	8	126	68	38		299	14	4
	1914	433	(2)	(2)	46	74	6		20	278
SHAWNEE.....	1919	1,114	50	1	938		44		15	90
	1914	845	(2)	(2)	725	5	18	8	9	80
TULSA.....	1919	1,740	54		250	86	870	185	174	130
	1914	845	(2)	(2)	177	86	63	9	414	96

* Includes 48 and under for 1914 and 1909.

† Corresponding figures not available.

‡ Includes "iron and steel, welding."

MANUFACTURES—OKLAHOMA.

TABLE 10.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING—																
	Establishments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		251 to 500 wage earners, inclusive.		501 to 1,000 wage earners, inclusive.		Over 1,000 wage earners.	
			Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries.....	2,445	20,503	427	1,400	2,356	374	4,009	136	4,205	46	3,168	37	6,209	11	3,323	1	818	4	4,725
Bread and other bakery products.....	258	993	52	208	436	24	195	3	90	3	218	1	272						
Brick and burnt-clay ballast.....	22	328		3	10	9	155	7	245										
Cars and general shop construction and repairs by steam-railroad companies.....	12	2,687						4	148	1	83	2	312	4	1,326	1	818		
Flour-mill and gristmill products.....	227	958	92	99	175	26	265	6	212	4	306								
Foundry and machine-shop products.....	114	1,717	7	52	148	31	350	15	471	8	552	1	196						
Glass.....	16	1,692		1	4			6	424	8	1,235								
Ice, manufactured.....	115	831		68	180	39	388	6	152	2	111								
Lumber and timber products.....	145	1,947	3	123	223	12	139	3	123	2	104			1	291			1	1,087
Lumber, planing-mill products, not including planing mills connected with sawmills.....	56	546	3	30	67	17	190	4	100	2	180								
Oil and cake, cottonseed.....	51	930		8	31	19	240	24	659										
Petroleum, refining.....	66	4,612		7	22	24	275	18	651	5	391	10	1,776	1	291			1	1,203
Printing and publishing, book and job.....	97	505	23	53	137	14	150	7	218										
Printing and publishing, newspapers and periodicals.....	410	1,415	138	227	432	38	387	3	113	1	59	3	424	4	1,143				
Smelting and refining, zinc.....	11	2,272				1	14					6	1,115						
All other industries.....	815	7,770	100	530	1,091	120	1,261	35	1,075	12	737	7	1,151					2	2,455
Total for cities.....	745	11,433	80	371	611	192	2,077	62	1,891	24	1,648	10	1,518	4	1,299	1	818	1	1,271
ARDMORE.....	35	305	2	20	46	9	94	3	94	1	71								
BARTLESVILLE.....	32	246	2	18	43	9	109	2	94										
CHICKASHA.....	24	548	1	15	35	5	75	2	56					1	382				
END.....	51	478	7	22	63	18	192	3	100			1	123						
GUTHRIE.....	36	244	7	19	42	8	62	1	26	1	84								
MCALISTER.....	20	149	2	9	21	7	79	2	49										
MUSKOGEE.....	82	1,218	9	45	106	19	171	4	117	2	147	2	318	1	356				
OKLAHOMA CITY.....	227	4,375	34	101	267	49	544	30	934	8	562	3	525	1	272			1	1,271
OKMULGEE.....	29	455	1	15	32	8	61	2	64	2	155	1	113						
SAPULPA.....	29	552	3	17	39	6	70	1	28			1	126	1	289				
SHAWNEE.....	45	1,114	4	28	64	8	60	3	117	1	56					1	818		
TULSA.....	135	1,749	8	62	160	46	491	8	212	9	573	2	313						

TABLE 11.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS: 1919, 1914, AND 1909.

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes.....	2,445	2,518	2,310	20,503	17,443	13,143	\$401,362,860	\$102,005,693	\$53,682,405	\$88,757,040	\$31,035,943	\$19,529,511
Less than \$5,000.....	710	1,403	1,182	387	1,018	1,608	1,846,360	3,183,934	2,675,597	1,151,348	2,012,505	1,702,600
\$5,000 to \$20,000.....	848	707	727	1,825	2,578	2,883	8,819,984	6,824,096	7,194,008	4,893,614	3,783,033	4,142,194
\$20,000 to \$100,000.....	541	256	295	4,217	3,065	3,008	24,158,638	10,885,671	13,057,308	11,360,580	4,718,895	5,877,865
\$100,000 to \$500,000.....	215	121	102	0,087	7,233	4,406	47,539,096	25,811,975	25,870,562	16,810,315	11,361,582	7,001,117
\$500,000 to \$1,000,000.....	69	17		3,904			40,090,378	11,972,363		10,968,092		
\$1,000,000 and over.....	72	14	4	13,073	2,951	298	278,908,413	43,342,654	4,884,270	43,573,032	9,159,028	715,775
PER CENT DISTRIBUTION.												
All classes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5,000.....	29.0	55.7	51.2	1.3	0.3	12.7	0.5	3.1	5.0	1.3	6.5	9.2
\$5,000 to \$20,000.....	34.7	28.1	31.5	6.2	14.8	21.8	2.2	6.7	13.4	5.5	12.2	21.2
\$20,000 to \$100,000.....	22.1	10.2	12.8	14.3	17.6	28.7	6.0	10.7	24.3	12.8	15.2	30.0
\$100,000 to \$500,000.....	8.8	4.8		20.0			11.8	25.3	48.2	18.9	36.0	35.8
\$500,000 to \$1,000,000.....	2.4	0.7		13.2			10.0	11.7		12.4		
\$1,000,000 and over.....	3.0	0.6	0.2	44.4	16.9	2.3	69.5	42.5	9.1	49.1	20.5	3.7

MANUFACTURES—OKLAHOMA.

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TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1919 AND 1914.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1919	1914	Per cent distribution.	1919	1914	Per cent distribution.	1919	1914	Per cent distribution.	1919	1914	Per cent distribution.
BREAD AND OTHER BAKERY PRODUCTS	288	342	100.0	993	697	100.0	\$3,128,632	\$2,773,811	100.0	\$3,088,390	\$1,193,015	100.0
Less than \$5,000	53	203	18.4	17	109	1.7	144,904	615,820	1.8	83,835	235,037	2.1
\$5,000 to \$20,000	137	120	47.6	180	242	19.0	1,518,685	1,070,800	18.7	694,265	467,571	19.2
\$20,000 to \$100,000	90	110	31.2	379	340	38.2	3,550,070	1,181,191	43.8	1,220,441	1,492,407	39.5
\$100,000 and over	8	8	2.8	408	1	41.1	2,905,067	1,208,849	35.7	1,208,849	1	39.2
FLOUR-MILL AND GRISTMILL PRODUCTS	227	253	100.0	958	700	100.0	40,843,800	16,638,690	100.0	5,663,705	2,321,724	100.0
Less than \$5,000	53	101	23.3	3	34	0.3	141,410	264,261	0.3	25,081	65,436	0.5
\$5,000 to \$20,000	72	72	31.7	25	79	2.6	786,323	782,774	1.6	129,913	163,303	2.3
\$20,000 to \$100,000	87	48	25.1	115	120	12.1	2,764,429	1,940,908	5.5	432,538	322,945	7.6
\$100,000 to \$500,000	21	24	9.3	126	367	13.2	4,935,838	5,946,550	9.9	661,090	1,321,452	11.7
\$500,000 to \$1,000,000	9	5	2.0	91	1	9.5	5,655,064	3,957,957	11.3	821,801	1	14.5
\$1,000,000 and over	15	8	6.6	597	100	62.3	35,560,656	8,796,231	71.3	3,592,882	448,585	63.4
FOUNDRY AND MACHINE-SHOP PRODUCTS*	124	99	100.0	1,737	785	100.0	13,608,577	2,856,571	100.0	7,331,686	1,341,946	100.0
Less than \$5,000	21	38	16.9	11	50	0.6	66,474	94,875	0.5	48,431	74,381	0.7
\$5,000 to \$20,000	39	31	31.5	122	104	7.0	448,141	300,855	3.3	320,531	204,903	4.4
\$20,000 to \$100,000	33	22	20.6	304	230	17.5	1,590,789	871,197	11.7	1,014,825	420,058	13.8
\$100,000 to \$500,000	25	8	20.2	804	341	40.7	6,632,292	1,680,644	41.4	2,888,374	642,604	39.4
\$500,000 and over	6	4	4.8	436	1	25.1	5,873,881	1,208,849	43.2	3,059,475	1	41.7
ICE, MANUFACTURED	115	97	100.0	831	528	100.0	3,574,431	1,604,148	100.0	2,530,356	1,202,018	100.0
Less than \$5,000	13	20	11.3	13	17	1.0	37,180	44,566	1.0	24,471	29,890	1.0
\$5,000 to \$20,000	51	55	44.3	150	220	18.1	590,555	643,630	16.5	395,688	474,750	15.7
\$20,000 to \$100,000	42	22	30.5	409	201	48.1	1,774,504	915,944	49.0	1,292,788	697,402	51.1
\$100,000 to \$500,000	9	5	7.8	208	1	32.3	1,172,212	1,208,849	32.8	810,134	1	32.3
\$500,000 and over	1	1	1.0	1	1	1.0	1	1	1.0	1	1	1.0
OIL AND CAKE, COTTONSEED	51	60	100.0	930	851	100.0	18,907,312	7,589,813	100.0	2,575,169	1,305,410	100.0
Less than \$5,000	8	25	15.7	45	188	4.8	859,577	1,128,148	1.9	54,053	200,320	2.1
\$5,000 to \$20,000	28	35	54.9	470	663	50.5	8,191,228	6,401,670	43.3	1,289,537	1,106,094	50.1
\$20,000 to \$100,000	15	15	29.4	415	1	44.6	10,350,507	1,208,849	64.8	1,231,578	1	47.8
\$100,000 to \$500,000	1	1	1.0	1	1	1.0	1	1	1.0	1	1	1.0
\$500,000 and over	1	1	1.0	1	1	1.0	1	1	1.0	1	1	1.0
PETROLEUM, REFINING	60	23	100.0	4,012	516	100.0	150,673,458	13,014,372	100.0	23,623,736	3,423,635	100.0
Less than \$5,000	6	6	9.1	28	29	0.6	206,567	303,091	0.1	31,427	79,428	0.1
\$5,000 to \$20,000	14	9	21.2	116	270	2.5	4,592,827	3,340,212	3.0	236,104	1,408,562	1.0
\$20,000 to \$100,000	14	3	21.2	285	1	6.2	10,026,902	1,817,090	6.7	1,638,076	1	6.5
\$100,000 to \$500,000	32	5	48.5	4,183	217	90.7	135,847,162	7,542,970	90.2	21,717,160	1,875,645	92.3
\$500,000 and over	1	1	1.0	1	1	1.0	1	1	1.0	1	1	1.0
PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS	410	542	100.0	1,415	1,318	100.0	7,704,823	3,237,734	100.0	5,521,909	2,532,255	100.0
Less than \$5,000	200	421	51.0	105	413	7.4	528,285	859,052	6.9	410,543	692,182	7.4
\$5,000 to \$20,000	154	103	37.6	341	382	24.1	1,424,481	816,717	18.5	1,055,920	643,529	10.7
\$20,000 to \$100,000	38	13	0.3	371	218	26.2	1,006,310	615,525	20.8	1,238,915	459,260	22.4
\$100,000 to \$500,000	6	5	1.5	224	805	15.8	1,234,721	946,440	16.0	920,535	787,284	16.7
\$500,000 and over	8	8	0.7	374	1	28.4	2,910,028	1,208,849	37.8	1,865,936	1	33.8

* Includes the group "\$100,000 to \$500,000."

* Includes the group "\$500,000 to \$1,000,000."

* Includes "iron and steel, welding."

TABLE 13.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919.

CITY AND VALUE OF PRODUCT.	Number of estab- lishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of estab- lishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average num- ber.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average num- ber.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
ARDMORE.....	35	305	100.0	\$4,965,622	100.0	\$1,397,082	100.0	GUTHRIE.....	36	244	100.0	\$3,330,365	100.0	\$527,378	100.0
Less than \$5,000.....	7	6	2.0	27,591	0.6	15,660	1.1	Less than \$5,000.....	14	12	4.9	30,997	0.9	22,102	4.2
\$5,000 to \$20,000.....	8	16	5.2	85,774	1.7	52,357	3.7	\$5,000 to \$20,000.....	10	25	10.2	112,439	3.4	54,561	10.3
\$20,000 to \$100,000.....	16	124	40.7	708,056	16.0	396,789	28.4	\$20,000 and over.....	12	207	84.8	3,186,929	95.7	450,715	85.5
\$100,000 and over.....	4	159	52.1	4,056,201	81.7	932,876	66.7								
BARTLESVILLE.....	32	246	100.0	1,905,575	100.0	1,022,868	100.0	MCALISTER.....	20	149	100.0	1,529,357	100.0	469,538	100.0
Less than \$5,000.....	6	3	1.2	17,495	0.9	6,312	0.6	Less than \$5,000.....	4	1	0.7	9,180	0.6	5,202	1.1
\$5,000 to \$20,000.....	8	14	5.7	87,461	4.6	48,413	4.7	\$5,000 to \$20,000.....	4	7	4.7	35,072	2.3	18,396	3.9
\$20,000 to \$100,000.....	18	229	93.1	1,800,629	94.5	968,143	94.7	\$20,000 to \$100,000.....	9	102	68.5	468,564	30.0	273,210	58.2
\$100,000 to \$500,000.....	6	5	2.0	1,000,000	52.1	1,000,000	97.8	\$100,000 to \$500,000.....	3	39	26.2	1,026,561	67.1	172,730	36.8
\$500,000 and over.....	1	1	0.4	1,000,000	52.1	1,000,000	97.8								
CHICKASHA.....	24	548	100.0	4,598,973	100.0	1,223,018	100.0	MUSKOGEE.....	82	1,218	100.0	8,402,888	100.0	3,027,312	100.0
Less than \$5,000.....	4	3	0.5	14,539	0.3	7,845	0.6	Less than \$5,000.....	10	6	0.5	34,057	0.4	21,962	0.7
\$5,000 to \$20,000.....	8	23	4.2	83,555	1.8	43,647	3.6	\$5,000 to \$20,000.....	36	90	7.4	421,371	5.0	249,272	8.2
\$20,000 to \$100,000.....	7	51	9.3	325,010	7.1	122,189	10.0	\$20,000 to \$100,000.....	24	148	12.2	981,053	11.7	497,108	16.4
\$100,000 to \$500,000.....	5	471	85.9	4,176,269	91.8	1,049,857	85.8	\$100,000 to \$500,000.....	6	210	17.2	1,495,257	17.8	772,049	25.5
\$500,000 and over.....	1	1	0.1	1,000,000	21.7	1,000,000	81.8	\$500,000 and over.....	6	704	62.7	5,471,120	65.1	1,486,921	49.1
ENID.....	51	478	100.0	13,073,672	100.0	2,223,029	100.0	OKLAHOMA CITY.....	227	4,375	100.0	\$69,970,788	100.0	\$11,320,614	100.0
Less than \$5,000.....	9	3	0.6	25,171	0.2	17,743	0.8	Less than \$5,000.....	39	15	0.3	100,830	0.1	65,990	0.6
\$5,000 to \$20,000.....	14	40	8.4	145,713	1.1	85,440	3.8	\$5,000 to \$20,000.....	67	155	3.5	808,679	1.2	516,760	4.6
\$20,000 to \$100,000.....	17	130	27.2	847,053	6.5	398,980	17.9	\$20,000 to \$100,000.....	69	619	14.1	3,526,405	5.0	1,775,615	15.7
\$100,000 to \$500,000.....	5	60	12.6	1,015,044	7.8	253,492	11.4	\$100,000 to \$500,000.....	38	1,071	24.5	8,025,937	11.5	3,210,037	28.3
\$500,000 and over.....	6	245	51.3	11,040,711	84.5	1,467,365	66.0	\$500,000 to \$1,000,000.....	5	135	4.2	3,596,106	5.1	596,144	5.3
								\$1,000,000 and over.....	9	2,330	53.3	63,912,801	77.1	5,162,098	45.6

TABLE 13.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR CITIES OF 10,000 INHABITANTS OR MORE. 1919—Continued.

CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
ORMULGEE.....	29	455	100.0	\$3,001,231	100.0	\$980,131	100.0	SHAWNEE.....	45	1,114	100.0	\$5,742,944	100.0	\$2,183,943	100.0
Less than \$5,000.....	6	4	0.9	18,886	0.5	12,074	1.2	Less than \$5,000.....	12	0	0.8	33,223	0.6	17,640	0.8
\$5,000 to \$20,000.....	7	15	3.3	97,828	2.5	62,974	6.4	\$5,000 to \$20,000.....	19	45	4.0	197,100	3.4	110,989	5.1
\$20,000 to \$100,000.....	8	79	17.4	355,002	8.9	171,874	17.4	\$20,000 to \$100,000.....	9	95	8.5	467,679	8.1	288,349	13.2
\$100,000 and over.....	8	357	78.5	2,519,455	88.2	749,209	76.0	\$100,000 and over.....	5	905	86.6	5,044,642	87.8	1,772,015	81.0
SAPULPA.....	29	552	100.0	2,197,083	100.0	1,116,038	100.0	TULSA.....	135	1,749	100.0	14,050,073	100.0	7,393,008	100.0
Less than \$5,000.....	3	1	0.2	12,530	0.6	8,874	0.8	Less than \$5,000.....	18	12	0.7	48,477	0.3	33,575	0.5
\$5,000 to \$20,000.....	13	25	4.5	143,678	6.5	87,400	7.8	\$5,000 to \$20,000.....	37	81	4.6	415,420	3.0	289,209	3.2
\$20,000 to \$100,000.....	9	71	12.9	435,342	19.8	245,359	22.0	\$20,000 to \$100,000.....	49	393	22.5	2,300,775	16.4	1,199,142	16.2
\$100,000 to \$1,000,000.....	4	455	82.4	1,005,533	73.1	774,405	69.4	\$100,000 to \$500,000.....	23	949	54.3	4,402,995	31.3	2,211,329	29.9
								\$500,000 and over.....	8	614	35.1	6,882,307	49.0	3,709,753	50.2

TABLE 14.—CHARACTER OF OWNERSHIP, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
					Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.						
		Indi- vid- u-als.	Cor- pora- tions.	All oth- ers.		Indi- vid- u-als.	Cor- pora- tions.	All oth- ers.	Indi- vid- u-als.	Cor- pora- tions.	All oth- ers.		Indi- vid- u-als.	Cor- pora- tions.	All oth- ers.	Indi- vid- u-als.	Cor- pora- tions.	oth- ers.				
All industries.....	1919	1,264	708	473	29,503	2,891	25,267	1,345	9.8	85.6	4.6	\$401,302,869	\$22,749,408	\$367,401,271	\$11,152,190	5.7	91.6	2.8				
	1914	1,533	540	436	17,443	3,008	13,037	1,398	17.2	74.7	8.0	102,005,093	8,048,451	88,650,116	5,268,126	7.9	80.0	5.2				
	1909	1,257	501	552	13,143	3,113	8,225	1,805	23.7	62.0	13.7	53,682,405	7,069,080	30,330,339	6,592,986	14.3	73.4	12.3				
Bread and other bakery products.	1919	225	12	51	993	464	412	117	46.7	41.6	11.8	8,128,632	4,206,377	2,819,655	1,102,600	51.7	34.7	13.6				
	1914	280	5	57	697	366	213	118	52.5	30.5	16.9	2,773,811	1,648,706	530,400	585,036	59.4	19.4	21.1				
Flour-mill and gristmill products.	1919	93	76	58	958	57	832	69	5.9	86.8	7.2	49,843,800	1,937,980	44,485,782	3,300,029	4.0	89.3	6.7				
	1914	117	60	70	700	97	508	95	13.9	72.6	13.5	16,688,690	1,086,923	14,022,694	1,579,073	6.5	84.0	9.5				
Foundry and machine-shop products. ¹	1919	48	56	20	1,737	279	1,390	68	16.1	80.0	3.9	13,668,577	2,132,111	11,108,731	367,735	15.7	81.0	2.7				
	1914	48	32	19	785	199	492	94	25.3	62.7	12.0	2,850,571	687,347	1,954,053	214,571	24.1	68.4	7.5				
Ice, manufactured.....	1919	15	79	21	881	30	736	65	3.6	88.6	7.8	8,574,431	111,862	8,191,482	271,087	3.1	89.3	7.6				
	1914	10	69	18	528	25	435	68	4.7	82.4	12.9	1,604,140	76,958	1,336,356	190,832	4.8	83.3	11.9				
Oil and cake, cottonseed..	1919	1	45	5	930	—	873	* 57	—	93.9	6.1	18,907,312	—	17,805,814	* 1,101,498	—	94.2	5.8				
	1914	5	52	3	851	21	823	7	2.5	96.7	0.8	7,589,185	95,079	7,492,186	32,540	1.3	98.3	0.4				
Petroleum, refining.....	1919	1	65	—	4,612	—	4,612	—	—	100.0	—	150,673,458	—	150,673,458	—	—	100.0	—				
	1914	—	23	—	516	—	516	—	—	100.0	—	13,014,372	—	13,014,372	—	—	100.0	—				
Printing and publishing, newspapers and periodicals.	1919	273	60	77	1,415	386	385	144	27.3	62.5	10.2	7,704,823	1,627,082	5,314,538	762,303	21.1	69.0	9.9				
	1914	398	74	72	1,318	541	642	135	41.0	48.7	10.2	3,237,734	1,096,261	1,808,350	333,123	33.0	65.8	10.3				
Total for cities.....	1919	321	295	129	11,433	1,188	9,815	430	10.4	85.8	3.8	133,758,571	11,110,880	119,382,061	3,258,810	8.3	89.3	2.4				
	1914	281	201	109	6,153	1,746	5,003	404	12.1	81.8	6.6	36,308,575	2,366,804	32,386,701	1,555,070	6.5	80.2	4.3				
ARDMORE.....	1919	17	11	7	305	70	215	20	23.0	70.5	6.6	4,965,622	353,489	4,434,204	177,920	7.1	89.3	3.6				
BARTLESVILLE.....	1919	17	10	5	246	102	131	13	41.5	53.3	5.3	1,005,675	848,907	922,078	138,990	44.5	48.4	7.0				
CHICKASHA.....	1919	9	11	4	548	30	510	8	5.5	93.1	1.5	4,598,073	110,903	4,418,830	69,240	2.4	96.1	1.5				
	1914	15	8	6	337	19	283	25	5.6	86.9	7.4	1,719,676	63,059	1,592,330	64,287	3.7	92.0	3.7				
ENID.....	1919	21	22	8	478	103	358	17	21.5	74.9	3.6	13,073,672	4,162,940	8,848,585	62,147	31.8	67.7	0.5				
	1914	16	20	9	283	34	225	24	12.0	79.5	8.5	2,610,533	106,015	2,412,498	92,020	4.1	92.4	3.5				
GUTHRIE.....	1919	22	5	9	244	—	* 244	—	—	100.0	—	3,330,365	—	* 3,330,365	—	—	100.0	—				
	1914	19	6	5	185	43	128	14	23.2	66.2	7.6	853,485	110,715	705,639	37,131	13.0	82.7	4.4				
MCALISTER.....	1919	7	10	3	149	11	125	13	7.4	83.9	8.7	1,529,367	117,063	1,327,198	85,096	7.7	89.8	5.6				
	1914	16	11	6	171	26	120	25	15.2	70.2	14.6	578,511	72,657	410,347	90,507	12.7	71.5	15.8				
MUSKOGEE.....	1919	34	30	18	1,218	105	1,072	41	8.6	88.0	3.4	8,402,838	605,832	7,390,868	406,188	7.2	88.0	4.8				
	1914	34	33	13	828	92	694	42	11.1	83.8	5.1	2,754,811	227,467	2,345,000	182,344	8.3	85.1	6.6				
OKLAHOMA CITY.....	1919	79	109	30	4,375	277	3,929	169	6.3	89.8	3.9	69,970,788	1,789,793	68,094,890	1,186,105	2.6	95.7	1.7				
	1914	86	76	33	2,226	202	1,861	163	9.1	83.6	7.3	20,725,811	730,011	19,462,281	533,590	3.5	93.9	2.6				
OKMULGEE.....	1919	14	10	5	455	33	402	20	7.3	88.4	4.4	3,091,231	231,272	3,636,040	123,919	5.8	91.1	3.1				
SAPULPA.....	1919	16	7	6	552	55	479	18	10.0	86.8	3.8	2,197,083	272,275	1,755,204	160,604	12.4	79.9	7.7				
	1914	16	7	7	433	45	369	19	10.4	85.2	4.4	604,457	102,387	410,467	85,603	10.9	68.9	14.2				
SHAWNEE.....	1919	23	14	8	1,114	47	1,038	29	4.2	93.2	2.6	5,742,944	191,727	5,364,571	186,046	3.3	93.4	3.3				
	1914	27	11	8	845	52	760	13	9.7	88.8	1.5	2,597,955	182,719	2,334,728	80,518	7.0	98.9	3.1				
TULSA.....	1919	92	59	17	1,749	355	1,312	82	20.3	75.0	4.7	14,050,073	2,432,659	10,959,408	657,946	17.3	78.0	4.7				
	1914	52	29	22	846	203	593	79	24.0	60.6	9.3	3,868,326	771,774	2,707,461	389,091	20.0	70.0	10.0				

¹ Includes "iron and steel, welding."² Includes the group "Individuals."³ Includes the groups "Individuals" and "All others."

MANUFACTURES—OKLAHOMA.

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TABLE 15.—MANUFACTURES, BY POPULATION GROUPS, IN CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

	Cen- sus year.	Aggregate.	CITIES HAVING A POPULATION OF 10,000 OR OVER.						THE STATE OUTSIDE OF CITIES HAVING A POPULATION OF 10,000 OR OVER.	
			Total.		10,000 to 25,000.		25,000 to 100,000.		Number or amount.	Per cent of aggre- gate.
			Number or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.		
Number of places.....	1919 1914 1909	----- ----- -----	12 9 8	----- ----- -----	9 6 6	----- ----- -----	3 3 2	----- ----- -----	-----	-----
Population ¹	1920 1915 1910	2,028,283 2,026,534 1,657,155	317,264 237,094 168,866	15.6 11.7 10.2	123,617 88,452 79,863	6.1 4.4 4.8	193,047 148,042 80,483	9.5 7.3 5.4	1,711,019 1,789,440 1,488,289	84.4 88.3 80.8
Number of establishments.....	1919 1914 1909	2,445 2,518 2,310	745 591 480	30.5 23.5 21.0	301 213 251	12.3 8.5 10.9	444 378 235	18.2 15.0 10.2	1,700 1,927 1,824	69.5 78.5 79.0
Average number of wage earners.....	1919 1914 1909	29,503 17,443 13,143	11,433 6,153 4,176	38.8 35.3 31.8	4,691 2,254 2,397	13.9 12.9 18.2	7,342 3,869 1,779	24.9 22.4 13.5	18,070 11,280 8,997	61.2 64.7 68.2
Value of products.....	1919 1914 1909	\$401,362,869 102,005,093 53,682,405	\$133,758,571 30,308,575 19,864,676	33.2 35.6 37.0	\$41,334,522 8,959,627 9,717,641	10.3 8.8 18.1	\$62,423,749 27,348,918 10,147,035	23.0 20.8 18.9	\$267,604,298 65,697,118 33,817,729	66.7 64.4 63.0
Value added by manufacture.....	1919 1914 1909	88,757,040 31,035,943 19,520,511	32,901,559 10,106,225 6,966,783	37.1 32.6 35.7	11,154,625 2,791,838 3,443,407	12.6 8.8 17.6	21,746,934 7,374,387 3,523,296	24.5 23.8 18.0	55,855,481 20,926,718 12,562,748	62.9 67.4 64.3

¹ Population of 1920, as of Jan. 1, 1920; 1915, estimated population as of July 1, 1914 (per reports census of manufactures, 1914); 1910, as of Apr. 15, 1910.

TABLE 16.—PRINCIPAL INDUSTRIES IN CITIES HAVING 50,000 INHABITANTS OR MORE, WITH PER CENT OF TOTAL FOR STATE: 1919.

CITY AND INDUSTRY.	VALUE OF PRODUCTS.				CITY AND INDUSTRY.	VALUE OF PRODUCTS.			
	Amount, 1919.	Per cent of total for the state.	Increase over 1914.			Amount, 1919.	Per cent of total for the state.	Increase over 1914.	
			Amount.	Per cent.				Amount.	Per cent.
OKLAHOMA CITY.					TULSA.				
Flour-mill and gristmill products.....	\$8,752,040	17.6	\$3,007,013	218.8	Foundry and machine-shop products.....	\$6,069,577	49.4	\$5,251,034	370.2
Bread and other bakery products.....	2,845,180	36.0	1,990,710	235.3	Printing and publishing, newspapers and periodicals.....	1,377,209	17.9	1,080,082	303.5
Printing and publishing, newspapers and periodicals.....	2,362,773	30.7	1,551,329	191.2	Lumber, planing-mill products, not includ- ing planing mills connected with saw- mills.....	844,744	26.8	552,214	188.8
Printing and publishing, book and job.....	1,409,474	58.2	902,470	215.3	Bread and other bakery products.....	700,805	8.6	509,705	286.8
Confectionery and ice cream.....	1,154,844	32.2	839,585	236.3	Printing and publishing, book and job....	503,226	20.1	430,255	589.6
Lumber, planing-mill products, not includ- ing planing mills connected with saw- mills.....	809,724	25.7	594,522	276.3	Flour-mill and gristmill products.....	(¹)	(¹)	(¹)	(¹)
Automobiles.....									
Butter.....									
Coffee, roasting and grinding.....									
Druggists' preparations.....	(¹)	(¹)	(¹)	(¹)					
Oil and cake, cottonseed.....									
Petroleum, refining.....									
Saddlery and harness.....									
Slaughtering and meat packing.....									

¹ Relative rank can not be shown without disclosing individual operations.

TABLE 17.—NUMBER AND HORSEPOWER OF TYPES OF PRIME MOVERS: 1919, 1914, AND 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
	1919	1914	1909	Amount.			Per cent distribution.		
				1919	1914	1909	1919	1914	1909
Primary power, total.....	5,822	3,251	2,235	139,983	97,308	71,130	100.0	100.0	100.0
Owned.....	1,840	1,588	1,437	104,115	87,035	65,701	74.4	89.4	92.5
Steam.....	1,080	812	832	79,707	70,803	56,043	56.9	72.8	79.6
Engines.....	1,041	(¹)	(¹)	72,723	(¹)	(¹)	52.0		
Turbines.....	39	(¹)	(¹)	6,984	(¹)	(¹)	5.0		
Internal-combustion engines.....	744	685	539	24,133	15,970	8,676	17.2	16.4	12.2
Water.....	22	11	6	275	256	472	0.2	0.3	0.7
Water wheels and turbines.....	11	8	5	259	253	470	0.2	0.3	0.7
Water motors.....	11	8	1	16	3	2	(²)	(²)	(²)
Rented.....	3,976	1,716	858	35,868	10,273	5,348	25.6	10.6	7.5
Electric.....	4,976	1,716	858	35,435	10,068	5,281	25.3	10.3	7.4
Other.....				433	205	67	0.3	0.2	0.1
Electric.....	4,957	2,324	955	54,605	23,780	7,887	100.0	100.0	100.0
Rented.....	3,976	1,716	858	35,435	10,068	5,281	64.9	42.4	67.0
Generated by establishments reporting.....	981	608	127	19,170	13,692	2,606	35.1	57.6	33.0

¹ Not reported separately.

² Less than one-tenth of 1 per cent.

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TABLE 18.—FUEL CONSUMED, FOR SELECTED INDUSTRIES AND FOR CITIES: 1910.

INDUSTRY AND CITY.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
	Anthracite ¹ (tons, 2,240 pounds).	Bituminous (tons, 2,000 pounds).				
All Industries.....	1910.. 44,433	478,734	37,400	3,163,152	0,108	40,523,914
	1914.. 1,032	420,745	29,870	224,575	(2)	24,078,701
Per cent of increase.....		11.4	25.2	1312.6	(2)	68.3
Brick and burnt-clay ballast.....		27,587		11,138		1,004,706
Cars and general shop construction and repairs by steam-railroad companies.....	1	9,374	94	47,030		1,160,048
Cement.....		86,156		5,413		2,300,000
Coke, not including gas-house coke.....		17,848				
Flour-mill and gristmill products.....	50	23,504		54,952	1,192	259,682
Foundry and machine-shop products.....	113	923	4,703	12,817	904	400,901
Glass.....	992	10		3,042	167	2,332,616
Ice, manufactured.....		33,460		69,916	343	1,593,013
Oil and cake, cottonseed.....	1,566	40,372		32,454	2,052	394,026
Petroleum, refining.....		91,738	482	2,632,184	573	11,847,807
Slaughtering and meat packing.....		5,238		241,362	24	512,080
Smelting and refining, zinc.....	41,228	102,005	31,353		110	15,520,316
All other industries.....	483	34,429	777	52,844	3,653	1,962,144
Total for cities.....	111	26,367	3,524	534,836	1,816	3,670,612
ARDMORE.....	30	302	125	60,632	615	142,404
BARTLESVILLE.....	24	180	126			503,374
CHICKASHA.....	4	3,244		35,116	139	1,711
ENID.....		2,553	134	82,786	201	160,174
GUTHRIE.....		4		7,450	10	81,236
MCALISTER.....		2,875				20,460
MUSKOGEE.....		0,669	342	103,272	91	325,353
OKLAHOMA CITY.....	13	0,892	675	167,922	202	885,420
OKMULGEE.....	26	3	360	44,356	125	642,443
SAPULPA.....					17	252,813
SHAWNEE.....	4	2,118	214	7,634	13	198,585
TULSA.....	10	1,526	1,548	25,068	463	447,034

¹ Includes some semianthracite coal.² Included in figures for fuel oils.

SPECIAL STATISTICS.

For a number of important industries the Census Bureau collects, by means of special schedules, certain details which do not appear on the general schedule. Data for three of these industries for Oklahoma are here presented.

Petroleum, refining (Table 19).—Measured by value of products, this industry, which in 1909 was eleventh in the state, and third in 1914, now holds first rank, with products constituting in value 37.5 per cent of the total for all manufacturing industries. Among the states it ranks fifth, being exceeded only by New Jersey, Texas, California, and Pennsylvania, in the order named. In 1914 the state ranked eighth in the petroleum refining industry. Table 19 gives the statistics in detail for 1919 in comparison with 1914 and 1909.

The total production of refined oils in 1919, the same including gasoline and naphthas, fuel oils, illumi-

nating oils, and lubricating oils, was 33,200,145 barrels of 50 gallons as compared with 8,610,533 barrels in 1914, and 792,682 in 1909.

The figures show a quantity increase from 1914 to 1919 of 286 per cent. The ratio increase from 1909 to 1914 was somewhat higher on account of the relatively small production in 1909. Of the total production of refined oils in 1919, fuel oils constituted 49.1 per cent, gasoline and naphthas 33.4 per cent, illuminating oils 15.8 per cent, and lubricating oils 1.7 per cent. In 1914 the distribution percentages were fuel oils 55.1, gasoline and naphthas 23.5, illuminating oils 20.4, and lubricating oils 1 per cent, whereas in 1909 the percentages were, respectively, 51.6, 15.8, 30.9, and 1.7. Although all classes of refined oils have increased, the distribution percentages show progressive increases for gasoline and naphthas, with decreases for illuminating oils, and for the last semidecade in fuel oils.

TABLE 19.—PETROLEUM, REFINING: 1919, 1914, AND 1909.

	1919	1914	1909		1919	1914	1909
MATERIALS.				PRODUCTS—continued.			
Total cost.....	\$127, 149, 722	\$9, 500, 737	\$575, 473	Lubricating oils:			
Crude petroleum:				Gallons.....	28, 394, 810	4, 379, 550	655, 500
Barrels (42 gallons).....	42, 430, 815	9, 966, 173	1, 078, 280	Value.....	\$1, 317, 900	\$341, 256	\$33, 306
Cost.....	\$108, 741, 915	\$8, 740, 159	\$480, 552	Liquid asphaltic road oils:			
Distillates purchased and rerun:				Gallons.....	3, 042, 000	7, 975, 400	2, 190, 200
Barrels.....	125, 270	(1)	(1)	Value.....	\$137, 557	\$85, 489	\$23, 110
Cost.....	\$177, 622	(1)	(1)	Partly refined oils sold for rerunning:			
Casing-head gasoline purchased:				Gallons.....	13, 575, 730	(1)	(1)
Barrels.....	957, 744	(1)	(1)	Value.....	\$902, 900		
Cost.....	\$7, 230, 675			Lubricating greases:			
Sulphuric acid:				Gallons.....	399, 700	10, 750	
Tons (net).....	17, 541			Value.....	\$88, 225	\$3, 251	
Cost.....	\$433, 205			Paraffin wax:			
Caustic soda:		\$104, 500	\$22, 060	Gallons.....	4, 075, 190	820, 000	\$35, 710
Pounds.....	4, 593, 850			Value.....	\$1, 061, 785	\$35, 340	
Cost.....	\$218, 273			Other special products, value.....	\$135, 723		
Other chemicals, cost.....	\$91, 460			All other products, value.....	\$95, 759	\$327, 064	
Fuller's earth:				EQUIPMENT (CAPACITY, GALLONS).			
Tons.....	5, 702	(1)	(1)	Stills:			
Cost.....	\$181, 423	(1)	(1)	Steam—			
Other filtering material, cost.....	\$12, 103	(1)	(1)	Number.....	233	56	10
Containers and materials therefor, cost.....	\$250, 695	\$34, 932	\$8, 185	Capacity.....	3, 115, 100	1, 023, 300	121, 600
All other materials, cost.....	\$9, 701, 950	\$705, 146	\$35, 670	Fire—			
PRODUCTS.				Number.....	491	125	20
Total value.....	\$150, 673, 453	\$13, 014, 372	\$1, 055, 011	Capacity.....	10, 438, 400	2, 411, 800	279, 300
Naphthas and lighter products:				Pressure—			
Gasoline—				Number.....	78	(1)	(1)
Gallons.....	515, 904, 850	81, 089, 000		Capacity.....	1, 355, 800		
Value.....	\$90, 213, 435	\$5, 824, 332		Agitators:			
Naphtha—				Number.....	138	47	12
Gallons.....	10, 353, 450		6, 258, 050	Capacity.....	4, 060, 000		
Value.....	\$2, 984, 639		\$350, 137	Chilling houses for paraffin:			
Benzine, etc.—				Number.....	8	(1)	(1)
Gallons.....	18, 878, 560	20, 071, 700		Capacity.....	274, 000		
Value.....	\$2, 015, 000	\$1, 074, 237		Filter houses:			
Illuminating oils:				Number.....	10	(1)	(1)
Gallons.....	202, 455, 270	87, 734, 150	12, 255, 450	Capacity.....	413, 200		
Value.....	\$22, 180, 742	\$2, 238, 808	\$369, 662	Hydraulic or other presses:			
Fuel oils:				Number.....	23	(1)	(1)
Distillates—				Capacity.....	190, 700		
Gallons.....	24, 521, 840	19, 152, 000		Storage tanks for:			
Value.....	\$1, 755, 051	\$522, 159		Crude petroleum—			
Gas oils—				Number.....	217	61	33
Gallons.....	110, 833, 350	0, 701, 850	20, 404, 200	Capacity.....	150, 541, 000	28, 826, 000	1, 704, 000
Value.....	\$5, 090, 896	\$151, 608	\$242, 957	Refined petroleum—			
Residual fuel oils—				Number.....	1, 673	412	112
Gallons.....	873, 005, 070	208, 256, 800		Capacity.....	216, 154, 000	48, 791, 000	5, 477, 000
Value.....	\$19, 771, 750	\$2, 350, 808		Fuel oil—			
				Number.....	380	70	(1)
				Capacity.....	88, 735, 000	30, 000, 000	
				Other storage tanks:			
				Number.....	348	138	(1)
				Capacity.....	30, 207, 000	1, 598, 000	

* Included with "All other materials."

* Residuum or tar.

* Figures not available.

Flour-mill and gristmill products (Table 20).—This table shows the kind, quantity, and value of the flour-mill and gristmill products for 1919, 1914, and 1909.

Wheat flour was the product of chief value in 1919 as it was in 1914, forming 74.3 per cent and 58.9 per cent, respectively, of the total value of all products of the industry in the state. The total value of products for the industry increased \$33,155,110, or 198.7 per cent, during the five-year period, and the value of wheat flour \$27,216,114, or 276.8 per cent. There was a comparatively smaller increase, however, in the number of barrels of wheat flour, this being 1,392,049, or 67.1 per cent.

TABLE 20.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILLS): 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$19, 843, 800	\$10, 688, 690	\$19, 144, 475
Wheat flour:			
Barrels.....	3, 464, 289	2, 072, 240	2, 235, 039
Value.....	\$37, 048, 315	\$9, 832, 201	\$10, 959, 367
Corn meal and corn flour:			
Barrels.....	293, 863	266, 284	352, 721
Value.....	\$2, 310, 596	\$904, 438	\$1, 124, 244
Bran and middlings:			
Tons.....	132, 036	83, 282	256, 005
Value.....	\$5, 908, 371	\$1, 060, 005	\$6, 760, 825

TABLE 20.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILLS): 1919, 1914, AND 1909—Continued.

	1919	1914	1909
Feed and offal:			
Tons.....	72, 526	141, 419	285, 005
Value.....	\$1, 148, 441	\$3, 803, 072	\$9, 700, 825
All other cereal products, value.....	\$115, 327	\$10, 533	\$993
All other products, value.....	\$8, 750	\$118, 391	\$209, 641

Printing and publishing (Table 21).—This table gives the number and aggregate circulation per issue of the various classes of publications reported in Oklahoma in 1919, 1914, and 1909:

TABLE 21.—PRINTING AND PUBLISHING: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1919	1914	1909	1919	1914	1909
Total.....	480	506	593	1, 020, 130	1, 081, 633	857, 950
Daily.....	62	59	87	347, 673	242, 305	185, 479
Sunday.....	20	12	11	187, 109	117, 158	77, 526
Weekly.....	382	500	500	352, 255	604, 595	513, 979
Monthly.....	16	25	15	133, 003	217, 875	84, 175

* Includes, in 1919, 5 semiweeklies and 1 triweekly; in 1914, 3 semiweeklies; in 1909, 1 semiweekly.

* Includes, in 1919, 1 semimonthly and 1 quarterly; in 1914, 1 quarterly and 4 semi-monthlies, and in 1909, 3 semi-monthlies.

The increase in circulation of daily newspapers for the five-year period from 1914 to 1919 was 105,368, or 43.5 per cent. Fifty-one of the dailies were published in the afternoon. Their circulation was 217,264, which is 62.5 per cent of the total daily circulation, and an increase of 53,512, or 32.7 per cent, over the afternoon circulation reported for 1914.

The circulation of the Sunday newspapers increased 70,041, or 59.8 per cent, during the five-year period from 1914 to 1919, and they were also more numerous than in 1914.

The disappearance of a number of weekly newspapers and monthly publications and the decreased circulation reported for certain semimonthlies are the causes of the decreases in number and circulation of all publications.

All publications were printed in English with the exception of two German weeklies.

Laundries (Table 22).—Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. Table 22, however, summarizes the statistics for such laundries in the state of Oklahoma for 1919 and 1914.

TABLE 22.—POWER LAUNDRIES: 1919 AND 1914.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1914-1919.
	1919	1914	
Number of establishments.....	99	101	-2.0
Persons engaged.....	2,355	1,632	44.3
Proprietors and firm members.....	117	115	1.7
Salaried employees.....	244	101	141.6
Wage earners (average number).....	1,994	1,416	40.8
Primary horsepower.....	2,191	1,766	24.1
Capital.....	\$2,157,041	\$980,074	118.8
Salaries and wages.....	1,707,624	753,997	126.5
Salaries.....	376,873	100,677	274.3
Wages.....	1,330,751	653,320	103.7
Paid for contract work.....	250	674	-62.9
Rent and taxes.....	79,240	53,508	48.1
Cost of materials.....	875,092	359,743	143.3
Amount received for work done.....	3,561,059	1,669,721	113.3

¹ A minus sign (—) denotes decrease.

Dyeing and cleaning (Table 23).—Statistics for dyeing and cleaning establishments that were operated by mechanical power in 1919 are presented in this table.

TABLE 23.—DYEING AND CLEANING: 1919.

	Number or amount.
Number of establishments.....	50
Persons engaged.....	303
Proprietors and firm members.....	73
Salaried employees.....	35
Wage earners (average number).....	255
Primary horsepower.....	259
Capital.....	\$425,037
Salaries and wages.....	341,552
Salaries.....	43,129
Wages.....	298,423
Paid for contract work.....	3,472
Rent and taxes.....	38,270
Cost of materials.....	152,201
Amount received for work done.....	844,992

Data for dyeing and cleaning establishments are not included in the general tables nor in the totals for manufacturing industries for censuses since 1900. This presentation is the first of its kind that has been made since the census statistics were confined to manufacturing industries as distinguished from the hand trades, household industries, etc.

Custom sawmills and custom gristmills (Table 24).—This table shows, for 1919 and 1909, a summary for custom sawmills and custom gristmills. Statistics for these custom mills are not included in the general tables nor in the totals for manufacturing industries, but are presented by totals in this table.

TABLE 24.—CUSTOM SAWMILLS AND GRISTMILLS: 1919 AND 1909.

	CUSTOM SAWMILLS.			CUSTOM GRISTMILLS.		
	1919	1909	Per cent of increase, ¹ 1909-1919.	1919	1909	Per cent of increase, ¹ 1909-1919.
Number of establishments.....	7	4	—	96	147	-34.7
Persons engaged.....	11	12	—	120	323	-62.8
Proprietors and firm members.....	8	5	—	114	182	-37.4
Salaried employees.....	—	—	—	—	4	—
Wage earners (average number).....	3	7	—	6	137	-95.6
Primary horsepower.....	218	118	84.7	1,510	4,123	-63.4
Capital.....	\$13,808	\$5,325	160.4	\$185,028	\$180,518	2.5
Salaries and wages.....	2,454	1,908	28.6	5,820	12,006	-54.9
Salaries.....	—	—	—	426	—	—
Wages.....	2,454	1,908	28.6	5,820	12,006	-53.3
Rent and taxes.....	91	(3)	—	4,113	(4)	—
Cost of materials ²	910	65	—	350,847	369,149	-5.0
Value of products ³	0,833	4,725	108.1	431,360	465,348	-7.3

¹ A minus sign (—) denotes decrease; percentages are omitted where base is less than 100.

² Figures not available.

³ Includes estimates of all grain ground. Value of products for custom sawmills represents the amount charged for work performed.

GENERAL TABLES.

Table 25 gives, for 1919, 1914, and 1909, for selected industries in the state and in Oklahoma City, the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products; and for the 8 other cities of 10,000 inhabitants or more for which figures are available, similar data for all industries combined.

Table 26 presents, for 1919, for the state as a whole and for Oklahoma City and Tulsa, statistics in detail for each industry for which figures can be shown without disclosing the operations of individual establishments; and for the 10 cities having from 10,000 to 50,000 inhabitants, similar data for all industries combined.

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TABLE 25.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
					Expressed in thousands.								Expressed in thousands.		
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
All industries.....	1919	2,445	29,503	139,083	\$35,026	\$312,606	\$401,363	Glass.....	1919	16	1,692	2,795	\$1,754	\$1,012	\$4,751
	1914	2,618	17,443	97,308	11,011	70,970	102,066		1914	12	1,270	1,291	992	720	2,006
	1909	2,310	13,143	71,139	7,240	34,153	63,082	Ice, manufactured.....	1919	115	831	18,394	944	1,044	3,574
Bread and other bakery prod- ucts.	1919	288	993	1,265	966	5,040	8,129		1914	87	528	15,195	353	402	1,604
	1914	342	987	650	381	1,581	2,774		1909	77	449	10,359	270	307	1,273
	1909	252	418	223	252	969	1,794	Lumber and timber products ²	1919	201	2,493	10,682	2,543	2,914	8,054
Brick and burnt-clay ballast....	1919	22	628	4,452	581	643	1,679		1914	284	2,651	12,799	1,308	1,685	4,114
	1914	23	462	3,231	217	129	496		1909	342	8,175	12,397	1,269	1,487	4,439
	1909	38	730	3,733	378	226	1,029	Marble and stone work.....	1919	48	117	475	160	304	688
Brooms, from broom corn.....	1919	32	110	96	116	346	696		1914	55	142	453	96	122	340
	1914	35	97	115	53	107	227		1909	41	147	257	111	187	418
	1909	23	76	51	43	145	248	Mattresses and spring beds.....	1919	13	99	184	100	378	700
Butter.....	1919	20	301	835	291	6,725	7,718		1914	11	75	259	42	164	265
	1914	14	46	282	28	673	809		1909	7	49	151	30	99	153
	1909	19	62	427	36	928	1,150	Mineral and carbonated waters.....	1919	70	153	393	130	550	1,292
Cars and general shop construction and repairs by electric- railroad companies.	1919	10	138	238	163	112	313		1914	108	122	222	70	210	472
	1914	7	58	125	48	43	98		1909	105	143	183	64	145	455
	1909	4	47	110	30	28	65	Oil and cake, cottonseed.....	1919	51	930	14,343	879	16,332	18,907
Cars and general shop construction and repairs by steam- railroad companies.	1919	12	2,687	2,130	3,778	2,055	6,149		1914	90	851	16,315	360	6,283	7,580
	1914	13	1,718	954	1,155	956	2,270		1909	89	581	10,720	285	4,245	5,187
	1909	8	1,412	957	942	642	1,702	Patent medicines and com- pounds.....	1919	17	64	23	31	219	455
Coffee, roasting and grinding....	1919	7	168	268	132	1,068	2,402		1914	13	18	7	10	25	62
	1914	6	90	171	28	618	757	Paving materials.....	1919	13	295	2,291	218	165	579
	1909	4	18	69	9	429	500		1914	3	100	625	48	23	91
Confectionery and ice cream....	1919	73	381	2,074	362	2,291	3,591	Petroleum, refining.....	1919	66	4,612	24,477	5,910	127,150	150,673
	1914	88	150	1,393	91	542	931		1914	23	516	3,304	432	9,591	19,014
	1909	75	187	42	263	432	984		1909	9	75	231	54	575	1,055
Copper, tin, and sheet-iron work	1919	75	137	42	263	432	984	Printing and publishing ³	1919	510	1,931	2,659	2,832	3,049	10,241
	1914	72	141	94	90	241	774		1914	624	1,619	2,288	1,022	623	4,024
	1909	62	233	46	184	411	790		1909	498	1,698	1,664	1,044	1,004	3,989
Explosives.....	1919	9	76	439	149	549	1,063	Saddlery and harness.....	1919	36	92	50	134	650	1,042
	1914	6	73	477	80	320	538		1914	30	54	39	43	240	368
Flour-mill and gristmill prod- ucts.	1919	227	958	16,573	1,021	44,180	49,844		1909	15	66	26	62	226	375
	1914	253	700	14,050	420	14,367	10,680	Smelting and refining, zinc.....	1919	11	2,272	6,952	3,174	14,550	19,518
	1909	295	842	10,400	473	10,493	19,144		1914	6	1,641	4,143	1,310	7,879	9,939
Food preparations, not else- where specified.	1919	10	40	450	27	242	337		1909	3	596	1,181	343	2,133	3,002
	1914	11	41	470	18	143	220	All other industries.....	1919	222	4,948	21,234	5,700	71,093	81,385
	1909	8	40	550	24	104	175		1914	199	2,783	16,091	1,631	21,309	28,638
Foundry and machine-shop products. ⁴	1919	262	2,394	6,133	3,198	7,713	16,599		1909	297	1,859	10,285	1,097	2,785	5,359
	1914	122	886	2,443	676	1,674	3,173								
	1909	64	467	1,113	320	587	1,371								
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
OKLAHOMA CITY.....	1919	227	4,375	12,453	\$4,395	\$58,644	\$69,971	Lumber, planing-mill products, not including planing mills connected with sawmills. ⁵	1919	7	162	432	\$185	\$395	\$810
All industries.	1914	195	2,226	6,172	1,353	10,232	20,726		1914	5	85	389	60	140	215
	1909	171	1,398	4,132	973	5,140	7,868		1909	8	150	277	106	193	388
Bread and other bakery prod- ucts.	1919	16	400	332	334	1,638	2,845	Patent medicines and com- pounds.....	1919	9	45	11	22	91	191
	1914	16	283	229	130	502	848		1914	9	13	7	9	22	52
	1909	17	85	39	59	214	366		1909	8	11	8	6	9	35
Confectionery and ice cream....	1919	9	129	916	117	689	1,155	Printing and publishing ⁶	1919	52	554	733	698	1,263	3,772
	1914	7	43	883	31	181	315		1914	53	426	505	256	349	1,260
	1909	6	170	1,350	162	7,897	8,763		1909	44	387	347	288	419	1,269
Flour-mill and gristmill prod- ucts.	1919	6	170	1,350	162	7,897	8,763	All other industries.....	1919	111	2,738	8,333	3,151	46,230	51,572
	1914	6	81	1,195	60	2,438	2,746		1914	82	1,162	5,699	725	12,343	14,799
	1909	7	75	1,187	56	1,839	2,087		1909	80	623	2,089	395	2,375	3,502
Foundry and machine-shop products. ⁴	1919	17	177	346	226	471	873	TULSA.....	1919	135	1,749	5,207	2,317	6,657	14,050
	1914	17	133	265	82	227	432	All industries. ⁷	1914	103	845	3,030	684	2,170	3,868
	1909	7	87	185	63	97	222		1909	53	462	1,586	315	874	1,593
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.															
CHICKASHA.....	1919	24	548	1,847	\$693	\$3,376	\$4,599	MCALISTER.....	1919	20	149	1,053	\$188	\$1,060	\$1,529
	1914	29	337	1,033	235	1,277	1,720		1914	33	171	1,111	101	298	574
	1909	30	364	1,488	242	1,285	1,887		1909	29	189	895	101	196	451
ENID.....	1919	51	478	2,247	578	10,851	13,074	MUSKOGEE.....	1919	82	1,218	3,807	1,539	5,376	8,403
	1914	45	283	1,715	175	2,048	2,611		1914	80	828	2,220	560	1,673	2,755
	1909	65	303	1,722	191	1,807	2,453		1909	64	381	1,421	241	1,478	2,276
OUTHWAITE.....	1919	36	244	976	179	2,809	3,330	SAPULPA.....	1919	29	552	1,531	641	1,081	2,197
	1914	30	185	1,211	116	563	853		1914	30	433	670	228	235	604
	1909	34	282	1,281	193	947	1,443	SHAWNEE.....	1919	45	1,114	2,055	1,467	3,554	5,743
									1914	46	845	2,059	533	1,808	2,598
									1909	40	908	1,831	473	1,168	1,941

¹ Includes "automobile repairing," "gas machines," "hardware," "iron and steel, welding," and "structural ironwork, not made in steel works or rolling mills," in all years; and "hardware, saddlery," and "pumps, steam, and other power," in 1919 and 1914.

² Includes "lumber, planing-mill products, not including planing mills connected with sawmills," in all years, and "boxes, wooden packing, except cigar boxes," in 1914 and 1909.

³ Includes "bookbinding and blank-book making" in all years, and "engraving, steel and copperplate, including plate printing," in 1919 and 1914.

⁴ Includes "automobile repairing," "gas machines," "hardware," and "structural ironwork, not made in steel works or rolling mills."

⁵ Includes "boxes, wooden packing, except cigar boxes," in 1914 and 1909.

⁶ Includes "bookbinding and blank-book making" in 1919 and 1909, and "engraving, steel and copperplate, including plate printing," in 1914.

⁷ Comparative statistics by industries for 1914 and 1909 not available.

COMBINED AND SPECIFIED INDUSTRIES: 1919.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.	
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rented. ¹
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	139,983	72,723	6,984	24,133	275	85,868	19,170	1
6,172,107	5,789,084	35,025,942	475,181	663,719	4,945,225	301,539,816	11,056,013	401,362,869	88,767,040	88,767,040	64	29	452	70	1,163	1,006	5	2
6,509	3,783	44,860	.....	2,371	814	87,345	1,311	204,625	115,869	115,869	105	105	105	105	105	105	105	3
24,568	9,485	137,835	.....	14,030	6,316	104,489	5,274	428,072	258,309	258,309	1,041	4	452	70	1,163	1,006	5	3
82,440	58,417	602,889	3,735	62,584	14,905	869,846	32,754	2,108,455	1,206,355	1,206,355	22	22	22	22	22	22	22	4
16,200	6,765	23,748	.....	6,679	334	147,654	658	244,660	96,348	96,348	1,265	30	2	70	1,163	1,006	5	5
67,877	200,164	980,305	53,028	95,135	77,739	4,809,597	140,845	8,128,682	3,088,390	3,088,390	4,452	3,460	503	11	569	32	10	6
106,260	37,936	580,875	.....	365	29,189	235,176	408,207	1,679,129	1,035,688	1,035,688	835	190	70	30	569	32	10	7
15,040	17,777	110,326	200	5,028	3,345	342,681	3,072	695,546	349,893	349,893	68	.....	.....	.....	.....	.....	.....	8
111,379	74,471	290,526	.....	17,757	29,008	6,670,716	53,786	7,718,428	993,926	993,926	.....	.....	.....	.....	.....	.....	.....	9
2,400	500	10,748	.....	1,670	503	11,909	1,516	40,584	33,100	33,100	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	5,500	.....	.....	225	2,034	490	11,600	8,206	8,206	.....	.....	.....	.....	.....	.....	.....	11
2,400	500	11,248	.....	1,370	281	5,975	1,055	34,934	24,934	24,934	.....	.....	.....	.....	.....	.....	.....	12
15,900	6,475	102,973	.....	.....	1,542	108,272	4,118	312,753	200,363	200,363	238	.....	100	.....	138	.....	.....	13
218,618	80,600	3,777,544	.....	.....	3,382	1,859,992	195,108	6,149,067	4,063,967	4,063,967	2,130	415	866	.....	848	50	14	14
.....	.....	15,420	.....	600	1,058	32,248	462	60,286	36,578	36,578	44	.....	.....	.....	44	.....	.....	15
3,000	7,143	132,308	.....	7,002	42,223	1,958,726	9,291	2,401,791	433,774	433,774	298	.....	.....	.....	298	.....	.....	16
86,916	45,774	362,344	.....	31,774	61,751	2,206,403	84,940	3,590,714	1,290,275	1,290,275	2,074	1,300	48	7	721	70	17	16
115,015	75,951	358,934	.....	19,455	20,939	960,331	5,937	1,844,999	378,731	378,731	211	.....	.....	.....	211	.....	.....	18
28,188	49,734	135,934	.....	12,310	21,812	1,246,102	70,000	2,245,102	920,544	920,544	1,893	1,300	48	7	610	70	19	18
88,837	29,717	262,717	2,006	15,008	6,140	427,853	4,074	883,820	551,899	551,899	42	.....	.....	.....	35	.....	.....	20
28,125	10,730	140,013	.....	5,454	41,616	537,048	11,477	1,063,310	514,785	514,785	439	439	.....	.....	405	.....	.....	21
88,089	15,373	1,021,017	3,800	5,605	726,115	43,812,380	307,766	49,843,800	5,663,705	5,663,705	10,573	7,660	30	5,007	233	3,699	1,031	22
428,717	374,804	27,265	.....	3,206	1,604	235,730	6,481	337,357	95,140	95,140	456	325	80	.....	81	.....	.....	23
6,016	12,748	10,577	.....	3,026	279	77,410	2,345	121,931	42,170	42,170	63	50	.....	.....	13	.....	.....	24
.....	.....	10,678	.....	240	1,325	158,320	4,136	215,426	52,070	52,070	393	275	.....	50	68	.....	.....	25
618,840	248,960	2,382,175	10,260	21,267	525,097	5,970,461	270,428	13,509,544	7,250,655	7,250,655	4,829	494	895	.....	3,440	80	26	26
15,047	21,285	385,563	4,600	1,214	33,561	179,096	400,760	1,085,624	878,548	878,548	1,879	220	470	.....	689	80	27	27
76,428	4,280	108,858	.....	1,200	179,096	400,760	9,744	1,242,063	742,459	742,459	156	.....	25	.....	131	.....	.....	28
308,081	104,195	1,580,510	5,275	18,630	290,383	4,300,034	214,530	9,066,117	5,141,883	5,141,883	2,775	224	399	.....	2,152	.....	.....	29
58,294	20,250	247,238	304	223	22,057	381,381	20,694	904,840	493,765	493,765	619	50	1	.....	468	.....	.....	30
4,800	4,000	46,148	.....	3,360	236	82,330	1,645	170,405	88,421	88,421	162	.....	.....	.....	162	.....	.....	31
3,600	3,600	10,974	.....	1,480	120	43,605	784	78,439	34,150	34,150	67	.....	.....	.....	67	.....	.....	32
1,200	400	20,174	.....	1,880	116	38,834	861	91,966	52,271	52,271	95	.....	.....	.....	95	.....	.....	33
224,012	60,800	1,753,686	.....	85	63,291	1,007,033	304,362	4,760,844	2,838,549	2,838,549	2,795	350	1,950	.....	495	977	34	34
.....	1,600	2,734	.....	2,340	108	4,228	280	18,561	15,343	15,343	1	.....	.....	.....	1	.....	.....	35
267,828	78,322	944,215	4,406	4,125	168,141	379,489	664,586	3,574,431	2,530,856	2,530,856	18,394	14,280	725	2,261	1,128	790	36	36
1,300	858	32,747	225	3,758	905	22,344	1,678	99,033	75,011	75,011	13	.....	.....	.....	13	.....	.....	37
160,097	66,263	1,937,871	215,739	1,857	187,054	1,243,547	68,227	4,908,863	8,892,079	8,892,079	8,829	8,006	687	90	16	30	1,020	38
157,350	66,955	604,064	43	8,227	74,509	1,570,987	30,830	3,149,868	1,648,051	1,648,051	1,853	470	.....	81	1,302	290	39	39
18,781	15,166	160,275	500	3,443	3,887	293,039	10,615	687,591	383,337	383,337	475	100	.....	148	227	8	40	40
11,050	15,166	86,908	500	2,738	2,051	180,557	6,797	425,141	237,787	237,787	265	.....	.....	108	157	8	41	41
7,731	.....	73,367	.....	705	1,236	118,082	3,818	262,450	146,550	146,550	210	100	.....	40	70	.....	.....	42
25,404	16,058	99,822	.....	6,932	13,048	373,070	4,970	700,368	322,528	322,528	184	.....	.....	48	136	.....	.....	43
43,248	20,301	130,295	1,200	12,038	43,768	537,840	12,519	1,292,096	741,737	741,737	303	18	2	75	1	297	3	44
290,562	71,178	879,095	5,625	5,381	275,434	15,976,402	360,741	18,907,312	2,576,180	2,576,180	14,343	12,036	1,219	.....	1,088	139	45	45
18,120	24,596	24,300	.....	1,463	536,439	8,187	680,622	136,996	572	572	.....	.....	.....	.....	572	.....	.....	46
18,514	68,551	30,809	1,500	4,165	5,599	218,450	900	454,577	235,227	235,227	28	.....	.....	1	22	.....	.....	47
.....	5,666	1,500	.....	2,526	236	17,557	91	42,089	24,421	24,421	1	.....	.....	1	.....	.....	.....	48
18,514	68,551	25,143	.....	1,639	5,363	209,893	809	412,503	210,806	210,806	22	.....	.....	.....	22	.....	.....	49
54,066	51,621	217,721	.....	17,167	5,087	121,033	44,022	578,925	413,870	413,870	2,291	1,820	.....	281	190	.....	.....	50
3,800	2,105	6,890	.....	1,320	1,640	75,514	232	104,712	28,966	28,966	1	.....	.....	.....	1	.....	.....	51
1,029,943	2,023,780	6,906,664	27,784	22,060	1,188,857	122,435,303	4,714,359	160,673,458	23,623,786	23,623,786	24,477	9,328	5,524	3,523	6,102	1,718	52	52
12,410	7,100	40,883	.....	3,300	2,004	10,222	2,183	98,930	86,525	86,525	21	.....	.....	.....	21	.....	.....	53
222,363	346,041	593,563	35,064	69,821	19,839	833,043	24,862	2,507,449	1,649,544	1,649,544	513	.....	.....	3	508	2	54	54
217,192	346,041	680,423	15,145	68,581	19,709	831,507	24,105	2,443,684	1,583,072	1,583,072	508	.....	.....	8	503	2	55	55
.....	.....	20,819	.....	.....	.....	250	.....	31,800	31,550	31,550	.....	.....	.....	.....	.....	.....	.....	56
5,171	.....	13,146	.....	840	130	1,286	757	29,922	29,922	29,922	5	.....	.....	.....	5	.....	.....	57
403,295	545,179	1,723,638	102,889	140,830	84,105	2,095,231	84,683	7,704,823	5,521,909	5,521,909	2,136	.....	.....	385	11	1,740	1	58
141,432	326,596	669,993	3,295	43,410	30,637	1,200,108	21,505	3,631,898	2,404,287	2,404,287	684	.....	.....	7	677	.....	.....	59
238,553	201,680	981,033	11,111	92,095	51,490	862,997	61,688	3,785,652	2,300,997	2,300,997	1,421	.....	.....	378	11	1,032	1	60
23,310	10,903	47,607	88,513	4,425	1,978	29,128	1,490	287,243	256,625	256,625	31	.....	.....	.....	31	.....	.....	61

No figures given for reasons stated under "Explanation of terms."

Same number reported for one or more other months.

Same number reported throughout the year.

MANUFACTURES—OKLAHOMA.

TABLE 26.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.		
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total	16 and over.			Under 16.	
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.		Male.	Female.
								Maximum month.	Minimum month.						

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

1	Rubber tires, tubes, and rubber goods, not elsewhere specified.	8	67	.....	9	25	7	26	Oc	71	Ja ^a	8	65	36	20	.....	Dollars, 619,444
2	Saddlery and harness.	36	153	41	11	6	3	92	Se	115	Fe	67	111	107	3	1	418,153
3	Shirts.	4	89	2	4	11	3	69	No	111	Ja	52	104	6	85	3	129,431
4	Signs, other than electric.	3	10	1	2	.....	.....	7	Je ^a	10	Ja	3	6	6	.....	.....	12,402
5	Smelting and refining, zinc.	11	2,410	.....	47	66	25	2,272	Ja	2,956	Jy	1,972	2,446	2,445	1	.....	12,045,470
6	Tobacco, cigars.	18	111	21	2	1	.....	87	De	104	Ap	73	106	36	70	.....	72,733
7	Wirework.	3	7	3	.....	.....	.....	4	Jy	6	Ja ^a	2	3	3	.....	.....	7,386
8	All other industries*	101	5,418	63	192	433	169	4,561	.....	.....	.....	.....	.....	.....	.....	.....	27,001,108

*All other industries embrace—	Boxes, set-up paper boxes.	1	Charcoal, not including production in the lumber and wood distillation industries.	3	Cordials and flavoring sirups.	1
Agricultural implements.	Boxes, wooden packing, except cigar boxes.	2	Chemicals.	2	Druggists' preparations.	4
Artificial limbs.	Buttons.	1	Clothing, men's.	2	Electroplating.	1
Automobiles.	Canning and preserving, fruits.	1	Coffins, burial cases, and undertakers' goods.	1	Engines, steam, gas, and water.	1
Bags, other than paper, not including bags made in textile mills.	Carpets, rag.	2	Coke, not including gas-house coke.	1	Engraving, steel and copperplate, including plate printing.	1
Baking powders.	Carriage and wagon materials.	1	Cooperage, hogsheads and barrels.	1	Gas and electric fixtures.	1
Bone and carbon black.	Cars, steam-railroad, not including operations of railroad companies.	1	Cordage and twine.	1	Gas, illuminating and heating.	2
Bookbinding and blank-book making.	Cement.	2			Gas machines.	1
Boots and shoes.					Glass, cutting, staining, and ornamenting.	1

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

1	OKLAHOMA CITY—All industries.	227	5,806	159	292	707	273	4,375	De	4,662	Fe	3,983	4,670	3,804	862	3	1	29,371,247
2	Automobile bodies and parts.	7	66	6	3	4	2	51	Se	58	Ja	39	46	44	2	.....	.....	55,478
3	Automobile repairing.	3	43	1	4	3	2	38	Au	41	Mh	34	38	38	.....	.....	.....	45,180
4	Bread and other bakery products.	16	496	18	9	43	26	400	De	472	Jy	345	470	271	199	.....	.....	1,006,064
5	Brooms, from broom corn.	4	85	7	4	7	2	65	Se	73	Mh	47	68	63	5	.....	.....	110,740
6	Confectionery and ice cream.	9	166	5	12	18	2	129	Se	189	Ja	74	153	77	76	.....	.....	917,242
7	Copper, tin, and sheet-iron work.	7	55	10	5	1	1	38	Ap ^a	42	No ^a	34	35	35	.....	.....	.....	82,444
8	Flour-mill and gristmill products.	6	228	1	24	24	9	170	No	197	My	146	187	187	.....	.....	.....	3,839,812
9	Food preparations, not elsewhere specified.	6	29	3	2	3	3	18	Se	24	No	10	22	12	10	.....	.....	44,200
10	Foundry and machine-shop products.	11	132	6	17	4	4	101	Se	132	Fe	76	121	121	.....	.....	.....	371,183
11	Ice, manufactured.	4	76	.....	6	12	3	55	Au	71	Ja ^a	44	64	64	.....	.....	.....	589,295
12	Lumber, planing-mill products, not including planing mills connected with sawmills.	7	210	2	22	16	8	162	Se	188	Ja	116	187	187	.....	.....	.....	740,430
13	Mattresses and spring beds.	4	70	.....	10	3	2	55	De	67	Ja	45	67	59	8	.....	.....	218,942
14	Mineral and carbonated waters.	5	25	4	2	3	.....	16	Jy ^a	24	Ja	10	9	9	.....	.....	.....	122,052
15	Patent medicines and compounds.	9	68	10	3	6	4	45	De	63	Ja ^a	41	63	7	56	.....	.....	117,195
16	Printing and publishing, book and job.	34	401	30	34	48	25	264	Ap ^a	271	Ja	255	264	194	70	.....	.....	607,079
17	Printing and publishing, newspapers and periodicals.	18	551	9	26	172	54	290	Oc ^a	323	Mh	259	311	272	38	1	.....	1,286,071
18	All other industries*	78	3,100	47	109	340	126	2,478	.....	.....	.....	.....	2,665	2,164	398	2	1	19,218,901

*All other industries embrace—	Bookbinding and blank-book making.	1	Chemicals.	2	Electroplating.	1
Agricultural implements.	Boxes, set-up paper boxes.	1	Cleausing preparations.	2	Engraving, steel and copperplate, including plate printing.	1
Artificial limbs.	Boxes, wooden packing, except cigar boxes.	1	Clothing, men's.	1	Furniture, store and office fixtures.	2
Artificial stone products.	Butter.	2	Coffee, roasting and grinding.	3	Gas, illuminating and heating.	1
Automobiles.	Buttons.	1	Coffins, burial cases, and undertakers' goods.	1	Gas machines.	1
Awnings, tents, and sails.	Cars and general shop construction and repairs by electric-railroad companies.	1	Cooperage, hogsheads and barrels.	1	Hand stamps.	1
Bags, other than paper, not including bags made in textile mills.			Cordials and flavoring sirups.	1	Hardware, builders'.	1
Baking powders.			Druggists' preparations.	2		

^a Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

^b Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.		Value of products.	Value added by manufacture.	Primary horsepower.				
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.			
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Rent- ¹
														Electric horsepower generated in establishments reporting.

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.						
9,915	18,205	26,543		2,503	5,182	100,833	1,427	207,725	105,461	164	125	23	13			1
34,142	9,979	133,685		15,478	7,218	647,182	2,747	1,342,107	392,178	50		2	48			2
12,757	38,757	39,935		3,140	8,623	384,555	534	572,757	187,767	19			19			3
2,765		13,322		1,507	2,440	5,934	200	31,376	25,242	3		2	1			4
167,682	133,630	3,174,486		242,101	12,743,825	1,803,153	19,517,593	4,067,588	6,952	3,045	5	1,315	1,687	2,545		5
2,700	2,030	63,482		2,488	24,034	143,782	1,590	285,053	120,711	2			2			6
604,948	795,843	5,333,183	4,133	225	255	9,004	81	21,970	12,885	1			1			7
				20,890	951,120	63,501,710	1,309,898	79,128,557	9,316,973	20,245	7,998	4,575	7,672	9,029		8

Grease and tallow, not including lubricating greases.	1	Mirrors, framed and unframed, not elsewhere specified.	1	Poultry, killing and dressing, not done in slaughtering and meat-packing establishments.	3	Structural ironwork, not made in steel works or rolling mills.	2
Hardware, builders.	2	Models and patterns, not including paper patterns.	2	Pumps, steam and other power.	2	Sulphuric, nitric, and mixed acids.	1
Hardware, saddlery.	2	Musical instruments and materials, not elsewhere specified.	1	Roofing materials.	2	Vinegar.	1
House-furnishing goods, feather pillows.	1	Optical goods.	2	Show cases.	1	Wall plaster and composition flooring.	4
Jewelry.	2	Paints.	1	Slaughtering and meat packing.	5	Washing machines and clothes wringers.	1
Lime.	2	Peanuts, grading, roasting, cleaning, and shelling.	2	Smelting and refining, lead.	1	Window and door screens and weather strips.	1
Looking-glass and picture frames.	1	Photographic apparatus.	1	Stoves and ranges.	1	Wood preserving.	1
Minerals and earths, ground or otherwise treated.	2			Stoves, gas and oil.	2	Wood, turned and carved.	1

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

920,316	1,372,101	4,895,192	93,941	162,300	1,119,800	58,023,514	620,400	69,970,783	11,326,614	12,453	6,835	100	144	5,374	3,106	
3,948	5,308	60,065		6,400	2,242	57,770	1,324	157,901	88,298	29				29		2
7,540	6,400	49,643		4,725	824	39,729	1,222	123,429	87,478	25				25		3
16,910	107,320	333,600	820	8,150	46,774	1,605,007	30,475	2,845,185	1,206,704	332	30			302		4
10,690	16,277	66,937		2,403	2,131	183,304	1,103	365,526	181,119	30				30		5
45,479	30,078	117,467		4,535	19,042	647,603	41,057	1,154,844	465,354	916	765			151	70	6
8,842	2,224	58,590		2,455	1,171	87,492	453	1,184,132	96,237	9				9		7
75,013	48,969	102,131		606	115,418	7,812,488	54,565	8,752,040	885,596	1,350	950			406	163	8
3,160	7,700	10,869		2,210	188	82,140	1,363	113,058	35,146	16				16		9
41,775	7,637	125,414		6,032	4,011	177,548	10,488	440,637	252,801	265			35	230		10
15,200	8,770	60,740		8,150	39,403	75,703	75,703	264,342	149,236	1,545	1,360	100		85	125	11
60,214	32,351	185,461		3,505	39,484	383,828	6,541	809,724	414,355	432	130			252	280	12
18,004	10,538	53,716		4,770	10,616	181,607	2,416	370,776	186,753	104			40	64		13
6,068	5,400	21,750		856	7,865	121,345	2,530	216,185	92,310	36				36		14
6,207	32,555	22,110		2,369	5,151	90,273	559	191,288	100,456	11				11		15
138,530	291,416	329,891	27,990	32,727	10,191	495,078	12,189	1,400,474	902,207	267				267		16
113,461	193,816	367,935	61,535	36,810	14,291	745,023	10,629	2,362,773	1,607,121	466				466		17
352,434	566,282	2,808,838	3,590	42,901	831,642	45,205,658	366,613	50,198,214	4,555,943	6,020	3,550		69	3,001	2,453	18

House-furnishing goods, feather pillows.	1	Musical instruments and materials, not elsewhere specified.	1	Petroleum, refining.	2	Slaughtering and meat packing.	1
Jewelry.	1	Oil and cake, cottonseed.	1	Photo-engraving.	2	Stoves, gas and oil.	1
Marble and stone work.	3	Oil, mineral.	2	Rubber tires, tubes, and rubber goods, not elsewhere specified.	6	Structural iron work, not made in steel works or rolling mills.	1
Mirrors, framed and unframed, not elsewhere specified.	1	Optical goods.	1	Saddlery and harness.	1	Vinegar.	1
Models and patterns, not including paper patterns.	1	Paints.	1	Shirts.	1	Window and door screens and weather strips.	1
		Paving materials.	1	Show cases.	1	Wire work.	2
		Perfumery and cosmetics.	2	Signs, other than electric.	2		

¹Same number reported for one or more other months.

MANUFACTURES—OKLAHOMA.

TABLE 26.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.						

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

1	TULSA—All industries.....	135	2,454	99	181	838	87	1,749	Se	1,941	Fe	1,433	2,000	1,868	120	4	10	Dollars. 12,620,091
2	Artificial stone products.....	9	32	9	3	1	.....	19	Se	22	Fe	16	23	23	.....	.....	.....	42,856
3	Automobile bodies and parts.....	6	42	5	3	.....	2	32	Mh	33	Ja	28	33	29	4	.....	.....	57,837
4	Automobile repairing.....	9	95	11	5	2	.....	77	Se	89	Ja	70	78	78	.....	.....	.....	58,179
5	Bread and other bakery products.....	8	110	5	8	22	6	69	De	88	Fe	54	88	79	9	.....	.....	397,597
6	Confectionery and ice cream.....	8	77	9	7	6	.....	55	Je	66	Ja	38	62	36	26	.....	.....	455,899
7	Copper, tin, and sheet-iron work.....	7	32	12	3	1	2	34	Jy	40	Fe	26	39	37	2	.....	.....	124,651
8	Foundry and machine-shop products.....	18	763	3	59	58	13	630	No	761	Fe	531	764	764	.....	.....	.....	8,026,870
9	Ice, manufactured.....	3	152	.....	11	6	1	134	Au	214	Ja	73	146	145	1	.....	.....	712,528
10	Lumber, planing-mill products, not including planing mills connected with sawmills.....	8	221	3	14	26	3	175	Au	233	Ja	125	199	169	.....	.....	.....	434,306
11	Marble and stone work.....	4	26	4	2	.....	.....	20	Se	30	Fe	14	22	22	.....	.....	.....	44,464
12	Mineral and carbonated waters.....	5	28	4	3	4	.....	17	Je	25	Ja	10	14	14	.....	.....	.....	90,167
13	Printing and publishing, book and job.....	10	123	12	13	7	3	88	De	102	Ja	83	95	78	17	.....	.....	323,841
14	Printing and publishing, newspapers and periodicals.....	7	424	5	22	155	44	198	My	211	Se	191	193	158	35	.....	.....	743,726
15	All other industries*.....	27	309	17	28	50	13	201	.....	.....	.....	.....	244	204	26	4	10	1,120,671

*All other industries embrace—
Awnings, tents, and sails..... 3
Brooms, from broom corn..... 1

Cars and general shop construction and repairs by electric-railroad companies..... 2

Cleansing preparations..... 1
Coffee, roasting and grinding..... 1
Engines, steam, gas, and water..... 1

Flour-mill and gristmill products..... 2
Furniture, store and office fixtures..... 1
Glass, cutting, staining, and ornamenting..... 1

CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

1	ARDMORE.....	35	476	38	51	67	15	305	Oc	380	Fe	230	354	326	27	1	.....	5,017,216
2	BARTLESVILLE.....	32	327	32	24	17	8	246	Se	274	Fe	199	270	259	11	.....	.....	1,987,827
3	CHICKASHA.....	24	625	18	34	15	10	548	Oc	627	My	478	589	574	12	3	.....	1,960,427
4	ENID.....	51	654	33	53	58	32	478	Se	576	Ja	388	510	445	65	.....	.....	5,197,530
5	GUTHRIE.....	36	341	38	19	20	20	244	Au	278	My	197	254	195	58	1	.....	806,006
6	MCALISTER.....	20	207	13	21	16	8	149	Au	197	Mh	91	178	167	10	1	.....	676,232
7	MUSKOGEE.....	82	1,560	72	62	142	60	1,218	De	1,353	Ja	1,124	1,355	1,260	94	1	.....	5,301,514
8	OKMULGEE.....	20	577	24	30	48	20	455	Jy	500	Ja	378	504	475	26	.....	.....	8,464,128
9	SAPULPA.....	29	644	30	28	18	16	532	My	618	Ja	501	597	564	32	1	.....	1,442,600
10	SHAWNEE.....	45	1,287	39	57	57	20	1,114	No	1,296	My	633	1,285	1,175	105	6	.....	2,121,444

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-holt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horse power generated in establishments reporting.	
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rented. ¹
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

Dollars. 545,704	Dollars. 471,876	Dollars. 2,316,644	Dollars. 59,885	Dollars. 90,184	Dollars. 419,495	Dollars. 6,372,475	Dollars. 284,590	Dollars. 14,050,073	Dollars. 7,393,008	5,207	1,205	894	3,108	151	1						
5,400	300	19,240	.....	1,600	329	40,679	1,043	90,804	54,582	29	.....	6	23	.....	2			
8,400	1,745	49,807	.....	4,920	2,140	70,449	1,057	166,724	95,218	32	.....	.....	32	.....	3		
26,000	3,000	73,203	.....	6,780	746	76,380	3,217	224,402	144,799	72	.....	3	69	.....	4			
9,751	39,155	79,361	46,286	11,519	4,577	420,011	11,013	700,805	263,781	187	.....	.....	187	.....	5			
14,973	7,849	53,454	.....	8,039	4,344	304,481	4,199	445,510	136,830	118	.....	.....	118	.....	6		
6,207	2,822	52,113	.....	2,385	1,538	73,291	510	196,892	123,091	2	.....	.....	2	.....	7		
241,719	105,511	904,933	.....	8,418	312,029	2,795,582	130,547	6,069,577	3,743,448	2,185	120	422	1,043	80	8					
29,824	8,628	132,351	.....	.....	29,062	32,875	85,562	495,725	377,288	1,233	720	410	103	61	9				
42,628	52,679	216,205	.....	1,775	17,991	430,581	14,177	844,744	390,986	400	.....	25	375	.....	10			
4,731	.....	33,247	.....	885	250	73,727	357	154,376	80,292	32	.....	.....	32	8	11		
6,240	4,800	19,147	.....	2,050	7,399	95,052	1,542	108,078	41,484	70	15	3	52	.....	12				
38,974	12,743	131,076	2,619	19,078	3,819	109,120	5,356	503,226	328,750	85	.....	.....	85	.....	13			
46,225	145,030	340,174	10,980	7,508	15,068	482,822	7,742	1,377,200	880,045	181	.....	.....	181	.....	14			
67,032	87,614	215,404	.....	15,167	19,003	1,331,419	18,268	2,006,501	716,814	581	350	25	206	2	15					
Hand stamps.....	2	Mattresses and spring beds.....	1	Photo-engraving.....	1	Shirts.....	1	Iron and steel, welding.....	1	Pumps, steam and other power....	1	Stoves and ranges.....	1	Looking-glass and picture frames....	1	Patent medicines and compounds....	2	Saddlery and harness.....	1	Wirework.....	1

CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

101,620	62,344	350,136	5,475	14,705	87,489	3,465,606	102,334	4,065,022	1,397,682	1,298	895	85	4	344	25	1
87,985	23,035	335,690	1,096	7,840	39,759	838,775	43,932	1,905,575	1,022,808	752	215	35	.....	502	.....	2
77,858	24,602	993,495	678	8,062	53,738	3,290,588	80,307	4,598,973	1,223,018	1,847	1,025	693	.....	129	230	3
137,805	112,165	577,527	2,837	23,309	90,550	10,071,709	178,874	13,073,072	2,223,020	2,247	1,370	114	.....	763	.....	4
40,062	61,676	178,510	4,400	7,445	18,416	2,754,913	48,074	8,330,365	527,378	970	800	8	.....	108	106	5
45,530	35,532	167,801	.....	6,240	28,020	1,034,345	25,474	1,520,357	400,538	1,053	820	4	.....	220	.....	6
195,962	190,975	1,538,744	10,460	33,290	112,588	8,104,887	271,180	8,402,888	3,027,312	3,807	2,192	218	.....	1,397	.....	7
81,454	103,742	554,189	.....	7,199	63,752	2,887,368	117,742	3,061,231	980,131	816	95	158	.....	563	36	8
77,232	45,238	640,076	3,069	8,462	37,504	1,099,808	71,137	2,197,083	1,110,038	1,531	545	175	.....	811	.....	9
152,128	84,044	1,467,075	62	13,000	41,534	3,450,216	67,785	5,742,944	2,188,043	2,055	395	651	.....	1,009	.....	10

¹ Same number reported for one or more other months.

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON

FOURTEENTH CENSUS OF THE UNITED STATES
MANUFACTURES: 1919

OREGON

Prepared under the supervision of EUGENE F. HARTLEY, Chief Statistician for Manufactures

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EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census of Hawaii for 1919, like that for 1909, was not confined strictly to manufacturing establishments conducted under the factory system, as distinguished from the neighborhood, hand, and building industries.

The census did not cover establishments which were idle during the entire year or whose products were valued at less than \$500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1919, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city or county, separate reports were secured in order that the figures for each plant might be included in the statistics for the city or county in which it was located. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products different for those covered by the class designation, and, on the other hand, may not represent the total product covered by this designation, because some of this class of product may be made in establishments in which it is not the product of chief value.

Selected industries.—The general tables at the end of this bulletin give the principal facts separately for the industries of the territory. A selection has been made of certain leading industries of the territory for more detailed consideration. Sometimes an industry of great importance has to be omitted because it comprises so few establishments that these detailed presentations would reveal the operations of individual concerns.

Comparisons with previous censuses.—Owing to changes in industrial conditions it is not always possible to classify establishments by industries in such a way as to permit accurate comparison with preceding censuses. At the census of 1909 the figures for kindred industries were combined. This practice has been followed in compiling the statistics for 1919 when placed in comparison with those for 1909 and prior years. The comparative summary for 1919, 1909, and 1899, therefore, does not show separately all the industries given for 1919 in the detailed statement for the territory.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1919 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the manufacturing industries were distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners. In the report for the census of 1899 these five classes were shown according to the three main groups: (1) Proprietors and firm members, (2) salaried officials, clerks, etc., and (3) wage earners. In comparative tables covering the census of 1899 it is of course necessary to group the figures according to the classification that was employed at the earlier censuses.

The number of persons engaged in each industry, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where this date was not a representative day an earlier date was chosen.

In the case of employees other than wage earners the number thus reported for the representative date has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, by sex, without distinction of age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given in certain tables for each separate industry, is not totaled for all industries combined, because, in view of the variations of date, such a total is believed not to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation.

In order to determine as nearly as possible the age distribution of the average number of wage earners for the territory as a whole, the per cent distribution by

age of the wage earners in each industry for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. The percentages thus obtained have been applied to the average number of wage earners for the year in that industry to determine the average numbers 16 years and over, and under 16, employed.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number of wage earners fluctuates from month to month in every industry, and in some cases to a very great extent. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month, and while representing the number according to the pay rolls to whom wages were paid on that date, no doubt represent a larger number than would be required to perform the work in any industry if all were continuously employed during the year.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a few wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital.—The instructions on the schedule for securing data relating to capital were as follows:

"The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises."

These instructions were identical with those employed at the census of 1909. The data compiled in respect to capital, however, at that census, as well as at the preceding census of manufactures, have been so defective as to be of little value except as indicating very general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include certain Federal taxes and state, county, and local taxes. Under "Federal taxes" there are included the internal revenue tax on manufactures (tobacco, beverages, etc.), excise taxes when included in values reported for products, corporation capital stock tax, and corporation income tax, but not the income tax for individual and partnership establishments.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of depreciation or interest, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power generated by the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, fuel oils, gasoline and other volatile oils, and gas—natural and manufactured, and represent the quantity used during the year. As only the principal kinds of fuel are shown, comparison as to the total cost of all fuel is impracticable. A comparison, however, of the total quantities of the several kinds of fuel used in 1919 and 1909 is given.

OREGON.

GENERAL STATISTICS.

General character of the state.—Oregon has a gross area of 96,699 square miles, of which 95,607 represent land surface. The inhabitants of the state in 1900 numbered 413,536; in 1910, 672,765; and in 1920, 783,389. In total population Oregon ranked thirty-fourth among the states in 1920. The number of inhabitants per square mile in 1910 was 7, the corresponding figure for 1920 being 8.2.

In 1920 there were four cities in the state—Astoria, Eugene, Portland, and Salem—having more than 10,000 inhabitants. The combined population of these cities in that year was 300,587, which formed 38.4 per cent of the total for Oregon. Of the total value of the state's manufactured products, 60.4 per cent were reported by these four cities.

Importance and growth of manufactures (Table 1).—The increases in wages, cost of materials, and value of products, from 1914 to 1919, as presented in Table 1, are in a great measure due to the changes in industrial conditions brought about by the World War. The increases in average number of wage earners and horsepower, however, are indicative of a decided growth in the manufacturing activities of the state. The addition of the Federal income tax since 1914 accounts for the large increase in "Rent and taxes."

Statistics for the state, by counties (Table 2).—Figures are not available for comparison of county totals for 1919 with those for prior censuses. Of the 36 counties in the state, Multnomah, containing the city of Portland, reported 58.6 per cent of the total value of products in the state and 49 per cent of the average number of wage earners.

Principal industries, ranked by value of products (Table 3).—The ranking of industries by value of products is not always conclusive as indicating their importance from a manufacturing standpoint. In many instances their ranking would change materially if based upon the average number of wage earners or value added by manufacture.

Persons engaged in manufacturing industries (Table 4).—The age classification of the average number of wage earners in this and other tables is an estimate obtained by the method described in the "Explanation of terms." The classification by sex, for 1919, was reported separately, but for 1914 and 1909 was obtained in the same manner as the distribution by age. Figures for individual industries will be found in Table 31.

Average number of wage earners for selected industries (Table 5).—The industries covered by this table are those which employed 200 or more wage earners in 1919, and for which statistics can be shown without the possibility of disclosing the operations of individual establishments.

Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more (Table 6).—During the census period 1914–1919 all cities show increases in value of products, due largely to the increased value of commodities at the latter period. Portland is by far the most important city in the state and shows an increase during this five-year period of 15,540, or 137.9 per cent, in the average number of wage earners, and \$140,682,706, or 252.6 per cent, in value of products.

Wage earners, by months (Table 7).—The statistics for wage earners in this table are intended to show the steadiness of employment, or the reverse, in accordance with the industrial conditions existing during the several census years.

Wage earners, by months, for selected industries and for cities (Table 8).—In addition to the number of wage earners employed by months, this table gives similar data for males and females for all industries combined for the state and for cities of 10,000 inhabitants or more. The table also shows a number of industries in the state in 1919 employing a considerable proportion of female wage earners.

Prevailing hours of labor (Table 9).—Since 1914 there has been a marked shortening of the working-day in Oregon. In that year only 13.8 per cent of the wage earners were reported in the group "48 and under" as against 89.4 per cent in 1919. In 1914 the "60" and "Over 60" groups constituted 54.9 per cent of the total wage earners, as compared with 3.4 per cent in 1919.

Size of establishments, by average number of wage earners, for selected industries and for cities (Table 10).—The predominance of the number of small establishments, when based on the number of wage earners employed, is evidenced in this table by the fact that of the total number of establishments in the state, 95.5 per cent were in the several classes having fewer than 101 wage earners, while such establishments employed but 35.1 per cent of the total number of such employees. On the other hand, the establishments employing an average of more than 100 wage earners represented only 4.5 per cent of the total manufacturing establish-

MANUFACTURES—OREGON.

ments in the state, but reported 64.9 per cent of the total number of wage earners.

Size of establishments, by value of products (Table 11).—At the censuses of 1909 and 1914, establishments with products valued at "\$100,000 to \$1,000,000" constituted one group, but at the census of 1919 this group was subdivided into "\$100,000 to \$500,000" and "\$500,000 to \$1,000,000." Separate figures for the number of establishments and value of products have been compiled, however, from the returns for 1914. The table, therefore, gives combined figures for these two groups for 1909, and in the case of average number of wage earners and value added by manufacture for 1914.

Size of establishments, by value of products, for selected industries (Table 12).—In the preparation of this table it was necessary in some instances to combine the establishments of one group of the industry with those of some other group of that industry to avoid the possibility of disclosing the operations of individual establishments.

Size of establishments, by value of products, for cities of 10,000 inhabitants or more (Table 13).—This table strikingly illustrates the fact that the number of establishments of itself is no real index of the extent of manufacturing activities.

Character of ownership (Table 14).—The predominance of corporate ownership is clearly brought out in this table. Although corporations owned but 34.5 per cent of the number of establishments in the state in 1919, they reported 86.9 per cent of the average number of wage earners and 87.9 per cent of the total value of products. During the five-year period 1914

to 1919 the average number of wage earners in corporations increased 26,813, or 111.5 per cent, and the value of products \$230,980,628, or 252.8 per cent.

Manufactures, by population groups, in cities of 10,000 inhabitants or more (Table 15).—This table shows that the combined number of establishments in these four cities in 1919 represented 39.2 per cent of the total in the state. They reported in that year 50.9 per cent of the average number of wage earners and 60.4 per cent of the value of products.

Principal industries in Portland (the only city in the state having 50,000 inhabitants or more), with per cent of total for the state (Table 16).—This table includes all industries in the city of Portland, having products of \$1,000,000 and over, for which figures can be shown without disclosing individual operations.

Number and horsepower of types of prime movers (Table 17).—The total horsepower reported in 1919, as compared with that for 1914, shows an increase of 90,124 horsepower, or 42.1 per cent. Of this increase, 36,064 horsepower, or 40 per cent, was owned power, and 54,060, or 60 per cent, rented power. During this five-year period, owned power increased 20.6 per cent and rented power 138.4 per cent.

Fuel consumed (Table 18).—This table shows the principal kinds of fuel used by the manufacturing plants in the state in 1919 and 1914, and gives separately for 1919 the amounts consumed by a number of important industries which use considerable quantities of fuel. There was an increase in the quantities of each of the several kinds of fuel used in 1919 as compared with 1914.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

	MANUFACTURING INDUSTRIES.					PER CENT OF INCREASE. ¹			
	1919	1914	1909	1904	1899	1914-1919	1909-1914	1904-1909	1899-1904
Number of establishments.....	2,707	2,320	2,246	1,602	1,406	16.7	3.3	40.2	13.9
Persons engaged.....	68,005	35,449	34,722	22,018	(2)	91.8	2.1	57.7	.....
Proprietors and firm members.....	2,540	2,189	2,499	1,726	(2)	16.0	-12.4	44.8	.....
Salaried employees.....	6,906	4,431	3,473	1,769	1,143	55.9	27.6	96.3	64.8
Wage earners (average number).....	58,559	28,829	28,750	18,523	14,459	103.1	0.3	55.2	28.1
Primary horsepower.....	304,346	214,222	175,019	81,348	60,005	42.1	22.4	115.1	35.6
Capital.....	\$237,254,736	\$139,500,379	\$89,081,873	\$44,023,548	\$28,359,089	70.1	56.6	102.4	65.2
Salaries and wages.....	95,092,955	20,614,328	23,940,428	13,576,026	8,044,171	257.3	11.1	76.4	68.8
Salaries.....	13,999,171	5,682,751	4,047,494	2,132,514	1,222,160	146.3	40.4	89.8	74.5
Wages.....	81,093,784	20,931,577	19,901,934	11,443,512	6,822,011	287.4	5.2	73.9	67.7
Paid for contract work.....	1,936,402	725,562	576,699	459,571	(2)	166.9	25.8	25.5	.....
Rent and taxes.....	13,703,888	2,135,047	1,418,564	* 688,506	(2)	541.9	50.5	.....	.....
Cost of materials.....	206,206,041	63,257,821	50,552,470	30,596,763	20,788,833	226.0	25.1	65.2	47.2
Value of products.....	366,782,627	109,761,951	93,004,845	55,525,123	36,592,714	234.2	18.0	67.5	51.7
Value added by manufacture.....	160,576,586	46,504,130	42,482,375	24,928,360	15,803,881	245.3	9.5	70.3	57.7

¹ A minus sign (—) denotes decrease.

² Figures not available.

³ Exclusive of internal revenue.

⁴ Value of products less cost of materials.

MANUFACTURES—OREGON.

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TABLE 2.—STATISTICS FOR THE STATE, BY COUNTIES: 1919.

COUNTY.	Number of establishments.	WAGE EARNERS.		Rent and taxes.	Cost of materials.	Value of products.	Value added by manufacture.	Primary horsepower.
		Average number.	Wages.					
The state.....	2,707	58,559	\$81,093,784	\$13,703,868	\$206,206,041	\$366,782,627	\$160,576,586	304,346
Baker.....	63	1,017	1,169,070	72,153	2,453,997	4,454,298	2,000,301	4,809
Benton.....	51	660	749,472	31,640	1,494,804	2,782,202	1,287,398	3,735
Clackamas.....	72	2,206	2,786,664	293,517	4,690,157	10,320,872	5,630,715	48,574
Clatsop.....	111	3,742	5,962,231	357,614	13,873,082	23,790,180	9,923,098	25,613
Columbia.....	73	2,154	2,813,900	272,713	3,402,212	7,525,743	4,123,531	17,521
Coos.....	95	2,661	4,211,776	221,592	4,760,147	11,476,847	6,716,500	26,211
Crook.....	12	38	40,219	1,977	62,408	145,738	83,330	413
Curry.....	18	352	542,454	14,845	575,658	1,227,582	651,024	1,704
Deschutes.....	29	1,359	2,141,375	501,795	1,072,252	5,715,195	4,842,943	4,934
Douglas.....	87	776	1,028,773	25,658	1,466,652	3,087,854	1,621,202	6,021
Gilliam.....	5	8	12,293	1,044	22,715	48,163	25,448	17
Grant.....	22	323	448,445	13,944	265,020	1,052,401	787,381	2,005
Harney.....	14	12	14,851	1,566	57,072	109,971	52,899	279
Hood River.....	23	447	565,175	28,793	877,282	1,687,103	809,821	5,894
Jackson.....	61	345	401,131	26,261	887,404	1,656,661	769,257	1,734
Jefferson.....	7	4	2,991	1,146	40,699	54,249	13,550	200
Josephine.....	24	163	161,918	6,582	244,554	552,698	308,144	905
Klamath.....	69	1,645	2,180,216	245,088	3,483,525	8,287,311	4,893,786	6,669
Lake.....	6	5	4,072	738	88,219	103,844	15,625	120
Lane.....	138	2,414	2,792,430	103,012	3,111,562	8,029,039	4,917,447	10,444
Lincoln.....	25	77	80,587	6,357	350,585	526,713	176,128	708
Linn.....	85	788	823,470	40,286	2,469,792	4,109,466	1,639,674	5,647
Malheur.....	14	34	45,260	4,190	67,984	165,058	97,074	54
Marion.....	170	2,559	3,025,626	346,817	9,093,720	14,735,404	5,641,744	10,915
Morrow.....	14	15	21,528	2,472	75,471	138,546	63,075	163
Multnomah.....	879	28,713	41,313,793	10,309,294	125,716,200	214,932,519	89,216,319	80,593
Polk.....	50	575	796,886	44,002	1,654,055	3,030,645	1,376,590	2,418
Sherman.....	9	22	24,017	1,405	44,047	96,347	52,300	143
Tillamook.....	81	883	1,171,751	89,946	2,794,490	4,825,452	2,030,962	6,911
Umatilla.....	81	460	592,028	86,405	4,841,131	6,318,555	1,477,425	2,870
Union.....	59	1,314	1,778,893	67,955	2,998,103	5,625,771	2,627,668	4,452
Wallowa.....	44	474	648,929	71,925	808,858	1,921,515	1,112,647	3,465
Wasco.....	41	613	684,821	144,616	5,076,048	6,739,460	1,663,412	2,065
Washington.....	68	1,022	1,311,473	199,802	3,697,077	6,246,244	2,549,167	6,196
Wheeler.....	13	23	25,419	856	28,064	82,537	54,473	378
Yamhill.....	94	650	719,277	56,856	3,560,955	5,174,583	1,613,628	3,566

TABLE 3.—PRINCIPAL INDUSTRIES, RANKED BY VALUE OF PRODUCTS: 1919.

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.			Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.
All industries.....	2,707	58,559	100.0	\$366,783	100.0	\$160,577	100.0	Food preparations, not elsewhere specified.....	13	169	0.3	\$4,218	1.1	\$574	0.3
Lumber and timber products.....	625	22,884	39.1	85,348	23.3	53,213	33.1	Condensed milk.....	8	180	0.3	4,180	1.1	927	0.6
Flour-mill and gristmill products.....	116	822	1.4	42,550	11.6	4,748	3.0	Boxes, wooden packing, except cigar boxes.....	20	610	1.0	4,112	1.1	2,001	1.2
Foundry and machine-shop products.....	121	3,265	5.6	21,136	5.8	12,413	7.7	Coffee, roasting and grinding.....	8	106	0.2	3,590	1.0	612	0.4
Slaughtering and meat packing.....	21	772	1.3	15,868	4.3	2,119	1.3	Confectionery and ice cream.....	37	450	0.8	3,466	0.9	1,246	0.8
Shipbuilding, wooden, including boat building.....	30	2,990	5.1	13,778	3.8	6,924	4.3	Printing and publishing, book and job.....	122	567	1.0	3,398	0.9	2,138	1.3
Canning and preserving, fruits and vegetables.....	50	1,720	2.9	12,266	3.3	4,050	2.5	Woolen goods.....	5	808	1.4	3,357	0.9	1,410	0.9
Bread and other bakery products.....	146	1,076	1.8	9,031	2.5	3,322	2.1	Furniture.....	23	895	1.5	3,183	0.9	1,962	1.2
Butter.....	76	349	0.6	8,723	2.4	1,289	0.8	Gas, illuminating and heating.....	11	334	0.6	2,927	0.8	2,109	1.3
Canning and preserving, fish.....	36	476	0.8	6,531	1.8	1,867	1.2	Cheese.....	52	66	0.1	2,854	0.8	310	0.2
Cars and general shop construction and repairs by steam-railroad companies.....	21	2,751	4.7	6,473	1.8	4,019	2.5	Automobile repairing.....	229	727	1.2	2,605	0.7	1,814	1.1
Printing and publishing, newspapers and periodicals.....	224	929	1.6	6,408	1.7	4,764	3.0	Clothing, men's.....	5	481	0.8	2,034	0.6	705	0.4
Structural ironwork, not made in steel works or rolling mills.....	6	1,111	1.9	6,392	1.7	2,544	1.6	Saddlery and harness.....	33	182	0.3	1,931	0.5	993	0.6
Lumber, planing-mill products, not including planing mills connected with sawmills.....	61	1,084	1.9	5,804	1.6	2,526	1.6	Pickles, preserves, and sauces.....	8	148	0.3	1,794	0.5	308	0.2
								Copper, tin, and sheet-iron work.....	63	204	0.3	1,339	0.4	741	0.5
								Mineral and soda waters.....	33	100	0.2	1,083	0.3	422	0.3
								Patent medicines and compounds.....	16	99	0.2	1,064	0.3	484	0.3
								All other industries ¹	479	12,195	20.8	70,337	21.6	38,023	23.7

¹ Among the industries for which statistics can not be shown separately without the possibility of disclosing the operations of individual establishments are seven having products in excess of some for which figures are shown in the table. These industries are as follows: "Bags, other than paper, not including bags made in textile mills"; "cars, steam-railroad, not including operations of railroad companies"; "engines, steam, gas, and water"; "paper and wood pulp"; "shipbuilding, steel"; "tinware, not elsewhere specified"; and "wool pulling."

MANUFACTURES—OREGON.

TABLE 4.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES: 1919, 1914, AND 1909.

CLASS.	Cen- sus year.	Total.	Male.	Fe- male.	PER CENT OF TOTAL.		CLASS.	Cen- sus year.	Total.	Male.	Fe- male.	PER CENT OF TOTAL.	
					Male.	Fe- male.						Male.	Fe- male.
All classes.....	1919	68,005	61,519	6,486	90.5	9.5	Clerks and other subordinate salaried employees.	1919	4,495	2,963	1,532	65.9	34.1
	1914	35,449	32,625	2,824	92.0	8.0		1914	2,990	2,315	675	77.4	22.6
	1909	34,722	31,849	2,873	91.7	8.3		1909	2,253	1,702	551	75.5	24.5
Proprietors and officials.....	1919	4,951	4,810	141	97.2	2.8	Wage earners (average number).....	1919	58,550	53,746	4,813	91.8	8.2
	1914	3,630	3,545	85	97.7	2.3		1914	28,829	26,765	2,064	92.8	7.2
	1909	3,719	3,667	52	98.6	1.4		1909	28,750	26,480	2,270	92.1	7.9
Proprietors and firm members...	1919	2,540	2,463	77	97.0	3.0	10 years of age and over..	1919	58,409	53,046	4,763	91.8	8.2
	1914	2,189	2,117	72	96.7	3.3		1914	28,742	26,728	2,014	93.0	7.0
	1909	2,499	2,453	46	98.2	1.8		1909	28,652	26,406	2,246	92.2	7.8
Salaried officers of corporations...	1919	917	878	39	95.7	4.3	Under 16 years of age.....	1919	150	100	50	66.7	33.3
	1914	537	527	10	98.1	1.9		1914	87	37	50	42.5	57.5
	1909	344	340	4	98.8	1.2		1909	98	74	24	75.5	24.5
Superintendents and managers...	1919	1,494	1,469	25	98.3	1.7							
	1914	904	901	3	99.7	0.3							
	1909	876	874	2	99.8	0.2							

TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS FOR SELECTED INDUSTRIES, WITH PER CENT, BY SEX AND AGE: 1919 AND 1914.

INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.			INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.		
			16 years of age and over.		Under 16 years of age.				16 years of age and over.		Under 16 years of age.
			Male.	Fe- male.					Male.	Fe- male.	
All industries.....	1919	58,559	91.6	8.1	0.3	Foundry and machine-shop products.....	1919	3,265	99.4	0.2	0.4
	1914	28,829	92.7	7.0	0.3		1914	660	100.0	.....	.....
	1909	28,750	91.8	7.8	0.4	Furniture.....	1919	895	94.5	5.5	.....
Automobile repairing.....	1919	727	97.8	1.7	0.6		1914	673	99.1	0.9	.....
	1914	185	99.5	.....	0.5	Gas, illuminating and heating.....	1919	334	100.0	.....	.....
Boxes, wooden packing, except cigar boxes..	1919	610	85.6	14.1	0.3		1914	385	100.0	.....	.....
	1914	327	94.8	4.3	0.9	Lumber and timber products.....	1919	22,884	98.2	1.7	0.1
Bread and other bakery products.....	1919	1,076	63.7	34.9	1.4		1914	12,829	99.6	0.3	(?)
	1914	700	74.8	24.6	0.6	Lumber, planing-mill products, not includ- ing planing mills connected with sawmills.	1919	1,084	95.2	4.6	0.2
Butter.....	1919	349	83.7	16.0	0.3		1914	732	100.0	.....	.....
	1914	260	92.7	7.3	.....	Printing and publishing, book and job.....	1919	567	76.7	21.9	1.4
Canning and preserving, fish.....	1919	476	88.2	11.8	.....		1914	515	83.7	15.1	1.2
	1914	304	90.4	9.6	.....	Printing and publishing, newspapers and periodicals.	1919	929	87.3	10.7	2.0
Canning and preserving, fruits and vege- tables.....	1919	1,720	39.2	58.8	2.0		1914	945	88.0	10.7	1.3
	1914	417	33.6	63.5	2.9	Shipbuilding, wooden, including boat build- ing.	1919	2,990	99.6	0.4	.....
Cars and general shop construction and re- pairs by electric-railroad companies.	1919	230	99.1	0.9	.....		1914	163	100.0	.....	.....
	1914	225	98.7	1.3	.....	Slaughtering and meat packing.....	1919	772	87.4	12.3	0.3
Cars and general shop construction and re- pairs by steam-railroad companies.	1919	2,751	98.4	1.6	.....		1914	442	96.4	3.6	.....
	1914	1,601	99.9	.....	0.1	Structural ironwork, not made in steel works or rolling mills.	1919	1,111	100.0	.....	.....
Clothing, men's ¹	1919	481	14.8	85.0	0.2		1914	161	100.0	.....	.....
Confectionery and ice cream.....	1919	450	41.6	58.4	.....	Woolen goods.....	1919	808	53.5	45.8	0.7
	1914	402	33.1	66.4	6.5		1914	648	61.4	37.7	0.9
Copper, tin, and sheet-iron work.....	1919	204	100.0	.....	.....	All other industries.....	1919	13,024	90.4	9.5	0.2
	1914	212	100.0	.....	.....		1914	5,596	85.8	14.0	0.2
Flour-mill and gristmill products.....	1919	822	97.8	2.2	.....					
	1914	450	100.0	.....	.....				

¹ Not shown separately in 1914.² Less than one-tenth of 1 per cent.

TABLE 6.—AVERAGE NUMBER OF WAGE EARNERS, BY SEX AND AGE, AND VALUE OF PRODUCTS FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

CITY.	AVERAGE NUMBER OF WAGE EARNERS IN MANUFACTURING INDUSTRIES.											VALUE OF PRODUCTS.			
	Total.			16 years of age and over.						Under 16 years of age.					
				Male.			Female.								
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909	1910	1914	1909
Astoria.....	1,404	1,172	.....	1,274	1,125	.....	130	46	.....	.....	1	.....	\$13,398,627	\$4,587,301	.....
Engene.....	534	238	.....	358	187	.....	176	51	.....	.....	.....	.....	2,489,647	810,846	.....
Portland.....	26,813	11,273	12,214	24,143	9,875	10,596	2,633	1,353	1,600	37	45	18	196,380,146	55,697,440	\$46,860,767
Salem.....	1,080	732	597	762	409	452	310	310	144	8	13	1	9,435,070	2,845,844	2,208,031

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TABLE 7.—WAGE EARNERS, BY MONTHS: 1919, 1914, AND 1909.

MONTH.	NUMBER. ¹			PER CENT OF MAXIMUM.			MONTH.	NUMBER. ¹			PER CENT OF MAXIMUM.		
	1919	1914	1909	1919	1914	1909		1919	1914	1909	1919	1914	1909
January.....	55,393	26,154	23,554	88.6	82.8	75.4	July.....	61,965	31,095	30,175	99.2	98.4	97.4
February.....	54,261	26,715	24,833	85.8	84.6	80.2	August.....	62,488	30,505	30,269	100.0	96.6	97.7
March.....	57,708	28,527	26,858	92.4	90.3	86.7	September.....	60,261	29,243	30,978	96.4	92.6	100.0
April.....	59,180	30,806	29,179	94.7	97.5	94.2	October.....	60,641	28,421	30,402	97.0	90.0	98.1
May.....	61,804	31,598	30,302	98.9	100.0	97.8	November.....	58,396	26,631	29,423	93.5	84.0	95.0
June.....	61,122	31,540	30,806	97.8	99.8	99.4	December.....	49,499	24,816	28,416	79.2	78.5	91.7

¹ The figures represent the number employed on the 15th of each month or the nearest representative day. Maximum number indicated by **bold-faced** figures, minimum by *italic* figures.

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

[The month of maximum employment for each industry is indicated by **bold-faced** figures and that of minimum employment by *italic* figures.]

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
All industries.....	58,559	55,393	54,251	57,708	59,180	61,804	61,122	61,965	62,488	60,261	60,641	58,396	49,499	79.2
Males.....	53,748	51,515	50,378	54,207	55,675	58,089	58,128	55,956	56,287	53,856	54,718	53,027	44,776	77.1
Females.....	4,813	3,878	3,873	3,501	3,505	3,735	4,994	6,009	6,201	6,405	5,923	5,369	4,723	53.7
Automobile repairing.....	727	608	617	661	697	723	732	761	798	810	798	770	749	75.1
Boxes, wooden packing, except cigar boxes.....	610	573	487	485	571	563	670	814	826	644	639	576	522	52.9
Bread and other bakery products.....	1,076	1,096	1,045	1,029	1,041	1,023	1,076	1,113	1,102	1,086	1,099	1,126	1,101	91.3
Butter.....	348	292	311	324	358	332	414	398	394	373	338	323	284	88.6
Canning and preserving, fish.....	476	116	130	171	247	557	572	796	940	839	630	523	192	12.2
Canning and preserving, fruits and vegetables.....	1,720	775	362	266	309	497	1,847	2,875	3,004	3,676	3,008	2,423	1,598	7.2
Cars and general shop construction and repairs by electric-railroad companies.....	230	239	228	236	225	221	226	227	227	224	231	237	239	92.5
Cars and general shop construction and repairs by steam-railroad companies.....	2,751	2,678	2,680	2,721	2,648	2,608	2,551	2,639	2,726	2,785	2,855	2,976	3,145	81.1
Clothing, men's.....	481	489	435	398	404	486	429	506	501	464	516	543	603	65.7
Confectionery and ice cream.....	450	401	396	403	430	456	471	450	449	474	494	484	436	79.0
Copper, tin, and sheet-iron work.....	204	153	102	169	185	180	201	234	237	226	248	228	225	61.7
Flour-mill and gristmill products.....	822	855	826	824	785	760	690	658	830	848	895	940	859	68.0
Foundry and machine-shop products.....	3,265	4,856	4,550	4,154	3,555	3,162	3,199	3,234	2,966	2,707	2,441	2,234	2,128	43.7
Furniture.....	895	754	748	777	785	847	899	957	984	973	1,006	1,012	1,016	72.1
Gas, illuminating and heating.....	334	261	287	280	286	288	322	322	345	390	406	407	414	63.6
Lumber and timber products, not including planing mills connected with sawmills.....	22,884	15,787	16,585	18,735	21,720	24,357	24,957	26,074	27,697	26,830	26,314	25,008	20,544	57.0
Printing and publishing, book and job.....	1,084	794	825	830	908	978	1,090	1,232	1,311	1,229	1,303	1,274	1,234	60.6
Printing and publishing, newspapers and periodicals.....	567	567	558	549	551	570	565	554	559	546	581	586	618	88.3
Shipbuilding, wooden, including boat building.....	929	882	877	889	908	921	926	928	929	940	957	992	999	87.8
Slaughtering and meat packing.....	2,990	7,830	6,563	4,882	3,377	3,060	2,531	2,238	1,560	1,471	874	726	988	8.6
Structural ironwork, not made in steel works or rolling mills.....	772	927	881	904	739	732	715	698	726	718	712	744	768	75.3
Textile goods.....	1,111	97	86	930	972	891	685	690	726	651	3,346	2,870	1,388	2.6
Woolen goods.....	808	731	722	701	756	786	805	834	843	909	886	863	855	77.1
All other industries.....	13,024	13,683	13,934	16,412	16,723	16,751	14,549	12,739	11,803	10,448	10,264	10,554	8,448	50.5
<i>Industries showing large proportion of females.</i>														
Bread and other bakery products.....	386	381	374	354	373	353	387	412	403	389	397	419	390	84.2
Canning and preserving, fruits and vegetables.....	1,039	373	93	50	57	162	1,282	2,003	2,111	2,419	1,813	1,324	781	2.1
Clothing, men's.....	409	425	373	334	340	417	355	421	415	399	449	470	510	65.5
Confectionery and ice cream.....	263	238	234	227	251	255	266	244	242	277	299	306	317	71.6
Printing and publishing, book and job.....	124	120	126	128	124	134	128	116	116	116	118	124	129	86.6
Printing and publishing, newspapers and periodicals.....	100	91	94	94	95	95	98	102	104	103	105	109	110	82.7
Woolen goods.....	376	340	331	327	348	370	374	393	396	426	413	396	398	76.8
Total for cities.....	29,831	33,007	31,867	33,789	32,333	32,549	30,917	29,898	28,725	26,699	28,173	26,950	23,065	68.3
Males.....	26,562	30,237	29,257	31,270	29,739	29,837	27,331	25,957	24,694	22,805	24,317	23,442	19,858	63.5
Females.....	3,269	2,770	2,610	2,519	2,594	2,712	3,586	3,941	4,031	3,894	3,856	3,508	3,207	62.5
ASTORIA.....	1,404	1,871	1,658	1,700	1,376	1,474	1,120	1,353	1,640	1,384	1,120	1,125	1,067	54.9
Males.....	1,274	1,769	1,559	1,591	1,253	1,386	981	1,197	1,443	1,233	989	1,015	922	52.1
Females.....	130	102	99	109	123	138	139	156	197	151	131	110	105	50.3
EUGENE.....	534	554	554	373	399	414	755	772	793	660	640	447	447	44.6
Males.....	358	388	293	306	326	338	593	593	426	395	381	372	369	67.6
Females.....	176	66	61	67	73	76	362	363	367	265	259	75	78	16.6
PORTLAND.....	26,813	29,938	29,150	30,991	29,838	29,932	27,840	26,514	24,835	23,130	25,050	23,974	20,564	66.4
Males.....	24,167	27,546	26,792	28,745	27,647	27,535	25,220	23,539	21,950	20,232	21,999	21,114	17,787	61.9
Females.....	2,646	2,392	2,358	2,246	2,191	2,399	2,620	2,975	2,885	2,898	3,051	2,860	2,777	73.6
SALEM.....	1,080	844	705	725	720	729	1,202	1,259	1,457	1,525	1,363	1,404	1,027	46.2
Males.....	763	634	613	628	613	630	812	875	945	945	945	941	780	64.7
Females.....	317	210	92	97	107	99	465	447	582	580	415	463	247	15.8

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TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48.1	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
All industries.....	1919	58,559	11,975	477	39,015	458	1,892	1,829	1,774	239
	1914	28,829	(2)	(2)	3,979	775	6,017	1,324	14,889	995
	1909	28,750	(2)	(2)	3,598	762	3,880	1,030	17,861	1,821
Automobile repairing.....	1919	727	52	6	376	17	223	20	31	2
	1914	185	(2)	(2)	54	1	117	.....	11	2
Boxes, wooden packing, except cigar boxes.....	1919	610	.....	.....	509	28	57	.....	16	.....
	1914	327	(2)	(2)	2	.....	88	91	146	.....
Bread and other bakery products.....	1919	1,076	79	.....	914	8	43	11	21	.....
	1914	700	(2)	(2)	61	191	314	16	101	17
Butter.....	1919	349	1	.....	137	22	73	23	65	28
	1914	260	(2)	(2)	17	6	54	8	83	92
Canning and preserving, fish.....	1919	476	11	.....	221	.....	76	30	129	9
	1914	301	(2)	(2)	14	.....	117	.....	107	63
Canning and preserving, fruits and vegetables.....	1919	1,720	3	.....	724	.....	382	.....	606	5
	1914	417	(2)	(2)	19	19	318	23	34	4
Cars and general shop construction and repairs by electric-railroad companies.....	1919	230	.....	55	173	.....	.....	2	.....	.....
	1914	225	(2)	(2)	1	.....	104	.....	60	.....
Cars and general shop construction and repairs by steam-railroad companies.....	1919	2,751	.....	.....	1,569	.....	.....	1,153	29	.....
	1914	1,601	(2)	(2)	56	.....	1,414	.....	30	101
Clothing, men's.....	1919	481	311	.....	170	.....	.....	.....	.....	.....
Confectionery and ice cream.....	1919	450	9	.....	345	4	10	.....	.....	82
	1914	402	(2)	(2)	31	89	148	98	4	37
Copper, tin, and sheet-iron work.....	1919	204	150	.....	47	.....	1	.....	.....	.....
	1914	212	(2)	(2)	183	4	25	.....	.....	.....
Flour-mill and gristmill products.....	1919	822	.....	.....	399	2	49	166	203	3
	1914	450	(2)	(2)	50	3	14	.....	388	.....
Foundry and machine-shop products.....	1919	3,265	528	.....	2,678	13	44	.....	2	.....
	1914	660	(2)	(2)	86	11	484	12	2	65
Furniture.....	1919	895	7	.....	881	.....	7	.....	.....	.....
	1914	673	(2)	(2)	240	.....	13	119	301	.....
Gas, illuminating and heating.....	1919	334	.....	.....	25	.....	.....	302	.....	7
	1914	385	(2)	(2)	350	.....	19	8	.....	8
Lumber and timber products.....	1919	22,884	18	164	21,992	85	283	6	336	.....
	1914	12,829	(2)	(2)	84	9	870	110	11,756	.....
Lumber, planing-mill products, not including planing mills connected with sawmills.....	1919	1,084	57	.....	968	10	40	.....	9	.....
	1914	732	(2)	(2)	81	33	155	112	351	.....
Printing and publishing, book and job.....	1919	567	31	14	522	.....	.....	.....	.....	.....
	1914	515	(2)	(2)	491	5	19	.....	.....	.....
Printing and publishing, newspapers and periodicals.....	1919	929	87	8	785	32	15	1	.....	1
	1914	945	(2)	(2)	790	37	103	.....	18	2
Shipbuilding, wooden, including boat building.....	1919	2,990	2,409	.....	577	4	.....	.....	.....	.....
	1914	163	(2)	(2)	154	.....	8	.....	1	.....
Slaughtering and meat packing.....	1919	772	12	.....	647	.....	85	12	16	.....
	1914	442	(2)	(2)	9	7	5	14	395	12
Structural ironwork, not made in steel works or rolling mills.....	1919	1,111	1,096	.....	15	.....	.....	.....	.....	.....
	1914	161	(2)	(2)	9	.....	162	.....	.....	.....
Woolen goods.....	1919	808	.....	.....	434	.....	191	.....	183	.....
	1914	648	.....	.....	.....	.....	25	228	397	.....
All other industries.....	1919	13,024	7,108	230	4,807	233	313	103	128	102
	1914	5,596	(2)	(2)	1,197	360	2,291	492	664	592
Total for cities.....	1919	29,831	11,518	312	16,010	296	707	527	330	131
	1914	13,415	(2)	(2)	2,833	668	4,489	627	4,485	313
ASTORIA.....	1919	1,404	461	8	835	4	59	18	19	.....
	1914	1,172	(2)	(2)	91	.....	199	5	847	30
EUGENE.....	1919	534	.....	.....	344	10	112	10	50	8
	1914	238	(2)	(2)	48	12	51	92	32	3
PORTLAND.....	1919	26,813	10,990	304	14,285	282	332	480	8	123
	1914	11,278	(2)	(2)	2,558	629	3,987	386	3,433	280
SALEM.....	1919	1,080	58	.....	546	.....	204	19	253	.....
	1914	732	(2)	(2)	136	27	252	144	173	.....

1 Includes 48 and under for 1914 and 1909.

2 Corresponding figures not available.

3 Not shown separately in 1914.

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TABLE 10.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRY AND CITY	TOTAL		ESTABLISHMENTS EMPLOYING—																
	Establishments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		251 to 500 wage earners, inclusive.		501 to 1,000 wage earners, inclusive.		Over 1,000 wage earners.	
			Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All Industries.....	2,707	58,559	388	1,421	3,136	526	5,854	165	5,476	84	6,090	81	12,623	26	8,609	12	8,194	4	8,577
Automobile repairing.....	220	727	19	186	399	18	172	6	156	—	—	—	—	—	—	—	—	—	—
Boxes, wooden packing, except cigar boxes.....	20	610	2	3	9	8	109	2	66	4	230	1	196	—	—	—	—	—	—
Bread and other bakery products.....	146	1,070	27	93	228	17	177	4	115	3	199	2	357	—	—	—	—	—	—
Butter.....	76	349	6	67	125	11	130	1	32	1	62	—	—	—	—	—	—	—	—
Canning and preserving, fish.....	36	476	1	14	48	15	188	5	100	1	80	—	—	—	—	—	—	—	—
Canning and preserving, fruits and vegetables.....	59	1,720	—	19	35	16	196	16	522	4	372	4	595	—	—	—	—	—	—
Cars and general shop construction and repairs by electric-railroad companies.....	4	230	—	1	2	—	—	1	43	1	55	1	130	—	—	—	—	—	—
Cars and general shop construction and repairs by steam-railroad companies.....	21	2,751	—	—	—	6	62	3	82	5	328	4	543	2	881	1	855	—	—
Clothing, men's.....	5	481	—	—	—	1	17	1	23	1	66	1	103	1	272	—	—	—	—
Confectionery and ice cream.....	37	450	5	21	53	5	50	3	108	3	239	—	—	—	—	—	—	—	—
Copper, tin, and sheet-iron work.....	63	204	12	41	81	8	70	2	53	—	—	—	—	—	—	—	—	—	—
Flour-mill and gristmill products.....	116	822	28	63	150	17	182	5	144	1	66	2	280	—	—	—	—	—	—
Foundry and machine-shop products.....	121	3,265	10	50	105	39	405	10	316	6	384	4	517	1	257	—	—	1	1,281
Furniture.....	23	895	4	5	14	5	55	5	191	2	144	2	491	—	—	—	—	—	—
Gas, illuminating and heating.....	11	334	—	—	—	4	10	6	54	—	—	—	—	1	270	—	—	—	—
Lumber and timber products.....	625	22,884	40	305	743	130	1,449	55	1,936	30	2,248	40	6,269	19	6,204	6	4,035	—	—
Lumber, planing-mill products, not including planing mills connected with sawmills.....	61	1,084	4	28	65	14	170	8	233	5	338	2	278	—	—	—	—	—	—
Printing and publishing, book and job.....	122	567	30	70	143	17	190	3	96	2	138	—	—	—	—	—	—	—	—
Printing and publishing, newspapers and periodicals.....	224	929	92	100	104	27	293	2	80	1	72	2	320	—	—	—	—	—	—
Shipbuilding, wooden, including boat building.....	30	2,990	2	13	23	2	30	1	28	1	85	9	1,535	—	—	2	1,288	—	—
Slaughtering and meat packing.....	21	772	1	9	27	10	139	—	—	—	—	—	—	—	—	1	606	—	—
Structural ironwork, not made in steel works or rolling mills.....	6	1,111	—	1	4	3	43	1	33	—	—	—	—	—	—	—	—	1	1,031
Woolen goods.....	5	808	—	—	—	—	—	1	43	1	81	2	293	1	391	—	—	—	—
All other industries.....	646	13,024	105	338	708	151	1,673	30	1,016	12	902	5	716	1	334	2	1,410	2	6,265
Total for cities.....	1,000	29,831	100	470	1,107	250	2,832	77	2,490	43	3,123	35	5,518	12	4,042	3	2,142	4	8,577
ASTORIA.....	78	1,404	10	30	85	15	187	5	148	4	294	5	690	—	—	—	—	—	—
EUGENE.....	52	534	9	27	63	13	147	—	—	2	135	1	189	—	—	—	—	—	—
PORTLAND.....	846	26,813	119	377	885	201	2,249	70	2,264	34	2,432	20	4,222	12	4,042	3	2,142	4	8,577
SALEM.....	84	1,080	22	33	74	21	249	2	78	3	202	3	417	—	—	—	—	—	—

TABLE 11.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS: 1919, 1914, AND 1909.

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes.....	2,707	2,320	2,246	58,559	28,829	28,750	\$366,782,627	\$109,701,951	\$93,004,845	\$160,576,586	\$46,504,120	\$42,452,375
Less than \$5,000.....	664	607	789	373	927	957	1,091,344	2,220,810	1,920,913	1,179,409	1,522,173	1,343,938
\$5,000 to \$20,000.....	851	752	786	2,229	2,618	3,214	9,077,091	7,809,072	8,203,081	5,834,548	4,684,557	5,082,474
\$20,000 to \$100,000.....	712	451	482	6,130	5,549	7,104	31,975,446	19,632,477	21,453,053	16,214,557	8,990,230	10,626,549
\$100,000 to \$500,000.....	343	171	—	14,296	10,447	15,110	77,258,954	37,873,837	47,022,078	33,695,754	24,344,165	20,766,801
\$500,000 to \$1,000,000.....	68	26	—	8,630	—	—	46,693,045	17,220,026	—	21,081,227	—	—
\$1,000,000 and over.....	69	13	8	20,901	3,288	2,365	200,089,747	25,145,829	14,398,817	82,571,691	6,963,005	4,632,613
PER CENT DISTRIBUTION.												
All classes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5,000.....	24.5	30.1	35.1	0.6	3.2	3.3	0.5	2.0	2.1	0.7	3.3	3.2
\$5,000 to \$20,000.....	31.4	32.4	35.9	3.8	9.1	11.2	2.5	7.1	8.8	3.6	10.1	12.0
\$20,000 to \$100,000.....	26.3	19.4	21.5	10.5	19.2	24.7	8.7	17.9	23.1	10.1	19.3	25.0
\$100,000 to \$500,000.....	12.7	7.4	—	24.4	57.1	52.6	21.1	34.3	50.6	13.1	52.3	48.9
\$500,000 to \$1,000,000.....	2.5	1.1	—	14.7	—	—	12.7	15.7	—	13.1	—	—
\$1,000,000 and over.....	2.5	0.6	0.4	45.9	11.4	8.2	54.6	22.9	15.5	51.4	15.0	10.0

MANUFACTURES—OREGON.

TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1919 AND 1914.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
			Per cent distribution.				Per cent distribution.				Per cent distribution.				Per cent distribution.	
	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914
BREAD AND OTHER BAKERY PRODUCTS.	146	163	100.0	100.0	1,076	700	100.0	100.0	\$9,031,478	\$3,325,789	100.0	100.0	\$3,322,409	\$1,446,261	100.0	100.0
Less than \$5,000.....	22	68	15.1	40.5	4	33	0.4	4.7	62,701	190,113	0.7	5.7	25,358	85,565	0.8	5.9
\$5,000 to \$20,000.....	56	69	38.4	42.3	73	129	6.8	18.4	632,083	614,951	7.0	18.5	246,389	280,853	7.4	19.4
\$20,000 to \$100,000.....	54	20	37.0	12.3	255	131	23.7	18.7	2,200,397	617,490	24.4	18.6	786,211	245,640	23.7	17.0
\$100,000 to \$500,000.....	10	18	6.8	4.9	257	1,407	23.9	58.1	2,142,419	1,903,235	23.7	57.2	701,522	1,834,203	21.1	57.7
\$500,000 and over.....	4		2.7		487		45.3		3,993,278		44.2		1,562,920		47.0	
BUTTER.	76	72	100.0	100.0	349	260	100.0	100.0	8,727,869	4,268,652	100.0	100.0	1,289,211	689,150	100.0	100.0
Less than \$5,000.....	9	7	11.8	9.7	4	3	1.1	1.2	99,987	19,173	1.1	0.4	16,831	3,708	1.3	0.5
\$5,000 to \$20,000.....	39	22	51.3	30.6	84	24	24.1	9.2	2,127,740	294,353	24.4	6.9	308,044	46,330	23.9	6.7
\$20,000 to \$100,000.....	25	10	32.9	13.9	150	125	43.0	48.1	4,429,986	1,597,955	50.8	55.2	647,593	277,252	50.2	40.2
\$100,000 to \$500,000.....	3		3.9		111		31.8		2,070,176	2,357,171	23.7		316,743	1,361,862	24.6	52.5
\$500,000 and over.....																
CANNING AND PRESERVING, FISH.	36	25	100.0	100.0	476	301	100.0	100.0	6,531,462	2,929,657	100.0	100.0	1,866,974	1,054,162	100.0	100.0
Less than \$100,000.....	22	14	61.1	56.0	117	62	24.6	20.6	975,461	534,783	14.9	18.3	206,909	170,716	14.3	16.2
\$100,000 to \$500,000.....	10	11	27.8	44.0	185	1239	38.9	79.4	2,337,010	1,597,955	35.8	81.7	755,733	1,883,446	40.5	83.8
\$500,000 and over.....	4		11.1		174		36.6		3,218,991		49.3		844,272		45.2	
CANNING AND PRESERVING, FRUITS AND VEGETABLES.	59	37	100.0	100.0	1,720	417	100.0	100.0	12,265,651	1,552,077	100.0	100.0	4,050,163	493,918	100.0	100.0
Less than \$5,000.....	4	17	6.8	45.9	4	33	0.2	7.9	13,426	36,430	0.1	2.3	7,597	16,784	0.2	3.4
\$5,000 to \$20,000.....	11	8	18.6	21.6	28	35	1.6	8.4	142,373	79,395	1.2	5.1	65,642	33,105	1.6	6.7
\$20,000 to \$100,000.....	15	6	25.4	16.2	187	95	10.9	22.8	814,147	258,923	6.6	16.7	291,152	50,405	7.2	10.2
\$100,000 to \$500,000.....	20	6	33.9	16.2	642	254	37.3	60.9	3,381,646	1,177,329	27.6	75.9	1,140,643	393,624	28.2	79.7
\$500,000 to \$1,000,000.....	6		10.2		547		31.8		3,990,045		32.5		1,350,749		33.3	
\$1,000,000 and over.....	3		5.1		312		18.1		3,924,014		32.0		1,194,480		29.5	
FLOUR-MILL AND GRISTMILL PRODUCTS.	116	95	100.0	100.0	822	450	100.0	100.0	42,540,987	11,192,573	100.0	100.0	4,748,239	1,365,342	100.0	100.0
Less than \$5,000.....	11	10	9.5	10.5	1	3	0.1	0.7	27,667	31,958	0.1	0.3	5,447	7,192	0.1	0.5
\$5,000 to \$20,000.....	29	31	25.0	32.6	14	28	1.7	6.2	344,526	394,850	0.8	3.5	72,684	72,103	1.5	5.3
\$20,000 to \$100,000.....	36	35	31.0	36.8	77	83	9.4	18.4	1,678,110	1,582,655	3.9	14.1	271,325	244,268	5.7	17.9
\$100,000 to \$500,000.....	130	106	25.9	16.8	1,141	141	25.7	31.3	8,608,076	3,833,181	20.0	34.3	1,095,988	530,762	21.0	38.9
\$1,000,000 and over.....	10	3	8.6	3.2	519	195	63.1	43.4	31,991,608	5,349,926	75.2	47.8	3,402,795	511,027	71.7	37.4
FOUNDRY AND MACHINE-SHOP PRODUCTS.	121	98	100.0	100.0	3,265	660	100.0	100.0	21,136,153	1,870,540	100.0	100.0	12,413,037	1,090,248	100.0	100.0
Less than \$5,000.....	17	33	14.0	33.7	9	37	0.3	5.6	40,019	88,284	0.2	4.7	27,750	64,457	0.2	5.9
\$5,000 to \$20,000.....	38	42	31.4	42.9	83	166	2.5	25.2	391,641	446,436	1.9	23.9	272,741	288,192	2.2	26.4
\$20,000 to \$100,000.....	44	19	36.4	19.4	443	270	13.6	40.9	1,971,762	792,740	9.3	42.4	1,205,697	430,330	9.7	39.5
\$100,000 to \$500,000.....	16	4	13.2	4.1	711	187	21.8	28.3	3,484,829	543,080	16.5	29.0	2,218,244	307,269	17.9	28.2
\$500,000 to \$1,000,000.....	3		2.5		327		10.0		1,853,994		8.8		1,306,937		10.5	
\$1,000,000 and over.....	3		2.5		1,692		51.8		13,393,908		63.4		7,381,068		59.5	
LUMBER AND TIMBER PRODUCTS.	625	439	100.0	100.0	22,884	12,829	100.0	100.0	85,347,711	27,509,638	100.0	100.0	53,213,068	15,020,570	100.0	100.0
Less than \$5,000.....	160	208	25.6	46.9	131	350	0.6	2.7	383,506	430,004	0.4	1.6	313,040	351,824	0.6	2.3
\$5,000 to \$20,000.....	203	118	32.5	26.4	847	737	3.7	5.7	2,226,456	1,137,371	2.6	4.1	1,779,614	863,742	3.3	5.8
\$20,000 to \$100,000.....	133	57	21.3	13.0	1,922	1,295	8.4	10.1	6,074,381	2,220,877	7.1	8.1	4,451,288	1,493,933	8.4	9.9
\$100,000 to \$500,000.....	84	46	13.4	10.5	6,401	19,144	28.0	71.3	22,490,287	11,651,283	26.3	42.4	13,218,817	10,314,544	24.8	68.7
\$500,000 to \$1,000,000.....	23	11	3.7	2.5	4,718		20.6		15,940,725	7,272,195	18.7	26.1	10,536,539		19.8	
\$1,000,000 and over.....	22	3	3.5	0.7	8,865	1,303	38.7	10.2	38,292,876	4,797,848	44.9	17.4	22,913,170	1,996,517	43.1	13.3
LUMBER, PLANING-MILL PRODUCTS, NOT INCLUDING PLANING MILLS CONNECTED WITH SAWMILLS.	61	69	100.0	100.0	1,084	732	100.0	100.0	5,804,349	2,378,642	100.0	100.0	2,526,063	1,020,093	100.0	100.0
Less than \$5,000.....	8	16	13.1	23.2	4	14	0.4	1.9	20,248	34,958	0.3	1.5	11,093	18,578	0.4	1.8
\$5,000 to \$20,000.....	18	25	29.5	36.2	38	82	3.5	11.2	200,367	286,922	3.5	12.1	80,457	135,869	3.4	13.3
\$20,000 to \$100,000.....	19	21	31.1	30.4	183	273	16.9	37.3	836,501	836,501	15.3	35.2	405,374	370,845	16.0	36.4
\$100,000 to \$500,000.....	116	7	26.2	10.1	1,859	363	79.2	49.6	1,466,841	1,220,261	80.9	51.3	2,023,139	494,801	80.1	48.5
PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS.	224	251	100.0	100.0	929	945	100.0	100.0	6,408,348	4,126,752	100.0	100.0	4,764,257	3,148,152	100.0	100.0
Less than \$5,000.....	116	147	51.8	58.6	56	118	6.0	12.5	296,362	358,534	4.6	8.7	235,886	303,037	5.0	8.6
\$5,000 to \$20,000.....	65	73	29.0	29.1	119	150	12.8	15.9	636,405	734,683	9.9	17.8	525,253	629,576	11.0	20.0
\$20,000 to \$100,000.....	37	27	16.5	10.8	283	221	30.5	23.4	1,526,486	962,406	23.8	23.3	1,239,674	795,091	26.0	23.3
\$100,000 to \$500,000.....	3	4	1.3	1.6	80	456	8.6	48.3	447,550	2,071,129	7.0	50.2	377,907	1,420,448	7.9	45.1
\$500,000 and over.....	3		1.3		391		42.1		3,501,545		54.6		2,885,637		50.1	
SHIPBUILDING, WOODEN, INCLUDING BOAT BUILDING.	30	20	100.0	100.0	2,990	163	100.0	100.0	13,777,615	332,074	100.0	100.0	6,924,053	217,626	100.0	100.0
Less than \$5,000.....	4	9	13.3	45.0	1	2	(*)	1.2	9,091	14,672	0.1	4.4	5,833	10,398	0.1	4.3
\$5,000 to \$20,000.....	12	7	40.0	35.0	441	30	1.4	18.4	1,123,982	67,862	0.9	20.4	475,073	40,734	1.1	18.7
\$20,000 to \$100,000.....	10	4	33.3	20.0	1,164	131	38.9	80.4	3,762,890	249,540	27.8	75.1	2,215,122	166,494	32.0	76.5
\$1,000,000 and over.....	4		13.3		1,784		59.7		9,881,652		71.7		4,628,025		66.8	
SLAUGHTERING AND MEAT PACKING.	21	14	100.0	100.0	772	442	100.0	100.0	15,868,169	7,486,920	100.0	100.0	2,118,836	1,284,465	100.0	100.0
\$5,000 to \$20,000.....	3		14.3		3		0.4		48,737		0.3		19,147		0.9	
\$20,000 to \$100,000.....	6	8	28.6	57.1	19	24	2.5	5.4	248,468	379,910	1.6	5.1	77,381	83,557	3.7	6.5
\$100,000 to \$500,000.....	9	6	42.9	42.9	112	7418	14.5	94.6	2,088,508	7,107,010	13.0	94.9	473,603	1,200,908	22.4	83.5
\$500,000 and over.....	3		14.3		638		82.6		13,502,466		85.1		1,548,705		73.1	

* Includes the group "\$500,000 to \$1,000,000."

* Includes the groups "\$500,000 to \$1,000,000" and "\$1,000,000 and over."

* Less than one-tenth of 1 per cent.

* Includes the group "\$20,000 to \$100,000."

* Includes the group "\$100,000 to \$500,000."

* Includes the group "\$5,000 to \$20,000."

* Includes the group "\$1,000,000 and over."

MANUFACTURES—OREGON.

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TABLE 13.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919.

CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
ASTORIA.....	78	1,404	100.0	\$13,398,627	100.0	\$4,128,053	100.0	SALEM.....	84	1,080	100.0	\$9,435,070	100.0	\$2,694,262	100.0
Less than \$5,000.....	6	2	0.1	11,013	0.1	8,384	0.2	Less than \$5,000.....	28	6	0.6	72,549	0.8	44,062	1.6
\$5,000 to \$20,000.....	33	62	4.4	339,355	2.5	174,022	4.2	\$5,000 to \$20,000.....	19	45	4.2	224,775	2.4	111,893	4.2
\$20,000 to \$100,000.....	21	187	13.3	1,045,757	7.8	529,840	12.8	\$20,000 to \$100,000.....	20	152	14.1	770,219	8.2	329,112	12.2
\$100,000 to \$500,000.....	12	701	54.2	3,598,128	26.9	1,565,247	38.6	\$100,000 to \$500,000.....	11	269	24.9	2,262,322	24.0	705,325	26.2
\$500,000 and over.....	6	392	27.9	8,403,474	62.7	1,820,500	44.1	\$500,000 to \$1,000,000.....	3	390	36.1	2,157,815	22.9	830,814	30.8
								\$1,000,000 and over.....	3	218	20.2	3,947,390	41.8	673,056	25.0
EUGENE.....	52	534	100.0	2,480,647	100.0	1,017,418	100.0	PORTLAND.....	846	20,813	100.0	196,380,146	100.0	84,993,567	100.0
Less than \$5,000.....	11	6	1.1	30,497	1.2	22,742	2.2	Less than \$5,000.....	153	74	0.3	428,065	0.2	294,275	0.3
\$5,000 to \$20,000.....	20	39	7.3	183,623	7.4	108,217	10.6	\$5,000 to \$20,000.....	240	507	1.9	2,645,167	1.3	1,090,815	2.0
\$20,000 to \$100,000.....	18	152	28.5	713,305	28.7	415,855	40.9	\$20,000 to \$100,000.....	262	2,116	7.9	11,785,356	6.0	6,513,036	7.7
\$100,000 and over.....	5	337	63.1	1,562,162	62.7	470,804	46.3	\$100,000 to \$500,000.....	122	4,191	15.6	26,029,883	13.3	12,376,307	14.6
								\$500,000 to \$1,000,000.....	29	2,383	8.9	19,843,847	10.1	6,781,594	8.0
								\$1,000,000 and over.....	40	17,542	65.4	135,647,828	69.1	57,337,570	67.5

TABLE 14.—CHARACTER OF OWNERSHIP, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Cons- sus year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
					Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.						
		Indi- vid- uals.	Cor- pora- tions	All oth- ers.		Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Indi- vid- uals.	Cor- pora- tions.	All oth- ers.		Indi- vid- uals.	Corpora- tions.	All others.	Indi- vid- uals.	Corpora- tions.	All oth- ers.				
All industries.....	1919	1,146	934	627	58,559	3,415	50,860	4,284	5.8	86.9	7.3	\$366,782,627	\$19,399,351	\$322,331,966	\$25,051,310	5.3	87.9	6.8				
	1914	1,062	710	548	28,829	2,078	24,047	2,104	9.3	83.4	7.3	109,761,951	9,800,214	91,351,338	8,550,399	9.0	83.2	7.8				
	1909	1,031	640	575	28,750	3,552	22,063	3,135	12.4	76.7	10.9	93,004,845	11,482,192	70,781,269	10,741,384	12.3	76.1	11.5				
Bread and other bakery products.	1919	96	20	30	1,076	199	754	123	18.5	70.1	11.4	9,031,478	1,620,093	6,303,798	1,101,587	18.0	69.8	12.2				
	1914	116	11	36	700	168	401	131	24.0	57.3	18.7	3,325,789	811,144	1,775,375	739,270	24.4	53.4	22.2				
Butter.....	1919	18	34	24	349	32	241	70	9.2	69.1	21.8	8,727,869	1,166,384	5,549,998	2,011,487	13.4	63.6	23.0				
	1914	21	20	22	260	38	161	61	14.6	61.9	23.5	4,268,652	654,325	2,367,778	1,246,549	15.3	55.5	29.2				
Canning and preserving, fish.	1919	2	31	3	470	442	134	.....	92.9	7.1	.....	6,531,462	.....	6,190,624	1,340,838	.....	94.8	5.2
	1914	1	23	1	301	.....	301	.....	100.0	.....	.....	2,929,657	.....	2,929,657	.....	.....	100.0	.....			
Canning and preserving, fruits and vegetables.	1919	10	34	15	1,720	54	1,562	104	3.1	90.8	6.0	12,265,651	305,114	10,254,242	1,706,295	2.5	83.6	13.9				
	1914	12	16	9	417	52	261	74	12.5	89.8	17.7	1,552,077	91,315	994,995	465,767	5.9	64.1	30.0				
Cars and general shop construction and repairs by steam-railroad companies.	1919	.....	21	.....	2,751	.....	2,751	.....	100.0	.....	.....	6,472,962	.....	6,472,962	.....	.....	100.0	.....			
	1914	.....	14	.....	1,601	.....	1,601	.....	100.0	.....	.....	2,583,653	.....	2,583,653	.....	.....	100.0	.....			
Flour-mill and gristmill products.	1919	49	47	20	822	79	702	41	9.6	85.4	5.0	42,549,987	2,316,789	38,821,400	1,411,798	5.4	91.2	3.3				
	1914	34	40	21	450	46	372	32	10.2	82.7	7.1	11,192,573	1,050,684	9,686,401	555,488	9.4	85.6	5.0				
Foundry and machine-shop products.	1919	45	53	23	3,205	135	2,987	143	4.1	91.5	4.4	21,136,153	730,594	19,682,980	722,579	3.5	93.1	3.4				
	1914	41	37	20	600	124	464	72	18.8	70.3	10.9	1,870,540	344,284	1,282,810	243,446	18.4	68.6	13.0				
Lumber and timber products	1919	236	199	100	22,884	1,333	20,223	1,328	5.8	88.4	5.8	85,347,711	4,441,423	70,537,842	4,368,446	5.2	89.7	5.1				
	1914	170	129	140	12,829	047	11,484	098	5.0	89.5	5.4	27,509,698	951,054	25,399,013	1,159,571	3.5	92.3	4.2				
Lumber, planing-mill products, not including planing mills connected with saw-mills.	1919	17	30	14	1,084	48	954	82	4.4	88.0	7.6	5,804,340	198,669	5,206,402	399,278	3.4	89.7	6.9				
	1914	20	28	21	732	69	571	92	9.4	78.0	12.6	2,378,642	228,829	1,779,798	370,015	9.6	74.8	15.6				
Printing and publishing, newspapers and periodicals.	1919	136	51	37	929	184	698	47	19.8	75.1	5.1	6,408,348	975,747	5,182,507	270,094	15.2	80.6	4.2				
	1914	104	47	40	945	206	680	59	21.8	72.0	6.2	4,126,752	861,014	2,972,100	293,638	20.9	72.0	7.1				
Shipbuilding, wooden, including boat building.	1919	9	14	7	2,990	17	2,732	241	0.6	91.4	8.1	13,777,615	60,940	12,963,534	753,141	0.4	94.1	5.5				
	1914	9	2	9	163	29	.....	.....	17.8	.....	82.2	332,074	71,242	.....	.....	21.5	.....	78.5
Slaughtering and meat packing.	1919	5	14	2	772	436	736	.....	4.7	95.3	.....	15,868,169	4482,492	15,385,677	.....	3.0	97.0	.....			
	1914	4	8	2	442	412	430	.....	2.7	97.3	.....	7,486,920	4229,285	7,257,635	.....	3.1	96.9	.....			
Total for cities.....	1919	413	443	204	29,831	1,354	26,445	2,032	4.5	88.6	6.8	221,703,490	7,717,425	201,095,986	12,890,079	3.5	90.7	5.8				
	1914	402	374	222	13,415	1,284	11,157	974	9.6	83.2	7.3	63,940,931	5,045,373	54,392,178	4,503,380	7.9	85.1	7.0				
ASTORIA.....	1919	27	35	16	1,404	210	1,177	17	15.0	83.8	1.2	13,398,627	1,030,649	12,200,426	187,552	7.7	91.1	1.2				
	1914	23	22	12	1,172	69	1,059	44	5.9	90.4	3.7	4,587,301	227,979	4,187,168	172,154	5.0	91.3	3.7				
EUGENE.....	1919	23	14	15	534	64	413	57	12.0	77.3	10.7	2,489,647	319,150	1,700,686	469,811	12.8	68.3	18.9				
	1914	14	9	14	238	54	135	49	22.7	56.7	20.6	810,346	167,382	388,578	254,386	20.7	47.9	31.4				
PORTLAND.....	1919	322	373	151	26,813	1,975	23,976	1,862	3.6	89.4	6.9	196,380,146	5,646,022	179,517,773	11,216,351	2.9	91.4	5.7				
	1914	336	325	176	11,273	1,077	9,407	729	9.5	84.0	6.5	55,697,440	4,263,753	48,151,708	3,281,979	7.7	86.4	5.9				
SALEM.....	1919	41	21	22	1,080	105	879	96	9.7	81.4	8.9	9,435,070	721,604	7,677,101	1,036,365	7.6	81.4	11.0				
	1914	29	18	20	732	84	496	152	11.5	67.7	20.8	2,845,844	386,259	1,664,724	794,801	13.6	68.5	27.9				

¹ Includes the group "Individuals."

² Includes the groups "Individuals" and "All others."

³ Includes the group "Corporations."

⁴ Includes the group "All others."

MANUFACTURES—OREGON.

TABLE 15.—MANUFACTURES, BY POPULATION GROUPS, IN CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

	Census year.	Aggregate.	CITIES HAVING A POPULATION OF 10,000 OR OVER.						THE STATE OUTSIDE OF CITIES HAVING A POPULATION OF 10,000 OR OVER.	
			Total.		10,000 to 25,000.		100,000 and over.			
			Number or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.
Number of places.....	1910 1914 1909	..... ..... .....	4 4 2	..... ..... .....	3 3 1	..... ..... .....	1 1 1	...............	...............	...............
Population ¹	1920 1915 1910	783,389 783,239 672,765	300,587 301,087 221,308	38.4 38.4 32.9	42,299 40,486 14,094	5.4 5.2 2.1	258,288 260,601 207,214	33.0 33.3 30.8	482,802 482,152 451,467	61.6 61.6 67.1
Number of establishments.....	1919 1914 1909	2,707 2,320 2,246	1,060 998 711	39.2 43.0 31.7	214 161 62	7.9 6.9 2.8	846 837 649	31.3 36.1 28.9	1,647 1,322 1,535	60.8 57.0 68.3
Average number of wage earners.....	1919 1914 1909	58,559 28,829 28,750	29,831 13,415 12,811	50.9 46.5 44.6	3,018 2,142 597	5.2 7.4 2.1	26,813 11,273 12,214	45.8 39.1 42.5	28,728 15,414 15,939	49.1 53.5 55.4
Value of products.....	1919 1914 1909	\$366,782,627 109,761,951 93,004,845	\$221,703,490 83,940,931 49,068,798	60.4 58.3 52.8	\$25,323,344 8,243,491 2,208,031	6.9 7.5 2.4	\$196,380,146 55,697,440 46,860,707	53.5 50.7 50.4	\$145,079,137 45,821,020 43,936,047	39.6 41.7 47.2
Value added by manufacture.....	1919 1914 1909	160,576,586 46,504,130 42,452,375	92,833,300 25,348,901 21,815,981	57.8 54.5 51.4	7,839,733 3,550,114 1,030,830	4.9 7.6 2.4	84,993,567 21,798,787 20,785,151	52.9 46.9 49.0	67,743,286 21,155,229 20,636,394	42.2 45.5 48.6

¹ Population of 1920, as of Jan. 1, 1920; 1915, estimated population as of July 1, 1914 (per reports census of manufactures, 1914); 1910, as of Apr. 15, 1910.

TABLE 16.—PRINCIPAL INDUSTRIES IN PORTLAND (THE ONLY CITY IN THE STATE HAVING 50,000 INHABITANTS OR MORE), WITH PER CENT OF TOTAL FOR STATE: 1919.

INDUSTRY.	VALUE OF PRODUCTS.				INDUSTRY.	VALUE OF PRODUCTS.			
	Amount, 1919.	Per cent of total for the state.	Increase over 1914.			Amount, 1919.	Per cent of total for the state.	Increase over 1914.	
			Amount.	Per cent.				Amount.	Per cent.
Flour-mill and gristmill products.....	\$22,525,761	52.9	\$17,296,849	330.8	Clothing, men's.....	\$2,034,335	100.0	(¹)	.....
Foundry and machine-shop products.....	19,423,232	91.9	18,039,641	1,303.8	Saddlery and harness.....	1,635,654	84.7	\$845,500	107.0
Lumber and timber products.....	18,845,793	22.1	12,259,074	186.1	Automobile repairing.....	1,265,165	48.6	756,747	148.8
Shipbuilding, wooden, including boat building.....	9,881,322	71.7	9,801,397	.....	Copper, tin, and sheet-iron work.....	1,129,107	84.3	(¹)	.....
Bread and other bakery products.....	7,157,084	79.2	4,630,536	183.3	Bags, other than paper, not including bags made in textile mills.....				
Structural ironwork, not made in steel- works or rolling mills.....	6,392,273	100.0	5,742,669	884.0	Cars and general shop construction and repairs by steam-railroad companies.....				
Printing and publishing, newspapers and periodicals.....	4,630,780	72.3	1,995,957	75.8	Cars, steam-railroad, not including opera- tions of railroad companies.....	(¹)	(¹)	(¹)	(¹)
Food preparations, not elsewhere specified.	4,217,694	100.0	3,340,150	380.6	Engines, steam, gas, and water.....				
Coffee, roasting and grinding.....	3,590,207	100.0	1,540,363	75.1	Gas, illuminating and heating.....				
Printing and publishing, book and job.....	3,119,527	91.9	1,599,221	105.2	Shipbuilding, steel, new vessels.....				
Confectionery and ice cream.....	2,935,430	84.7	(¹)	.....	Slaughtering and meat packing.....				
Furniture.....	2,899,667	91.1	1,652,662	132.5	Tinware, not elsewhere specified.....				
Lumber, planing-mill products, not includ- ing planing mills connected with sawmills	2,716,868	40.8	1,634,025	150.9	Wool pulling.....				
Butter.....	2,652,847	30.4	926,506	53.7	Woolen goods.....				

¹ Figures can not be shown without disclosing individual operations.

MANUFACTURES—OREGON.

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TABLE 17.—NUMBER AND HORSEPOWER OF TYPES OF PRIME MOVERS: 1919, 1914, AND 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
	1919	1914	1909	Amount.			Per cent distribution.		
				1919	1914	1909	1919	1914	1909
Primary power, total.....	9,674	5,188	3,442	304,346	214,222	175,019	100.0	100.0	100.0
Owned.....	2,130	1,719	1,921	211,219	175,155	169,110	69.4	81.8	91.5
Steam.....	1,692	1,308	1,572	165,801	116,591	112,244	54.5	54.4	64.1
Engines.....	1,650	(1)	(1)	140,640	(1)	(1)	45.2		
Turbines.....	42	(1)	(1)	25,161	(1)	(1)	8.3		
Internal-combustion engines.....	250	133	81	2,186	1,289	428	0.7	0.6	0.2
Water.....	188	278	268	43,252	57,275	47,438	14.2	26.7	27.1
Water wheels and turbines.....	170	234	237	43,057	56,972	47,041	14.1	26.6	26.9
Water motors.....	18	44	31	195	303	397	0.1	0.1	0.2
Rented.....	7,544	3,469	1,521	93,127	39,067	14,909	30.6	18.2	8.5
Electric.....	7,544	3,469	1,521	92,576	39,010	14,811	30.4	18.2	8.4
Other.....				551	57	98	0.2	(2)	0.1
Electric.....	8,795	3,937	1,745	118,187	48,739	20,892	100.0	100.0	100.0
Rented.....	7,544	3,469	1,521	92,576	39,010	14,811	78.3	80.0	71.2
Generated by establishments reporting.....	1,251	468	224	25,611	9,729	5,091	21.7	20.0	28.8

¹ Not reported separately.

² Less than one-tenth of 1 per cent.

TABLE 18.—FUEL CONSUMED, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRY AND CITY.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
	Anthracite (tons, 2,210 pounds).	Bituminous (tons, 2,000 pounds).				
All industries.....	1919.....	1914.....				
Per cent of increase.....	1,825	1,821	10,970	1,350,459	19,873	402,457
	0.2	403.5	6,106	940,377	(1)	61,988
			79.7	45.7	(1)	549.2
Brass and bronze products.....		2	53	2,689	36	1,497
Bread and other bakery products.....	156	465	489	15,350	135	30,497
Brick and tile, terra-cotta, and fire-clay products.....		3,016		942	5	
Canning and preserving, fish.....	12	870		9,623	1,049	1,482
Canning and preserving, fruits and vegetables.....	300	6,328	30	16,196	12	
Cars and general shop construction and repairs by steam-railroad companies.....		36,126	104	26,058	9,720	
Cement.....				37,097		
Cordage and twine.....				14,011		
Foundry and machine-shop products.....	254	9,411	7,778	9,199	344	17,676
Gas, illuminating and heating.....		4,492	785	585,235		
Lumber and timber products.....	60	2,732	8	177,134	4,011	
Paper and wood pulp.....				313,368		
Shipbuilding, steel, new vessels.....	721	350	51	45,330	184	75,321
Slaughtering and meat packing.....		1,019		15,159		690
Structural ironwork, not made in steel works or rolling mills.....	28	5	350	14,500		172,000
Woolen goods.....		1,186		17,851		
All other industries.....	285	6,693	1,319	46,717	4,377	103,294
Total for cities.....	1,395	38,333	9,923	759,463	5,387	396,893
ASTORIA.....	89	802	26	11,282	905	2,651
EUGENE.....		697	872	3,964	4	1,134
PORTLAND.....	1,006	34,048	8,701	733,717	4,465	394,468
SALEM.....	300	2,726	324	10,500	13	610

¹ Included in figures for fuel oils.

SPECIAL STATISTICS.

For a number of important industries the Census Bureau collects, by means of special schedules, certain details which do not appear on the general schedule. Data for seven of these industries in Oregon are here presented.

Lumber and timber products (Table 19).—This table presents statistics pertaining to the chief products of the lumber industry for 1919, 1914, and 1909. The growth of this industry in Oregon has been very rapid since 1899. The relative rank of the state in the production of lumber has advanced from twenty-third place in that year, to ninth, in 1909, fifth, in 1914, and third, in 1919.

Oregon is credited with having the largest stand of timber of any state in the Union, the principal species being Douglas fir and western yellow pine. In the production of lumber from these woods in 1919, this state occupied second place and first place, respectively, producing 30.4 per cent of the total cut of Douglas fir and 27.4 per cent of the total cut of western yellow pine in the United States.

The lumber cut from the principal species in 1919 was reported as follows: Douglas fir, 1,795,492,000 feet, or 69.7 per cent of the total cut from all species in the state; western yellow pine, 480,514,000 feet, or 18.6 per cent; spruce, 166,056,000 feet, or 6.4 per cent; hemlock, 52,906,000 feet, or 2.1 per cent; Port Orford cedar, 25,360,000 feet, or 1 per cent; white fir, 22,731,000 feet, or nine-tenths of 1 per cent; and larch, 18,968,000 feet, or seven-tenths of 1 per cent. Seven other woods were reported as manufactured into lumber, the most important of these being cedar, sugar pine, cottonwood, and maple.

TABLE 19.—LUMBER, LATH, AND SHINGLES: 1919, 1914, AND 1909.

PRODUCT.	QUANTITY. ¹		
	1919	1914	1909
Lumber.....M feet b. m.	2,577,403	1,817,875	1,898,995
Lath.....thousands..	122,818	(²)	161,512
Shingles.....thousands..	530,066	(²)	293,644

¹ The output of custom mills is included in 1919 and 1909, but not in 1914.

² Not reported.

Flour-mill and gristmill products (Table 20).—Wheat flour was the product of chief value in 1919 as in 1914, forming 81 per cent and 69.2 per cent, respectively, of the total value of products for the industry in the state. The value of bran and middlings and feed and offal combined was second in value of products, forming 18 per cent of the total for the industry in 1919 and 27.5 per cent in 1914. During this five-year period, the total value for the industry increased \$31,357,414, or 280.2 per cent. The value

of flour increased \$26,728,139, or 344.9 per cent, and the quantity, 1,550,422 barrels, or 86.6 per cent. Similarly, bran and middlings increased 220.4 per cent in value and 89.6 per cent in quantity, while feed and offal increased 103.3 per cent in value, but decreased 7 per cent in quantity.

TABLE 20.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILLS): 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$42,549,987	\$11,192,573	\$8,891,001
Wheat flour:			
Barrels.....	3,341,756	1,791,334	1,360,281
Value.....	\$34,477,758	\$7,740,019	\$6,015,845
Barley meal:			
Pounds.....	1,132,930	1,836,918	1,095,604
Value.....	\$29,961	\$34,806	\$17,993
Corn meal and corn flour:			
Barrels.....	557	2,867	559
Value.....	\$4,534	\$14,050	\$2,236
Bran and middlings:			
Tons.....	93,122	51,768	
Value.....	\$3,800,078	\$1,185,918	
Feed and offal:			
Tons.....	66,239	71,254	
Value.....	\$3,846,156	\$1,802,079	
Breakfast foods:			
Pounds.....	2,191,040	5,305,437	
Value.....	\$113,642	\$188,715	
All other cereal products, value.....	\$246,450	\$109,689	\$64,056
All other products, value.....	\$31,408	\$17,697	\$102,806

Slaughtering and meat packing (Table 21).—This table presents for the slaughtering and meat-packing industry for the census years 1919, 1914, and 1909, the number and cost of the most important classes of animals slaughtered, the cost of "All other materials," which includes that for goats and kids, poultry, dressed meat purchased for curing, cottonseed oil for making lard compounds and substitutes, butter and whole milk for making oleomargarine, curing materials, seasoning, refrigeration, containers, fuel, rent of power, mill supplies, and freight; and the kind, quantity, and value of the principal products that can be shown without disclosing individual operations. The value of minor and auxiliary specified products are grouped under "All other products" and include beef, pickled and other cured, canned sausage, lard compounds and substitutes, lard oil and other oils, oleomargarine, casings, fertilizers and fertilizer materials, glue, wool, and stock feed.

From 1914 to 1919 there was an actual decrease of 38,555 in the total number of all classes of animals slaughtered. This decrease was in sheep and lambs and hogs, which together show a decrease of 59,561; while, on the other hand, there was an increase of 21,006 in the number of beeves and calves combined. The cost of each of these classes, however, shows a large increase. The total cost of materials increased \$7,546,878, or 121.7 per cent, and value of products \$8,381,249, or 111.9 per cent, during this five-year period.

Of the several products for which the values are shown, the same general proportions of the total for the industry prevailed in 1919 as in 1914, with the exception of fresh pork, which was second in importance, with 16.2 per cent of the total in 1914 as compared with third in 1919, with but 7.9 per cent.

TABLE 21.—SLAUGHTERING AND MEAT PACKING: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$13,749,333	\$6,202,455	\$5,014,840
Animals slaughtered:			
Beef—			
Number.....	50,413	33,431	51,922
Cost.....	\$4,086,350	\$2,549,264	\$2,391,050
Calves—			
Number.....	5,312	1,288	6,034
Cost.....	\$116,052	\$20,246	\$70,659
Sheep and lambs—			
Number.....	98,571	141,892	92,038
Cost.....	\$837,190	\$700,294	\$397,387
Hogs—			
Number.....	143,252	150,492	75,395
Cost.....	\$5,151,435	\$2,394,147	\$1,295,899
All other materials, cost.....	\$3,558,306	\$538,504	\$359,242
PRODUCTS.			
Total value.....	\$15,868,109	\$7,486,020	\$5,879,615
Fresh meat:			
Beef—			
Pounds.....	24,574,531	18,550,133	28,759,934
Value.....	\$3,976,454	\$2,237,855	\$2,235,816
Veal—			
Pounds.....	572,588	162,028	851,558
Value.....	\$117,018	\$10,888	\$88,063
Mutton and lamb—			
Pounds.....	4,095,504	7,242,761	3,866,798
Value.....	\$820,599	\$633,165	\$351,170
Pork—			
Pounds.....	5,131,830	10,635,553	4,256,595
Value.....	\$1,250,403	\$1,213,683	\$517,974
Edible offal and other fresh meat—			
Pounds.....	2,114,637	1,737,778	72,535
Value.....	\$385,310	\$153,971	\$8,303
Pork, pickled and other cured:			
Pounds.....	12,030,437	7,817,795	5,123,483
Value.....	\$3,703,376	\$1,192,045	\$762,137
Sausage:			
Pounds.....	2,048,094	2,180,304	2,069,163
Value.....	\$595,472	\$307,751	\$250,822
Lard:			
Pounds.....	3,385,854	3,591,540	5,709,268
Value.....	\$971,858	\$410,179	\$635,628
Tallow:			
Pounds.....	1,529,865	1,239,341	827,738
Value.....	\$143,256	\$65,371	\$45,024
Hides:			
Cattle—			
Number.....	50,413	33,431	
Pounds.....	3,003,524	2,456,068	
Value.....	\$870,335	\$324,668	
Calf—			
Number.....	5,308	1,188	
Pounds.....	53,292	16,108	
Value.....	\$32,240	\$2,569	
Sheep pelts—			
Number.....	97,597	141,892	
Value.....	\$191,073	\$103,966	
All other products, value.....	\$2,795,775	\$812,809	\$514,310

Shipbuilding, including boat building (Tables 22 and 23).—This industry includes the building and repairing of steel and wooden vessels, as well as small craft, and the manufacture of masts, spars, oars, and rigging. The number and tonnage of all vessels launched in 1919 and 1916 are shown, by classes, in the following table.

No steel vessels were launched in Oregon during 1916. In 1919, 28 vessels of this class of 135,042 tons were launched at Portland. Twenty-seven of these vessels were steam, all large sized, designed for freight service and equipped with oil burners. Some of them exceeded 6,000 gross tons.

Although two less wooden vessels were launched in 1919 than in 1916, there was an increase during the three-year period of 71,065 in tonnage, or 609.9 per cent. The wooden vessels constructed were mostly of a uniform type and tonnage, and like the steel vessels were built largely to meet the exigencies of the World War.

TABLE 22.—SHIPBUILDING, INCLUDING BOAT BUILDING—NUMBER AND TONNAGE: 1919 AND 1916.

	1919		1916	
	Num-ber.	Gross tonnage.	Num-ber.	Gross tonnage.
Vessels, 5 gross tons and over, launched during the year.....	62	217,759	36	11,652
Steel.....	28	135,042		
Steam.....	27	135,020		
Motor.....	1	22		
Wooden.....	34	82,717	36	11,652
Steam.....	20	51,734	5	4,719
Motor.....	1	14	9	118
Sail.....	1	1,728	19	6,255
Unrigged.....	12	29,241	3	560
Power boats, less than 5 gross tons.....	49		73	

The value of work done upon vessels of all kinds during 1919 and 1916 is shown in Table 23.

TABLE 23.—SHIPBUILDING, INCLUDING BOAT BUILDING—VALUE: 1919 AND 1916.

	1919	1916
Total value of work.....	\$53,501,950	\$2,915,346
Work done during the year on new vessels, 5 gross tons and over.....		
Steel.....	52,809,785	2,627,046
Wood.....	39,707,354	800,000
Boats of less than 5 tons.....	13,102,451	1,827,046
Power boats of all kinds.....	51,294	60,566
Sailboats, rowboats, etc.....	46,654	39,856
Repair work.....	4,640	20,710
Steel.....	243,291	152,017
Wood.....	17,001	25,000
Masts.....	226,290	127,017
All other products.....	130,152	(1)
	267,428	75,717

¹ Included in "All other products."

The figures in this table are not strictly comparable with those for tonnage launched, as shown in Table 22, since they include only the value of work done in the shipyards of Oregon in 1919 and 1916, while part of the cost of construction of the vessels actually launched may have been an expenditure during prior years, just as the value of the work reported in Table 23 represents the expense of any work done during the year on vessels on the ways.

Canning and preserving (Table 24).—This table shows in detail the quantity and value of the principal kinds of fruits, vegetables, and fish canned and preserved during 1919, 1914, and 1909.

From 1914 to 1919 the total value of all products for the industry increased \$15,853,068, or 334.6 per cent. Of this increase, \$10,713,574, or 67.6 per cent, were in fruits and vegetables, \$3,559,729, or 22.5 per cent, in fish and oysters, and \$1,579,765, or 10 per

cent, in pickles, preserves, and sauces. These three branches of the canning industry show increases in 1919 over 1914 in value of products as follows: Fruits and vegetables 690.3 per cent; fish and oysters 119.8 per cent; and pickles, preserves, and sauces 737.3 per cent. Practically all items in this table show increases in quantity, as well as in value during this five-year period, except salted fish and smoked or dried fish, both of which while increasing in value decreased in quantity.

TABLE 24.—CANNING AND PRESERVING: 1919, 1914, AND 1909

	1919	1914	1909
Total value ¹	\$20,591,135	\$4,738,007	\$3,207,060
Canning and preserving, fruits and vegetables.....	\$12,265,651	\$1,552,077	\$708,285
Canning and preserving, fish and oysters.....	6,531,462	2,971,733	2,336,412
Pickles, preserves, and sauces.....	1,794,022	214,257	162,363
Canned vegetables.....	\$258,609	\$27,893	\$48,219
Beans—			
Cases.....	30,569	9,292	12,831
Value.....	\$93,880	\$16,231	\$26,179
All other—			
Cases.....	54,865	6,099	10,565
Value.....	\$164,729	\$11,632	\$22,040
Dried vegetables:			
Pounds.....	1,204,713	(²)	(²)
Value.....	\$343,512	(²)	(²)
Canned fruits.....	\$6,701,131	\$539,075	\$117,818
Loganberries—			
Cases.....	195,535	(³)	(³)
Value.....	\$1,458,019	(³)	(³)
Blackberries—			
Cases.....	222,633	2,219	4,408
Value.....	\$1,200,411	\$4,114	\$9,321
Pears—			
Cases.....	164,733	(³)	(³)
Value.....	\$1,161,462	(³)	(³)
Cherries—			
Cases.....	142,146	38,479	22,770
Value.....	\$890,103	\$112,926	\$49,203
Apples—			
Cases.....	230,321	24,872	8,557
Value.....	\$802,515	\$40,148	\$15,918
Raspberries—			
Cases.....	37,416	29,641	9,658
Value.....	\$285,028	\$91,187	\$23,206
Strawberries—			
Cases.....	21,107	15,194	3,490
Value.....	\$217,253	\$55,092	\$10,361
All other—			
Cases.....	166,882	50,061	14,033
Value.....	\$620,340	\$157,404	\$26,967
Dried fruits:			
Pounds.....	24,743,386	12,863,689	14,028,251
Value.....	\$3,443,070	\$849,900	\$473,008
Prunes—			
Pounds.....	19,030,935	12,621,817	14,009,597
Value.....	\$2,785,373	\$822,837	\$170,911
All other—			
Pounds.....	4,812,451	241,872	18,651
Value.....	\$657,697	\$27,063	\$2,097
Canned fish, clams, etc.....	\$5,505,849	\$2,366,075	\$1,352,281
Salmon—			
Cases.....	511,325	376,492	
Value.....	\$5,447,491	\$2,314,771	\$1,341,481
All other—			
Cases.....	10,974	14,052	
Value.....	\$58,358	\$51,304	\$10,800
Salted fish—			
Pounds.....	2,086,628	3,672,277	5,333,074
Value.....	\$591,082	\$473,458	\$731,000
Smoked or dried fish—			
Pounds.....	126,559	189,920	137,700
Value.....	\$35,729	\$21,507	\$20,800
Pickles, preserves, and sauces, value.....	\$1,794,022	\$214,257	\$162,363
All other products of canning and preserving, fish and oysters, value.....	\$393,802	(⁴)	(⁴)
All other products of canning and preserving, fruits and vegetables, value.....	\$1,519,329	\$245,332	\$240,971

¹ In addition, products to the value of \$78,045 in 1919, \$20,433 in 1914, and \$10,538 in 1909, were reported by establishments engaged primarily in other industries.

² Reported in "All other products" in 1914 and 1909.

³ Reported in "All other" canned fruits in 1914 and 1909.

⁴ Not reported separately in 1914 and 1909.

Butter, cheese, and condensed milk (Table 25).—This table shows the quantity and value of the principal products of the combined industries for

1919, 1914, and 1909. From 1914 to 1919, the total value of products for the three industries increased \$9,194,263, or 140 per cent. Butter was the product of chief value in 1919 as in 1914, forming 51.1 per cent and 50.3 per cent, respectively, of the total for the industry. From 1914 to 1919 much larger percentages of increase are shown for values than for quantities; for instance, butter increased 143.8 per cent in value and 25 per cent in quantity, while the corresponding increases for cheese were 210.5 per cent in value and 49.2 per cent in quantity.

TABLE 25.—BUTTER, CHEESE, AND CONDENSED MILK: 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$15,762,212	\$6,597,949	\$4,920,462
Butter:			
Pounds.....	13,984,185	11,182,937	8,472,660
Value.....	\$8,061,141	\$3,306,494	\$2,682,106
Packed solid—			
Pounds.....	6,594,846	3,714,736	992,102
Value.....	\$3,047,179	\$1,022,496	\$298,721
Prints or rolls—			
Pounds.....	7,389,339	7,468,201	7,480,558
Value.....	\$4,413,962	\$2,283,998	\$2,383,385
Cheese:			
Pounds.....	9,424,399	6,314,757	4,218,953
Value.....	\$2,956,032	\$952,101	\$640,868
Evaporated milk: ¹			
Pounds.....	34,084,196	23,157,414	21,788,037
Value.....	\$4,038,583	\$1,302,698	\$1,164,360
All other butter, cheese, and condensed-milk factory products, value.....	\$684,080	\$663,035	\$154,350
All other products, value.....	\$22,376	\$253,651	\$278,778

¹ Includes condensed milk for 1914 and 1909, the value of which for 1919 is included in "All other butter, cheese, and condensed-milk factory products" to avoid disclosure of individual operations.

Printing and publishing (Table 26).—This table gives the number and aggregate circulation per issue of all newspapers and periodicals published in Oregon as reported at the censuses of 1919, 1914, and 1909.

TABLE 26.—PRINTING AND PUBLISHING: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1919	1914	1909	1919	1914	1909
Total.....	265	289	254	1,005,889	917,846	735,363
Daily.....	33	34	31	293,204	218,449	150,560
Sunday.....	11	7	6	191,330	146,975	93,142
Semiweekly ¹	11	14	11	25,575	30,009	26,725
Weekly.....	174	201	176	281,324	349,363	220,585
Monthly ²	30	33	30	214,456	173,050	235,351

¹ Includes in 1919 and 1914, 2 triweekly publications, and in 1909, 1 triweekly publication.

² Includes in 1919, 2 semi-monthly, 1 bimonthly, and 1 three-times-a-year publications; in 1914, 4 semi-monthly, 6 quarterly, and 1 semiannual publications; and in 1909, 2 semi-monthly, 1 quarterly, and 1 "All other" publications.

The decrease in total number of newspapers during the five-year period from 1914 to 1919 is due to the decrease in weeklies, which fact is in accordance with that existing in many states owing to high cost of paper. The aggregate circulation per issue of all publications, however, increased by 88,043, or 9.6 per cent, during the same five years.

Circulation of the daily newspapers increased 74,755, or 34.2 per cent. Of these, 25 with a circulation of

202,334, or 69 per cent of the total daily circulation, were issued in the afternoon, an increase of 61,511, or 43.7 per cent, over the afternoon circulation reported for 1914.

The increase in number of Sunday newspapers was four for the five-year period, and in circulation 44,355, or 30.2 per cent.

The foreign-language publications in 1919 numbered 11 with a circulation of 67,230, compared with 10 in 1914 having a circulation of 23,335, and of 8 in 1909 with a circulation of 50,675. In 1919 there were 2 daily newspapers, both published in the afternoon, 1 in Finnish and the other in Japanese; 7 weeklies, 2 in German and 2 in Italian, and 1 each in Finnish, Norwegian-Danish, and Swedish; 1 tri-weekly in Finnish, and 1 monthly in German. The German papers led in circulation with 47,470, the Finnish following with 14,135.

Laundries (Table 27).—Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. Table 27, however, summarizes the statistics for such laundries in the state of Oregon for 1919 and 1914.

TABLE 27.—POWER LAUNDRIES: 1919 AND 1914.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1914-1919.
	1919	1914	
Number of establishments.....	73	78	.....
Persons engaged.....	2,253	1,969	14.4
Proprietors and firm members.....	60	74	.....
Salaried employees.....	160	150	6.7
Wage earners (average number).....	2,033	1,745	16.5
Primary horsepower.....	2,334	2,338	-0.2
Capital.....	\$2,117,225	\$1,669,317	26.8
Salaries and wages.....	2,015,967	1,136,059	77.5
Salaries.....	237,322	174,382	36.1
Wages.....	1,778,645	961,677	85.0
Paid for contract work.....	0,664	.....	.....
Rent and taxes.....	68,289	49,055	39.2
Cost of materials.....	723,313	385,166	87.8
Amount received for work done.....	3,629,983	2,140,868	69.1

¹ A minus sign (—) denotes decrease; percentages are omitted where base is less than 100.

Dyeing and cleaning (Table 28).—Statistics for dyeing and cleaning establishments that were operated by mechanical power in 1919 are presented in this

table. Statistics for such establishments are not included in the general tables nor in the totals for manufacturing industries for censuses since 1900. This presentation is the first of its kind that has been made since the census statistics were confined to manufacturing industries as distinguished from the hand trades, household industries, etc.

TABLE 28.—DYEING AND CLEANING: 1919.

	Number or amount.
Number of establishments.....	23
Persons engaged.....	274
Proprietors and firm members.....	24
Salaried employees.....	43
Wage earners (average number).....	207
Primary horsepower.....	198
Capital.....	\$187,110
Salaries and wages.....	242,539
Salaries.....	37,740
Wages.....	204,799
Paid for contract work.....	565
Rent and taxes.....	16,223
Cost of materials.....	126,459
Amount received for work done.....	534,282

Custom gristmills (Table 29).—Statistics for custom gristmills are not included in the general tables nor in the totals for manufacturing industries. Data for these custom mills were not collected in 1914. Table 29, however, summarizes the statistics for such mills for 1919 and 1909. The value of products for custom gristmills represents the selling value of the grain milled.

TABLE 29.—CUSTOM GRISTMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	12	15	.....
Persons engaged.....	16	22	.....
Proprietors and firm members.....	15	16	.....
Wage earners (average number).....	1	6	.....
Primary horsepower.....	208	344	-39.5
Capital.....	\$54,006	\$40,710	32.8
Wages.....	1,500	2,046	-26.7
Rent and taxes.....	387	398	-2.8
Cost of materials ²	66,581	97,323	-31.6
Value of products ²	87,138	116,984	-25.5

¹ A minus sign (—) denotes decrease; percentages are omitted where base is less than 100.

² Includes estimate of all grain ground.

GENERAL TABLES.

Table 30 gives the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products for all industries combined and selected industries for the state and Portland, and for Astoria, Eugene, and Salem similar data for all industries combined for 1919, 1914, and 1909. Certain kindred industries are com-

bined in some instances for comparison with the 1909 figures. Table 31 presents, for 1919, for the state and for Portland, statistics in detail for each industry for which figures can be shown without disclosing the operations of individual establishments, and the statistics for all industries combined for Astoria, Eugene, and Salem.

MANUFACTURES—OREGON.

TABLE 30.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Expressed in thou- sands of dollars.			INDUSTRY AND CITY.	Cen- sus year.	Number of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Expressed in thou- sands of dollars.		
					Wages.	Cost of mate- rials.	Value of prod- ucts.						Wages.	Cost of mate- rials.	Value of prod- ucts.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
All industries.....	1919	2,707	58,559	304,346	81,094	206,206	366,783	Gas, illuminating and heating.	1919	11	334	1,910	353	818	2,927
	1914	2,320	28,829	214,222	20,932	63,258	109,762		1914	9	385	2,482	310	404	1,528
	1909	2,240	28,750	175,019	19,902	50,552	93,005		1909	8	260	1,483	194	200	909
Artificial stone products.....	1919	14	48	103	69	109	265	Ice, manufactured.....	1919	30	108	2,440	158	105	556
	1914	19	40	252	33	43	146		1914	27	106	2,050	92	118	876
	1909	20	47	46	35	46	113		1909	25	69	1,569	53	76	267
Automobile bodies and parts..	1919	17	46	93	71	118	259	Leather goods ³	1919	44	255	277	336	1,154	2,400
	1914	6	35	42	32	50	115		1914	48	202	205	158	673	1,075
Boxes, set-up paper boxes and cartons.	1919	5	169	167	125	304	585		1909	48	353	173	262	989	1,629
	1914	4	90	60	49	73	219	Leather, tanned, curried, and finished.	1919	5	39	203	49	236	315
Brass and bronze products.....	1919	4	58	250	96	275	525		1914	5	34	163	20	148	188
	1914	6	35	138	34	59	140		1909	8	49	224	34	181	244
	1909	4	42	66	49	41	122	Lumber and timber products ⁴ .	1919	706	24,578	173,178	34,427	37,524	95,264
Bread and other bakery prod- ucts.	1919	146	1,076	1,125	1,143	5,709	9,031		1914	526	13,888	101,832	9,942	14,399	30,920
	1914	163	700	589	463	1,880	3,326		1909	713	15,000	95,213	10,172	12,413	30,200
	1909	151	613	336	441	1,621	2,829	Marble and stone work.....	1919	17	55	318	89	149	354
Brick and tile, terra-cotta, and fire-clay products.	1919	23	152	1,166	165	92	386		1914	24	88	278	85	146	346
	1914	42	382	2,894	201	165	521		1909	23	76	159	75	113	297
	1909	61	385	1,922	266	155	675	Mattresses and spring beds, not elsewhere specified.	1919	6	82	155	90	329	534
Brooms.....	1919	7	84	103	72	204	412		1914	8	59	171	40	115	211
	1914	5	35	74	18	66	103		1909	7	83	105	68	211	350
Butter, cheese, and condensed milk.	1919	136	595	3,333	707	13,237	15,762	Mineral and soda waters.....	1919	33	109	1,097	154	661	1,083
	1914	118	434	1,827	325	5,502	6,588		1914	33	57	135	37	86	211
	1909	95	420	1,935	290	3,952	4,920		1909	29	69	69	43	83	239
Canning and preserving ¹	1919	103	2,344	4,397	2,018	14,366	20,591	Patent medicines and com- pounds.	1919	16	99	162	91	580	1,064
	1914	71	799	1,655	339	3,090	4,738		1914	20	42	25	22	109	217
	1909	71	661	1,318	315	2,187	3,207	Paving materials.....	1919	11	99	1,600	144	69	266
Cars and general shop construc- tion and repairs by electric- railroad companies.	1919	4	230	728	328	219	578		1914	4	26	1,201	22	98	131
	1914	4	225	737	196	305	536	Printing and publishing ⁵	1919	358	1,595	2,584	2,195	3,006	10,155
Cars and general shop construc- tion and repairs by steam- railroad companies.	1919	21	2,751	2,938	3,664	2,454	6,473		1914	377	1,556	2,230	1,407	1,563	6,011
	1914	14	1,601	1,370	1,343	1,019	2,684		1909	324	1,459	1,927	1,448	1,103	5,041
	1909	8	777	933	544	509	1,163	Shipbuilding, wooden, includ- ing boat building.	1919	30	2,090	7,282	4,609	6,854	13,778
Coffee, roasting and grinding...	1919	8	106	420	98	2,978	3,590		1914	20	163	445	158	114	332
	1914	9	99	329	61	1,532	2,050		1909	24	212	287	190	204	477
	1909	5	72	298	52	1,096	1,427	Slaughtering and meat packing.	1919	21	772	3,048	958	13,749	15,808
Coffins, burial cases, and un- takers' goods.	1919	4	73	144	113	290	494		1914	14	442	1,844	309	6,202	7,487
	1914	3	7	27	5	14	37		1909	14	366	752	280	5,015	6,890
Confectionery and ice cream...	1919	37	450	872	392	2,220	3,466	Stoves and hot-air furnaces....	1919	6	126	136	184	181	598
	1914	35	402	713	208	1,090	2,026		1914	10	80	88	75	129	289
	1909	35	402	713	208	1,090	2,026		1909	11	86	183	79	130	351
Flour-mill and gristmill prod- ucts.	1919	116	822	13,314	1,166	37,802	42,550	Tobacco, cigars.....	1919	41	91	6	96	165	367
	1914	95	450	8,565	330	9,827	11,193		1914	63	154	2	109	148	383
	1909	114	394	11,541	278	7,067	8,891		1909	55	186	.....	171	170	471
Food preparations, not else- where specified.	1919	13	169	1,729	170	3,643	4,218	Vinegar and cider.....	1919	10	60	219	57	380	629
	1914	18	79	833	53	625	878		1914	5	19	94	13	49	113
	1909	8	50	275	36	352	580		1909	4	16	54	9	61	87
Foundry and machine-shop products. ²	1919	369	5,338	14,032	9,320	14,357	31,680	Woolen goods.....	1919	5	308	2,341	754	1,946	3,357
	1914	169	1,254	4,238	1,035	1,616	3,823		1914	7	648	1,670	373	943	1,702
	1909	82	1,055	2,709	892	1,472	3,135		1909	6	466	1,558	201	522	919
Fur goods.....	1919	6	59	34	64	107	270	All other industries.....	1919	301	10,894	59,610	15,591	38,505	73,041
	1914	6	35	8	29	60	190		1914	312	3,505	73,392	2,584	10,254	17,714
	1909	5	51	12	35	96	191		1909	304	4,815	48,371	3,067	9,413	17,307
Furniture.....	1919	23	895	2,832	978	1,221	3,183								
	1914	21	673	1,674	422	544	1,335								
	1909	19	552	1,501	323	484	1,094								

¹ Includes "canning and preserving, fish"; "canning and preserving, fruits and vegetables"; and "pickles, preserves, and sauces" in all years; and "canning and preserv-
ing, oysters" in 1914 and 1909.

² Includes "automobile repairing"; "engines, steam, gas, and water"; "hardware"; "iron and steel, cast-iron pipe"; "iron and steel, welding"; "structural ironwork,
not made in steel works or rolling mills," in all years; "hardware, saddlery," in 1919 and 1914; "gas machines"; "pumps, power, other than steam," in 1919; and "steam
fittings and steam and hot-water heating apparatus" in 1914.

³ Includes "saddlery and harness" and "trunks and valises" in all years, and "pocketbooks" in 1914.

⁴ Includes "boxes, wooden packing, except cigar boxes," and "lumber, planing-mills products, not including planing mills connected with sawmills," in all years; and
"window and door screens" in 1914.

⁵ Includes "bookbinding and blank-book making"; and "engraving, steel and copper plate, including plate printing," in all years; and "lithographing" in 1914 and 1909.

MANUFACTURES—OREGON.

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TABLE 30.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES, 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
PORTLAND.....	1919	840	26,813	70,536	38,758	111,387	196,380	Fur goods.....	1919	6	59	34	64	107	270
All industries.....	1914	837	11,273	36,188	8,542	33,809	55,697		1914	6	35	8	29	60	191
	1909	649	12,214	32,122	8,979	26,076	46,861		1909	5	51	12	35	96	190
Automobile bodies and parts.....	1919	10	44	79	66	104	217	Furniture.....	1919	14	769	2,551	871	1,106	2,000
	1914	6	35	42	32	50	115		1914	12	608	1,466	389	508	1,247
	1909	6	35	42	32	50	115		1909	11	478	1,207	283	458	993
Boxes, set-up paper boxes and cartons.....	1919	5	169	167	125	304	585	Ice, manufactured.....	1919	7	51	957	84	58	275
	1914	4	90	50	49	73	219		1914	7	54	1,213	46	61	178
	1909	4	90	50	49	73	219		1909	4	16	575	14	45	108
Bread and other bakery prod- ucts.....	1919	61	853	805	887	4,489	7,157	Leather goods ^a	1919	22	222	259	283	1,005	2,104
	1914	60	536	438	354	1,441	2,527		1914	24	170	186	130	553	911
	1909	63	511	297	363	1,275	2,196		1909	26	304	136	220	868	1,386
Butter.....	1919	10	142	725	152	2,185	2,653	Lumber and timber products ^d	1919	38	3,892	22,210	5,542	10,612	21,593
	1914	9	124	589	92	1,444	1,726		1914	35	2,557	14,130	1,957	4,028	7,847
	1909	8	139	800	105	1,102	1,431		1909	42	3,669	13,998	2,672	5,067	10,111
Canning and preserving ¹	1919	9	235	219	195	886	1,454	Marble and stone work.....	1919	6	30	161	51	100	241
	1914	6	135	192	72	316	585		1914	11	67	226	64	111	264
	1909	8	133	77	49	250	464		1909	7	38	90	38	71	175
Coffee, roasting and grinding.....	1919	8	106	420	98	2,078	3,590	Mineral and soda waters.....	1919	6	75	937	119	510	795
	1914	9	99	329	61	1,532	2,050		1914	3	18	9	12	16	46
	1909	5	72	208	52	1,006	1,427		1909	5	33	27	19	39	101
Confectionery and ice cream.....	1919	26	350	768	339	1,033	2,035	Printing and publishing ^e	1919	143	1,031	1,827	1,534	2,446	7,905
	1914	20	348	618	174	989	1,830		1914	149	1,029	1,505	975	1,260	4,336
	1909	5	73	1,222	54	1,179	1,337		1909	132	952	1,402	1,036	847	3,736
Flour-mill and gristmill prod- ucts.....	1919	7	374	3,179	553	20,110	22,526	Shipbuilding, wooden, includ- ing boat building.....	1919	9	1,787	3,658	2,907	5,409	9,881
	1914	6	183	1,925	135	4,699	5,229		1914	5	40	84	37	19	80
	1909	5	73	1,222	54	1,179	1,337		1909	7	101	63	92	90	231
Food preparations, not else- where specified.....	1919	13	169	1,729	170	3,643	4,218	All other industries.....	1919	301	11,008	17,593	16,846	30,993	76,653
	1914	18	79	633	53	625	878		1914	333	4,054	9,222	3,027	14,173	22,246
	1909	8	50	275	36	352	580		1909	269	4,795	9,498	3,207	12,019	10,867
Foundry and machine-shop products. ^a	1919	145	4,538	12,253	7,872	13,409	28,458								
	1914	114	1,012	3,323	854	1,311	3,193								
	1909	44	709	2,080	704	1,222	2,627								

CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

ASTORIA	1919	78	1,404	6,832	2,072	9,271	13,399	SALEM	1919	84	1,080	3,324	1,179	6,741	9,435
	1914	57	1,172	8,090	866	2,649	4,587		1914	67	732	3,185	404	1,637	2,840
	1909	57	1,172	8,090	866	2,649	4,587		1909	62	597	1,688	367	1,177	2,208
EUGENE	1919	52	534	2,133	474	1,472	2,490								
	1914	37	238	1,061	167	407	810								

- ¹ Includes "canning and preserving, fish"; "canning and preserving, fruits and vegetables"; and "pickles, preserves, and sauces" in all years; and "canning and pre-
serving, oysters" in 1914.
- ² Includes "automobile repairing"; "engines, steam, gas, and water"; "hardware"; "iron and steel, welding"; and "structural ironwork, not made in steel works or
rolling mills" in all years; "hardware, saddlery" in 1919 and 1914; "gas machines" and "pumps, power, other than steam" in 1919.
- ³ Includes "saddlery and harness" and "trunks and valises."
- ⁴ Includes "lumber, planing-mill products, not including planing mills connected with sawmills" in all years; "boxes, wooden packing, except cigar boxes" in 1914 and
1909; and "window and door screens" in 1914.
- ⁵ Includes "engraving, steel and copper plate, including plate printing" in all years; "bookbinding and blank-book making"; and "lithographing" in 1914 and 1909.

MANUFACTURES—OREGON.

TABLE 31.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.						

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

	2,707	68,005	2,540	2,411	2,963	1,532	58,559	Au 62,488	De 49,499	(*)	(*)	(*)	(*)	(*)	Dollars.
All industries.....	14	71	12	9	1	1	48	Oc 71	Ja 16	73	73	—	—	—	218,493
Artificial stone products.....	17	70	22	1	1	—	46	Jy 55	Ja 31	50	48	1	1	—	115,256
Automobile bodies and parts.....	229	1,163	294	46	57	39	727	Se 810	Ja 608	813	797	12	4	—	1,492,590
Automobile repairing.....	3	22	2	3	—	—	17	(*) 17	(*) 17	19	14	5	—	—	21,343
Baskets, and rattan and willow ware.	6	69	4	6	1	3	55	Au 67	Ja 49	55	24	29	2	—	91,881
Bookbinding and blank-book making.	5	186	2	7	3	5	169	De 205	Ja 149	205	71	134	—	—	323,641
Boxes, set-up paper boxes and cartons.	20	662	14	24	12	2	610	Au 826	Fe 437	620	528	90	2	—	1,479,065
Boxes, wooden packing, except cigar boxes.	4	72	1	10	1	2	58	Mh 65	Oc 49	52	52	—	5	10	283,288
Brass and bronze products.....	146	1,550	164	71	149	90	1,076	No 1,126	My 1,028	1,116	716	385	5	—	2,986,540
Bread and other bakery products...	23	187	22	11	1	1	152	—	—	285	281	1	3	—	1,034,650
Brick and tile, terra-cotta, and fire-clay products.	15	104	16	4	—	—	84	Jy 197	Ja 10	161	158	—	3	—	322,880
Building brick.....	8	83	6	7	1	1	68	Oc 123	Ja 17	124	123	1	—	—	711,770
Stove lining, sewer pipe, drain-tile, and terra-cotta products.	7	100	3	8	3	2	84	De 104	My 61	105	71	34	—	—	267,994
Brooms.....	76	570	44	61	58	58	349	Je 414	De 284	328	280	47	1	—	2,686,548
Butter.....	36	578	8	51	28	15	476	Au 940	Ja 115	1,034	849	185	—	—	7,302,828
Canning and preserving, fish.....	59	1,937	37	92	39	40	1,720	—	—	3,769	1,384	2,300	15	60	5,027,763
Canning and preserving, fruits and vegetables.	34	1,482	13	75	33	37	1,324	Se 2,897	Ap 199	2,811	891	1,846	14	60	3,412,502
Canned fruits.....	21	302	24	12	1	9	256	Oc 603	Mh 44	635	399	235	1	—	1,148,103
Dried fruits.....	4	153	—	5	5	3	140	Au 287	Fe 18	313	94	219	—	—	467,158
Canned and dried vegetables.....	3	39	3	3	3	1	29	Oc 36	Ja 24	34	27	7	—	—	12,561
Carpets, rag.....	4	22	5	—	—	—	17	Jy 22	Mh 15	19	18	—	1	—	22,852
Carriages and wagons, repair work only.	4	250	—	6	12	2	230	Ja 239	My 221	237	235	2	—	—	631,351
Cars and general shop construction and repairs by electric-railroad companies.	21	2,924	—	95	47	31	2,751	De 3,145	Je 2,551	3,145	3,106	39	—	—	3,858,129
Cars and general shop construction and repairs by steam-railroad companies.	52	96	25	2	2	1	66	Jy 91	Ja 34	87	85	1	1	—	409,726
Cheese.....	5	549	8	19	25	16	481	De 603	Mh 396	603	92	510	1	—	1,077,643
Clothing, men's.....	7	64	8	—	1	2	53	—	—	65	11	54	—	—	80,556
Clothing, women's.....	3	23	5	—	—	—	18	Oc 26	Ja 12	26	6	20	—	—	46,134
Suits, skirts, and cloaks.....	4	41	3	—	1	2	35	Oc 46	Ja 24	39	5	34	—	—	34,422
All other.....	8	176	2	16	44	8	106	Jy 113	Ap 97	104	54	50	—	—	1,545,235
Coffee, roasting and grinding.....	4	93	1	9	5	5	73	Ja 80	Se 65	76	62	14	—	—	407,828
Coffins, burial cases, and undertakers' goods.	8	247	—	21	29	17	180	De 241	Ap 138	249	207	42	—	—	2,494,314
Condensed milk.....	37	637	38	41	65	43	450	—	—	495	179	316	—	—	1,210,956
Confectionery and ice cream.....	30	496	32	27	55	36	346	De 417	Mh 304	417	109	308	—	—	737,046
Confectionery.....	7	141	6	14	10	7	124	Jy 129	De 79	78	70	8	—	—	423,910
Ice cream.....	4	28	5	4	—	—	19	Oc 31	Fe 10	24	24	—	—	—	91,046
Cooperage, hogsheds and barrels.....	63	338	69	28	25	12	204	Oc 248	Ja 153	227	227	—	—	—	761,340
Copper, tin, and sheet-iron work.....	3	8	2	1	—	1	4	De 8	Je 2	7	6	—	1	—	21,000
Dairymen's, poultrymen's, and apiarists' supplies.	5	18	5	—	—	—	13	Ap 15	Fe 12	12	9	3	—	—	8,942
Dental goods.....	3	31	2	4	3	2	20	Se 23	Ap 17	21	18	3	—	—	50,256
Electrical machinery, apparatus, and supplies.	6	58	6	2	—	6	44	De 51	Ja 37	51	43	8	—	—	72,018
Engraving, steel and copper plate, including plate printing.	3	9	1	2	—	—	6	Ap 7	Au 5	7	7	—	—	—	10,950
Fertilizers.....	4	21	4	1	2	3	11	Mh 14	My 8	10	7	3	—	—	75,480
Flavoring extracts.....	116	1,232	99	142	113	56	822	De 959	Jy 652	954	929	25	—	—	23,000,662
Flour-mill and gristmill products.....	13	259	10	29	34	17	169	—	—	171	134	37	—	—	2,561,087
Food preparations, not elsewhere specified.	4	29	3	1	2	2	21	Oc 22	Se 18	22	17	5	—	—	95,775
Macaroni, vermicelli, and noodles	9	230	7	28	32	15	148	Oc 187	Jy 112	149	117	32	—	—	2,465,312
All other.....	121	3,722	95	153	152	67	3,265	—	—	2,460	2,442	8	9	1	7,388,394
Foundry and machine-shop products.	18	1,738	9	32	67	18	1,612	Ja 2,957	De 888	868	868	—	—	—	2,634,702
Boiler shops and foundries.....	82	1,222	72	85	47	28	990	Ap 1,113	De 799	855	838	7	9	1	3,042,208
Machine shops.....	21	762	14	36	88	11	663	Ja 828	De 455	737	736	1	—	—	1,711,484
Machine shop and foundry combined.	6	83	8	5	5	6	59	Se 71	Ap 48	65	20	44	1	—	196,845
Fur goods.....	23	1,004	14	46	34	15	895	—	—	1,019	970	49	—	—	2,979,542
Furniture.....	17	870	9	35	28	13	785	De 870	Ja 658	880	835	45	—	—	2,613,466
Wood, other than rattan and willow.	6	134	5	11	6	2	110	Oc 150	Ja 76	139	135	4	—	—	365,076
All other.....	11	540	—	36	98	72	334	De 414	Ja 261	414	414	—	—	—	14,549,796
Gas, illuminating and heating.....	3	6	2	—	—	—	4	Fe 6	Mh 3	5	5	—	—	—	5,000
Hardware, saddlery.....	3	30	3	3	—	—	21	No 30	Mh 15	29	8	21	—	—	43,454
Hats and caps, other than felt, straw, and wool.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).
 * Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).
 * No figures given for reasons stated under "Explanation of terms."

MANUFACTURES—OREGON.

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COMBINED AND SPECIFIED INDUSTRIES; 1919.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.			Rent- ²	
										Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.							
7,815,628	6,183,543	81,093,784	1,936,402	1,285,941	12,417,927	201,354,721	4,851,320	366,782,627	160,576,586	304,346	140,640	25,161	2,166	43,252	93,127	25,611
24,345	1,242	60,080	.....	2,351	1,861	106,211	2,749	265,385	159,425	103	.....	.....	3	.....	100	.....
1,850	360	71,358	.....	12,718	1,434	113,705	3,940	258,078	141,033	93	.....	.....	.....	.....	93	.....
78,713	80,884	1,027,133	405,620	107,166	15,305	745,746	44,380	2,604,002	1,814,496	1,202	2	.....	196	11	963	3
5,620	.....	12,858	.....	80	250	10,747	400	44,447	33,234	12	.....	.....	.....	.....	12	.....
20,354	4,304	52,843	2,520	3,875	2,738	74,618	1,705	195,734	119,411	38	.....	.....	.....	.....	38	.....
38,040	8,944	124,739	.....	14,958	16,589	293,585	5,554	585,249	281,110	167	50	.....	.....	.....	117	.....
92,855	30,309	600,391	7,440	5,850	79,810	2,084,192	27,156	4,112,237	2,000,889	3,540	820	.....	5	.....	2,715	110
28,010	6,774	96,280	.....	5,770	50,024	263,834	11,525	525,105	249,746	250	.....	.....	.....	.....	250	.....
176,450	342,494	1,142,911	638	93,183	108,803	5,573,984	135,085	9,031,478	3,322,409	1,125	105	.....	10	.....	1,009	19
23,689	2,969	165,424	1,983	180	9,242	26,581	65,139	385,581	293,861	1,166	536	.....	10	.....	600	20
5,608	.....	89,937	.....	30	1,590	13,319	32,020	189,153	143,214	680	275	.....	.....	.....	395	11
18,081	2,969	75,487	1,983	150	7,052	13,262	32,519	196,428	150,647	486	281	.....	10	.....	205	20
19,744	8,653	72,167	.....	4,420	7,143	291,190	3,211	412,060	117,650	103	50	.....	.....	.....	53	13
116,231	111,387	395,827	861	31,270	21,155	7,369,497	69,161	8,727,889	1,289,211	1,714	289	.....	25	.....	1,400	39
125,723	58,419	606,090	211,107	5,617	164,005	4,005,178	59,310	6,531,402	1,896,974	1,390	999	25	59	.....	307	15
234,606	100,505	1,225,144	361	12,590	322,956	8,108,554	106,934	12,205,651	4,050,163	2,574	1,204	30	120	60	1,160	16
201,356	72,154	904,884	106	10,884	312,886	4,832,551	59,215	8,251,293	3,359,527	1,909	1,072	.....	8	42	787	17
23,300	21,218	221,063	165	1,706	4,380	3,009,545	27,335	3,684,150	547,280	371	87	30	.....	.....	252	18
8,850	7,133	99,197	.....	5,080	200,458	20,384	20,384	430,198	143,350	294	45	.....	110	18	121	19
1,650	2,432	30,813	.....	1,655	50	18,340	866	71,624	52,418	38	7	.....	.....	.....	31	20
.....	.....	24,004	.....	3,106	206	29,304	1,503	77,394	46,587	32	.....	.....	.....	.....	32	21
15,087	15,431	328,169	.....	364	206,775	12,056	578,091	359,260	728	728	.....	.....	.....	.....	728	22
242,710	110,436	3,663,827	.....	4,420	2,232,075	222,263	6,472,962	4,018,624	2,038	763	.....	.....	.....	.....	2,175	72
2,800	907	89,667	3,714	1,578	35,953	2,524,379	20,394	2,854,282	309,509	498	397	.....	12	10	79	24
42,159	36,675	348,455	.....	9,000	20,549	1,322,435	6,537	2,034,335	705,313	224	150	.....	.....	.....	74	25
.....	3,530	44,205	.....	5,921	1,088	81,309	1,277	153,095	71,109	11	.....	.....	.....	.....	11	26
.....	.....	13,555	.....	900	784	29,096	466	48,075	18,513	3	.....	.....	.....	.....	3	27
48,379	38,213	97,524	.....	17,130	304	51,013	811	105,020	52,596	8	.....	.....	.....	.....	8	28
30,904	7,895	113,208	.....	1,500	40,092	2,964,540	13,557	3,590,207	612,110	420	.....	.....	.....	.....	420	29
49,805	57,999	221,460	2,040	250	10,857	288,452	1,792	494,442	204,198	144	.....	.....	.....	.....	144	30
120,511	142,918	391,584	182	23,379	169,367	3,182,839	70,413	4,180,061	926,809	1,121	618	.....	.....	.....	503	10
68,854	124,482	240,548	182	20,059	49,474	2,176,997	42,920	3,455,899	1,245,892	872	75	.....	26	.....	771	31
51,667	18,436	142,030	.....	3,320	22,480	1,301,555	10,983	2,243,438	924,000	230	.....	.....	20	.....	204	33
8,400	.....	23,688	.....	2,856	20,985	875,442	25,937	1,222,371	320,092	642	75	.....	.....	.....	507	34
68,045	40,696	325,337	1,800	20,007	1,114	100,532	1,020	148,479	46,927	38	.....	.....	.....	.....	38	35
1,800	150	2,030	.....	304	17,202	589,789	8,411	1,389,365	741,105	264	.....	.....	.....	.....	264	36
.....	.....	.....	.....	.....	.....	8,645	316	25,422	16,461	30	.....	.....	.....	.....	30	37
6,910	9,285	20,998	.....	1,805	16,222	20,436	74	57,719	37,209	3	.....	.....	.....	.....	3	38
.....	.....	.....	.....	2,782	816	37,241	1,067	103,127	64,819	35	.....	.....	.....	.....	35	39
6,565	4,282	54,818	.....	5,100	521	25,919	2,018	154,837	120,900	72	.....	.....	.....	.....	72	40
1,800	.....	7,192	.....	300	16	13,551	865	31,170	16,754	58	40	.....	3	.....	15	41
1,500	6,020	12,236	.....	3,240	65	141,060	1,207	192,474	40,598	15	.....	.....	.....	.....	15	42
387,018	214,125	1,165,868	30,139	19,788	274,062	37,559,277	242,471	42,540,987	4,748,239	13,314	447	.....	402	3,147	9,318	34
69,465	95,447	170,208	.....	12,687	66,297	3,616,096	27,141	4,217,694	574,457	1,729	750	.....	.....	.....	979	44
1,500	3,736	21,887	.....	2,658	1,145	113,607	4,003	164,943	46,673	106	.....	.....	.....	.....	106	45
67,965	91,711	148,321	.....	10,029	65,122	3,502,489	22,478	4,052,751	527,784	1,023	750	.....	.....	.....	873	46
595,487	273,475	6,219,532	7,901	72,579	1,248,396	8,389,694	333,422	11,136,153	12,413,037	7,636	3,175	.....	59	.....	4,402	1,100
154,306	99,382	3,773,619	2,780	15,960	910,359	4,677,070	179,316	11,554,161	6,697,175	4,246	3,075	.....	.....	.....	1,171	1,100
276,812	99,333	1,500,462	.....	43,624	187,809	2,350,701	83,554	3,891,409	3,397,154	1,781	100	.....	56	.....	1,625	40
164,309	74,760	1,345,451	5,151	12,995	144,138	1,331,323	70,552	3,720,583	2,318,708	1,609	.....	.....	3	.....	1,006	50
13,625	11,270	63,916	854	17,400	8,490	105,174	1,695	270,445	163,576	34	.....	.....	.....	.....	34	51
126,476	82,269	978,203	54	10,582	85,891	1,172,976	48,044	3,182,718	1,901,608	2,832	90	617	2	.....	2,123	52
100,403	73,057	821,197	54	2,755	84,877	1,001,307	44,533	2,694,292	1,648,452	2,658	.....	617	2	.....	2,039	53
29,073	9,212	157,006	.....	7,827	1,014	171,669	3,511	488,426	313,246	174	90	.....	.....	.....	84	54
77,185	193,621	353,324	.....	635	231,122	214,568	603,907	2,927,374	2,108,896	1,910	293	1,540	.....	.....	77	2,089
.....	.....	5,235	.....	330	28	1,415	332	11,854	10,107	23	.....	.....	15	.....	8	55
5,580	2,412	23,006	.....	1,380	250	45,673	471	103,961	57,817	6	.....	.....	.....	.....	6	57

¹ Same number reported throughout the year.
² Same number reported for one or more other months.

MANUFACTURES—OREGON.

TABLE 31.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.			
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.	Female.		
								Maximum month.							Minimum month.

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

INDUSTRY.	Number of establishments.	Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.	Average number.	Wage earners.	Total.	16 and over.	Under 16.	Capital.
1 Hats, fur-felt.....	3	7	3	18	5	4	4	4	4	4	8,307
2 Ice, manufactured.....	30	159	24	18	5	4	108	187	66	115	1,123,480
3 Jewelry.....	4	11	5	4	2	5	55	No ⁴ 57	Je ⁴ 53	56	56,998
4 Lapidary work.....	4	22	4	1	2	1	6	(²) 6	(²) 6	6	7,489
5 Leather goods, not elsewhere specified	6	46	4	3	2	1	14	De 17	My 11	17	44,378
6 Leather, tanned, curried, and finished	5	25	6	2	1	1	39	Ja ⁴ 40	No 37	38	242,998
7 Looking-glass and picture frames.....	4	25	6	2	1	1	12	De 13	Ja 11	14	100,071
8 Lumber and timber products.....	625	24,876	701	524	570	197	22,884	Au 27,697	Ja 15,787	27,204	83,482,424
9 Lumber, planing-mill products, not including planing mills connected with sawmills.	61	1,305	51	76	68	26	1,084	Au 1,311	Ja 794	1,229	3,908,674
10 Marble and stone work.....	17	96	16	8	14	3	55	My 63	Ja 43	59	334,781
11 Mattresses and spring beds, not elsewhere specified.	6	105	8	6	6	3	82	No ⁴ 111	Ja ⁴ 57	111	289,386
12 Millinery and lace goods, not elsewhere specified.	6	52	9	2	2	2	41	.....	.....	47	45,718
13 Trimmings hats and hat frames.....	3	20	5	2	2	2	15	Ap ⁴ 18	Ja ⁴ 13	16	22,118
14 All other.....	3	32	4	2	2	2	26	De 31	Ja ⁴ 25	31	23,600
15 Mineral and soda waters.....	33	181	34	8	27	3	109	Je 137	Ja 74	125	1,488,121
16 Models and patterns, not including paper patterns.	5	28	6	2	2	2	22	Je 28	Ja ⁴ 16	23	22,698
17 Patent medicines and compounds.....	16	197	28	25	26	19	99	.....	.....	90	1,955,850
18 Patent and proprietary medicines	10	163	22	19	21	16	85	Oc 116	My ⁴ 71	83	1,822,132
19 Patent and proprietary compounds, not elsewhere specified.	6	34	6	5	3	3	14	Mh ⁴ 18	De 8	13	133,718
20 Paving materials.....	11	117	7	8	3	3	99	Se 196	Ja 22	155	344,435
21 Photo-engraving.....	4	28	3	2	1	1	21	De 25	Ap ⁴ 19	21	21,090
22 Pickles, preserves, and sauces.....	8	214	5	20	26	15	148	Ja 177	De 125	131	1,847,257
23 Printing and publishing, book and job	122	890	120	81	64	58	567	.....	.....	607	2,090,450
24 Job printing.....	113	825	108	78	47	47	545	De 595	Se 524	584	1,968,987
25 All other.....	9	65	12	3	17	11	22	Fe ⁴ 23	My 20	23	121,463
26 Printing and publishing, newspapers and periodicals.	224	1,857	205	180	374	219	929	.....	.....	1,011	3,493,299
27 Printing and publishing.....	17	172	15	14	25	13	105	De 115	Fe 98	115	300,803
28 Printing, publishing, and job printing.	158	1,540	161	80	320	156	828	De 883	Fe 778	895	3,066,075
29 Publishing without printing.....	49	145	20	36	29	50	1	(²) 1	(²) 1	1	127,421
30 Saddlery and harness.....	33	260	33	18	18	9	182	Ja 281	No 145	156	984,702
31 Shipbuilding, wooden, including boat building.	30	3,255	23	70	120	52	2,990	.....	.....	4,396	9,667,360
32 New vessels.....	15	3,171	5	64	117	52	2,933	Ja 7,757	Oc 624	4,328	9,437,117
33 Repair work only.....	3	37	4	3	1	1	29	Jy 37	Je 19	24	78,014
34 Small boats, and masts, spars, oars and rigging.	12	47	14	3	2	2	28	Ja 46	Oc 17	44	152,229
35 Signs, other than electric.....	9	28	10	2	2	2	16	Oc 20	Ja 12	18	13,318
36 Slaughtering and meat packing.....	21	1,035	10	29	174	50	772	Ja 927	Jy 698	721	5,255,407
37 Stoves and hot-air furnaces.....	6	155	11	1	6	6	126	Ja 189	De 102	102	245,584
38 Structural ironwork, not made in steel works or rolling mills.	6	1,248	5	26	85	21	1,111	Oc 3,346	Fe 86	1,387	687,142
39 Tobacco, cigars.....	41	144	47	1	4	1	91	De 108	Fe 84	106	371,257
40 Tools, not elsewhere specified.....	4	24	3	2	2	2	19	Ja ⁴ 22	Fe 16	19	40,280
41 Trunks and valises.....	5	77	5	7	4	2	59	No 72	Ja 48	71	198,076
42 Vinegar and cider.....	10	78	4	10	2	2	60	Oc 114	My 20	121	408,157
43 Wood, turned and carved.....	8	75	5	4	1	1	65	Oc 85	Ja 37	78	127,238
44 Wooden goods, not elsewhere specified.	4	16	3	2	2	2	13	De 25	Ja 8	12	36,394
45 Woolen goods.....	5	858	17	27	6	6	808	Se 909	Mh 701	855	2,459,000
46 All other industries*.....	144	10,742	91	232	285	177	9,956	.....	.....	457	28,862,919

*All other industries embrace—

Agricultural implements..... 1
Artificial limbs..... 1
Awnings, tents, and sails..... 3
Babbitt metal and solder..... 2
Bags, other than paper, not including bags made in textile mills..... 2
Belting, leather..... 1
Blacking, stains, and dressings..... 2
Bluing..... 2
Boots and shoes..... 2
Boxes, cigar..... 1
Brushes..... 1
Cars, steam-railroad, not including operations of railroad companies... 1

Cement..... 1
Chemicals..... 1
Cleansing and polishing preparations..... 2
Cordage and twine..... 1
Cordials and flavoring sirups..... 1
Electroplating..... 2
Enameling..... 1
Engines, steam, gas, and water..... 3
Fancy articles, paper and wood novelties..... 2
Flags and banners..... 1
Flax and hemp, dressed..... 1
Furnishing goods, men's neckwear.. 1

Furs, dressed..... 1
Galvanizing..... 1
Gas and electric fixtures..... 2
Gas machines..... 1
Glass, cutting, staining, and ornamenting..... 2
Gloves and mittens, cloth, not including gloves made in textile mills..... 1
Gloves and mittens, leather..... 2
Glucose..... 1
Grease and tallow, not including lubricating greases..... 1
Hair work..... 1

Hand stamps..... 2
Hardware..... 2
Instruments, professional and scientific..... 1
Iron and steel, steel works and rolling mills..... 1
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills..... 1
Iron and steel, cast-iron pipe..... 1
Iron and steel, cut nails and spikes, not made in steel works or rolling mills..... 1
Iron and steel, welding..... 2

1 Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

2 Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-halt or transmitted power from neighboring power plants).

MANUFACTURES—OREGON.

23

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.				Electric horsepower generated in establishments reporting.
										Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹	Rent- ²	

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.							
45,922	12,126	3,800	555	1,480	58	8,549	397	21,660	12,614	2						2	
8,479	6,675	167,943	645	15,450	22,438	20,927	83,731	556,002	451,344	2,440	115					2,130	
		72,066		5,410	910	44,943	838	187,490	141,709	32						32	
		4,855		726	59	2,099	1,277	17,847	14,471	31						29	
1,000	3,875	15,120		2,280	478	36,327	1,602	68,977	31,047	12				2		12	
5,400		49,177			1,005	231,861	4,451	314,667	78,255	203	16					187	
3,101	3,964	14,939		4,322	1,160	38,027	4,330	91,996	53,639	12				10		2	
2,109,393	1,161,198	32,437,677	836,284	147,374	2,476,077	31,432,701	701,942	85,347,711	53,213,088	163,737	115,457	22,784	917	3,208	21,371	18,114	
228,898	127,074	1,389,375	17,270	30,918	85,977	3,220,034	52,252	5,804,349	2,526,083	5,901	2,643	65		75	3,118	200	
21,410	21,716	89,370		7,803	1,961	141,035	8,132	354,138	204,971	318					318		1
19,250	8,627	89,737		4,935	1,445	325,496	3,552	534,140	205,092	155					155		1
	1,480	26,615	200	6,667	249	30,988	714	91,951	60,249	7					7		1
		10,806	200	4,079	120	17,985	564	47,806	20,267	3					3		1
	1,480	15,899		2,578	129	13,003	150	44,145	30,992	4					4		1
17,520	47,197	163,614		6,842	63,061	639,481	21,099	1,082,599	422,019	1,097	708		4	2	383		1
		32,410		2,400	156	10,248	937	70,850	53,674	39					39		1
95,306	51,980	90,005	15	8,430	25,861	574,032	5,480	1,063,828	484,316	162	86			10	66		1
75,047	45,117	71,323		7,034	24,855	450,425	3,688	870,521	422,408	79	40				39		1
20,259	6,863	10,282	15	802	1,006	123,607	1,792	187,307	61,908	83	46			10	27		1
10,860	1,240	143,995		3,169	3,126	45,175	23,707	266,267	197,385	1,000	446		6	32	1,116		2
2,220	2,630	34,402		2,460	877	10,282	916	106,196	88,999	10					10		2
48,915	79,517	180,807		8,097	17,080	1,455,161	30,712	1,794,022	308,149	433	92		5		336	1	2
247,676	140,484	724,532	23,952	76,145	54,691	1,233,513	23,858	3,395,859	2,138,488	793				1	792		2
242,244	129,902	695,859	22,106	73,703	54,062	1,227,268	22,180	3,288,307	2,039,309	785				1	784		2
5,432	16,582	28,673	1,750	2,442	629	6,265	1,678	107,052	99,119	8					8		2
341,155	777,797	1,363,102	284,037	118,484	218,906	1,582,253	61,838	6,408,348	4,764,257	1,681			54	13	1,614		2
28,941	34,574	152,203	8,511	7,552	10,255	93,778	7,317	534,048	432,953	150					150		2
243,688	643,764	1,210,495	5,904	96,047	106,490	1,458,611	54,388	5,159,905	3,646,606	1,530				54	13	1,463	2
68,526	99,459	404	260,622	14,285	3,161	29,864	133	714,695	684,698	1					1		2
40,593	35,864	245,004		17,502	52,252	931,547	6,437	1,931,187	993,203	233					233	1	2
269,216	276,739	4,609,196	57,534	74,072	585,641	6,754,145	99,417	13,777,615	6,924,053	7,282	1,544		140		5,598		3
245,016	273,878	4,510,138	57,534	70,072	570,537	6,623,748	97,675	13,433,491	6,712,068	7,036	1,469		120		5,447		3
7,200	1,200	61,929		1,890	1,330	48,585	170	141,777	93,022	87	55		14		18		3
17,000	1,661	37,129		2,110	13,724	81,812	1,572	202,347	118,963	159	20		6		133		3
	744	23,102	675	4,102	70	22,134	78	77,245	55,033	3					3		3
112,047	314,206	957,674	16,180	24,461	40,760	13,625,004	124,329	15,868,169	2,118,836	3,048	435	100			2,513		3
40,200	9,542	189,883		3,315	8,269	172,168	8,357	597,904	417,379	136					136		3
91,478	50,463	1,701,796	4,672	10,974	10,164	3,814,836	33,290	6,392,273	2,544,147	4,618					4,618		3
317	5,400	95,965		7,374	40,631	163,590	1,497	367,450	202,463	6					6		3
3,280		39,095		2,072	342	30,631	1,168	78,602	40,803	25				5	20		3
24,381	20,696	70,021		7,170	3,710	176,658	1,665	399,350	221,027	32					32		3
21,856	3,016	56,999	150	3,510	11,157	370,606	9,190	520,463	149,767	219				12	179		3
6,460	100	47,443	66	2,920	602	58,691	3,143	158,718	96,984	443	120				323		3
	788	12,255	543	1,033	149	20,132	1,248	44,454	23,074	123				15	93		3
57,595	72,935	754,064	1,996	62,171	1,858,725	87,744	87,744	3,356,659	1,410,190	2,341	153			1,250	938	40	3
1,032,031	781,788	14,756,685	14,350	129,270	5,480,324	35,512,200	1,243,699	69,253,673	32,497,774	58,670	7,916		61	35,211	15,482	3,688	3

Knit goods.....	1	Optical goods.....	5	Sausage, not made in slaughtering	1	Tinware, not elsewhere specified.....	3
Labels and tags.....	2	Paints.....	2	and meat-packing establishments..	1	Toys and games.....	2
Lamps.....	2	Paper and wood pulp.....	4	Saws.....	4	Typewriter supplies, carbon paper..	1
Line.....	2	Peanuts, grading, roasting, cleaning,	1	Shipbuilding, steel, new vessels.....	3	Upholstering materials, excelsior..	2
Liquors, malt.....	2	and shelling.....	1	Shirts.....	1	Varnishes.....	2
Minerals and earths, ground or other-	1	wise treated.....	1	Soap.....	4	Wall plaster and composition flooring	1
Mirrors, framed and unframed, not	1	elsewhere specified.....	1	Sporting and athletic goods.....	1	Waste, cotton.....	1
elsewhere specified.....	1	Photographs and graphophones.....	2	Springs, steel, automobile.....	1	Window shades and fixtures.....	2
Musical instruments and materials,	1	Photographic materials.....	2	Statuary and art goods.....	1	Wirework, not elsewhere specified..	2
not elsewhere specified.....	1	Pottery, earthen and stone ware.....	1	Steam packing.....	1	Wood preserving.....	1
Needles, pins, and hooks and eyes..	1	Pulp goods, wall board.....	2	Stencils and brands.....	2	Wool pulling.....	2
Oil, lard.....	1	Pumps, power, other than steam....	2	Stereotyping and electrotyping.....	2	Wool scouring.....	1
Oil, animal.....	2	Roofing materials.....	2	Surgical appliances.....	2	Worsted goods.....	1
		Rubber tires, tubes, and rubber	2				
		goods, not elsewhere specified.....	2				

¹ Same number reported throughout the year.

² Same number reported for one or more other months.

MANUFACTURES—OREGON.

TABLE 31.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.					

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

		846	32,157	609	1,885	1,839	951	26,813	Mh 30,991	De 20,564	29,396	26,241	3,107	32	16	Dollars. 106,365,175
1	PORTLAND—All industries..															
2	Artificial stone products.....	6	39	5	5	1	1	27	De 40	Ja 4	44	44	.....	.....	.....	100,249
3	Automobile bodies and parts.....	10	53	12	1	1	.....	44	Ja 51	Ja 31	45	45	1	.....	.....	76,580
4	Automobile repairing.....	67	497	64	34	34	20	345	Ja 372	Fe 304	340	339	7	.....	.....	543,383
5	Boxes, set-up paper boxes and cartons	5	185	2	7	3	5	199	De 205	Ja 149	206	71	134	.....	.....	328,041
6	Bread and other bakery products.....	61	1,187	60	63	143	02	853	No 898	My 813	878	554	312	2	10	2,339,060
7	Brick, sewer pipe, and drain tile.....	3	49	1	4	.....	.....	44	Ja 111	Ja 3	85	84	1	.....	.....	601,491
8	Brooms.....	7	100	3	8	3	2	84	De 104	My 61	105	71	34	.....	.....	267,994
9	Butter.....	10	231	4	20	42	23	142	Ja 172	De 113	115	90	25	.....	.....	1,288,195
10	Carpets, rag.....	3	39	3	3	3	1	29	De 30	Ja 24	34	27	7	.....	.....	12,801
11	Clothing, men's.....	5	549	8	19	25	16	481	De 603	Mh 396	603	62	510	1	.....	1,077,643
12	Clothing, women's.....	7	64	8	.....	1	2	53	.....	.....	65	11	54	.....	.....	80,556
13	Suits, skirts, and cloaks.....	3	23	5	.....	.....	.....	18	Ja 26	Ja 12	26	6	20	.....	.....	45,134
14	All other.....	4	41	3	.....	1	2	35	Ja 46	Ja 24	39	5	34	.....	.....	34,422
15	Coffee, roasting and grinding.....	8	170	2	16	44	8	106	Ja 113	Ap 97	104	54	50	.....	.....	1,648,296
16	Coffins, burial cases, and undertakers' goods.....	4	93	1	9	5	5	73	Ja 80	Se 65	70	62	14	.....	.....	407,828
17	Confectionery and ice cream.....	26	521	27	32	63	40	359	Oc 402	Fe 316	396	164	232	.....	.....	1,041,796
18	Copper, tin, and sheet-iron work.....	40	265	40	27	23	9	166	Oc 199	Ja 127	179	179	.....	.....	.....	626,533
19	Dental goods.....	5	18	5	.....	.....	.....	13	Ap 15	Fe 12	12	9	3	.....	.....	8,942
20	Electrical machinery, apparatus, and supplies.....	3	31	2	4	3	2	20	Se 23	Ap 17	21	18	3	.....	.....	50,256
21	Engraving, steel and copper plate, including plate printing.....	6	58	6	2	.....	6	44	De 51	Ja 37	51	43	8	.....	.....	72,018
22	Flavoring extracts.....	4	21	4	1	2	3	11	Mh 14	My 8	10	7	3	.....	.....	75,496
23	Flour-mill and gristmill products.....	7	529	.....	48	74	33	374	De 440	Jy 316	440	422	18	.....	.....	12,414,238
24	Food preparations, not elsewhere specified.....	13	259	10	29	34	17	169	.....	.....	171	134	37	.....	.....	2,561,037
25	Macaroni, vermicelli, and noodles.....	4	29	3	1	2	2	21	Oc 22	Se 18	22	17	5	.....	.....	95,775
26	All other.....	9	230	7	28	32	15	148	Oc 187	Jy 112	149	117	32	.....	.....	2,465,312
27	Foundry and machine-shop products.....	64	3,254	36	132	140	49	2,897	.....	.....	2,017	2,007	6	4	.....	6,028,122
28	Boiler shops and foundries.....	14	1,723	4	31	66	18	1,604	Ja 2,953	De 857	857	857	.....	.....	.....	2,600,364
29	Machine shops.....	45	1,079	20	83	45	25	897	Ap 1,021	De 711	757	747	6	4	.....	2,668,961
30	Machine shop and foundry combined.....	5	452	3	18	29	6	396	Ja 529	De 301	403	403	.....	.....	.....	756,797
31	Fur goods.....	6	83	8	5	5	6	59	Se 71	Ap 48	65	20	44	1	.....	196,843
32	Furniture.....	14	852	7	37	27	12	769	Oc 832	Ja 625	879	842	37	.....	.....	2,088,226
33	Hats and caps, other than felt, straw, and wool.....	3	30	3	3	.....	3	21	No 30	Mh 15	29	8	21	.....	.....	43,454
34	Hats, fur-felt.....	3	7	3	.....	.....	.....	4	(*) 4	(*) 4	4	.....	4	.....	.....	6,307
35	Ice, manufactured.....	7	75	7	11	3	3	51	Jy 71	De 37	41	41	.....	.....	.....	686,371
36	Leather goods, not elsewhere specified	6	22	4	1	2	1	14	De 17	My 11	17	10	7	.....	.....	44,378
37	Looking-glass and picture frames.....	4	25	6	2	.....	5	12	De 13	Ja 11	14	11	3	.....	.....	100,071
38	Lumber and timber products.....	19	3,542	1	80	74	44	3,343	Jy 3,978	Ja 2,221	3,656	3,578	76	2	.....	16,877,218
39	Lumber, planing-mill products, not including planing mills connected with sawmills.....	19	655	12	39	38	17	549	No 626	Ja 422	614	585	27	1	1	1,474,474
40	Marble and stone work, monuments and tombstones.....	6	54	6	6	11	1	30	My 37	Ja 23	32	32	.....	.....	.....	210,912
41	Millinery and lace goods, not elsewhere specified.....	6	52	9	.....	.....	2	41	.....	.....	47	8	39	.....	.....	45,718
42	Trimmed hats and hat frames.....	3	20	5	.....	.....	.....	15	Ap 18	Ja 13	16	7	9	.....	.....	22,118
43	All other.....	3	32	4	.....	.....	2	26	De 31	Ja 25	31	1	30	.....	.....	23,600
44	Mineral and soda waters.....	6	115	6	6	20	2	75	Ja 95	Ja 54	77	76	1	.....	.....	1,820,381
45	Models and patterns, not including paper patterns.....	5	28	6	.....	.....	.....	22	Ja 28	Ja 16	23	23	.....	.....	.....	22,598
46	Patent medicines and compounds.....	10	177	21	22	23	17	94	Oc 122	My 82	87	18	69	.....	.....	1,849,184
47	Photo-engraving.....	4	28	3	2	1	1	21	De 25	Ap 19	21	14	7	.....	.....	21,090
48	Printing and publishing, book and job	79	783	69	76	63	54	521	.....	.....	550	437	106	7	.....	1,824,017
49	Job printing.....	70	718	57	73	46	43	499	De 538	Se 480	527	417	104	6	.....	1,702,554
50	All other.....	9	65	12	3	17	11	22	Fe 23	My 20	23	20	2	1	.....	121,463
51	Printing and publishing, newspapers and periodicals.....	58	1,072	33	71	338	164	466	.....	.....	506	479	23	4	.....	1,980,537
52	Printing, publishing, and job printing.....	18	938	13	35	310	115	465	De 505	Fe 435	505	479	23	3	.....	1,861,102
53	Publishing without printing.....	40	134	20	36	38	49	1	(*) 1	(*) 1	1	.....	.....	.....	.....	119,435
54	Saddlery and harness.....	11	193	8	14	15	7	149	Ja 255	No 112	122	117	5	.....	.....	725,257
55	Shipbuilding, wooden, including boat building.....	9	1,956	8	39	99	28	1,787	Ja 5,091	No 110	2,300	2,300	.....	.....	.....	5,890,991
56	Signs, other than electric.....	9	28	10	.....	.....	2	16	Oc 20	Ja 12	18	18	.....	.....	.....	13,318
57	Structural ironwork, not made in steel works or rolling mills.....	6	1,248	5	26	85	21	1,111	Oc 3,346	Fe 86	1,387	1,387	.....	.....	.....	687,142

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

MANUFACTURES—OREGON.

25

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.				
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		Rent- ed.^{2}

CITIES OF 50,000 INHABITANTS OF MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

Dollars. 4,260,286	Dollars. 3,903,891	Dollars. 38,758,259	Dollars. 823,833	Dollars. 926,314	Dollars. 9,232,908	Dollars. 109,093,953	Dollars. 2,292,026	Dollars. 190,380,146	Dollars. 84,993,567	70,536	20,091	2,117	43	48,285	3,475	1
18,473	1,242	45,280	2,145	842	63,714	1,507	168,163	102,882	36	36				36		2
1,060	360	65,883	10,703	1,153	100,573	3,395	210,832	112,804	79	79				79		3
57,718	50,006	480,069	402,720	61,013	5,003	369,981	20,447	1,265,165	426	426				426		4
35,040	8,044	124,739	475	14,958	16,589	208,585	5,554	585,249	167	167				167		5
159,050	315,003	887,273		65,252	159,750	4,394,341	95,011	7,157,084	805	805				805		6
6,104	999	48,104		6,411	6,411	8,812	21,116	103,776	103	103				103		7
19,744	8,653	72,167		4,420	7,143	291,190	3,211	412,060	305	305				305		8
47,794	66,596	152,307		18,305	11,931	2,160,788	24,247	2,652,847	103	103				103		9
1,650	2,432	30,813		1,685	50	18,340	860	71,624	7	7				7		10
42,150	36,675	348,455		9,000	26,549	1,322,435	6,587	2,094,335	224	224				224		11
	3,530	44,205		5,921	1,088	81,809	1,277	153,695	11	11				11		12
		13,555		900	784	29,696	466	48,675	3	3				3		13
	3,530	30,710		5,021	304	51,613	811	105,020	8	8				8		14
48,379	88,213	97,524		17,130	49,692	2,964,540	13,557	3,590,207	420	420				420		15
30,604	7,895	113,208		1,500	10,557	288,452	1,792	494,442	144	144				144		16
109,251	137,860	339,363		19,379	108,135	1,893,642	39,273	2,935,435	768	768				768		17
66,658	36,007	267,268	1,800	16,324	16,324	487,570	7,617	1,129,107	234	234				234		18
		16,222		1,805	41	20,436	74	57,719	3	3				3		19
6,616	9,285	20,998		2,782	816	37,241	1,067	103,127	35	35				35		20
6,565	4,282	54,818		5,100	521	25,910	2,018	154,837	72	72				72		21
1,500	6,920	12,286		3,240	65	141,699	1,207	192,474	15	15				15		22
184,116	139,713	553,123	26,603	14,270	124,018	20,024,803	85,094	22,525,761	3,179	3,179				3,179		23
69,406	95,447	170,208		12,687	66,297	3,616,096	27,141	4,217,694	1,729	1,729				1,729		24
1,500	3,736	21,887		2,658	1,145	113,607	4,663	164,943	106	106				106		25
67,965	91,711	148,321		10,029	65,152	3,502,489	22,478	4,052,751	1,623	1,623				1,623		26
534,922	252,042	5,372,370		50,300	1,238,280	7,953,938	306,196	19,423,232	6,781	6,781				6,781		27
152,381	99,162	3,366,115		15,768	916,031	4,664,559	177,355	11,515,024	4,219	4,219				4,219		28
273,612	94,193	1,347,337		35,262	185,231	2,220,008	71,613	5,413,529	1,469	1,469				1,469		29
100,020	58,687	658,018		8,270	137,018	1,060,371	57,228	2,494,679	1,103	1,103				1,103		30
13,625	11,270	63,916	854	17,400	8,490	105,174	1,695	270,445	34	34				34		31
107,795	69,527	871,166		9,846	81,932	1,067,015	39,267	1,793,385	2,551	2,551				2,551		32
5,680	2,412	23,006		1,380	250	45,673	471	103,961	6	6				6		33
31,882	8,826	3,600		1,430	58	8,549	397	21,560	2	2				2		34
1,000	3,876	83,589	500	5,700	10,932	9,859	48,551	275,088	967	967				967		35
3,101	3,964	15,120		2,280	478	36,327	1,602	68,977	12	12				12		36
353,367	181,493	14,930		4,322	1,166	38,027	330	91,996	12	12				12		37
128,614	85,412	772,479		50,368	746,337	9,073,911	127,078	18,845,793	19,531	19,531				19,531		38
				27,087	50,605	1,380,441	30,438	2,716,868	2,679	2,679				2,679		39
18,410	17,776	51,018		6,600	1,222	96,210	3,439	241,180	161	161				161		40
	1,480	26,615	200	6,657	240	30,988	714	91,951	7	7				7		41
		10,806	200	4,079	120	17,985	564	47,806	3	3				3		42
	1,480	15,809		2,578	129	13,003	150	44,145	4	4				4		43
15,600	45,247	118,731		1,270	60,964	492,377	17,137	795,251	937	937				937		44
		32,410		2,460	156	70,248	937	70,859	39	39				39		45
84,306	51,980	84,685		8,157	25,120	517,985	4,195	977,395	95	95				95		46
2,220	2,630	34,402		2,460	877	10,282	915	106,196	10	10				10		47
239,746	142,552	674,048		66,252	53,078	1,145,407	20,162	3,119,527	700	700				700		48
224,614	125,970	645,975		63,810	52,449	1,139,162	18,434	3,012,475	692	692				692		49
5,432	16,582	28,873		2,442	629	6,255	1,078	107,052	8	8				8		50
239,696	712,039	804,070		79,576	200,495	1,224,616	27,410	4,630,780	1,055	1,055				1,055		51
171,170	612,830	803,666		65,513	107,368	1,195,773	27,410	3,934,473	1,054	1,054				1,054		52
68,526	99,259	404		14,063	3,127	28,843		667,464	1	1				1		53
33,768	25,902	192,004		11,245	45,822	784,122	4,426	1,635,654	215	215				215		54
171,779	205,024	2,907,407		61,367	527,936	5,357,608	51,036	9,831,322	3,658	3,658				3,658		55
	744	23,102		4,102	79	22,134	78	77,245	3	3				3		56
91,478	50,463	1,704,796		16,974	10,164	3,814,836	33,290	6,392,273	4,618	4,618				4,618		57

* Same number reported for one or more other months.
 † Same number reported throughout the year.

MANUFACTURES—OREGON.

TABLE 31.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.						

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

PORTLAND—Continued.															Dollars.			
1	Tobacco, cigars.....	15	64	16	1	1	46	De	57	Mh ^a	43	57	47	9	1	275,145
2	Trunks and valises.....	5	77	5	7	4	2	59	No	72	Ja	48	71	39	32	.....	198,076
3	Vinegar and cider.....	3	10	1	2	.....	1	6	De	16	Ap ^a	1	22	22	.....	.....	43,737
4	Wood, turned and carved.....	3	62	.....	3	1	.....	58	Oe	78	Ja	38	71	48	23	.....	85,825
5	All other industries*	166	12,695	108	968	379	254	10,986	12,683	11,554	1,115	9	5	37,498,555

* All other industries embrace—	Brass and bronze products.....	3	Cleansing and polishing preparations.....	2	Gas and electric fixtures.....	2
Artificial limbs.....	Brushes.....	1	Cooperage, hogsheds and barrels..	3	Gas, illuminating and heating.....	2
Awning, tents, and sails.....	Canning and preserving, fish.....	1	Cordage and twine.....	1	Gas machines.....	1
Babbitt metal and solder.....	Canning and preserving, fruits.....	2	Cordials and flavoring sirups.....	1	Glass, cutting, staining, and ornamenting.....	2
Bags, other than paper, not including bags made in textile mills.....	Carriages and wagons, repair work only.....	1	Dairymen's, poultrymen's, and apiarists' supplies.....	2	Gloves and mittens, leather.....	2
Baskets, and rattan and willow ware	Cars and general shop construction and repairs by electric-railroad companies.....	2	Electroplating.....	1	Glucose.....	1
Beltting, leather.....	Cars and general shop construction and repairs by steam-railroad companies.....	2	Enameling.....	1	Hair work.....	1
Blacking, stains, and dressings.....	Cars, steam-railroad, not including operations of railroad companies..	1	Engines, steam, gas, and water.....	1	Hand stamps.....	1
Bluing.....	Chemicals.....	1	Fancy articles, paper novelties.....	1	Hardware, builders'.....	1
Bookbinding and blank-book making.....			Fertilizers.....	1	Hardware, saddlery.....	2
Boots and shoes.....			Flags and banners.....	1	Instruments, professional and scientific.....	1
Boxes, cigar.....			Furnishing goods, men's neckwear..	1	Iron and steel, steel works and rolling mills.....	1
Boxes, wooden packing, except cigar boxes.....			Galvanizing.....	1		

CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

1	ASTORIA.....	78	1,641	61	74	49	53	1,404	Ja	1,871	De	1,027	2,200	1,988	212	.....	.....	11,881,102
2	EUGENE.....	52	661	52	49	13	13	534	Al	793	Ja ^a	354	777	413	364	.....	.....	1,706,594
3	SALEM.....	84	1,341	83	62	59	57	1,080	Se	1,525	Fa	705	1,600	1,024	563	1	12	5,636,770

^a Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).^a Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

MANUFACTURES—OREGON.

27

COMBINED AND SPECIFIED INDUSTRIES: 1919.

[illegible]

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.

[illegible]

Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	1	Mirrors, framed and unframed, not elsewhere specified.....	1	Roofing materials.....	2	Stoves and hot-air furnaces.....	1
Iron and steel, cut nails and spikes, not made in steel works or rolling mills.....	1	Musical instruments and materials, not elsewhere specified.....	1	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	2	Surgical appliances.....	1
Iron and steel, welding.....	2	Oil, linseed.....	1	Sausage, not made in slaughtering and meat-packing establishments..	1	Tinware, not elsewhere specified.....	1
Jewelry.....	5	Optical goods.....	3	Saws.....	3	Tools, not elsewhere specified.....	1
Knit goods.....	1	Paints.....	2	Shipbuilding, steel, new vessels.....	1	Toys and games.....	1
Lamps.....	2	Peanuts, grading, roasting, cleaning, and shelling.....	1	Shirts.....	3	Typewriter supplies, carbon paper..	1
Lapidary work.....	1	Perfumery and cosmetics.....	2	Shiplighting, steel, new vessels.....	1	Varnishes.....	1
Leather, tanned, curried, and finished.....	1	Photographs and graphophones.....	2	Slaughtering and meat packing.....	4	Waste, cotton.....	1
Liquors, malt.....	1	Photographic materials.....	2	Soap.....	2	Window shades and fixtures.....	1
Mattresses and spring beds, not elsewhere specified.....	4	Pickles, preserves, and sauces.....	6	Sporting and athletic goods.....	4	Wirework, not elsewhere specified.....	1
		Pottery, earthen and stone ware.....	1	Springs, steel, automobile.....	1	Wooden goods, not elsewhere specified.....	1
		Pulp goods, wall board.....	1	Statuary and art goods.....	1	Wool pulling.....	1
		Pumps, power, other than steam.....	1	Steam packing.....	1	Wool scouring.....	1
				Stencils and brands.....	2	Woolen goods.....	1
				Stereotyping and electrotyping.....	1	Worsteds goods.....	1

CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

248,164	128,487	2,072,076	171,481	27,507	178,461	9,108,322	164,252	13,398,627	4,128,053	6,832	2,646	8	4,178	57
100,437	20,195	474,147	3,280	13,680	22,009	1,407,454	64,775	2,489,647	1,017,418	2,133	295	40	290	20
169,170	155,509	1,179,334	7,866	21,000	264,770	6,617,449	123,359	9,435,070	2,694,262	3,324	1,551	6	170	62

¹ Same number reported for one or more other months.