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MANUFACTURES: 1919

MICHIGAN

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 process 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.

MICHIGAN.

GENERAL STATISTICS.

General character of the state.—Michigan has a gross area of 57,980 square miles, of which 57,480 represent land surface. The inhabitants of the state in 1900 numbered 2,420,982; in 1910, 2,810,173; and in 1920, 3,668,412. In total population Michigan ranked seventh among the states in 1920. The number of inhabitants per square mile in 1910 was 48.9, the corresponding figure for 1920 being 63.8.

In 1920 there were 28 cities in the state (see Table 6) having more than 10,000 inhabitants. The statistics for Haintramck and Highland Park, however, can not be shown separately without the possibility of disclosing the operations of individual establishments. The combined population of these 28 cities in 1920 was 1,894,612, which formed 51.6 per cent of the total population of the state. In 1919 these cities reported 81.8 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 value of products from 1914 to 1919, as presented in Table 1, are largely 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 to 1919. The increases shown, however, in average 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 of prior censuses. Of the 83 counties in the state, Wayne and Kent, which include the cities of Detroit and Grand Rapids, reported 60.5 per cent of the total value of products in the state in 1919 and 59.8 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 often misleading as to their real importance from a manufacturing standpoint. 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 36.

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).—This table shows increases from 1914 to 1919 in practically all details for the cities for which comparative figures are available.

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 for selected industries, 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, and also the number of females for industries in which a large number of females were employed. There were a number of industries in the state in 1919 in which the number of female wage earners predominated.

*** Prevailing hours of labor (Table 9).**—Since 1914 there has been a marked shortening of the working day in Michigan. In that year 11.6 per cent of the wage earners were included in the group "48 and under," as against 35.1 per cent in 1919. In 1914 the "60" and "Over 60" groups constituted 27.6 per cent of the total wage earners, as compared with 8.3 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, 91.4 per cent were in the several classes having fewer than 101 wage earners, while such establishments employed but 17.9 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 8.6 per cent of the total number of manufacturing establishments in the state, but reported 82.1 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 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. Although corporations owned but 39.1 per cent of the number of establishments in the state in 1919, they reported 94.3 per cent of the average number of wage earners and 95.2 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 202,687, or 83.8 per cent, and the value of products \$2,312,599,775, or 234.4 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 28 cities in 1919 represented 57.7 per cent of the total in the state. They reported in that year 79.8 per cent of the average number of wage earners and 81.8 per cent of the value of products.

Principal industries in Detroit, Flint, Grand Rapids, Lansing, and Saginaw, with per cent of total for state (Table 16).—This table includes the principal industries in each of the 5 cities in the state having 50,000 inhabitants or more in 1920, figures being given for those which can be shown without 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 471,745 horsepower, or 64.6 per cent. This increase, however, is chiefly due to the gain of 356,868 horsepower, or 185.6 per cent, in rented power. The owned power increased 114,877 horsepower, or 21.3 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 used by a number of industries which are large consumers of fuel.

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

	1919	1914	1909	1904	1899	PER CENT OF INCREASE. ¹			
						1914-1919	1909-1914	1904-1909	1899-1904
Number of establishments.....	8,305	8,724	9,159	7,446	7,310	-4.8	-4.7	23.0	1.9
Persons engaged.....	549,069	320,611	271,071	200,166	(²)	71.3	18.3	35.4	.....
Proprietors and firm members.....	6,762	7,725	8,965	7,732	(²)	-12.5	-13.8	15.9	.....
Salaried employees.....	71,065	41,706	30,607	17,235	13,350	70.0	36.6	77.6	26.1
Wage earners (average number).....	471,242	271,090	231,499	175,229	155,800	73.8	17.1	32.1	12.5
Primary horsepower.....	1,202,128	730,383	598,288	440,890	368,497	64.6	27.7	35.7	19.6
Capital.....	\$2,340,954,312	\$869,143,114	\$583,946,965	\$337,894,102	\$246,990,529	168.3	48.8	72.8	36.8
Salaries and wages.....	788,743,091	250,524,979	153,838,044	98,749,270	74,897,786	214.8	62.8	55.8	31.9
Salaries.....	149,034,998	68,272,695	34,870,214	17,470,433	12,335,974	118.3	95.8	99.6	41.6
Wages.....	639,708,093	182,252,284	118,967,830	81,278,837	62,561,812	251.0	53.2	46.4	30.0
Paid for contract work.....	8,232,883	7,973,706	3,397,011	4,475,054	(²)	2.3	134.7	-24.1	.....
Rent and taxes.....	170,170,376	18,481,171	11,757,437	4,072,474	(²)	820.8	67.2	.....	.....
Cost of materials.....	1,919,243,243	592,801,094	368,612,022	230,080,931	175,966,128	223.8	60.8	60.2	30.8
Value of products.....	3,466,188,483	1,086,162,432	685,109,109	429,120,060	319,091,856	219.1	58.5	59.7	84.2
Value added by manufacture.....	1,546,945,240	493,361,368	310,497,147	199,039,129	143,725,728	213.6	55.9	59.0	38.5

¹ A minus sign (-) denotes decrease.

² Figures not available.

³ Exclusive of internal revenue.

⁴ Value of products less cost of materials.

MANUFACTURES—MICHIGAN.

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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.....	8,305	471,242	\$639,708,093	\$170,170,376	\$1,919,243,243	\$3,406,188,483	\$1,546,945,240	1,202,128
Alcona.....	8	24	13,120	624	120,557	164,849	44,292	177
Alger.....	15	1,421	1,590,609	175,747	2,304,070	5,710,430	3,406,360	7,146
Algon.....	105	1,567	1,659,208	659,490	8,028,057	12,244,990	4,216,933	11,241
Alpena.....	39	1,378	1,533,224	340,033	4,887,750	9,361,640	4,473,890	19,548
Antrim.....	18	364	345,062	66,039	1,459,635	2,771,329	1,311,694	1,215
Arenac.....	12	29	29,895	2,011	203,109	285,764	82,655	220
Baraga.....	30	694	715,796	50,177	437,836	2,534,071	2,096,235	2,086
Barry.....	51	1,045	1,050,365	147,260	2,810,522	5,451,217	2,640,695	2,998
Bay.....	132	5,822	6,217,587	1,737,938	19,952,846	30,039,750	16,086,910	32,812
Benzie.....	12	97	77,326	17,953	453,827	637,489	183,662	222
Berrien.....	206	6,473	6,846,463	1,869,425	18,735,563	36,431,623	17,696,060	13,603
Branch.....	66	1,081	838,615	115,237	4,694,405	7,317,604	2,623,199	8,038
Calhoun.....	203	9,960	12,590,800	3,409,194	36,721,861	73,217,755	36,495,894	31,003
Cass.....	48	1,160	1,299,271	350,009	2,716,206	6,358,266	3,642,060	4,099
Charlevoix.....	35	1,427	1,420,894	369,761	3,840,490	8,119,186	4,278,696	5,522
Cheboygan.....	26	607	594,589	254,187	3,358,968	5,095,039	1,738,071	5,187
Chippewa.....	65	1,916	2,107,143	598,429	7,489,351	12,720,989	5,231,638	8,290
Clare.....	10	24	19,118	2,882	186,610	260,948	74,338	151
Clinton.....	47	446	482,875	20,825	1,694,159	3,022,596	1,328,437	2,098
Crawford.....	16	489	624,048	84,063	812,540	2,041,805	1,220,349	1,893
Delta.....	89	3,602	3,851,081	403,369	6,127,060	12,937,399	6,810,330	16,513
Dickinson.....	49	612	732,835	41,251	878,588	2,192,823	1,314,235	2,250
Eaton.....	68	1,371	1,304,102	142,556	4,702,076	8,461,023	3,608,947	5,747
Emmet.....	39	978	910,885	64,541	2,070,786	4,123,847	2,053,061	5,503
Genesee.....	151	24,884	38,589,156	12,346,743	174,420,563	278,321,516	103,900,953	38,998
Gladwin.....	13	24	23,600	4,469	292,007	350,355	58,348	200
Gogebic.....	49	612	771,324	38,807	1,076,792	2,134,104	1,067,312	1,740
Grand Traverse.....	63	991	871,185	108,225	2,321,874	4,234,083	1,912,209	3,538
Gratiot.....	61	1,700	2,261,171	632,094	21,162,890	27,165,994	6,003,104	6,973
Hillsdale.....	63	701	771,627	87,098	6,915,230	9,377,918	2,462,088	2,783
Houghton.....	123	2,038	2,144,489	216,581	28,597,364	38,585,022	9,988,558	6,167
Huron.....	45	480	535,277	102,641	4,501,873	6,154,700	1,652,887	3,856
Ingham.....	180	12,441	14,065,615	4,014,735	65,874,887	105,985,903	40,111,016	21,362
Ionia.....	82	3,144	3,080,449	389,777	9,503,730	16,429,508	6,025,778	7,641
Iosco.....	18	228	324,675	10,556	394,751	1,044,389	649,638	1,380
Iron.....	53	328	351,173	13,175	580,624	1,265,147	684,523	707
Isabella.....	30	400	397,868	69,788	3,111,274	4,577,862	1,466,588	1,353
Jackson.....	193	10,073	11,714,343	740,950	31,221,013	52,065,986	20,844,973	20,690
Kalamazoo.....	224	10,228	11,361,862	2,314,850	37,700,972	67,086,766	29,385,794	50,024
Kalkaska.....	10	62	59,015	2,876	77,737	202,961	125,224	398
Kent.....	700	25,640	28,395,218	4,141,176	58,729,590	122,065,487	63,335,897	61,549
Lake.....	7	10	8,401	479	65,018	79,645	14,627	50
Lapeer.....	44	277	275,205	14,298	1,147,473	1,735,724	538,261	1,282
Leelanau.....	17	61	45,758	1,291	226,941	393,504	106,563	746
Leanswee.....	131	3,009	3,040,751	503,218	10,159,576	27,521,091	8,361,515	10,198
Livingston.....	42	274	305,538	35,419	2,652,711	3,405,099	752,388	1,102
Luce.....	12	745	843,584	95,107	2,255,632	3,737,408	1,431,726	2,589
Mackinac.....	23	256	228,602	13,422	207,395	708,053	500,658	728
Macomb.....	93	692	920,544	101,566	2,843,850	5,138,151	2,314,301	2,891
Manistee.....	51	2,076	1,717,315	324,652	3,963,197	8,174,701	4,221,504	9,196
Marquette.....	82	1,990	2,219,738	145,008	5,470,944	9,256,186	3,785,242	8,033
Mason.....	42	1,719	1,467,552	444,586	3,545,194	7,010,702	4,071,508	4,117
Mecosta.....	34	481	354,030	29,875	1,549,694	2,423,898	874,204	2,050
Menominee.....	58	2,094	2,192,327	511,512	4,837,382	10,128,286	5,290,904	13,975
Midland.....	17	1,121	1,548,743	355,223	2,905,292	5,827,562	2,922,270	12,044
Missaukee.....	12	589	388,676	152,886	467,526	1,367,225	899,699	1,447
Monroe.....	60	3,187	3,674,451	709,188	9,129,733	17,061,031	8,531,298	18,604
Montcalm.....	57	852	620,374	84,549	3,183,059	4,636,363	1,453,294	1,715
Montmorency.....	12	61	40,127	901	143,926	204,217	60,201	168
Muskegon.....	203	12,664	14,950,232	3,699,818	33,927,112	72,169,248	38,242,136	31,097
Newaygo.....	46	508	461,738	69,620	2,402,979	3,568,433	1,165,454	2,805
Oakland.....	104	8,125	11,383,621	5,367,954	68,903,199	108,195,982	39,292,783	15,996
Oceana.....	44	439	284,972	26,174	1,069,816	2,362,915	663,090	1,164
Ogemaw.....	6	41	47,494	1,302	88,700	199,002	110,302	214
Oshtemo.....	27	863	708,656	85,810	598,629	2,140,277	1,541,648	2,653
Oscoda.....	23	294	301,737	37,093	1,954,010	2,543,674	589,664	1,882
Otsego.....	11	353	276,665	41,550	475,334	1,258,382	783,048	1,000
Ottawa.....	165	5,588	5,369,169	976,221	22,192,115	37,002,265	14,810,150	11,046
Presque Isle.....	19	765	875,445	57,632	1,900,729	3,492,235	1,691,506	2,002
Saginaw.....	262	12,319	13,571,961	1,512,642	27,009,517	56,525,989	29,516,472	61,331
St. Clair.....	157	4,819	5,542,821	594,867	12,267,522	23,952,076	11,684,553	14,246
St. Joseph.....	86	3,050	3,084,445	394,281	6,104,948	13,496,165	7,391,217	7,478
Sanilac.....	39	333	266,267	106,229	2,911,490	3,768,671	857,181	2,178
Schoolcraft.....	27	989	1,023,802	247,210	3,735,866	5,804,866	2,069,000	13,069
Shawasssee.....	67	1,867	2,316,769	522,434	6,866,352	11,842,842	4,976,490	4,691
Tuscola.....	44	313	351,946	128,732	3,244,727	4,310,856	1,066,120	2,664
Van Buren.....	99	1,128	1,077,748	163,458	4,541,993	7,289,038	2,747,045	3,189
Washtenaw.....	148	2,610	3,206,904	523,295	8,829,273	15,451,733	6,622,460	10,698
Wayne.....	2,377	256,144	390,184,190	115,229,416	1,058,452,036	1,975,599,670	917,147,634	483,838
Westford.....	43	1,835	1,746,132	478,317	5,999,207	10,313,888	4,314,621	18,063
All other counties.....	7	51	54,015	6,754	134,948	254,222	119,274	499

All other counties comprise Keweenaw, Oscoda, and Roscommon.

MANUFACTURES—MICHIGAN.

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.....	8,305	471,242	100.0	\$3,466,188	100.0	\$1,540,945	100.0	Wood distillation.....	15	1,586	0.3	\$10,651	0.3	\$4,858	0.3
Automobiles.....	68	125,937	26.9	1,332,076	38.4	522,872	33.8	Patent medicines and compounds.....	70	1,392	0.3	9,948	0.3	5,736	0.4
Automobile bodies and parts.....	203	49,048	10.4	288,307	8.3	137,744	8.9	Cement.....	11	1,387	0.3	9,643	0.3	5,681	0.4
Foundry and machine-shop products.....	523	39,430	8.4	169,463	4.9	100,662	6.5	Tobacco, chewing and smoking, and snuff.....	14	816	0.2	9,574	0.3	4,761	0.3
Engines, steam, gas, and water.....	35	14,258	3.0	101,989	2.9	44,939	2.9	Clothing, men's.....	31	1,760	0.4	9,189	0.3	3,643	0.2
Shipbuilding, steel, new vessels and small boats.....	7	15,996	3.4	83,124	2.4	48,078	3.1	Hardware.....	30	2,174	0.5	8,761	0.3	5,569	0.4
Furniture.....	171	18,496	3.9	69,497	2.0	41,187	2.7	Iron and steel, forgings, not made in steel works or rolling mills.....	15	1,506	0.3	8,559	0.3	3,697	0.2
Paper and wood pulp.....	39	8,561	2.6	66,800	1.9	25,046	1.7	Springs, steel, car and carriage, not made in steel works or rolling mills.....	6	1,870	0.4	8,472	0.2	3,046	0.2
Brass, bronze, and copper products.....	80	10,306	2.2	62,708	1.8	23,859	1.5	Iron and steel, steel works and rolling mills.....	7	1,455	0.3	8,345	0.2	5,443	0.4
Slaughtering and meat packing.....	24	1,712	0.4	59,585	1.7	9,810	0.6	Screws, machine.....	20	1,624	0.3	7,936	0.2	4,318	0.3
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	7	5,044	1.1	50,318	1.5	29,139	1.9	Stamped ware, not elsewhere specified.....	21	1,185	0.3	7,636	0.2	3,793	0.3
Lumber and timber products.....	380	14,923	3.2	46,044	1.3	30,350	2.0	Stoves, gas and oil.....	7	1,001	0.2	7,497	0.2	4,504	0.3
Leather, tanned, curried, and finished.....	28	3,464	0.7	45,801	1.3	13,340	0.9	Corsets.....	12	1,520	0.3	7,298	0.2	3,366	0.3
Bread and other bakery products.....	944	5,085	1.1	44,923	1.3	16,808	1.1	Refrigerators.....	12	1,655	0.4	6,718	0.2	3,618	0.2
Flour-mill and gristmill products.....	345	1,128	0.2	44,144	1.3	5,959	0.4	Boots and shoes.....	15	1,120	0.2	6,046	0.2	1,862	0.1
Lumber, planing-mill products, not including planing mills connected with sawmills.....	192	5,256	1.1	37,869	1.1	13,800	0.9	Lamps and reflectors.....	8	924	0.2	5,564	0.2	3,472	0.2
Chemicals.....	36	5,712	1.2	37,851	1.1	22,107	1.4	Mineral and soda waters.....	131	602	0.1	5,407	0.2	2,602	0.2
Food preparations, not elsewhere specified.....	37	2,483	0.5	35,702	1.0	16,889	1.1	Musical instruments, pianos.....	8	1,122	0.2	5,397	0.2	2,574	0.2
Butter.....	231	984	0.2	33,388	1.0	3,805	0.3	Liquors, malt.....	25	779	0.2	5,270	0.2	3,240	0.2
Smelting and refining, copper.....	4	709	0.2	32,725	0.9	6,980	0.5	Boxes, wooden packing, except cigar boxes.....	46	1,481	0.3	4,978	0.1	2,231	0.1
Condensed milk.....	32	1,064	0.2	27,738	0.8	4,631	0.3	Pickles, preserves, and sauces.....	44	483	0.1	4,830	0.1	1,827	0.1
Sugar, beet.....	16	1,836	0.4	26,379	0.8	9,697	0.6	Tinware, not elsewhere specified.....	6	918	0.2	4,631	0.1	1,966	0.1
Electrical machinery, apparatus, and supplies.....	54	4,190	0.9	25,026	0.7	15,990	1.0	Woolen goods.....	9	812	0.2	4,572	0.1	1,691	0.1
Printing and publishing, newspapers and periodicals.....	565	3,176	0.7	24,030	0.7	17,234	1.1	Phonographs and graphophones.....	10	798	0.2	4,230	0.1	2,568	0.2
Druggists' preparations.....	16	3,219	0.7	23,904	0.7	13,908	0.9	Automobile repairing.....	259	968	0.2	4,227	0.1	2,364	0.2
Stoves and hot-air furnaces.....	21	4,240	0.9	20,489	0.6	14,200	0.9	Varnishes.....	6	193	(1)	4,092	0.1	1,948	0.1
Tobacco, cigars and cigarettes.....	349	5,456	1.2	18,119	0.5	9,728	0.6	Clothing, women's.....	33	1,030	0.2	3,923	0.1	1,650	0.1
Gas, illuminating and heating.....	59	2,846	0.6	17,993	0.5	9,723	0.6	Cars and general shop construction and repairs by electric-railroad companies.....	15	1,401	0.3	3,828	0.1	2,203	0.2
Printing and publishing, book and job.....	436	3,717	0.8	17,676	0.5	11,204	0.7	Copper, tin, and sheet-iron work.....	115	694	0.1	3,791	0.1	2,069	0.1
Cars and general shop construction and repairs by steam-railroad companies.....	36	7,025	1.5	17,223	0.5	10,995	0.7	Paper goods, not elsewhere specified.....	10	451	0.1	3,748	0.1	1,452	0.1
Structural ironwork, not made in steel works or rolling mills.....	34	2,313	0.5	17,124	0.5	6,109	0.4	Cheese.....	55	146	(1)	3,663	0.1	446	(1)
Wirework, not elsewhere specified.....	38	2,516	0.5	17,065	0.5	6,262	0.4	Cleansing and polishing preparations.....	20	138	(1)	3,599	0.1	1,798	0.1
Paints.....	24	1,019	0.2	16,435	0.5	6,871	0.4	Wall plaster and composition flooring.....	10	585	0.1	3,591	0.1	2,101	0.1
Salt.....	12	2,063	0.4	14,054	0.4	7,715	0.5	Carriages and sleds, children's.....	10	799	0.2	3,410	0.1	2,013	0.1
Iron and steel, blast furnaces.....	11	1,101	0.2	13,534	0.4	3,235	0.2	Brick and tile, terra-cotta, and fire-clay products.....	48	852	0.2	3,339	0.1	2,621	0.2
Machine tools.....	31	3,196	0.7	12,656	0.4	8,684	0.6	Plumbers' supplies, not elsewhere specified.....	11	837	0.2	3,300	0.1	1,768	0.1
Confectionery and ice cream.....	184	1,748	0.4	12,627	0.4	5,468	0.4	Models and patterns, not including paper patterns.....	52	861	0.2	3,280	0.1	2,840	0.2
Knit goods.....	31	3,170	0.7	12,039	0.3	5,249	0.3	Wooden goods, not elsewhere specified.....	18	984	0.2	3,225	0.1	1,718	0.1
Tools, not elsewhere specified.....	89	3,261	0.7	11,899	0.3	8,360	0.5	Steam fittings and steam and hot-water heating apparatus.....	15	762	0.2	3,063	0.1	1,490	0.1
Canning and preserving, fruits and vegetables.....	52	2,109	0.4	11,172	0.3	3,201	0.2	All other industries ¹	1,565	35,634	7.6	218,966	6.3	125,291	8.1
Agricultural implements.....	23	2,708	0.6	11,091	0.3	6,043	0.4								
Boxes, paper and other, not elsewhere specified.....	22	2,336	0.5	10,935	0.3	5,649	0.4								

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 six having products in excess of some for which figures are shown in the table. These industries are as follows: "Billiard tables and accessories"; "cars, steam-railroad, not including operations of railroad companies"; "cash registers and calculating machines"; "coke, not including gas-house coke"; "silk goods"; and "stationery goods, not elsewhere specified."

MANUFACTURES—MICHIGAN.

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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	549,069	475,246	73,823	86.6	13.4	Clerks and other subordinate sala- ried employees.	1919	50,663	31,358	19,405	61.7	38.3
	1914	320,611	278,229	42,382	86.8	13.2		1914	32,058	22,928	9,130	71.5	28.5
	1909	271,071	231,915	39,156	85.6	14.4		1909	22,576	16,183	6,393	71.7	28.3
Proprietors and officials.....	1919	27,161	26,280	884	96.7	3.3	Wage earners (average number)....	1919	471,242	417,708	53,534	88.6	11.4
	1914	17,463	16,900	563	96.8	3.2		1914	271,090	238,401	32,689	87.9	12.1
	1909	16,996	16,434	562	96.7	3.3		1909	231,499	199,298	32,201	85.1	13.9
Proprietors, and firm members.	1919	6,762	6,456	306	95.5	4.5	16 years of age and over.....	1919	499,750	418,616	53,134	88.7	11.3
	1914	7,725	7,335	390	95.0	5.0		1914	289,519	237,496	32,023	88.1	11.9
	1909	8,665	8,564	401	95.5	4.5		1909	228,982	197,777	31,205	86.4	13.6
Salaried officers of corporations.	1919	5,266	5,108	158	97.0	3.0	Under 16 years of age.....	1919	1,492	1,092	400	73.2	26.8
	1914	3,572	3,471	101	97.2	2.8		1914	1,571	905	666	57.6	42.4
	1909	3,089	3,026	63	98.0	2.0		1909	2,517	1,521	996	60.4	39.6
Superintendents and managers.	1919	15,136	14,716	420	97.2	2.8							
	1914	6,106	6,094	72	98.8	1.2							
	1909	4,942	4,844	98	98.0	2.0							

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 (average num- ber).	PER CENT OF TOTAL.			INDUSTRY.	Cen- sus year.	Wage earners (average 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	471,242	88.4	11.3	0.3	Hardware.....	1919	2,174	77.0	22.3	0.7
	1914	271,090	87.6	11.8	0.6		1914	742	89.8	9.8	0.4
	1909	231,499	85.4	13.5	1.1	Knit goods.....	1919	3,170	23.8	74.2	2.0
Agricultural implements.....	1919	2,708	97.5	2.4	(1)		1914	2,714	24.4	74.1	1.5
	1914	2,143	90.6	.....	0.4	Leather, tanned, curried, and finished.....	1919	3,464	95.9	4.1	.....
Automobile bodies and parts.....	1919	49,048	94.6	5.3	0.1		1914	2,773	99.9	(1)	(1)
	1914	24,736	97.7	2.1	0.2	Lumber and timber products.....	1919	14,923	98.7	1.2	0.1
Automobiles.....	1919	128,937	95.8	4.1	0.1		1914	21,488	99.7	0.2	0.2
	1914	42,802	97.9	2.0	0.1	Lumber, planing-mill products, not includ- ing planing mills connected with saw- mills.	1919	5,256	93.8	5.3	0.9
Boxes, paper and other, not elsewhere spec- ified.	1919	2,336	32.4	66.5	1.1		1914	4,944	98.0	1.3	0.7
	1914	1,461	66.3	31.7	2.0	Paper and wood pulp.....	1919	9,561	86.7	13.3	(1)
Brass, bronze, and copper products.....	1919	10,396	91.7	8.2	(1)		1914	6,051	84.7	15.3	(1)
	1914	4,731	94.5	3.6	1.8	Printing and publishing, book and job.....	1919	3,717	68.9	29.8	1.3
Bread and other bakery products.....	1919	5,088	74.7	24.3	1.0		1914	3,860	74.1	24.4	1.5
	1914	4,014	79.6	19.6	0.7	Printing and publishing, newspapers and periodicals.	1919	3,176	80.1	17.7	2.2
Canning and preserving, fruits and vege- tables.	1919	2,169	44.2	50.5	5.3		1914	3,270	83.4	14.5	2.1
	1914	1,687	42.5	57.0	0.5	Rubber tires, tubes, and rubber goods, not elsewhere specified. ³	1919	5,044	91.8	8.2	0.1
Cars and general shop construction and re- pairs by steam-railroad companies.	1919	7,025	98.7	1.3	(1)	Salt.....	1919	2,063	93.2	6.4	0.4
	1914	5,868	100.0	.....	.....		1914	1,434	93.2	6.8	.....
Chemicals.....	1919	5,712	98.3	1.5	0.1	Shipbuilding, steel, new vessels and small boats.	1919	15,906	99.6	0.4	(1)
	1914	4,509	99.3	0.6	0.1		1914	935	100.0	.....	.....
Druggists' preparations.....	1919	3,210	43.3	56.7	.....	Stoves and hot-air furnaces.....	1919	4,240	99.0	0.8	0.2
	1914	2,175	52.6	46.9	0.6		1914	3,832	99.0	0.2	0.8
Electrical machinery, apparatus, and sup- plies.	1919	4,190	60.0	39.0	0.1	Structural ironwork, not made in steel works or rolling mills.	1919	2,313	96.8	3.2	(1)
	1914	1,144	71.2	28.4	0.4		1914	1,371	99.4	.....	0.6
Engines, steam, gas, and water.....	1919	14,258	95.8	4.2	(1)	Tobacco, cigars and cigarettes.....	1919	5,456	16.6	83.1	0.3
	1914	4,427	99.7	0.2	(1)		1914	7,295	19.7	78.2	4.1
Food preparations, not elsewhere specified..	1919	2,483	62.6	37.4	.....	Tools, not elsewhere specified.....	1919	3,261	84.8	15.1	0.1
	1914	1,683	71.2	28.8	0.1		1914	372	97.0	1.3	1.6
Foundry and machine-shop products ²	1919	42,745	93.9	6.0	0.1	Wirework, not elsewhere specified.....	1919	2,516	77.6	21.7	0.7
	1914	17,608	97.2	2.7	0.1		1914	1,314	92.6	6.7	0.7
Furniture.....	1919	18,496	85.9	13.2	0.9	All other industries.....	1919	85,406	78.6	20.8	0.6
	1914	14,700	95.8	3.7	0.5		1914	72,717	78.4	20.7	0.8
Gas, illuminating and heating.....	1919	2,846	99.8	0.2	.....					
	1914	2,349	99.8	0.2	.....					

¹ Less than one-tenth of 1 per cent.

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

³ Not shown separately in 1914.

MANUFACTURES—MICHIGAN.

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
Adrian.....	1,870	1,256	1,059	1,473	1,002	924	358	249	118	9	5	17	\$14,549,081	\$5,442,338	\$6,085,126	
Alpena.....	1,372	1,494	1,432	1,288	1,460	1,403	54	33	27	.....	1	2	9,356,190	4,101,935	3,903,823
Ann Arbor.....	1,612	842	573	1,440	747	535	172	93	38	.....	2	.....	9,793,696	2,603,379	1,865,594
Battle Creek.....	6,680	4,599	4,175	5,503	3,999	3,415	1,170	599	752	7	1	8	56,130,953	23,248,420	20,174,016	
Bay City.....	5,057	3,771	4,737	3,979	3,355	4,263	1,062	386	441	16	30	33	28,214,525	11,119,286	10,293,747	
Benton Harbor.....	2,328	1,285	.....	2,030	1,098	.....	290	187	.....	8	.....	.....	11,345,034	3,021,552	.....
Detroit.....	167,016	99,603	81,011	145,179	82,012	64,138	21,379	16,598	15,061	458	993	1,812	1,234,519,842	400,347,912	252,939,243	
Escanaba.....	842	777	720	637	615	505	204	159	122	1	3	3	3,017,912	1,506,526	1,074,109	
Flint.....	24,603	8,722	7,088	22,190	8,349	6,775	2,405	366	312	8	7	1	275,779,038	53,375,039	24,115,007	
Grand Rapids.....	23,548	17,427	17,590	19,146	14,622	15,157	4,163	2,748	2,320	239	57	113	109,135,055	49,792,200	42,280,675	
Holland.....	2,748	2,165	2,162	2,250	1,877	1,951	464	270	186	34	18	25	17,711,095	8,683,835	5,802,043	
Ironwood.....	399	516	201	375	511	197	14	5	4	10	.....	.....	1,381,290	793,247	377,416
Ishpeming.....	107	79	66	99	75	59	7	3	6	1	1	1	1,007,432	228,643	122,374	
Jackson.....	9,620	4,906	4,788	8,116	4,019	3,754	1,485	867	1,023	19	20	11	49,517,712	16,809,846	13,984,121	
Kalamazoo.....	7,629	5,525	6,272	5,922	4,253	4,390	1,654	1,233	1,844	53	39	38	46,254,917	20,214,314	17,900,600	
Lansing.....	12,349	6,231	5,285	11,360	5,903	5,043	972	327	239	17	1	3	104,722,115	26,984,496	16,567,093	
Marquette.....	1,415	589	509	1,370	572	500	33	14	9	12	3	.....	7,210,375	1,394,587	1,277,828
Monroe.....	2,904	.....	.....	1,828	.....	.....	1,074	.....	.....	2	.....	.....	16,052,331	.....	.....
Muskegon.....	9,716	4,646	4,522	8,258	3,960	3,871	1,427	640	615	31	46	36	55,969,347	11,147,605	9,647,823	
Owosso.....	1,781	1,231	.....	1,594	1,120	.....	177	110	.....	10	1	.....	9,948,730	3,468,534	.....
Pontiac.....	7,682	2,409	1,739	7,071	2,336	1,629	611	73	106	.....	.....	4	104,990,133	15,102,453	5,893,961
Port Huron.....	2,231	1,296	1,580	1,887	1,045	1,435	334	251	142	10	.....	3	9,545,578	4,090,323	3,588,272
Saginaw.....	9,472	6,342	5,368	7,791	5,479	4,637	1,637	847	706	44	16	25	43,146,125	19,008,670	14,192,054	
Sault Ste. Marie.....	1,248	938	825	1,151	893	775	96	74	50	1	1	.....	10,690,767	3,821,404	3,729,117
Traverse City.....	960	956	1,220	757	712	1,102	200	242	117	3	2	1	4,099,960	2,251,484	2,289,150	
Wyandotte.....	6,214	.....	.....	5,058	.....	.....	252	.....	.....	4	.....	.....	33,382,791	.....	.....
All other cities ¹	64,629	.....	.....	63,268	.....	.....	1,358	.....	.....	3	.....	.....	569,208,377	.....	.....

¹ All other cities comprise Hamtramck and Highland Park.

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.....	421,493	273,067	<i>211,679</i>	80.6	96.8	84.6	July.....	480,152	268,399	232,023	91.8	95.1	92.8
February.....	425,205	277,824	218,230	81.3	98.5	87.3	August.....	497,915	274,164	235,804	95.2	97.2	94.3
March.....	428,121	282,176	223,087	81.9	100.0	88.2	September.....	507,050	273,866	240,310	97.0	97.1	96.1
April.....	431,021	281,040	222,273	82.4	99.6	88.9	October.....	515,805	270,454	241,912	98.6	96.8	96.7
May.....	442,925	278,103	226,811	84.7	98.6	90.7	November.....	522,876	254,678	246,729	100.0	90.3	98.7
June.....	461,718	269,532	229,058	88.3	95.5	91.6	December.....	520,623	<i>249,777</i>	250,078	99.6	88.5	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.

MANUFACTURES—MICHIGAN.

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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.....	471,242	<i>421,493</i>	425,205	428,121	431,021	442,025	461,718	480,152	497,915	507,050	515,805	522,876	520,623	80.6
Males.....	417,708	<i>371,976</i>	376,532	379,590	381,814	392,827	409,526	424,915	441,386	449,561	457,033	464,243	463,687	80.0
Females.....	53,534	<i>50,117</i>	48,673	48,529	49,207	50,098	52,192	55,237	56,529	57,489	58,772	58,633	56,936	82.6
Agricultural implements.....	2,708	<i>2,044</i>	2,943	3,111	3,113	2,913	2,818	2,068	2,083	<i>2,110</i>	2,273	2,468	2,752	67.8
Automobile bodies and parts.....	49,048	<i>36,649</i>	38,293	40,072	42,700	43,619	45,763	49,581	53,044	56,459	60,218	61,438	59,780	59.7
Automobiles.....	120,937	<i>89,668</i>	103,345	107,479	114,432	121,185	128,064	133,493	138,077	142,077	144,191	145,197	145,241	68.6
Boxes, paper and other, not elsewhere specified.....	2,336	<i>2,257</i>	2,313	2,274	2,253	<i>2,248</i>	<i>2,249</i>	2,335	2,391	2,336	2,414	2,515	2,452	89.3
Brass, bronze, and copper products.....	10,306	<i>9,759</i>	9,357	9,121	9,170	9,270	<i>8,922</i>	9,696	10,852	11,437	12,402	12,454	11,232	71.6
Bread and other bakery products.....	5,088	<i>4,748</i>	<i>4,098</i>	4,851	4,954	4,075	5,141	5,177	5,311	5,195	5,278	5,395	5,363	87.6
Canning and preserving, fruits and vegetables.....	2,109	800	418	400	541	781	3,533	5,019	4,180	4,186	3,151	1,581	658	8.0
Cars and general shop construction and repairs by steam-railroad companies.....	7,025	<i>7,038</i>	7,044	6,975	<i>6,910</i>	6,954	6,938	6,960	6,978	6,925	7,064	7,243	7,288	95.1
Chemicals.....	5,712	<i>7,494</i>	6,697	5,768	5,042	<i>4,980</i>	5,077	5,083	5,123	5,482	5,720	5,962	6,116	66.5
Druggists' preparations.....	3,219	3,183	3,221	3,208	<i>3,145</i>	3,170	3,171	3,247	3,210	3,232	3,212	3,317	3,303	94.8
Electrical machinery, apparatus, and supplies.....	4,190	<i>3,847</i>	3,853	3,845	<i>3,775</i>	3,854	3,928	4,050	4,369	4,493	4,697	4,908	4,661	70.9
Engines, steam, gas, and water.....	14,258	<i>16,691</i>	13,038	13,755	<i>10,400</i>	10,782	13,216	14,413	15,213	15,305	15,531	15,746	16,346	62.7
Food preparations, not elsewhere specified.....	2,483	<i>1,778</i>	1,917	1,883	2,110	2,583	2,728	3,083	3,354	3,108	2,621	2,282	2,240	53.0
Foundry and machine-shop products.....	39,490	<i>36,539</i>	36,114	37,103	36,433	36,090	37,229	39,169	39,756	41,065	43,457	45,392	45,154	78.4
Furniture.....	18,496	<i>15,008</i>	16,240	16,795	17,055	17,406	17,966	18,843	19,487	19,777	20,191	20,913	21,365	74.5
Gas, illuminating and heating.....	2,846	<i>2,557</i>	2,867	2,478	2,609	2,679	2,764	3,032	2,981	3,018	3,274	3,145	3,275	72.9
Hardware.....	2,174	<i>1,758</i>	1,816	1,807	1,894	1,992	2,044	2,223	2,336	2,427	2,586	2,687	2,583	66.7
Knit goods.....	3,170	<i>3,201</i>	3,175	3,083	3,115	3,001	<i>2,971</i>	3,097	3,188	3,121	3,352	3,345	3,416	87.0
Leather, tanned, curried, and finished.....	3,464	<i>3,302</i>	3,366	3,303	3,547	3,406	3,392	3,527	3,622	3,511	3,518	3,626	3,540	91.2
Lumber and timber products.....	14,923	10,355	16,575	15,656	13,787	13,797	<i>13,049</i>	13,957	14,051	14,536	14,783	15,364	16,566	82.3
Lumber, planing-mill products, not including planing mills connected with sawmills.....	5,256	<i>4,851</i>	4,301	4,334	4,600	5,047	5,276	5,703	5,860	5,898	5,851	5,908	5,953	71.4
Machine tools.....	3,196	<i>3,314</i>	3,214	3,066	<i>3,044</i>	3,055	<i>3,080</i>	3,057	3,165	3,263	3,324	3,436	3,384	88.2
Paper and wood pulp.....	9,661	<i>9,223</i>	9,185	<i>9,063</i>	9,110	9,294	9,505	9,705	9,941	9,866	9,905	9,996	9,979	90.7
Printing and publishing, book and job.....	3,717	<i>3,556</i>	3,621	3,613	3,600	3,576	3,619	3,621	3,734	3,844	3,910	3,908	4,017	88.0
Printing and publishing, newspapers and periodicals.....	3,176	<i>3,032</i>	3,054	3,075	3,111	3,143	3,137	3,192	3,153	3,236	3,273	3,341	3,365	90.1
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	5,044	<i>4,184</i>	4,620	4,828	4,557	4,810	4,786	4,983	5,164	5,279	5,505	5,814	5,968	70.1
Salt.....	2,063	<i>2,017</i>	1,964	<i>1,923</i>	1,981	1,925	2,016	2,060	2,178	2,125	2,143	2,169	2,255	85.3
Shipbuilding, steel, new vessels and small boats.....	15,996	<i>17,333</i>	18,855	20,269	19,133	18,904	19,726	15,968	16,370	13,863	11,502	10,449	<i>9,400</i>	46.7
Stoves and hot-air furnaces.....	4,240	<i>3,816</i>	4,160	4,150	4,095	4,133	4,070	3,975	4,306	4,429	4,609	4,679	4,450	81.5
Structural ironwork, not made in steel works or rolling mills.....	2,313	<i>2,125</i>	1,969	1,965	1,980	<i>1,932</i>	2,098	2,384	2,592	2,641	2,668	2,675	2,727	70.8
Tobacco, cigars and cigarettes.....	5,456	<i>5,238</i>	5,504	5,428	5,400	5,465	<i>4,666</i>	5,281	5,489	5,516	5,730	5,675	5,618	78.7
Tools, not elsewhere specified.....	3,261	<i>2,800</i>	<i>2,810</i>	2,923	2,994	2,997	3,076	3,064	3,328	3,574	3,740	3,823	3,813	71.6
Wirework, not elsewhere specified.....	2,616	<i>1,889</i>	2,242	2,368	2,398	2,509	2,758	2,712	2,638	2,638	2,704	2,638	2,598	72.1
All other industries.....	85,525	<i>83,397</i>	82,290	<i>77,265</i>	77,819	79,843	82,415	85,674	89,788	90,175	90,912	93,306	93,418	82.7
<i>Industries showing large proportion of females.</i>														
Boxes, paper and other, not elsewhere specified.....	1,571	<i>1,557</i>	1,582	1,514	1,511	1,487	<i>1,484</i>	1,549	1,565	1,548	1,633	1,734	1,688	85.6
Bread and other bakery products.....	1,255	<i>1,228</i>	<i>1,120</i>	1,226	1,257	1,238	1,256	1,298	1,302	1,215	1,265	1,329	1,336	83.8
Canning and preserving, fruits and vegetables.....	1,139	<i>377</i>	129	97	139	235	2,034	2,829	2,487	2,466	1,926	745	204	3.4
Druggists' preparations.....	1,824	<i>1,872</i>	1,860	1,861	1,808	1,834	1,821	1,835	<i>1,767</i>	1,797	1,770	1,831	1,832	93.5
Electrical machinery, apparatus, and supplies.....	1,638	<i>1,482</i>	1,488	1,502	<i>1,431</i>	1,512	1,520	1,559	1,719	1,776	1,848	2,027	1,783	70.6
Food preparations, not elsewhere specified.....	928	<i>625</i>	608	639	850	1,108	1,171	1,329	1,388	1,242	861	688	727	37.8
Hardware.....	485	<i>585</i>	389	386	387	421	430	526	540	551	594	616	595	62.5
Knit goods.....	2,399	<i>2,434</i>	2,380	2,302	2,367	2,278	<i>2,246</i>	2,362	2,409	2,354	2,549	2,528	2,575	87.2
Printing and publishing, book and job.....	1,112	<i>1,065</i>	1,097	1,084	1,071	<i>1,041</i>	1,070	1,065	1,104	1,154	1,175	1,187	1,231	84.6
Tobacco, cigars and cigarettes.....	4,543	<i>4,362</i>	4,596	4,521	4,491	4,528	<i>3,836</i>	4,394	4,554	4,599	4,795	4,901	4,939	77.7
Wirework, not elsewhere specified.....	552	<i>556</i>	458	482	514	570	626	628	617	601	590	586	596	56.7
Total for cities.....	376,032	<i>330,601</i>	333,217	335,523	344,776	355,475	367,611	384,337	397,195	408,026	416,590	419,976	419,057	78.7
Males.....	332,700	<i>289,511</i>	293,253	295,718	304,357	314,435	325,799	340,677	352,332	361,860	369,379	372,486	372,798	77.6
Females.....	43,332	<i>41,090</i>	39,964	<i>39,805</i>	40,419	41,040	41,812	43,660	44,863	46,166	47,211	47,490	46,259	83.8
ADRIAN.....	1,870	<i>1,748</i>	1,827	1,811	1,763	<i>1,716</i>	1,768	1,789	1,902	1,918	2,082	2,055	2,064	82.4
Males.....	1,482	<i>1,373</i>	1,454	1,460	1,387	<i>1,302</i>	1,397	1,397	1,500	1,520	1,675	1,629	1,630	81.3
Females.....	388	<i>375</i>	373	351	376	353	369	392	402	398	407	426	434	80.9
ALPENA.....	1,372	<i>1,224</i>	<i>1,218</i>	1,236	1,332	1,247	1,278	1,325	1,360	1,539	1,590	1,576	1,539	76.6
Males.....	1,288	<i>1,175</i>	<i>1,170</i>	1,186	1,277	1,186	1,222	1,262	1,294	1,469	1,435	1,409	1,371	79.6
Females.....	84	<i>49</i>	48	50	55	61	56	63	66	70	155	167	168	28.6
ANN ARBOR.....	1,612	<i>1,555</i>	1,615	1,686	<i>1,508</i>	1,638	1,588	1,711	1,529	1,604	1,638	1,652	1,626	87.8
Males.....	1,440	<i>1,379</i>	1,466	1,509	<i>1,338</i>	1,481	1,445	1,513	1,341	1,419	1,466	1,470	1,453	88.4
Females.....	172	<i>176</i>	149	177	164	157	<i>133</i>	198	188	185	172	182	173	72.2
BATTLE CREEK.....	6,680	<i>5,868</i>	6,267	6,356	6,667	7,009	7,145	7,374	7,554	6,693	6,267	6,342	6,618	77.7
Males.....	5,506	<i>4,645</i>	5,375	5,414	5,547	5,858	5,725	5,793	5,956	5,259	5,195	5,437	5,668	84.7
Females.....	1,174	<i>823</i>	892	942	1,120	1,351	1,420	1,581	1,598	1,434	1,072	905	950	51.5

MANUFACTURES—MICHIGAN.

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.	
BAY CITY.....	5,057	5,036	4,956	4,902	4,983	4,762	4,983	5,130	4,305	4,362	5,590	5,548	6,127	70.3
Males.....	3,995	4,037	3,926	3,904	3,950	3,829	4,009	4,112	3,159	3,159	4,340	4,485	5,030	82.8
Females.....	1,062	999	1,030	998	1,033	933	974	1,018	1,146	1,203	1,250	1,063	1,097	74.0
BENTON HARBOR.....	2,328	2,433	2,253	2,201	2,174	2,092	2,354	2,375	2,264	2,380	2,439	2,464	2,507	83.4
Males.....	2,038	2,166	2,030	1,980	1,967	1,879	2,056	2,009	2,040	2,040	2,057	2,173	2,232	83.6
Females.....	290	267	223	221	207	213	298	319	255	340	382	291	275	42.5
DETROIT.....	167,016	154,228	153,741	151,248	152,357	155,800	158,252	167,756	175,163	181,300	185,542	185,910	182,835	81.4
Males.....	145,565	132,821	133,256	131,083	132,224	135,415	138,266	146,659	153,791	158,650	162,250	162,236	160,129	80.8
Females.....	21,451	21,407	20,485	20,165	20,133	20,445	19,986	21,097	21,372	22,650	23,292	23,674	22,706	84.4
ESCANABA.....	842	873	882	873	869	857	811	799	774	811	839	850	866	87.8
Males.....	638	653	655	643	652	640	620	620	608	623	638	646	658	92.4
Females.....	204	220	227	230	217	217	191	179	166	188	201	204	208	72.2
FLINT.....	24,603	18,366	20,161	21,174	22,430	24,113	25,214	25,782	27,335	27,244	26,688	27,325	28,414	62.4
Males.....	22,198	16,384	18,155	18,995	20,049	21,656	22,717	23,231	24,771	24,670	24,087	24,670	25,033	60.5
Females.....	2,405	1,982	2,006	2,179	2,381	2,457	2,497	2,551	2,564	2,566	2,601	2,655	2,381	75.0
GRAND RAPIDS.....	23,548	20,784	21,044	21,326	21,687	21,749	22,676	23,923	24,898	25,183	25,985	26,463	26,918	77.0
Males.....	19,305	17,015	17,324	17,627	17,830	17,857	18,520	19,510	20,193	20,576	21,166	21,783	22,259	76.4
Females.....	4,243	3,769	3,720	3,699	3,857	3,892	4,156	4,413	4,705	4,607	4,819	4,680	4,659	76.8
HOLLAND.....	2,748	2,432	2,477	2,493	2,455	2,507	2,746	2,870	3,036	3,089	2,964	2,916	2,990	78.7
Males.....	2,288	1,989	2,028	2,052	2,049	2,101	2,264	2,376	2,521	2,527	2,372	2,427	2,510	78.7
Females.....	480	443	449	441	407	406	482	494	515	562	592	489	480	68.6
IRONWOOD.....	399	406	409	419	281	271	405	420	412	439	450	425	451	90.1
Males.....	385	393	399	409	267	257	389	405	393	425	436	408	434	88.9
Females.....	14	13	10	10	14	14	16	15	14	14	14	17	17	88.8
ISHPEMING.....	107	74	61	63	66	74	75	78	152	162	164	159	166	87.2
Males.....	100	70	57	59	62	70	71	73	144	155	149	146	144	86.8
Females.....	7	4	4	4	4	4	4	5	8	7	15	13	12	28.7
JACKSON.....	9,620	8,145	8,491	8,889	9,015	8,802	9,194	9,596	10,316	10,359	10,782	11,075	10,776	73.5
Males.....	8,132	6,834	7,135	7,494	7,500	7,412	7,741	8,107	8,758	8,797	9,141	9,415	9,160	72.6
Females.....	1,488	1,311	1,356	1,395	1,425	1,390	1,453	1,489	1,558	1,562	1,641	1,660	1,616	78.0
KALAMAZOO.....	7,629	7,229	7,299	7,229	7,268	7,280	7,230	7,577	7,819	7,888	8,178	8,027	8,724	81.2
Males.....	5,952	5,566	5,659	5,618	5,631	5,699	5,638	5,915	6,147	6,272	6,477	6,166	6,836	80.4
Females.....	1,677	1,663	1,640	1,611	1,637	1,581	1,592	1,662	1,672	1,616	1,701	1,861	1,888	83.7
LANSING.....	12,349	10,185	10,951	11,550	11,725	12,115	12,593	13,098	13,194	12,676	13,022	13,712	12,767	74.3
Males.....	11,376	9,384	10,107	10,605	10,745	11,062	11,502	11,991	12,128	11,762	12,688	12,765	11,793	73.6
Females.....	973	801	844	945	980	1,053	1,091	1,107	1,066	914	934	947	974	72.4
MARQUETTE.....	1,415	1,439	1,437	1,421	1,417	1,469	1,466	1,409	1,418	1,373	1,427	1,438	1,466	88.2
Males.....	1,382	1,408	1,404	1,388	1,384	1,435	1,432	1,382	1,391	1,341	1,390	1,401	1,426	88.3
Females.....	33	36	33	33	33	34	27	27	27	32	37	37	40	67.5
MONROE.....	2,904	2,678	2,662	2,699	2,746	2,845	2,875	2,988	2,990	3,073	3,030	3,091	3,135	85.4
Males.....	1,829	1,656	1,661	1,689	1,720	1,795	1,814	1,914	1,935	1,933	1,913	1,939	1,989	83.0
Females.....	1,075	1,022	1,041	1,010	1,026	1,050	1,061	1,074	1,055	1,140	1,117	1,152	1,146	87.7
MUSKOGON.....	9,716	9,651	8,976	8,669	8,872	9,063	9,401	9,624	10,147	10,211	10,254	10,731	10,993	73.9
Males.....	8,271	8,106	7,617	7,379	7,630	7,810	7,995	8,265	8,618	8,699	8,692	9,093	9,358	73.9
Females.....	1,445	1,545	1,359	1,290	1,242	1,253	1,406	1,359	1,529	1,512	1,562	1,638	1,635	75.4
OWASSO.....	1,751	1,820	1,488	1,570	1,659	1,671	1,739	1,775	1,818	1,804	1,856	2,042	2,121	70.2
Males.....	1,604	1,678	1,360	1,432	1,488	1,505	1,565	1,595	1,636	1,613	1,651	1,820	1,909	70.7
Females.....	177	142	118	147	171	166	174	180	182	191	205	216	212	63.9
PONTIAC.....	7,682	5,622	5,919	6,817	6,824	7,042	7,278	8,028	8,388	8,830	8,978	9,345	9,113	60.2
Males.....	7,071	5,180	5,396	6,256	6,224	6,440	6,680	7,414	7,713	8,184	8,339	8,676	8,430	59.0
Females.....	611	502	523	561	600	602	598	614	675	646	639	669	683	73.5
PORT HURON.....	2,231	1,717	1,771	1,847	1,950	2,047	2,303	2,417	2,345	2,683	2,767	2,535	2,390	62.1
Males.....	1,896	1,355	1,460	1,544	1,650	1,742	2,002	2,099	2,015	2,356	2,395	2,135	1,969	57.8
Females.....	335	362	311	303	300	305	301	318	330	327	372	400	421	71.3
SAGINAW.....	9,472	7,990	8,023	8,093	8,294	8,742	9,029	9,748	10,085	10,288	10,711	11,379	11,282	70.2
Males.....	7,834	6,489	6,623	6,678	6,929	7,327	7,509	8,070	8,201	8,465	8,850	9,448	9,389	68.0
Females.....	1,638	1,501	1,400	1,415	1,365	1,415	1,520	1,678	1,794	1,823	1,861	1,931	1,893	70.7
SAULT STE. MARIE.....	1,248	1,182	1,221	1,170	1,187	1,236	1,270	1,254	1,248	1,278	1,298	1,325	1,307	88.3
Males.....	1,152	1,090	1,131	1,089	1,093	1,139	1,171	1,159	1,163	1,185	1,197	1,216	1,195	86.3
Females.....	96	83	90	84	94	97	99	95	95	93	101	109	112	74.1
TRAVERSE CITY.....	960	843	874	880	874	883	900	942	1,025	1,074	1,055	1,094	1,076	77.1
Males.....	780	664	681	702	706	710	719	710	793	839	848	882	866	75.3
Females.....	200	179	193	178	168	173	181	232	232	235	207	212	210	71.5
WYANDOTTE.....	6,214	6,957	6,953	6,539	6,558	6,547	6,605	4,729	5,132	5,909	6,065	6,071	6,503	68.0
Males.....	5,962	6,660	6,686	6,324	6,369	6,348	6,386	4,475	4,898	5,627	5,782	5,775	6,214	68.9
Females.....	252	297	267	215	189	199	219	254	234	282	283	296	289	63.6
ALL OTHER CITIES ¹	64,620	50,186	50,211	52,353	57,820	62,039	66,635	69,820	70,580	73,856	74,329	74,426	73,293	67.4
Males.....	63,271	48,847	49,058	51,197	56,599	60,830	65,326	68,574	69,171	72,337	72,750	72,850	71,713	67.1
Females.....	1,348	1,339	1,153	1,156	1,221	1,209	1,309	1,246	1,409	1,519	1,579	1,576	1,580	73.0

¹ All other cities comprise Hamtramck and Highland Park.

MANUFACTURES—MICHIGAN.

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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	471,242	8,654	8,231	148,489	169,318	48,624	51,744	33,281	5,901
	1914	271,090	(2)	(2)	31,326	31,353	57,614	75,878	64,861	10,058
	1909	231,499	(2)	(2)	11,174	6,612	38,449	51,552	113,702	9,950
Agricultural implements.....	1919	2,708	—	—	2	219	120	2,206	101	—
	1914	2,143	(2)	(2)	199	411	788	411	334	—
Automobile bodies and parts.....	1919	49,048	198	1,909	18,717	20,920	2,805	4,176	323	—
	1914	24,736	(2)	(2)	88	2,127	2,557	16,740	3,224	—
Automobiles.....	1919	126,937	526	—	59,573	58,559	7,043	1,196	40	—
	1914	42,802	(2)	(2)	12,370	7,232	971	16,908	5,315	—
Boxes, paper and other, not elsewhere specified.....	1919	2,336	—	—	874	635	448	355	24	—
	1914	1,461	(2)	(2)	36	75	213	907	230	—
Brass, bronze, and copper products.....	1919	10,306	497	524	26	5,834	124	2,924	377	—
	1914	4,731	(2)	(2)	14	143	1,360	1,977	1,237	—
Bread and other bakery products.....	1919	5,088	423	324	1,138	668	1,944	89	447	55
	1914	4,014	(2)	(2)	425	561	1,394	598	966	70
Canning and preserving, fruits and vegetables.....	1919	2,109	23	—	159	—	201	273	958	498
	1914	1,687	(2)	(2)	24	6	522	311	795	29
Cars and general shop construction and repairs by steam-railroad companies.....	1919	7,025	—	57	6,104	206	42	452	74	—
	1914	5,803	(2)	(2)	382	1,589	3,198	67	553	14
Chemicals.....	1919	5,712	—	3	1,737	719	117	2,600	479	48
	1914	4,509	(2)	(2)	29	18	20	2,040	1,741	601
Druggists' preparations.....	1919	3,219	40	2,631	20	422	18	60	28	—
	1914	2,175	—	—	—	1,925	183	66	1	—
Electrical machinery, apparatus, and supplies.....	1919	4,190	16	47	453	2,461	370	515	128	200
	1914	1,144	(2)	(2)	73	118	471	277	205	—
Engines, steam, gas, and water.....	1919	14,258	390	—	3,208	4,013	917	5,716	14	—
	1914	4,427	—	—	—	97	1,547	2,267	516	—
Food preparations, not elsewhere specified.....	1919	2,483	5	—	87	135	25	62	1,948	221
	1914	1,683	(2)	(2)	553	67	122	61	707	83
Foundry and machine-shop products ²	1919	42,745	1,257	15	4,963	18,802	5,316	9,726	2,666	—
	1914	17,608	(2)	(2)	670	1,766	4,637	8,727	1,808	—
Furniture.....	1919	18,490	41	38	210	12,339	3,282	2,416	170	—
	1914	14,706	(2)	(2)	645	2,080	5,502	2,344	4,135	—
Gas, illuminating and heating.....	1919	2,846	—	3	1,203	5	6	607	852	110
	1914	2,349	—	—	—	—	109	967	270	1,003
Hardware.....	1919	2,174	—	—	381	1,194	557	24	18	—
	1914	742	(2)	(2)	1	120	168	358	80	—
Knit goods.....	1919	3,170	34	13	921	1,431	771	—	—	—
	1914	2,714	(2)	(2)	26	201	2,315	172	—	—
Leather, tanned, curried, and finished.....	1919	3,464	—	—	674	1,021	1,641	—	128	—
	1914	2,773	—	—	—	11	972	563	1,227	—
Lumber and timber products.....	1919	14,023	28	6	168	133	337	808	13,443	—
	1914	21,488	(2)	(2)	84	547	427	325	20,105	—
Lumber, planing-mill products, not including planing mills connected with sawmills.....	1919	5,250	260	—	23	1,896	814	1,676	1,087	—
	1914	4,944	(2)	(2)	171	814	1,470	1,256	1,704	29
Paper and wood pulp.....	1919	9,561	—	—	5,310	1,904	2,011	226	9	101
	1914	6,051	—	—	—	278	1,016	623	1,482	2,652
Printing and publishing, book and job.....	1919	8,717	42	36	3,277	297	42	1	20	2
	1914	8,860	(2)	(2)	2,748	555	500	32	25	—
Printing and publishing, newspapers and periodicals.....	1919	3,176	133	87	2,295	202	296	57	105	1
	1914	3,270	(2)	(2)	2,059	209	682	190	106	24
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	1919	5,044	17	—	4,845	48	2	132	—	—
Salt.....	1919	2,063	—	2	541	—	411	587	428	94
	1914	1,434	(2)	(2)	12	—	40	565	536	281
Shipbuilding, steel, new vessels and small boats.....	1919	15,996	—	—	15,994	—	—	2	—	—
	1914	935	(2)	(2)	89	—	659	—	187	—
Stoves and hot-air furnaces.....	1919	4,240	—	201	67	1,611	1,569	692	100	—
	1914	3,832	(2)	(2)	5	724	2,209	275	619	—
Structural ironwork, not made in steel works or rolling mills.....	1919	2,313	—	—	265	1,016	102	764	166	—
	1914	1,371	(2)	(2)	156	47	304	848	16	—
Tobacco, cigars and cigarettes.....	1919	5,456	884	530	796	1,185	2,002	4	55	—
	1914	7,295	(2)	(2)	3,496	1,751	2,049	6	23	—
Tools, not elsewhere specified.....	1919	3,261	66	38	188	2,566	193	207	3	—
	1914	372	(2)	(2)	1	1	39	288	43	—
Wirework, not elsewhere specified.....	1919	2,516	78	—	416	563	245	1,080	43	91
	1914	1,314	(2)	(2)	3	12	129	701	469	—
All other industries.....	1919	85,406	3,696	1,770	13,764	25,814	14,853	11,982	9,047	4,480
	1914	72,717	(2)	(2)	6,991	8,359	21,041	15,008	16,106	5,212

¹ Includes 48 and under for 1914 and 1909.² Corresponding figures not available.³ Includes "iron and steel, tempering and welding" and "machine tools."⁴ Not shown separately in 1914.

MANUFACTURES—MICHIGAN.

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.....	1919 1914	376,032 177,605	7,405 (²)	7,935 (²)	122,704 16,389	153,330 28,851	37,412 45,136	35,310 57,509	10,546 26,619	1,390 3,101
ADRIAN.....	1919 1914	1,870 1,256	(²) 2	(²) 2	26 28	379 31	356 179	817 270	282 695	6 4
ALPENA.....	1919 1914	1,372 1,494	(²)	(²)	348 33	30 —	77 42	423 310	494 848	261 —
ANN ARBOR.....	1919 1914	1,612 842	78 (²)	10 (²)	118 189	417 6	272 237	697 316	16 80	4 14
BATTLE CREEK.....	1919 1914	6,680 4,599	40 (²)	31 (²)	733 870	185 492	423 1,478	3,003 709	2,051 1,042	214 8
BAY CITY.....	1919 1914	5,057 3,771	69 (²)	20 (²)	1,944 237	882 184	497 1,249	760 497	883 1,462	2 142
BENTON HARBOR.....	1919 1914	2,328 1,285	9 (²)	2 (²)	106 11	3 19	550 133	1,307 564	228 558	33 —
DETROIT.....	1919 1914	167,016 99,603	5,460 (²)	7,019 (²)	53,344 9,702	71,132 20,735	12,788 20,248	15,159 35,419	1,547 12,804	567 695
ESCANABA.....	1919 1914	842 777	29 (²)	(²)	264 67	9 12	287 224	36 343	214 127	3 4
FLINT.....	1919 1914	24,603 8,722	76 (²)	(²)	181 157	22,597 341	597 406	709 7,568	439 146	4 104
GRAND RAPIDS.....	1919 1914	23,548 17,427	323 (²)	445 (²)	4,338 1,721	15,448 2,484	1,867 9,048	936 1,997	177 1,011	14 266
HOLLAND.....	1919 1914	2,748 2,165	4 (²)	6 (²)	223 232	826 27	967 939	619 409	15 490	88 68
IRONWOOD.....	1919 1914	399 516	1 (²)	(²)	23 7	6 9	19 10	— —	350 480	— 10
ISHPEMING.....	1919 1914	107 79	(²)	3 (²)	17 14	— 3	58 10	13 —	16 52	— —
JACKSON.....	1919 1914	9,620 4,906	13 (²)	5 (²)	1,144 413	5,421 900	928 1,568	1,916 1,411	187 403	6 211
KALAMAZOO.....	1919 1914	7,629 5,525	519 (²)	300 (²)	1,442 251	3,230 682	1,068 2,392	930 861	125 1,102	15 237
LANSING.....	1919 1914	12,349 6,231	8 (²)	9 (²)	350 484	3,534 2,175	7,600 634	670 2,474	85 899	63 75
MARQUETTE.....	1919 1914	1,415 589	4 (²)	(²)	489 201	60 7	35 92	26 14	800 185	1 —
MONROE.....	1919	2,904	1	—	1,922	175	565	120	115	6
MUSKEGON.....	1919 1914	9,716 4,646	345 (²)	3 (²)	716 581	228 301	3,777 2,587	4,239 3,378	296 444	112 355
OWOSSO.....	1919 1914	1,781 1,231	(²)	(²)	72 70	25 —	506 71	952 345	71 625	155 120
PONTIAC.....	1919 1914	7,682 2,409	6 (²)	(²)	2,540 58	4,473 14	29 257	74 1,785	527 214	83 81
PORT HURON.....	1919 1914	2,231 1,296	290 (²)	21 (²)	957 279	144 185	155 185	507 91	144 327	13 229
SAGINAW.....	1919 1914	9,472 6,342	110 (²)	52 (²)	1,905 607	4,251 236	1,913 2,982	879 596	343 1,767	19 164
SAULT STE. MARIE.....	1919 1914	1,248 938	3 (²)	1 (²)	28 33	692 2	448 124	15 592	59 178	2 9
TRAVERSE CITY.....	1919 1914	960 956	(²)	(²)	101 54	89 6	167 41	279 561	324 290	— 4
WYANDOTTE.....	1919	6,214	2	—	5,037	662	23	22	468	—
ALL OTHER CITIES ³	1919	64,629	13	6	44,246	13,432	1,440	202	290	—

¹ Includes 48 and under for 1914 and 1909.² Corresponding figures not available.³ All other cities comprise Hamtramck and Highland Park.

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.	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.
All Industries.....	8,305	471,242	1,085	3,809	8,573	1,494	16,748	747	25,050	456	33,945	414	66,285	167	57,771	78	53,182	55	209,688	
Agricultural implements.....	23	2,708	9	48	104	39	470	21	694	20	2,088	20	3,210	17	6,170	13	9,329	10	26,983	
Automobile bodies and parts.....	68	126,937	1	4	10	7	88	13	459	8	614	11	1,857	5	1,491	2	1,751	17	120,067	
Automobiles.....	22	2,336	1	14	39	6	86	5	185	5	334	3	591	1	294	1	846	1	1,532	
Boxes, paper and other, not elsewhere specified.....	80	10,306	2	14	39	23	281	12	397	9	949	5	862	9	3,114	5	3,432	1	1,532	
Brass, bronze, and copper products.....	944	5,088	190	606	1,306	112	1,040	23	758	6	427	4	659	3	898	...	...	...	...
Bread and other bakery products.....	52	2,109	1	8	28	16	205	15	515	6	467	0	894	...	...	...	...	...	...
Canning and preserving, fruits and vegetables.....	36	7,025	...	2	2	4	42	7	202	10	761	6	987	1	411	5	3,616	1	1,004	
Cars and general shop construction and repairs by steam-railroad companies.....	36	5,712	5	14	25	4	64	7	223	1	90	...	...	1	340	1	692	3	4,278
Chemicals.....	16	3,210	3	1	2	5	54	2	50	3	196	...	...	1	286	...	...	1	2,631
Druggists' preparations.....	54	4,190	2	15	42	13	171	6	254	7	573	8	1,250	2	658	...	...	1	1,242
Electrical machinery, apparatus, and supplies.....	35	14,258	1	5	18	3	46	6	215	6	483	7	1,315	2	854	1	700	4	10,627	
Engines, steam, gas, and water.....	37	2,483	5	17	32	6	47	4	142	2	162	1	213	...	...	1	771	1	1,126
Food preparations, not elsewhere specified.....	523	30,430	23	143	385	102	1,194	107	3,565	52	3,715	55	8,790	27	9,370	10	6,549	4	5,862	
Foundry and machine-shop products.....	171	18,496	4	21	62	27	357	32	1,051	36	2,767	33	5,340	10	3,001	8	5,318	...	...
Furniture.....	59	2,846	...	15	59	26	278	7	220	5	352	5	748	...	...	...	...	1	1,189
Gas, illuminating and heating.....	30	2,174	1	7	15	5	48	5	129	7	562	4	672	2	748	...	...	...	...
Hardware.....	31	3,170	1	3	6	7	93	6	224	7	554	3	432	2	826	2	1,035	...	...
Knit goods.....	28	3,464	1	...	...	2	18	3	95	8	611	12	2,010	2	730	...	...	...	...
Leather, tanned, curried, and finished.....	380	14,923	9	176	389	87	1,005	38	1,310	29	2,170	25	3,790	12	3,694	4	2,565	...	...
Lumber and timber products.....	192	5,256	0	74	186	55	673	31	1,066	12	878	11	1,624	3	829	...	...	...	...
Lumber, planing-mill products, not including planing mills connected with sawmills.....	31	3,196	...	3	10	7	81	4	144	8	500	7	1,005	...	...	2	1,366	...	...
Machine tools.....	39	9,661	...	2	6	3	23	2	63	4	280	13	2,305	11	3,718	3	2,036	1	1,130	
Paper and wood pulp.....	436	3,717	93	203	470	92	961	31	1,000	16	1,110	1	176	...	...	...	...	...	...
Printing and publishing, book and job.....	505	3,176	141	320	691	78	832	20	649	3	223	2	379	1	402	...	...	...	...
Printing and publishing, newspapers and periodicals.....	7	5,044	...	2	3	2	25	1	47	...	...	1	124	...	...	...	...	1	4,845
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	12	2,093	...	1	3	...	...	...	...	4	326	4	662	3	1,072	...	...	...	...
Salt.....	7	15,996	...	1	2	...	...	...	...	1	84	...	...	...	...	...	...	5	15,910
Shipbuilding, steel, new vessels and small boats.....	21	4,240	...	3	11	...	...	5	176	3	250	0	1,020	...	...	4	2,783	...	...
Stoves and hot-air furnaces.....	34	2,313	1	5	16	14	143	7	226	1	77	4	741	1	368	1	742	...	...
Structural ironwork, not made in steel works or rolling mills.....	349	5,456	116	153	315	42	429	14	471	9	669	9	1,310	5	1,754	1	508	...	...
Tobacco, cigars and cigarettes.....	80	3,261	4	24	70	23	317	28	992	7	478	1	120	...	...	2	1,278	...	...
Tools, not elsewhere specified.....	38	2,516	...	12	34	6	66	9	360	4	325	4	782	3	949	12	7,865	3	9,620	
Wirework, not elsewhere specified.....	3,657	85,525	466	1,001	4,207	674	7,552	270	8,934	148	10,888	142	22,208	41	14,250	12	7,865	3	9,620	
All other industries.....	4,792	376,032	570	1,855	4,501	1,051	11,830	520	17,245	293	21,541	265	43,227	120	41,553	65	44,535	47	191,510	
Total for cities.....	4,792	376,032	570	1,855	4,501	1,051	11,830	520	17,245	293	21,541	265	43,227	120	41,553	65	44,535	47	191,510	
ADRIAN.....	62	1,870	13	22	61	9	108	8	263	4	289	5	817	1	332	...	...	...	...
ALPENA.....	38	1,372	8	11	24	8	92	6	179	...	...	3	357	2	720	...	...	...	...
ANN ARBOR.....	78	1,612	24	28	61	16	212	4	135	4	260	...	...	1	349	1	595	...	...
BATTLE CREEK.....	118	6,680	18	53	126	21	238	10	332	3	196	6	1,155	3	1,118	2	1,347	2	2,168	
BAY CITY.....	108	5,057	14	36	100	24	276	12	415	9	666	10	1,596	1	281	1	521	1	1,202	
BENTON HARBOR.....	65	2,328	9	24	40	15	172	4	110	8	554	2	288	2	603	1	555	...	...
DETROIT.....	2,176	167,016	251	770	1,805	504	5,716	280	9,219	133	9,715	123	19,590	56	19,097	36	24,194	23	77,590	
ESCANABA.....	45	842	2	26	60	12	98	1	23	2	140	1	234	1	287	...	...	...	...
FLINT.....	107	24,603	14	42	124	30	299	6	222	4	283	3	476	4	1,435	...	...	4	21,704
GRAND RAPIDS.....	611	23,548	90	240	580	117	1,393	68	2,036	51	3,788	27	4,588	14	5,087	9	6,081	...	...
HOLLAND.....	64	2,748	5	24	61	8	73	14	489	3	207	9	1,528	1	390	...	...	...	...
IRONWOOD.....	28	399	6	14	37	7	60	...	...	...	...	...	...	1	302	...	...	...	...
ISHPEMING.....	21	107	...	18	35	4	27	1	45	...	...	...	...	...	...	...	...	...	...
JACKSON.....	150	9,620	8	70	180	37	428	17	588	8	608	7	1,166	3	1,168	4	2,048	2	2,828	
KALAMAZOO.....	185	7,629	20	71	176	47	543	14	521	12	840	16	3,035	4	1,384	...	...	1	1,130
LANSING.....	147	12,349	9	62	151	41	465	12	434	8	661	5	884	6	2,111	2	1,706	2	5,877	
MARQUETTE.....	34	1,415	2	13	28	7	86	4	96	1	69	6	854	1	282	...	...	...	...
MONROE.....	41	2,904	3	20	54	5	50	5	184	4	303	1	260	1	400	2	1,663	...	...
MUSKEGON.....	141	9,716	23	61	139	19	226	12	423	11	792	7	1,090	5	1,715	1	613	2	4,818	
OWOSSO.....	40	1,781	6	17	48	6	64	3	109	1	61	4	568	3	931	...	...	...	...
PONTIAC.....	78	7,682	5	40	98	17	165	6	203	2	186	3	409	1	315	2	1,734	2	4,572	
PORT HURON.....	83	2,231	14	39	108	11	108	9	269	4	270	4	680	2	796	...	...	...	...
SAGINAW.....	208	9,472	17	86	218	50	574	19	647	12	945	19	2,992	1	438	2	1,260	2	2,398	
SAULT STE. MARIE.....	26	1,248	2	14	43	6	50	1	32	1	60	...	...	1	366	1	691	...	...
TRAVERSE CITY.....	56	960	1	27	70	15	149	7	215	6	526	...	...	...	...	...	...	...	...
WYANDOTTE.....	26	6,214	3	12	23	3	37	...	...	1	67	3	471	2	650	...	...	2	4,966
ALL OTHER CITIES.....	50	64,629	9	17	39	12	115	2	56	1	60	1	199	3	996	1	967	4	62,197	

1 All other cities comprise Hamtramck and Highland Park.

MANUFACTURES—MICHIGAN.

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.....	8,305	8,724	9,159	471,242	271,090	231,499	\$3,466,188,483	\$1,086,162,432	\$685,109,169	\$1,546,945,240	\$493,361,368	\$316,497,147
Less than \$5,000.....	1,539	2,976	3,372	916	8,154	3,906	3,960,695	7,254,892	7,821,328	2,444,262	4,501,300	4,914,568
\$5,000 to \$20,000.....	2,278	2,566	2,665	5,845	10,555	12,382	24,871,038	26,702,525	27,383,330	13,464,814	14,339,662	14,559,126
\$20,000 to \$100,000.....	2,361	1,914	1,999	20,716	30,078	35,706	106,296,336	87,746,430	90,330,115	51,878,594	40,638,674	41,918,104
\$100,000 to \$500,000.....	1,341	933	1,035	61,795	117,227	123,279	306,923,542	206,598,783	301,233,306	150,101,597	157,753,189	148,842,066
\$500,000 to \$1,000,000.....	327	175		43,258			232,661,055	123,370,371		112,651,519		
\$1,000,000 and over.....	459	160	88	339,042	110,075	56,226	2,788,475,817	634,489,481	258,341,090	1,216,404,464	276,168,543	108,263,253
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.....	18.5	34.1	36.8	0.2	1.2	1.7	0.1	0.7	1.1	0.2	0.9	1.6
\$5,000 to \$20,000.....	27.4	29.4	29.1	1.2	3.9	5.3	0.7	2.5	4.0	0.9	2.9	4.6
\$20,000 to \$100,000.....	28.4	21.9	21.8	4.4	11.1	15.4	3.2	8.1	13.2	3.3	8.2	13.2
\$100,000 to \$500,000.....	16.2	10.7		13.1	43.2	53.3	8.9	19.0	44.0	9.7	32.0	46.4
\$500,000 to \$1,000,000.....	3.9	2.0		9.2	40.6	24.3	6.7	11.4		7.3		
\$1,000,000 and over.....	5.5	1.8	1.0	71.9			80.4	58.4	37.7	78.6	56.0	34.2

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.
AUTOMOBILE BODIES AND PARTS.....	203	140	100.0	49,048	24,736	100.0	\$288,306,858	\$71,540,077	100.0	\$137,744,416	\$33,146,818	100.0
Less than \$5,000.....	15	17	7.4	15	21	(1)	40,755	49,299	(1)	11,867	30,145	(1)
\$5,000 to \$20,000.....	35	19	17.2	82	85	0.2	344,792	213,984	0.1	229,586	131,642	0.2
\$20,000 to \$100,000.....	49	29	24.1	611	676	1.2	2,416,890	1,774,733	0.8	1,540,952	1,033,860	1.1
\$100,000 to \$500,000.....	43	41	21.2	2,820	2,313	5.7	10,218,891	9,024,150	3.5	5,763,097	2,991,442	4.2
\$500,000 to \$1,000,000.....	11	14	5.4	1,443		2.9	7,308,239	10,060,025	2.5	3,325,317		2.4
\$1,000,000 and over.....	50	20	24.6	44,077	10,641	89.9	207,977,291	50,417,886	93.0	120,864,597	22,650,729	82.1
AUTOMOBILES.....	68	65	100.0	126,937	42,802	100.0	1,332,076,498	326,748,945	100.0	522,871,509	145,926,809	100.0
Less than \$20,000.....	4	8	5.9	7	64	(1)	50,569	154,115	(1)	24,560	43,345	(1)
\$20,000 to \$100,000.....	5	17	7.4	41	207	(1)	275,515	802,089	(1)	145,102	328,506	(1)
\$100,000 to \$500,000.....	16	10	23.5	649	2,479	0.5	4,232,927	3,693,087	0.3	1,775,511	2,897,474	0.3
\$500,000 to \$1,000,000.....	5		7.4	373		0.3	3,416,158		0.3	1,055,084		0.2
\$1,000,000 and over.....	38	30	55.9	125,867	42,052	99.2	1,324,095,329	322,009,654	99.4	519,870,352	144,657,481	99.4
BRASS, BRONZE, AND COPPER PRODUCTS.....	80	64	100.0	10,306	4,731	100.0	62,708,335	16,868,725	100.0	23,850,357	5,365,258	100.0
Less than \$5,000.....	4	13	5.0	4	17	(1)	12,966	40,675	(1)	9,368	23,344	(1)
\$5,000 to \$20,000.....	6	12	7.5	15	55	0.1	77,330	126,482	0.1	39,252	67,429	0.2
\$20,000 to \$100,000.....	25	19	31.2	240	415	2.3	1,350,990	1,000,854	2.2	672,376	529,306	2.8
\$100,000 to \$500,000.....	23	17	23.8	1,341	2,510	13.0	4,948,450	5,828,771	7.9	2,544,230	2,804,331	10.7
\$500,000 to \$1,000,000.....	8		10.0	1,219		11.8	5,689,642		9.0	2,688,575		11.3
\$1,000,000 and over.....	14	3	17.5	7,487	1,734	72.7	50,664,587	9,871,943	80.8	17,905,550	1,880,848	76.0
BREAD AND OTHER BAKERY PRODUCTS.....	944	922	100.0	5,088	4,014	100.0	44,923,454	16,000,068	100.0	16,807,665	6,691,971	100.0
Less than \$5,000.....	108	311	11.4	20	209	0.4	318,168	949,157	0.7	131,011	434,466	0.8
\$5,000 to \$20,000.....	422	474	44.7	500	1,164	9.8	4,963,088	4,632,098	11.1	1,784,664	1,774,465	10.6
\$20,000 to \$100,000.....	349	118	37.0	1,466	1,207	28.8	13,728,963	4,768,750	30.6	4,715,292	1,880,774	28.1
\$100,000 to \$500,000.....	57	14	6.0	1,522	1,434	29.9	12,516,201	2,503,515	27.9	4,691,725	2,402,266	27.9
\$500,000 to \$1,000,000.....	4		0.5				3,416,158		19.7			
\$1,000,000 and over.....	8		0.8	1,580		31.1	13,368,924		29.8	5,484,673		32.6
BUTTER.....	231	270	100.0	984	769	100.0	33,385,420	13,470,297	100.0	3,804,528	1,818,195	100.0
Less than \$5,000.....	13		4.8	8		1.0		39,870	0.3		7,298	0.4
\$5,000 to \$20,000.....	23	66	10.0	89	1.4	11.6	263,335	920,321	0.8	38,962	134,080	1.0
\$20,000 to \$100,000.....	126	171	54.5	279	425	28.4	7,257,408	7,596,258	21.7	801,608	954,931	21.1
\$100,000 to \$500,000.....	71	20	30.7	419	247	42.6	13,036,776	4,952,848	41.7	1,616,773	715,986	39.9
\$500,000 to \$1,000,000.....	6		2.2	113		11.5	4,345,919		13.0	510,426		13.4
\$1,000,000 and over.....	5			159		16.2	7,681,982		22.7	936,759		24.6
CHEMICALS.....	36	36	100.0	5,712	4,509	100.0	37,850,834	13,891,415	100.0	22,106,759	7,517,930	100.0
Less than \$5,000.....	13	16	36.1	6	21	0.1	28,973	32,486	0.1	16,942	23,280	0.1
\$5,000 to \$20,000.....	3	4	8.3	6	14	0.1	25,194	43,254	0.1	9,297	17,034	0.1
\$20,000 to \$100,000.....	6	3	16.7	72	41	1.3	406,534	181,760	1.1	223,038	80,605	1.3
\$100,000 to \$500,000.....	9	2	25.0	318	325	5.6	3,477,438	1,072,986	9.2	1,833,454	871,812	8.0
\$500,000 to \$1,000,000.....	5	5	13.9	5,310	4,108	93.0	33,912,695	11,660,929	89.6	20,024,028	6,525,609	90.6
ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES.....	54	35	100.0	4,190	1,144	100.0	25,025,528	3,415,500	100.0	15,990,472	1,675,952	100.0
Less than \$5,000.....	4	7	7.4	2	8	(1)	7,341	17,340	(1)	4,537	9,452	(1)
\$5,000 to \$20,000.....	9	9	16.7	26	40	0.6	124,907	95,090	0.5	50,057	44,552	0.5
\$20,000 to \$100,000.....	15	8	27.8	209	161	5.0	830,296	394,114	3.3	416,268	208,027	2.6
\$100,000 to \$500,000.....	12	11	22.2	595	935	14.2	2,661,111	2,908,956	10.2	1,289,149	1,418,921	8.1
\$500,000 to \$1,000,000.....	7			864		20.6	5,173,350		20.7	3,139,654		19.6
\$1,000,000 and over.....	7		13.0	2,494		59.5	16,328,523		65.2	11,083,907		69.3

1 Less than one-tenth of 1 per cent.

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

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

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

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

MANUFACTURES—MICHIGAN.

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

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
ENGINES, STEAM, GAS, AND WATER.	35	48	100.0	100.0	14,258	4,427	100.0	100.0	\$101,989,440	\$12,369,172	100.0	100.0	\$44,038,747	\$6,407,540	100.0	100.0
Less than \$5,000.....	1	5	2.8	10.4	1	3	0.1	0.1	1	8,538	0.1	0.1	1	4,780	0.1	0.1
\$5,000 to \$20,000.....	14	10	11.4	20.8	19	65	0.1	1.5	127,068	113,418	(?)	0.9	110,008	60,551	(?)	1.0
\$20,000 to \$100,000.....	5	11	14.3	22.9	87	326	0.6	7.4	217,285	642,875	0.2	5.2	125,322	316,962	0.3	4.9
\$100,000 to \$500,000.....	12	19	34.3	39.0	702	1,494	5.3	33.7	3,063,903	4,319,995	3.6	34.9	1,515,252	2,157,357	3.4	33.7
\$500,000 to \$1,000,000.....	6	17	17.1	39.0	974	1,494	6.8	33.7	4,059,521	7,284,348	4.0	58.9	2,510,726	3,861,890	5.6	60.3
\$1,000,000 and over.....	8	3	22.9	6.2	12,426	2,539	87.2	57.4	94,021,598	7,284,348	92.2	58.9	40,762,430	3,861,890	90.7	60.3
FLOUR-MILL AND GRIST-MILL PRODUCTS.....	345	427	100.0	100.0	1,128	1,370	100.0	100.0	44,144,434	27,381,474	100.0	100.0	5,959,339	4,082,303	100.0	100.0
Less than \$5,000.....	14	45	4.1	10.5	2	27	0.2	2.0	47,243	134,169	0.1	0.5	8,820	30,535	0.1	0.7
\$5,000 to \$20,000.....	75	147	21.7	34.4	40	173	3.6	12.6	900,117	1,714,408	2.0	6.3	173,478	344,991	2.9	8.4
\$20,000 to \$100,000.....	185	188	53.6	44.0	278	457	24.6	33.4	8,508,510	7,787,576	19.3	28.4	1,340,759	1,294,361	22.6	31.7
\$100,000 to \$500,000.....	59	39	17.1	9.1	322	397	28.5	29.0	12,191,285	7,541,907	27.6	27.5	1,060,762	1,433,149	27.9	35.1
\$500,000 to \$1,000,000.....	6	3	1.7	0.7	155	137	13.7	23.1	4,047,740	1,730,062	9.2	6.3	629,492	979,267	8.9	24.0
\$1,000,000 and over.....	6	5	1.7	1.2	331	316	29.3	23.1	18,449,539	8,473,352	41.8	30.9	2,240,019	979,267	37.6	24.0
FOUNDRY AND MACHINE-SHOP PRODUCTS.....	580	502	100.0	100.0	42,745	17,008	100.0	100.0	\$182,735,316	\$39,428,783	100.0	100.0	\$109,796,783	\$23,630,250	100.0	100.0
Less than \$5,000.....	55	119	9.5	23.7	20	151	0.1	0.9	145,151	350,179	0.1	0.9	105,189	258,378	0.1	1.1
\$5,000 to \$20,000.....	128	139	22.1	27.7	425	747	1.0	4.2	1,450,580	1,418,615	0.8	3.6	994,652	580,400	0.9	3.9
\$20,000 to \$100,000.....	149	153	25.7	30.5	2,220	3,281	5.2	18.6	7,632,791	6,993,489	4.3	17.7	5,142,485	4,401,659	4.7	18.0
\$100,000 to \$500,000.....	169	73	27.4	14.5	9,719	11,792	22.7	67.0	36,751,189	15,784,096	20.1	40.0	23,026,021	14,763,077	21.0	62.6
\$500,000 to \$1,000,000.....	40	14	6.9	2.8	6,320	1,637	14.8	9.3	27,332,202	10,021,704	15.0	25.4	17,193,471	3,186,076	15.7	13.6
\$1,000,000 and over.....	49	4	8.4	0.8	24,023	1,637	56.2	9.3	109,122,123	4,890,800	59.7	12.3	69,834,970	3,186,076	57.7	13.6
FURNITURE.....	171	192	100.0	100.0	18,496	14,706	100.0	100.0	69,497,237	30,184,542	100.0	100.0	41,187,025	17,665,105	100.0	100.0
Less than \$5,000.....	10	25	5.8	13.0	12	42	0.1	0.3	22,740	61,786	(?)	0.2	14,963	39,320	(?)	0.2
\$5,000 to \$20,000.....	15	31	8.8	16.1	67	158	0.4	1.1	168,087	311,825	0.2	1.0	96,957	194,383	0.2	1.1
\$20,000 to \$100,000.....	35	55	20.5	28.6	604	1,809	3.3	12.3	1,945,200	3,063,818	2.8	10.2	1,057,503	1,735,214	2.6	9.8
\$100,000 to \$500,000.....	72	68	42.1	35.4	5,219	12,097	28.2	86.3	19,453,200	16,965,453	28.0	52.0	11,371,767	15,696,188	27.6	88.9
\$500,000 to \$1,000,000.....	20	13	11.7	6.8	3,839	1,637	20.8	9.3	14,493,187	10,781,630	20.9	35.7	8,993,953	3,186,076	21.8	13.6
\$1,000,000 and over.....	19	11	11.1	2.4	8,755	1,637	47.3	9.3	33,414,814	4,890,800	48.1	12.3	19,651,882	3,186,076	47.7	13.6
LUMBER AND TIMBER PRODUCTS.....	380	477	100.0	100.0	14,923	21,488	100.0	100.0	46,043,855	33,873,367	100.0	100.0	30,350,299	19,764,708	100.0	100.0
Less than \$5,000.....	102	174	26.8	36.5	110	333	0.7	1.5	223,849	370,639	0.5	1.1	165,075	260,740	0.5	1.3
\$5,000 to \$20,000.....	97	119	25.5	24.9	407	880	3.1	4.1	1,057,950	1,295,673	2.3	3.8	727,410	814,213	2.4	4.1
\$20,000 to \$100,000.....	88	98	23.2	20.5	1,392	3,402	9.3	15.8	3,874,759	4,587,400	8.4	13.4	2,381,654	2,993,598	7.8	15.0
\$100,000 to \$500,000.....	65	73	17.1	15.3	4,937	10,878	33.1	78.5	14,799,729	10,898,555	32.1	40.9	9,463,705	15,720,157	31.2	79.5
\$500,000 to \$1,000,000.....	19	13	5.0	2.7	4,619	1,637	31.0	9.3	13,958,108	10,771,100	30.3	31.8	9,601,437	3,186,076	31.0	13.6
\$1,000,000 and over.....	9	4	2.4	0.8	3,398	1,637	22.8	9.3	12,129,460	4,890,800	25.3	12.3	8,011,013	3,186,076	25.4	13.6
LUMBER, PLANING-MILL PRODUCTS, NOT INCLUDING PLANING MILLS CONNECTED WITH SAWMILLS.	192	217	100.0	100.0	5,266	4,944	100.0	100.0	37,899,230	19,767,955	100.0	100.0	13,850,822	7,559,706	100.0	100.0
Less than \$5,000.....	21	49	10.9	22.6	21	65	0.4	1.3	63,227	149,258	0.2	0.8	38,040	72,200	0.3	1.0
\$5,000 to \$20,000.....	36	41	18.7	18.9	95	203	1.8	4.1	383,236	486,004	1.0	2.5	186,835	270,298	1.3	3.6
\$20,000 to \$100,000.....	59	75	30.7	34.6	540	1,205	10.4	26.2	2,960,420	3,558,126	7.8	18.0	1,862,472	1,540,139	9.8	20.4
\$100,000 to \$500,000.....	57	43	29.7	19.8	1,961	3,381	37.3	68.4	13,272,037	8,360,360	35.0	42.3	4,901,619	5,677,129	35.4	75.1
\$500,000 to \$1,000,000.....	11	9	5.7	4.1	1,094	1,637	20.8	9.3	8,422,334	7,214,217	21.2	36.5	3,113,418	3,186,076	22.5	13.6
\$1,000,000 and over.....	8	4	4.2	0.8	1,539	1,637	29.3	9.3	13,138,076	4,890,800	34.7	12.3	4,258,638	3,186,076	30.7	13.6
PATENT MEDICINES AND COMPOUNDS.....	70	102	100.0	100.0	1,392	1,029	100.0	100.0	9,948,329	3,871,014	100.0	100.0	5,735,523	2,395,160	100.0	100.0
Less than \$5,000.....	27	54	38.6	52.9	9	27	0.6	2.6	63,831	100,811	0.6	2.8	37,520	73,999	0.7	3.1
\$5,000 to \$20,000.....	14	27	20.0	20.5	13	75	0.9	7.3	152,631	308,397	1.5	8.0	98,036	222,212	1.7	9.3
\$20,000 to \$100,000.....	21	16	30.0	15.7	148	90	10.6	9.3	904,172	875,678	9.1	22.6	576,214	612,278	10.0	25.6
\$100,000 to \$500,000.....	4	5	5.7	4.0	38	831	2.7	80.8	854,843	2,580,128	8.6	66.7	332,454	1,486,701	5.8	62.1
\$500,000 and over.....	4	4	5.7	4.0	1,184	1,637	85.1	9.3	7,972,952	4,890,800	80.1	12.3	4,691,269	3,186,076	81.8	13.6
PRINTING AND PUBLISHING, BOOK AND JOB.....	436	404	100.0	100.0	3,717	3,880	100.0	100.0	17,675,925	9,380,560	100.0	100.0	11,204,129	6,298,771	100.0	100.0
Less than \$5,000.....	119	174	27.3	43.1	51	177	1.4	4.6	302,168	418,638	1.7	4.5	200,255	304,710	1.8	4.8
\$5,000 to \$20,000.....	150	144	35.8	35.6	401	640	10.8	16.6	1,670,145	1,426,943	9.5	15.2	1,091,259	875,630	9.7	15.5
\$20,000 to \$100,000.....	121	63	27.8	15.0	1,288	1,270	34.7	32.9	5,624,410	2,837,439	31.3	30.2	3,663,087	1,920,072	32.7	30.6
\$100,000 and over.....	40	23	9.2	5.7	1,977	1,773	53.2	45.9	10,173,207	4,697,540	57.6	50.1	6,249,528	3,090,359	55.8	49.1
PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS.....	565	600	100.0	100.0	3,176	3,270	100.0	100.0	24,630,421	12,290,227	100.0	100.0	17,234,276	8,946,668	100.0	100.0
Less than \$5,000.....	236	372	41.8	56.4	207	479	6.5	14.6	657,309	965,112	2.6	7.9	600,674	781,277	2.9	8.7
\$5,000 to \$20,000.....	216	210	38.2	31.8	541	849	17.0	26.0	2,072,024	1,849,066	8.3	15.0	1,565,983	1,513,307	9.1	16.0
\$20,00																

MANUFACTURES—MICHIGAN.

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.
ADRIAN.....	62	1,870	100.0	\$14,549,031	100.0	\$4,396,103	100.0	ISHPEMING.....	21	107	100.0	\$1,007,432	100.0	\$524,734	100.0
Less than \$5,000.....	15	6	0.3	32,793	0.2	20,892	0.5	Less than \$5,000.....	5	4	3.7	16,746	1.7	6,772	1.3
\$5,000 to \$20,000.....	11	25	1.3	96,759	0.7	63,417	1.4	\$5,000 to \$20,000.....	7	17	15.9	62,428	6.2	32,523	6.2
\$20,000 to \$100,000.....	18	158	8.4	818,090	5.6	427,606	9.7	\$20,000 to \$100,000.....	6	30	28.0	192,434	19.1	93,549	17.8
\$100,000 to \$500,000.....	10	549	29.4	1,770,132	12.2	914,662	20.8	\$100,000 to \$500,000.....	3	56	52.3	735,824	73.0	391,880	74.7
\$500,000 to \$1,000,000.....	4	485	25.9	2,417,927	16.6	1,069,864	24.3								
\$1,000,000 and over.....	4	647	34.6	9,412,730	64.7	1,899,572	43.2	JACKSON.....	156	9,020	100.0	49,517,712	100.0	19,529,000	100.0
ALPENA.....	38	1,372	100.0	9,356,190	100.0	4,468,715	100.0	Less than \$5,000.....	19	15	0.2	57,570	0.1	36,317	0.2
Less than \$5,000.....	11	5	0.4	27,776	0.3	15,471	0.3	\$5,000 to \$20,000.....	37	101	1.0	421,232	0.9	242,875	1.2
\$5,000 to \$20,000.....	4	7	0.5	53,779	0.6	21,352	0.5	\$20,000 to \$100,000.....	48	411	4.3	2,058,498	4.2	1,072,129	5.5
\$20,000 to \$100,000.....	14	182	13.3	603,182	6.4	290,612	6.5	\$100,000 to \$500,000.....	35	1,334	13.9	7,214,940	14.6	3,807,648	19.5
\$100,000 to \$500,000.....	6	330	24.1	1,016,937	10.9	594,635	13.3	\$500,000 to \$1,000,000.....	6	869	9.0	4,994,618	10.1	1,781,085	9.1
\$1,000,000 and over.....	3	848	61.8	7,654,516	81.8	3,546,045	79.4	\$1,000,000 and over.....	11	6,890	71.6	34,770,845	70.2	12,588,946	64.5
ANN ARBOR.....	78	1,612	100.0	9,793,696	100.0	4,417,049	100.0	KALAMAZOO.....	185	7,629	100.0	46,254,917	100.0	22,018,574	100.0
Less than \$5,000.....	28	9	0.6	66,282	0.7	46,415	1.0	Less than \$5,000.....	28	14	0.2	75,575	0.2	48,936	0.2
\$5,000 to \$20,000.....	18	41	2.5	219,797	2.2	127,330	2.9	\$5,000 to \$20,000.....	40	145	1.9	534,397	1.2	315,152	1.4
\$20,000 to \$100,000.....	21	191	11.8	899,399	9.2	541,407	12.3	\$20,000 to \$100,000.....	55	449	5.9	2,390,200	5.2	1,158,303	5.3
\$100,000 and over.....	13	1,371	85.0	8,608,218	87.9	3,701,897	83.8	\$100,000 to \$500,000.....	33	1,720	22.5	7,585,457	16.4	4,054,231	18.4
BATTLE CREEK.....	118	6,680	100.0	56,139,953	100.0	28,151,062	100.0	\$500,000 to \$1,000,000.....	13	1,877	24.6	9,133,862	19.7	4,948,480	22.5
Less than \$5,000.....	16	5	(1)	36,975	(1)	25,793	(1)	\$1,000,000 and over.....	10	3,424	44.9	26,529,426	57.4	11,493,442	52.2
\$5,000 to \$20,000.....	37	72	1.1	452,376	0.8	254,689	0.9	LANSING.....	147	12,340	100.0	104,722,115	100.0	39,740,775	100.0
\$20,000 to \$100,000.....	38	309	4.6	1,628,624	2.9	846,715	3.0	Less than \$5,000.....	20	13	0.1	59,751	(1)	41,220	0.1
\$100,000 to \$500,000.....	12	372	5.6	2,471,275	4.4	1,313,006	4.7	\$5,000 to \$20,000.....	36	100	0.8	426,570	0.4	255,247	0.6
\$500,000 to \$1,000,000.....	4	430	6.4	2,470,117	4.4	1,344,695	4.8	\$20,000 to \$100,000.....	41	357	2.9	1,683,454	1.6	831,225	2.1
\$1,000,000 and over.....	11	5,492	82.2	49,071,686	87.4	24,365,564	86.6	\$100,000 to \$500,000.....	32	1,324	10.7	8,468,717	8.1	3,307,403	8.3
BAY CITY.....	108	5,057	100.0	28,214,525	100.0	12,952,929	100.0	\$500,000 to \$1,000,000.....	5	635	5.1	3,340,004	3.2	1,532,487	3.9
Less than \$5,000.....	16	7	0.1	45,901	0.2	22,294	0.2	\$1,000,000 and over.....	13	9,920	80.3	90,743,619	86.7	33,773,190	85.0
\$5,000 to \$20,000.....	25	84	1.7	285,935	1.0	133,843	1.0	MARQUETTE.....	34	1,415	100.0	7,210,375	100.0	2,545,079	100.0
\$20,000 to \$100,000.....	26	247	4.9	1,462,841	5.2	622,797	4.0	Less than \$5,000.....	4	2	0.1	10,494	0.1	5,775	0.2
\$100,000 to \$500,000.....	29	1,587	31.4	6,963,304	24.7	3,363,971	26.0	\$5,000 to \$20,000.....	8	26	1.8	97,367	1.4	54,497	2.1
\$500,000 to \$1,000,000.....	5	548	10.8	3,495,813	12.4	1,151,675	8.9	\$20,000 to \$100,000.....	11	122	8.6	494,310	6.9	254,881	10.0
\$1,000,000 and over.....	7	2,584	51.1	15,961,731	56.6	7,758,344	59.9	\$100,000 to \$500,000.....	7	532	37.6	1,606,065	22.3	760,870	29.9
BENTON HARBOR.....	65	2,328	100.0	11,345,034	100.0	6,713,511	100.0	\$500,000 and over.....	4	733	51.8	5,002,139	69.4	1,469,036	57.7
Less than \$5,000.....	13	5	0.2	31,702	0.3	15,873	0.2	MONROE.....	41	2,904	100.0	16,052,331	100.0	7,691,204	100.0
\$5,000 to \$20,000.....	15	33	1.4	185,040	1.6	97,466	1.5	Less than \$5,000.....	5	3	0.1	9,521	(1)	6,143	0.1
\$20,000 to \$100,000.....	22	269	11.6	1,117,631	9.9	621,434	9.3	\$5,000 to \$20,000.....	11	20	1.0	126,378	0.8	70,041	0.9
\$100,000 to \$500,000.....	9	492	21.1	2,231,414	19.7	1,350,282	20.1	\$20,000 to \$100,000.....	10	54	1.9	382,368	2.4	159,839	2.1
\$500,000 to \$1,000,000.....	3	371	15.9	1,783,541	15.7	832,200	12.4	\$100,000 to \$500,000.....	9	396	13.6	2,109,624	13.1	872,659	11.5
\$1,000,000 and over.....	3	1,158	49.7	5,995,706	52.8	3,796,156	56.5	\$500,000 to \$1,000,000.....	3	509	17.5	2,205,272	13.7	964,693	12.3
DETROIT.....	2,176	167,016	100.0	1,234,519,842	100.0	578,606,379	100.0	\$1,000,000 and over.....	3	1,913	65.9	11,218,668	69.9	5,617,829	73.0
Less than \$5,000.....	235	96	(1)	625,055	(1)	404,936	0.1	MUSKOGEE.....	141	9,716	100.0	55,969,347	100.0	30,293,618	100.0
\$5,000 to \$20,000.....	532	1,097	0.7	5,987,366	0.5	3,539,111	0.6	Less than \$5,000.....	34	10	0.1	78,839	0.1	41,588	0.1
\$20,000 to \$100,000.....	696	6,571	3.9	33,038,658	2.7	19,806,155	3.4	\$5,000 to \$20,000.....	33	75	0.8	334,290	0.6	180,366	0.6
\$100,000 to \$500,000.....	447	19,500	11.7	101,906,552	8.3	55,412,137	9.6	\$20,000 to \$100,000.....	35	315	3.2	1,563,760	2.8	757,567	2.5
\$500,000 to \$1,000,000.....	96	12,131	7.3	67,551,141	5.5	34,782,264	6.0	\$100,000 to \$500,000.....	21	1,224	12.6	4,553,779	8.1	2,635,514	8.7
\$1,000,000 and over.....	170	127,621	76.4	1,025,411,070	83.1	464,661,776	80.3	\$500,000 to \$1,000,000.....	9	857	8.8	6,541,053	11.7	2,379,301	7.9
ESCANABA.....	45	842	100.0	3,017,912	100.0	1,864,981	100.0	\$1,000,000 and over.....	9	7,235	74.5	42,897,626	76.0	24,296,292	80.2
Less than \$5,000.....	5	3	0.4	15,340	0.5	8,552	0.5	OWASCO.....	40	1,781	100.0	9,948,736	100.0	4,739,646	100.0
\$5,000 to \$20,000.....	19	44	5.2	223,998	7.4	99,762	5.3	Less than \$5,000.....	6	.....	.....	10,899	0.1	6,836	0.1
\$20,000 to \$100,000.....	17	134	15.9	694,300	23.0	321,664	17.2	\$5,000 to \$20,000.....	14	35	2.0	153,170	1.5	67,537	1.4
\$100,000 and over.....	4	661	78.5	2,084,274	69.1	1,435,003	76.9	\$20,000 to \$100,000.....	10	94	5.3	519,315	5.2	260,457	5.5
FLINT.....	107	24,603	100.0	275,779,638	100.0	102,955,874	100.0	\$100,000 to \$500,000.....	6	372	20.9	1,820,929	18.3	1,032,141	21.8
Less than \$5,000.....	12	4	(1)	26,244	(1)	15,851	(1)	\$500,000 and over.....	5	1,280	71.9	7,444,423	74.8	3,372,645	71.2
\$5,000 to \$20,000.....	23	54	0.2	274,797	0.1	147,405	0.1	PONTIAC.....	73	7,682	100.0	104,990,133	100.0	38,203,971	100.0
\$20,000 to \$100,000.....	43	291	1.2	2,078,879	0.8	995,186	1.0	Less than \$5,000.....	5	.....	.....	11,522	(1)	6,605	(1)
\$100,000 to \$500,000.....	15	473	1.9	3,629,712	1.3	1,367,012	1.3	\$5,000 to \$20,000.....	25	65	0.8	285,895	0.3	173,881	0.5
\$500,000 and over.....	14	23,781	96.7	269,770,006	97.8	100,430,420	97.5	\$20,000 to \$100,000.....	26	174	2.3	1,118,439	1.1	441,542	1.2
GRAND RAPIDS.....	611	23,548	100.0	109,135,055	100.0										

MANUFACTURES—MICHIGAN.

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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.
TRAVERSE CITY.....	56	960	100.0	\$4,099,960	100.0	\$1,817,979	100.0	WYANDOTTE—Contd.							
Less than \$5,000.....	5	5	0.5	14,832	0.4	7,542	0.4	\$500,000 to \$1,000,000....	3	660	10.6	\$2,378,441	7.1	\$1,327,808	6.7
\$5,000 to \$20,000.....	24	83	8.6	232,036	6.1	145,531	8.0	\$1,000,000 and over.....	4	5,427	87.3	30,252,126	90.6	18,233,943	91.4
\$20,000 to \$100,000.....	13	154	16.0	595,975	14.5	279,459	15.4	ALL OTHER CITIES.....	50	64,629	100.0	569,208,377	100.0	260,138,249	100.0
\$100,000 to \$500,000.....	14	718	74.8	3,237,117	79.0	1,385,444	76.2	Less than \$5,000.....	4			9,643	(¹)	5,574	(¹)
WYANDOTTE.....	26	6,214	100.0	33,382,791	100.0	19,942,807	100.0	\$5,000 to \$20,000.....	10	9	(²)	93,815	(²)	41,236	(²)
Less than \$20,000.....	12	16	0.3	121,150	0.4	55,807	0.3	\$20,000 to \$100,000.....	20	93	0.1	838,916	0.1	348,724	0.1
\$20,000 to \$100,000.....	4	14	0.2	140,373	0.4	61,552	0.3	\$100,000 and over.....	16	64,527	99.9	568,266,003	99.9	259,747,715	99.9
\$100,000 to \$500,000.....	3	97	1.6	490,701	1.5	203,637	1.3								

¹ All other cities comprise Hamtramck and Highland Park.

² Less than one-tenth of 1 per cent.

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

INDUSTRY AND CITY.	Cen- sus year.	AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
		NUMBER OF ESTABLISH- MENTS OWNED BY—			In establishments owned by—			Per cent of total.			Of establishments owned by—			Per cent of total.					
		Indi- vid- u-als.	Cor- pora- tions.	All oth- ers.	Total.	Indi- vid- u-als.	Cor- pora- tions.	All oth- ers.	Indi- vid- u-als.	Cor- pora- tions.	All oth- ers.	Total.	Individ- u-als.	Corpora- tions.	All others.	Indi- vid- u-als.	Corpora- tions.	All oth- ers.	
All industries.....	1919	3,572	3,249	1,484	471,242	14,730	444,516	11,096	3.1	94.3	2.5	\$3,460,188,483	\$92,181,144	\$3,299,255,502	\$74,751,837	2.7	95.2	2.1	
	1914	4,282	2,900	1,542	271,090	16,674	241,829	12,587	0.2	89.2	4.6	1,080,162,432	50,886,390	986,055,727	48,020,315	4.7	90.8	4.5	
	1909	4,507	2,638	1,054	231,499	20,564	193,130	17,790	8.9	83.4	7.7	685,109,169	67,652,930	671,102,107	50,354,132	8.4	83.4	8.2	
Agricultural implements..	1910	6	16	1	2,708	195	2,613	.....	3.5	96.5	.....	11,090,669	1,274,717	10,815,952	.....	2.5	97.5	.....
	1914	8	18	4	2,143	96	2,027	20	4.5	94.6	0.0	7,731,217	273,131	7,390,617	67,469	3.5	95.6	0.9	
Automobile bodies and parts.	1919	46	137	20	49,048	653	48,284	111	1.3	98.4	0.2	288,306,858	3,802,539	284,010,487	493,832	1.3	98.5	0.2	
	1914	28	106	6	24,736	130	24,407	109	0.5	99.0	0.4	71,540,077	395,118	70,816,683	328,276	0.6	99.0	0.5	
Boxes, paper and other, not elsewhere specified.	1919	1	17	4	2,336	.....	2,165	¹ 171	.....	92.7	7.3	10,934,722	.....	10,483,458	² 451,204	.....	95.0	4.1
	1914	4	13	0	1,461	40	1,088	333	2.7	74.5	22.8	3,747,876	48,545	2,782,318	917,013	1.3	74.2	24.5	
Brass, bronze, and copper products.	1919	16	55	9	10,306	94	10,129	83	0.9	98.3	0.8	62,708,335	596,193	61,421,195	690,947	1.0	97.9	1.1	
	1914	14	40	10	4,731	187	4,492	52	4.0	94.9	1.1	10,808,725	607,450	15,928,399	332,870	3.6	94.4	2.0	
Bread and other bakery products.	1919	713	58	173	5,088	1,714	2,724	650	33.7	53.5	12.8	44,023,454	16,391,071	22,002,561	6,529,822	36.5	49.0	14.5	
	1914	755	29	138	4,014	2,041	1,492	481	50.8	37.2	12.0	16,000,068	8,017,604	5,930,037	2,046,307	50.1	37.1	12.8	
Butter.....	1919	67	71	93	984	171	548	265	17.4	55.7	26.9	33,385,420	6,308,839	18,066,976	8,979,605	18.9	54.2	26.9	
	1914	80	96	94	709	147	408	214	19.1	53.1	27.8	13,479,297	2,453,497	7,414,806	3,610,934	18.2	55.0	26.8	
Canning and preserving, fruits and vegetables.	1919	13	30	9	2,109	242	1,649	218	11.5	78.2	10.3	11,172,169	1,314,935	8,537,037	1,320,107	11.8	76.4	11.8	
	1914	14	26	9	1,687	210	1,361	110	12.8	80.7	6.5	4,421,946	404,821	3,767,687	189,438	10.5	85.2	4.3	
Chemicals.....	1919	9	25	2	5,712	4	5,708	.....	0.1	99.9	.....	37,850,834	¹ 25,170	37,825,664	.....	0.1	99.9	.....
	1914	11	21	4	4,509	12	4,493	4	0.3	99.6	(³)	13,891,415	26,300	13,858,241	6,874	0.2	99.8	(³)	
Confectionery and ice cream.	1919	90	30	64	1,746	344	905	497	10.7	51.8	28.5	12,620,501	2,493,155	7,264,649	2,868,697	19.7	57.5	22.7	
	1914	73	22	20	1,187	341	661	185	28.7	55.7	15.6	1,272,904	1,272,904	2,773,017	796,820	20.3	57.3	16.5	
Druggists' preparations....	1919	7	9	.....	3,219	38	3,181	.....	1.2	98.8	.....	23,003,850	821,744	23,582,112	.....	1.3	98.7	.....
	1914	4	10	1	2,175	147	2,128	.....	2.2	97.8	.....	11,738,062	102,203	11,636,459	.....	0.9	99.1	.....
Electrical machinery, apparatus, and supplies.	1919	9	40	5	4,190	84	4,092	14	2.0	97.7	0.3	25,025,528	275,840	24,660,021	89,667	1.1	98.5	0.4	
	1914	7	26	2	1,144	150	1,094	.....	4.4	95.6	.....	3,415,500	1,99,993	3,315,507	.....	2.9	97.1	.....
Engines, steam, gas, and water.	1919	2	32	1	14,258	17	14,251	.....	(³)	99.9	.....	101,989,440	130,800	101,058,580	.....	(³)	99.9	.....
	1914	10	35	3	4,427	35	4,401	131	0.8	99.3	3.0	12,309,172	74,470	12,074,084	220,618	0.6	97.6	1.8	
Flour-mill and gristmill products.	1919	146	85	114	1,128	203	746	179	18.0	66.1	15.9	44,144,434	6,572,213	30,150,339	7,421,882	14.9	68.3	16.8	
	1914	203	83	141	1,370	332	731	307	24.2	58.4	22.4	27,381,474	5,600,028	16,384,336	5,388,110	20.5	60.8	19.7	
Food preparations, not elsewhere specified.	1919	8	25	4	2,488	8	2,457	18	0.3	99.0	0.7	35,701,760	166,897	35,323,175	211,688	0.5	98.9	0.6	
	1914	14	32	10	1,688	39	1,023	621	2.3	60.8	36.9	16,005,282	137,801	7,824,862	8,042,619	0.9	48.9	50.2	
Foundry and machine-shop products. ⁴	1919	145	369	66	42,745	1,393	40,206	1,086	3.2	94.2	2.5	182,735,316	4,877,479	172,726,812	5,131,025	2.7	94.5	2.8	
	1914	148	271	83	17,608	1,039	15,947	622	5.9	90.6	3.5	39,428,783	2,101,547	35,960,107	1,307,069	5.5	91.2	3.3	
Furniture.....	1919	26	128	17	18,496	374	17,907	215	2.0	96.8	1.2	69,497,237	1,401,032	67,168,769	927,436	2.0	96.6	1.3	
	1914	34	138	20	14,706	460	13,950	296	3.1	94.9	2.0	30,184,542	879,875	28,816,498	488,169	2.9	95.5	1.6	
Knit goods.....	1919	6	24	1	3,170	166	3,104	.....	2.1	97.9	.....	12,039,377	¹ 183,968	11,855,409	.....	1.5	98.5	.....
	1914	3	26	3	2,711	68	2,598	45	2.5	95.8	1.7	5,228,035	67,766	4,960,091	200,178	1.3	94.9	3.8	
Lumber and timber products.	1919	192	96	92	14,923	2,008	10,072	2,843	13.5	67.5	19.1	46,043,855	7,939,838	30,085,094	7,418,323	17.2	66.6	16.1	
	1914	238	129	110	21,488	2,051	10,985	2,462	9.5	79.0	11.4	33,873,367	3,074,477	26,710,809	4,088,081	9.1	78.9	12.1	
Lumber, planing-mill products, not including planing mills connected with sawmills.	1919	40	110	42	5,256	312	4,315	629	5.9	82.1	12.0	37,869,230	2,123,293	32,059,340	3,686,597	5.6	84.7	9.7	
	1914	67	103	47	4,944	940	3,412	592	19.0	69.0	12.0	2,890,954	2,890,954	14,757,226	2,119,785	14.6	74.7	10.7	
Paper and wood pulp.....	1919	3	36	.....	9,561	18	9,543	.....	0.2	99.8	.....	66,299,513	74,092	66,225,421	.....	0.1	99.9	.....
	1914	2	34	1	6,051	20	6,031	.....	0.3	99.7	.....	22,049,990	¹ 45,336	22,004,654	.....	0.2	99.8	.....
Printing and publishing, book and job.	1919	234	118	81	3,717	657	2,732	328	17.7	73.5	8.8	17,075,925	2,799,018	12,778,867	2,098,040	15.8	72.3	11.9	
	1914	229	106	69	3,860	715	2,820	325	18.5	73.1	8.4	9,380,560	1,722,291	6,881,312	776,967	18.4	73.4	8.8	

¹ Includes the group "All others."
² Includes the group "Individuals."

³ Less than one-tenth of 1 per cent.

⁴ Includes "iron and steel, tempering and welding" and "machine tools."

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

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISH- MENTS 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.				
Printing and publishing, newspapers and period- icals.	1919	303	149	113	3,176	558	2,251	367	17.6	70.9	11.6	\$24,930,421	\$2,009,647	\$21,313,661	\$1,607,113	8.1	85.5	6.4				
	1914	387	165	108	3,270	860	2,090	320	26.3	63.9	9.8	12,290,227	1,777,613	9,605,334	907,280	14.5	78.2	7.4				
Slaughtering and meat packing.	1919	11	19	3	1,712	47	1,653	12	2.7	96.6	0.7	59,584,740	1,729,966	57,427,123	427,651	2.9	96.4	0.7				
	1914	9	7	1	1,112	23	1,089	.....	2.1	97.9	.....	20,665,737	1,572,504	20,093,233	.....	2.8	97.2	.....			
Structural ironwork, not made in steel works or rolling mills.	1919	9	20	5	2,313	78	2,189	46	3.4	94.6	2.0	17,124,120	476,946	16,402,714	243,460	2.8	96.8	1.4				
	1914	9	19	3	1,371	91	1,252	28	6.6	91.3	2.0	4,918,366	296,708	4,544,832	70,826	6.0	92.4	1.6				
Tobacco, cigars and cig- arettes.	1919	282	35	32	5,456	1,114	3,933	409	20.4	72.1	7.5	18,118,556	4,217,478	12,663,365	1,237,713	23.3	69.9	6.8				
	1914	515	26	68	7,295	1,504	4,555	1,236	20.6	62.5	16.9	12,121,862	3,154,556	6,753,776	2,213,530	28.0	55.7	18.3				
Tools, not elsewhere spec- ified.	1919	21	54	14	3,261	287	2,790	184	8.8	85.6	5.6	11,898,853	1,128,036	10,072,676	698,141	9.5	84.7	5.9				
	1914	8	11	5	3,372	40	2,97	35	10.3	79.8	9.4	850,144	76,189	719,430	63,525	8.9	83.7	7.4				
Wirework, not elsewhere specified.	1919	3	29	6	2,516	44	2,442	30	1.7	97.1	1.2	17,065,225	260,165	16,650,288	154,772	1.5	97.6	0.9				
	1914	6	23	4	1,314	61	1,233	20	4.6	93.8	1.5	5,891,274	130,477	5,680,910	79,878	2.2	96.4	1.4				
Total for cities.....	1919	1,850	2,205	737	376,032	8,709	361,101	6,222	2.3	96.0	1.7	2,836,698,957	54,033,779	2,744,216,497	38,448,681	1.9	96.7	1.4				
	1914	2,069	1,815	727	177,605	9,763	160,364	7,478	5.5	90.3	4.2	688,568,088	28,565,266	629,113,585	30,879,237	4.1	91.4	1.6				
ADRIAN.....	1919	26	22	14	1,870	92	1,616	162	4.9	86.4	8.7	14,549,031	508,970	13,005,832	1,034,229	3.5	89.4	7.1				
	1914	34	21	13	1,256	102	1,001	153	8.1	79.7	12.2	5,442,338	349,498	4,734,595	358,245	6.4	87.0	6.6				
ALPENA.....	1919	16	16	6	1,372	145	1,206	27	10.6	87.5	2.0	9,356,190	336,062	8,806,110	214,018	3.6	94.1	2.3				
	1914	28	17	9	1,494	73	1,390	31	4.9	93.0	2.1	4,101,935	126,258	3,867,843	107,834	3.1	94.3	2.6				
ANN ARBOR.....	1919	35	26	17	1,612	135	1,433	44	8.4	88.9	2.7	9,793,696	783,953	8,725,961	283,782	8.0	85.1	2.9				
	1914	38	19	18	842	134	593	115	15.9	70.4	13.7	2,603,379	352,540	1,761,742	489,097	13.5	67.7	18.8				
BATTLE CREEK.....	1919	55	48	15	6,680	151	6,493	36	2.3	97.2	0.5	56,139,953	277,880	54,533,778	328,315	2.3	97.1	0.6				
	1914	64	52	19	4,599	180	3,523	896	3.9	70.6	19.5	23,248,420	630,068	13,734,003	8,884,359	2.7	59.1	38.2				
BAY CITY.....	1919	45	50	13	5,057	205	4,725	127	4.1	93.4	2.5	28,214,525	1,987,472	25,282,167	944,886	7.0	89.6	3.3				
	1914	76	46	20	3,771	462	3,036	273	12.3	80.5	7.2	11,119,286	1,270,219	8,919,281	929,780	11.4	80.2	8.4				
BENTON HARBOR.....	1919	24	32	9	2,328	45	2,210	73	1.9	94.9	3.1	11,345,034	309,469	10,531,096	504,469	2.7	92.8	4.4				
	1914	25	22	15	1,285	132	1,029	124	10.3	80.1	9.6	3,021,552	515,895	2,317,335	188,322	17.1	76.7	6.2				
DETROIT.....	1919	772	1,085	319	167,016	4,025	159,834	3,107	2.4	95.7	1.9	1,234,519,842	27,422,084	1,188,067,496	19,030,262	2.2	96.2	1.5				
	1914	882	860	294	99,603	4,397	91,757	3,449	4.4	92.1	3.5	400,347,012	13,557,847	376,187,763	10,602,302	3.4	94.0	2.6				
ESCANABA.....	1919	20	11	5	842	77	737	28	9.1	87.5	3.3	3,017,912	460,709	2,396,533	160,670	15.3	79.4	5.3				
	1914	23	13	9	777	53	680	44	6.8	87.5	5.7	1,506,526	111,140	1,303,913	91,473	7.4	86.5	6.1				
FLINT.....	1919	49	39	19	24,603	237	24,185	181	1.0	98.3	0.7	275,779,638	1,726,465	272,855,259	1,197,914	0.6	98.9	0.4				
	1914	40	34	20	8,722	160	8,416	146	1.8	96.5	1.7	53,375,039	373,390	52,389,000	612,589	0.7	98.2	1.1				
GRAND RAPIDS.....	1919	266	259	86	23,548	1,077	21,617	954	4.6	91.4	4.1	109,135,055	5,272,883	99,195,060	4,660,512	4.8	90.9	4.3				
	1914	267	231	96	17,427	1,431	15,207	789	8.2	87.3	4.5	49,792,200	3,871,624	43,765,934	2,154,634	7.8	87.9	4.3				
HOLLAND.....	1919	14	40	10	2,748	51	2,651	46	1.9	96.5	1.7	17,711,095	162,903	17,124,013	424,179	0.9	96.7	2.4				
	1914	16	34	11	2,165	55	2,067	53	2.5	95.0	2.4	8,683,835	130,243	8,281,748	271,844	1.5	95.4	3.1				
IRONWOOD.....	1919	16	6	6	399	39	329	31	9.8	82.5	7.8	1,381,290	352,590	816,387	212,313	25.5	59.1	15.4				
	1914	13	6	5	516	39	443	34	7.6	85.9	6.6	793,247	153,662	545,045	94,540	19.4	68.7	11.9				
ISHPEMING.....	1919	15	4	2	107	149	58	.....	45.8	54.2	.....	1,007,432	1,358,090	649,342	.....	35.5	64.5	.....			
	1914	13	2	4	79	31	148	.....	39.2	60.8	.....	228,643	67,757	160,886	.....	29.6	70.4	.....			
JACKSON.....	1919	59	73	24	9,620	400	9,030	190	4.2	93.9	2.0	49,517,712	1,681,622	46,658,431	1,177,659	3.4	94.2	2.4				
	1914	56	67	24	4,906	257	4,498	151	5.2	91.7	3.1	16,809,846	770,961	15,629,622	409,263	4.6	93.0	2.4				
KALAMAZOO.....	1919	66	94	25	7,629	428	7,076	125	5.6	92.8	1.6	46,254,917	1,957,136	43,717,000	580,781	4.2	94.5	1.3				
	1914	96	84	33	5,525	420	4,948	157	7.6	89.6	2.8	20,214,314	1,048,046	18,785,086	381,182	5.2	92.9	1.9				
LANSING.....	1919	54	70	23	12,349	223	12,022	104	1.8	97.4	0.8	104,722,115	1,764,930	101,618,932	1,338,253	1.7	97.0	1.3				
	1914	79	75	26	6,231	254	5,837	140	4.1	93.7	2.2	26,984,496	1,072,797	25,111,441	800,258	4.0	93.1	3.0				
MARQUETTE.....	1919	12	19	3	1,415	40	1,370	5	2.8	96.8	0.4	7,210,375	212,673	6,943,449	54,253	2.9	96.3	0.8				
	1914	21	10	3	589	77	487	25	13.1	82.7	4.2	1,394,587	146,318	1,176,671	71,598	10.5	84.4	5.1				
MONROE.....	1919	12	25	4	2,904	25	2,869	10	0.9	98.8	0.3	16,052,331	158,276	15,581,801	312,254	1.0	97.1	1.9				
MUSKEGON.....	1919	52	66	23	9,716	175	9,415	126	1.8	96.9	1.3	55,969,347	1,218,060	54,129,103	622,184	2.2	96.7	1.1				
	1914	47	44	12	4,046	328	4,281	37	7.1	92.1	0.8	11,147,605	1,007,375	10,060,450	89,780	9.0	90.2	0.8				
OWOSSO.....	1919	20	16	4	1,781	318	1,438	25	17.9	80.7	1.4	9,948,736	1,023,238	8,746,218	179,280	10.3	87.9	1.8				
	1914	24	16	5	1,231	113	1,094	24	9.2	88.9	1.9	3,468,534	298,615	3,078,016	91,903	8.6	88.7	2.6				
PONTIAC.....	1919	22	26	30	7,682	69	7,453	160	0.9	97.0	2.1	104,990,133	538,419	102,991,503	1,460,211	0.5	98.1	1.4				
	1914	14	20	12	2,409	49	2,286	74	2.0	94.9	3.1	15,102,453	324,293	14,471,015	307,145	2.1	95.8	2.0				
PORT HURON.....	1919	43	28	12	2,231	115	2,065	51	5.2	92.6	2.3	9,545,578	729,823	8,482,230	333,525	7.6	88.9	3.5				

MANUFACTURES—MICHIGAN.

19

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. ¹		10,000 to 25,000. ¹		25,000 to 100,000.		100,000 and over.			
			Number or amount.	Per cent of aggregate.	Number or amount.	Per cent of aggregate.	Number or amount.	Per cent of aggregate.	Number or amount.	Per cent of aggregate.	Number or amount.	Per cent of aggregate.
Number of places.....	1919		28		14		12		2			
	1914		26		16		8		2			
	1909		24		15		7		2			
Population ²	1920	3,668,412	1,894,612	51.6	179,991	4.9	583,309	15.9	1,131,312	30.8	1,773,800	48.4
	1915	2,976,030	1,194,360	40.1	211,887	7.1	321,696	10.8	690,877	22.2	1,781,670	50.9
	1910	2,810,173	1,043,746	37.1	203,817	7.3	261,592	9.3	578,337	20.6	1,766,427	62.9
Number of establishments.....	1919	8,305	4,792	57.7	624	7.5	1,381	16.6	2,787	33.6	3,513	42.3
	1914	8,724	4,710	54.0	825	9.5	1,255	14.4	2,630	30.1	4,014	46.0
	1909	9,159	4,500	49.1	817	8.9	1,123	12.3	2,560	27.9	4,659	50.9
Average number of wage earners...	1919	471,242	376,032	79.8	25,800	5.5	159,668	33.0	190,564	40.4	95,210	20.2
	1914	271,090	181,446	66.9	19,674	7.3	44,742	16.5	117,030	43.2	89,644	33.1
	1909	231,499	156,747	67.7	20,433	8.8	37,713	16.3	98,601	42.6	74,752	32.3
Value of products.....	1919	\$3,466,188,483	\$2,836,098,957	81.8	\$149,555,640	4.3	\$1,343,488,420	38.8	\$1,343,654,897	38.8	\$629,489,525	18.2
	1914	1,086,162,432	697,694,182	64.2	65,646,394	6.0	181,907,676	16.7	150,140,112	41.4	388,468,250	35.8
	1909	685,109,199	465,201,235	67.9	52,798,619	7.7	117,232,598	17.1	295,170,018	43.1	219,907,934	32.1
Value added by manufacture.....	1919	1,546,045,240	1,288,383,086	83.3	71,374,377	4.6	580,420,036	37.5	636,579,673	41.2	258,562,154	16.7
	1914	493,361,368	313,194,451	63.5	26,621,691	5.4	82,676,454	16.8	203,806,306	41.3	180,166,917	36.5
	1909	316,497,147	225,047,464	71.3	23,980,450	7.6	56,450,253	17.8	145,216,761	45.0	90,849,683	28.7

¹ Includes Manistee and Menominee in 1914 and 1909; population less than 10,000 in 1920.

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.

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 ¹ over 1914.			Amount, 1919.	Per cent of total for the state.	Increase ¹ over 1914.	
			Amount.	Per cent.				Amount.	Per cent.
DETROIT.					GRAND RAPIDS—Continued.				
Automobiles.....	\$348,772,599	26.2	\$223,165,620	177.7	Printing and publishing, newspapers and periodicals.....	\$2,343,793	9.4	\$900,630	62.4
Automobile bodies and parts.....	201,455,182	69.9	162,086,208	423.7	Lumber, planing-mill products, not including planing mills connected with sawmills.....	2,015,250	5.3	337,607	20.1
Foundry and machine-shop products ²	67,161,666	36.8	49,976,198	280.8	Phonographs and graphophones.....	1,996,429	47.2	(³)	—
Slaughtering and meat packing.....	57,648,125	96.7	37,570,977	187.1	Tobacco, cigars and cigarettes.....	1,982,597	10.9	689,837	53.3
Brass, bronze, and copper products.....	49,239,768	78.5	34,610,017	236.6	Leather, tanned, curried, and finished.....	1,835,337	4.1	390,968	26.2
Engines, steam, gas, and water.....	36,611,142	35.9	29,455,124	411.6	Printing and publishing, book and job.....	1,775,419	10.0	620,430	53.7
Bread and other bakery products.....	22,631,347	60.4	15,142,526	202.2	Butter.....	1,047,484	4.9	900,300	120.5
Printing and publishing, newspapers and periodicals.....	14,017,463	56.2	8,238,099	142.5	Automobiles.....	1,254,478	0.1	1,108,049	756.7
Electrical machinery, apparatus, and supplies.....	12,970,284	51.8	10,729,879	478.9	Cars and general shop construction and repairs by steam-railroad companies.....	(³)	(³)	(³)	(³)
Tobacco, cigars and cigarettes.....	11,606,301	64.1	3,102,462	36.5	Gas, illuminating and heating.....	(³)	(³)	(³)	(³)
Printing and publishing, book and job.....	11,430,857	64.7	6,060,845	112.9	House-furnishing goods, not elsewhere specified.....	(³)	(³)	(³)	(³)
Chemicals.....	11,355,383	30.0	7,480,855	193.1	Paper and wood pulp.....	(³)	(³)	(³)	(³)
Structural ironwork, not made in steel works or rolling mills.....	11,271,015	65.8	9,141,473	429.3	Plumbers' supplies, not elsewhere specified.....	(³)	(³)	(³)	(³)
Stoves and hot-air furnaces.....	10,144,800	49.5	(³)	—	Roofing materials.....	(³)	(³)	(³)	(³)
Tools, not elsewhere specified.....	9,216,733	77.5	(³)	—	LANSING.				
Lumber, planing-mill products, not including planing mills connected with sawmills.....	9,114,453	24.1	3,547,943	63.7	Automobile bodies and parts.....	9,229,855	3.2	7,233,722	363.5
Leather, tanned, curried, and finished.....	8,624,215	18.8	6,809,198	375.2	Foundry and machine-shop products ²	4,581,448	2.7	2,263,336	97.2
Patent medicines and compounds.....	8,091,447	81.3	4,224,304	109.2	Iron and steel forgings, not made in steel works or rolling mills.....	4,174,718	48.8	(³)	—
Cars, steam-railroad, not including operations of railroad companies.....	(³)	(³)	(³)	(³)	Engines, steam, gas, and water.....	3,227,820	3.2	1,795,476	125.4
Cash registers and calculating machines.....	(³)	(³)	(³)	(³)	Lumber, planing-mill products, not including planing mills connected with sawmills.....	2,226,531	5.9	1,438,135	182.4
Druggists' preparations.....	(³)	(³)	(³)	(³)	Flour-mill and gristmill products.....	846,933	1.9	305,883	56.5
Flour-mill and gristmill products.....	(³)	(³)	(³)	(³)	Bread and other bakery products.....	840,135	1.9	500,024	200.6
Lamps and reflectors.....	(³)	(³)	(³)	(³)	Automobiles.....	(³)	(³)	(³)	(³)
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	(³)	(³)	(³)	(³)	Condensed milk.....	(³)	(³)	(³)	(³)
Stoves, gas and oil.....	(³)	(³)	(³)	(³)	Screws, machine.....	(³)	(³)	(³)	(³)
Tobacco, chewing and smoking, and snuff.....	(³)	(³)	(³)	(³)	Sugar, beet.....	(³)	(³)	(³)	(³)
FLINT.					SAGINAW.				
Automobile bodies and parts.....	8,537,634	2.9	(³)	—	Foundry and machine-shop products ²	13,609,601	8.0	11,560,559	504.2
Foundry and machine-shop products.....	2,148,759	1.3	501,644	30.5	Lumber, planing-mill products, not including planing mills connected with sawmills.....	2,474,337	6.5	—23,496	—1.1
Bread and other bakery products.....	1,621,915	3.6	1,321,790	440.4	Bread and other bakery products.....	1,479,984	3.3	878,213	145.9
Automobiles.....	(³)	(³)	(³)	(³)	Automobile bodies and parts.....	695,137	0.2	(³)	—
Electrical machinery, apparatus, and supplies.....	(³)	(³)	(³)	(³)	Butter.....	(³)	(³)	(³)	(³)
Flour-mill and gristmill products.....	(³)	(³)	(³)	(³)	Cars and general shop construction and repairs by steam-railroad companies.....	(³)	(³)	(³)	(³)
Gas, illuminating and heating.....	(³)	(³)	(³)	(³)	Corsets.....	(³)	(³)	(³)	(³)
Paints.....	(³)	(³)	(³)	(³)	Engines, steam, gas, and water.....	(³)	(³)	(³)	(³)
Printing and publishing, newspapers and periodicals.....	(³)	(³)	(³)	(³)	Flour-mill and gristmill products.....	(³)	(³)	(³)	(³)
Springs, steel, automobile.....	(³)	(³)	(³)	(³)	Furniture.....	(³)	(³)	(³)	(³)
GRAND RAPIDS.					Graphite, ground and refined.....	(³)	(³)	(³)	(³)
Furniture.....	34,962,294	50.3	20,137,084	135.8	Leather, tanned, curried, and finished.....	(³)	(³)	(³)	(³)
Automobile bodies and parts.....	5,656,074	2.0	5,553,421	5,378.5	Tools, not elsewhere specified.....	(³)	(³)	(³)	(³)
Flour-mill and gristmill products.....	5,453,588	12.4	2,311,856	73.0	Wooden goods, not elsewhere specified.....	(³)	(³)	(³)	(³)
Foundry and machine-shop products ²	4,505,769	2.5	2,015,087	80.9					
Bread and other bakery products.....	3,605,027	8.0	1,922,829	114.3					
Hardware.....	2,802,248	32.0	2,322,543	484.2					
Knit goods.....	2,478,656	20.6	1,414,871	133.0					
Confectionery and ice cream.....	2,344,979	18.6	1,701,027	264.2					

¹ A minus sign (—) denotes decrease.

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

³ Figures can not be shown without disclosing individual operations.

⁴ Includes "machine tools" and "textile machinery and parts."

⁵ Includes "iron and steel, welding."

MANUFACTURES—MICHIGAN.

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.....	58,208	25,686	15,527	1,202,128	730,383	599,288	100.0	100.0	100.0
Owned.....	4,582	5,790	6,967	652,952	538,075	521,543	54.3	73.7	87.2
Steam ¹	3,411	4,177	5,066	592,911	486,771	465,536	49.3	66.6	71.8
Engines.....	3,200	(²)	(²)	440,130	(²)	(²)	36.6		
Turbines.....	211	(²)	(²)	152,781	(²)	(²)	12.7		
Internal-combustion engines.....	776	1,062	1,167	19,605	19,593	13,988	1.6	2.7	2.3
Water.....	395	551	734	40,346	31,711	42,019	3.4	4.3	7.0
Water wheels and turbines.....	388	486	700	40,329	30,424	41,442	3.4	4.2	6.9
Water motors.....	7	65	34	17	1,287	577	(³)	0.2	0.1
Rented.....	53,626	19,896	8,560	549,176	192,308	76,745	45.7	26.3	12.8
Electric.....	53,626	19,896	8,560	540,757	188,702	74,270	45.0	25.8	12.4
Other.....				8,419	3,606	2,475	0.7	0.5	0.4
Electric.....	76,678	28,992	12,917	818,271	311,966	133,064	100.0	100.0	100.0
Rented.....	53,626	19,896	8,560	540,757	188,702	74,270	66.1	60.5	55.8
Generated by establishments reporting.....	23,052	9,096	4,357	277,514	123,264	58,794	33.9	39.5	44.2

¹ Figures for horsepower include for 1909 the amount reported under the head of "Other" owned power.³ Less than one-tenth of 1 per cent.² Not reported separately.

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, 2,240 pounds).	Bituminous (tons, 2,000 pounds).				
All industries.....	50,516	8,241,877	812,041	1,741,039	150,419	2,105,965
Per cent of increase ¹	95,815 —47.3	5,974,604 87.9	460,122 76.5	781,212 142.1	(1) (1)	2,455,572 —14.2
Agricultural implements.....	82	23,040	4,882	4,465	112	1,722
Automobile bodies and parts.....	781	238,660	10,862	73,256	7,969	160,520
Automobiles.....	1,062	648,913	69,096	555,839	70,550	913,391
Brass, bronze, and copper products.....	2,629	75,527	33,550	127,470	1,596	185,154
Bread and other bakery products.....	13,422	30,107	25,842	449	1,801	59,011
Brick and tile, terra-cotta, and fire-clay products.....	94	82,933	30	114,122	183	
Butter.....	2,281	27,851	205	232	280	1,332
Cars and general shop construction and repairs by steam-railroad companies.....	42	100,880	369	6,700	29	552
Chemicals.....	190	967,341	161,828	14,228	205	
Confectionery and ice cream.....	473	9,123	370	6	141	49,730
Copper, tin, and sheet-iron work.....	72	1,509	57	7	139	1,222
Electrical machinery, apparatus, and supplies.....	41	10,210	140	16	761	38,846
Electroplating.....	93	722	13	240	11	2,109
Engines, steam, gas, and water.....	208	74,910	10,625	52,752	15,475	40,788
Flour-mill and gristmill products.....	407	46,841	104	2,386	1,875	
Foundry and machine-shop products.....	2,788	311,949	135,797	99,533	8,263	231,574
Furniture.....	947	126,244	1,422	25	599	11,327
Gas, illuminating and heating.....	45	834,391	3,832	411,562		598
Hardware.....	371	6,187	753	555	23	4,406
Iron and steel, steel works and rolling mills.....		30,481	6,038	32,208	1,095	1,022
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	4	2,386	211	10,475	5	50
Iron and steel, forgings, not made in steel works or rolling mills.....		38,448	437	46,152	10	6,000
Iron and steel, tempering and welding.....	27	2,004	78	1,755	11	11,175
Lime.....	886	4,161	7,092	7,135	2,895	
Liquors, malt.....	1,400	96,944	3,013	2,950	254	475
Machine tools.....	7	9,491		4,244	6,050	102,948
Marble and stone work.....	124	559	66	51	1,044	460
Mineral and soda waters.....	154	5,877	148	42	146	1,228
Pottery.....		16,008		6,785		49,189
Printing and publishing, book and job.....	237	6,651	77	10	130	8,624
Printing and publishing, newspapers and periodicals.....	789	6,928	245	1,137	1,101	26,705
Screws, machine.....	360	4,300	25	2,900	100	5,100
Shipbuilding, steel, new vessels and small boats.....		78,564	2,685	30,456	1,186	
Springs, steel, car and carriage, not made in steel works or rolling mills.....		2,007	25	49,295	5,701	18,990
Stamped ware, not elsewhere specified.....	18	5,824	28	164	65	1,230
Stoves and hot-air furnaces.....	167	32,754	15,561	8	389	9,398
Structural ironwork, not made in steel works or rolling mills.....	66	12,491	1,557	30,336	655	2,868
Tools, not elsewhere specified.....	114	5,768	240	1,086	2,881	11,637
Wirework, not elsewhere specified.....	17	10,149	251	945	2,186	4,061
All other industries.....	20,138	4,246,758	314,917	49,062	14,503	132,793

¹ Included in figures for fuel oils.² A minus sign (—) denotes decrease.

MANUFACTURES—MICHIGAN.

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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).				
Total for cities.....	28,594	4,708,982	489,818	1,544,277	129,404	1,892,978
ADRIAN.....	7	25,554	882	24	1,860	874
ALPENA.....	2	177,649	404	3	241	30
ANN ARBOR.....	285	36,023	254	4,233	288	119,184
BATTLE CREEK.....	5,015	179,255	7,037	8,095	324	8,908
BAY CITY.....	1,200	52,899	8,851	1,066	2,356	3,251
BENTON HARBOR.....	263	39,204	1,709	20,875	2,527	932
DETROIT.....	15,747	1,626,226	178,236	795,769	64,946	896,139
ESCANABA.....	9	8,704	1,186	4,365	12	.....
FLINT.....	136	190,275	8,464	128,725	9,565	253,533
GRAND RAPIDS.....	2,523	280,937	15,319	37,793	1,104	26,803
HOLLAND.....	9	40,612	1,179	30	28	50,215
IRONWOOD.....	34	1,828	522	2,154	.....	331
ISHPEMING.....	52	5,346	.....	3	10	294
JACKSON.....	166	83,582	1,703	55,795	3,343	34,412
KALAMAZOO.....	437	240,434	5,703	12,031	2,337	3,689
LANSING.....	206	115,911	6,988	68,360	14,413	114,606
MARQUETTE.....	12	21,407	689	108	4	1,404
MONROE.....	15	184,560	659	205	107	876
MUSKEGON.....	558	116,705	10,157	17,202	5,321	12,253
OWosso.....	84	56,240	2,005	54	239	7,098
PONTIAC.....	98	63,745	15,596	49,637	6,687	26,116
FORT HURON.....	329	61,714	6,176	12,079	283	780
SAGINAW.....	378	103,760	5,511	10,422	585	31,694
SAULT STE. MARIE.....	15	113,959	63,493	877	9	9,528
TRAVERSE CITY.....	515	6,425	62	.....	23	1,087
WYANDOTTE.....	155	563,442	61,347	.....	6	1,641
ALL OTHER CITIES ¹	344	313,078	66,695	314,372	12,783	293,330

¹ All other cities comprise Hamtramck and Highland Park.

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 11 of these industries in Michigan are here presented.

Automobiles, including bodies and parts (Table 19).—This table shows the number and value of the different classes of automobiles manufactured, as reported at the censuses of 1919, 1914, and 1909.

Although the figures in the table show large increases in the number of the different classes of automobiles manufactured in 1919 as compared with preceding censuses, they are somewhat misleading owing to a change in the character of operations of one large establishment. In 1914 and 1909 this plant reported a large number of completed automobiles, while in 1919 the greater part of its production was reported as "bodies and parts," the completed machines being reported by assembling plants owned by the same company and located at various places throughout the United States.

Of the total number of automobiles produced in Michigan in 1919, 364,184, or over one-half, were rated as having 20 but less than 30 horsepower. In 1914 the corresponding figures were 313,395 out of a total of 443,072. The remainder was distributed in groups according to horsepower ratings as follows: Three hundred and fifty-seven were of less than 10 horsepower in 1919, as compared with 1,937 in 1914; 163,948 were of 10 but less than 20 horsepower, against 39,250; and 160,681 were of 30 to 50 horsepower, as compared with 79,254. In 1919 no automobiles were reported as having a horsepower rating of 50 and over, while in 1914 there were 9,236 classified in this group.

TABLE 19.—AUTOMOBILES, INCLUDING BODIES AND PARTS: 1919, 1914, AND 1909.

	1919		1914		1909	
	Num-ber.	Value.	Num-ber.	Value.	Num-ber.	Value.
		<i>Dollars.</i>		<i>Dollars.</i>		<i>Dollars.</i>
Total value.....		1,620,383,356		398,289,022		96,651,451
Automobiles, total.....	689,170	727,004,358	443,072	303,774,254	64,800	70,359,749
Pleasure vehicles.....	626,853	642,925,814	437,083	295,553,172	63,883	68,756,909
Touring cars.....	509,830	483,103,499	367,092	251,609,056	43,855	51,305,984
Closed cars.....	54,573	89,900,677	6,610	10,636,284	1,539	3,803,616
Roadsters, runabouts, and all other.....	62,450	69,921,638	63,381	33,307,852	18,489	13,587,309
Business vehicles.....	62,317	84,078,544	5,989	8,221,082	917	1,602,840
Delivery wagons.....	12,912	11,294,203	1,295	970,569	401	319,071
Trucks.....	47,442	70,169,104	4,684	7,220,321	372	994,311
All other.....	1,963	2,615,237	10	30,192	144	289,453
Chassis.....	41,247	51,624,485	(¹)	(¹)	(¹)	(¹)
Trailers.....	5,451	1,737,338	(¹)	(¹)	(¹)	(¹)
All other products, including bodies and parts and repairs.....		840,017,175		94,514,768		26,291,702

¹ Not reported separately.

Shipbuilding, including boat building (Tables 20 and 21).—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 the rigging of vessels. Comparisons of the 1919 figures for this industry, unlike those for any other for which tables are presented, are made with those of the special census for shipbuilding, taken in 1916.

TABLE 20.—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.....	131	208,602	29	33,340
Steel.....	126	206,912	19	37,906
Motor.....	121	206,162	12	35,618
Unrigged.....	5	750	7	2,288
Wooden.....	5	1,690	10	431
Steam.....	5	1,690	1	327
Motor.....			9	107
Unrigged.....				
Power boats, less than 5 gross tons.....	50		172	

The gross tonnage of iron and steel vessels launched, which was 37,906 in 1916, increased to 206,912 in 1919. Forty-three steel vessels, with a total of 97,249 gross tons, were launched at Detroit; 29 vessels, with 71,567 gross tons, at River Rouge; 6 vessels, with 14,096 gross tons, at Saginaw; and 48 vessels, with 24,000 gross tons, at Dearborn. Of the 126 vessels launched, 73, with 182,162 gross tonnage, were for ocean freight service; 5, aggregating 750 gross tons, were coal barges for the United States Navy; and 48, with 24,000 gross tonnage, were Eagle patrol boats.

The value of work done upon vessels of all kinds during 1919 and 1916 is shown in Table 21.

TABLE 21.—SHIPBUILDING, INCLUDING BOAT BUILDING—VALUE: 1919 AND 1916.

	1919	1916
Total value of work.....	\$85,154,702	\$5,637,103
Work done during the year on new vessels, 5 gross tons and over.....	82,508,048	3,371,759
Steel.....	81,454,048	3,255,904
Wood.....	1,054,000	115,855
Boats of less than 5 tons.....	171,852	156,043
Power boats of all kinds.....	103,259	130,184
Sailboats, rowboats, etc.....	68,698	25,859
Repair work.....	1,567,132	1,455,258
Steel.....	828,585	890,602
Wood.....	738,537	564,656
All other products.....	907,670	654,043

Paper and wood pulp (Table 22).—This table shows the quantity and cost of the principal materials used, the quantity and value of the various products, and detailed information regarding equipment, for 1919, 1914, and 1909.

Michigan ranked fifth among the states in the manufacture of paper and wood pulp in 1919. Of the 39 paper and pulp mills in the state in 1919, 4 were

engaged exclusively in the manufacture of wood pulp, 27 made paper only, and 8 produced both pulp and paper.

TABLE 22.—PAPER AND WOOD PULP: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$40,353,447	\$14,544,945	\$9,024,595
Pulp wood:			
Cords.....	207,234	182,314	132,846
Cost.....	\$2,680,808	\$1,270,400	\$858,230
Wood pulp purchased:			
Tons.....	106,918	78,488	60,750
Cost.....	\$9,617,530	\$3,160,006	\$2,405,975
Ground—			
Tons.....	9,918	17,511	15,320
Cost.....	\$341,842	\$357,000	\$384,489
Soda fiber—			
Tons.....	13,030	12,833	10,360
Cost.....	\$1,185,726	\$581,101	\$601,614
Sulphite fiber—			
Tons.....	67,781	42,765	29,070
Cost.....	\$9,006,262	\$2,022,035	\$1,820,972
Sulphate fiber—			
Tons.....	12,894	4,098	(2)
Cost.....	\$1,073,344	\$170,028	(2)
Screenings, mechanical and chemical—			
Tons.....	3,205	1,281	(2)
Cost.....	\$110,356	\$29,926	(2)
Rags, including cotton and flax waste and sweepings:			
Tons.....	9,675	16,006	11,039
Cost.....	\$1,202,231	\$425,935	\$383,886
Paper stock, including high-grade shavings and old and waste paper: ¹			
Tons.....	300,908	200,370	114,497
Cost.....	\$9,084,955	\$3,419,791	\$2,193,302
China clay, domestic and foreign:			
Tons.....	34,375	(2)	(2)
Cost.....	\$633,265	(2)	(2)
Bleaching powder:			
Tons.....	5,631	(2)	(2)
Cost.....	\$245,299	(2)	(2)
Fuel and rent of power, cost.....	\$3,925,143	\$1,467,613	\$958,147
All other materials, cost.....	\$13,058,216	\$4,801,044	\$2,225,055
PRODUCTS.			
Total value.....	\$66,299,513	\$22,040,990	\$13,922,124
Book, cover, plate, and coated paper:			
Tons.....	156,598	118,091	85,048
Value.....	\$25,690,000	\$10,076,238	\$6,499,865
Fine paper:			
Tons.....	26,332	17,463	5,032
Value.....	\$6,617,961	\$1,880,801	\$705,772
Wrapping paper:			
Tons.....	53,643	59,873	50,323
Value.....	\$6,893,109	\$3,427,732	\$2,799,583
Boards:			
Tons.....	215,553	100,360	56,342
Value.....	\$15,000,415	\$3,633,395	\$1,866,436
All other paper:			
Tons.....	29,383	36,935	36,411
Value.....	\$6,394,483	\$1,602,933	\$1,709,000
Wood pulp made for sale or for consumption in mills other than where produced:			
Tons.....	31,378	16,464	8,199
Value.....	\$2,249,301	\$549,031	\$300,948
Wood pulp produced (including that used in mills where manufactured), total tons.....	106,497	81,451	65,331
Ground, tons.....	16,980	17,280	12,273
Sulphite fiber, tons.....	71,959	53,358	53,058
Other chemical fiber, tons.....	17,558	10,813	.....
All other products, value.....	\$3,454,244	\$790,800	\$40,514
EQUIPMENT.			
Paper machines:			
Total number.....	83	81	68
Capacity, yearly, tons.....	878,380	430,077	301,345
Fourdrinier—			
Number.....	55	55	43
Capacity per 24 hours, tons.....	923	809	573
Cylinder—			
Number.....	28	26	25
Capacity per 24 hours, tons.....	962	619	321
Pulp equipment:			
Grinders, number.....	19	19	17
Digesters, number.....	36	29	27
Capacity, yearly, tons of pulp, total.....	139,878	93,186	74,032
Mechanical, tons.....	35,974	24,510	18,303
Chemical, tons.....	103,904	68,676	56,629

¹ Reported as "Other chemical fiber" in 1914 and 1909.

² Not reported separately.

³ Reported as "Old and waste paper" in 1914 and 1909.

⁴ Includes sizing, chemicals, sulphur, dyestuffs, and mill supplies.

Book paper was the principal product of the industry at each census, forming 38.8 per cent of the total value of products in 1919. Boards was the next product in importance, representing 22.6 per cent of the total value. To avoid disclosing the data of individual establishments, it was necessary to include the value of tissue paper, tag stock, and various other grades in the item "All other products."

Butter, cheese, and condensed milk (Table 23).—This table shows the quantity and value of the several products of the industry for 1919, 1914, and 1909.

Michigan was the fourth state in 1919 in the production of butter, cheese, and condensed-milk factory products. The states that exceeded it in the total value of these products were Wisconsin, New York, and Minnesota, in the order given. Michigan was the seventh state in the production of butter, fourth in the production of cheese, and fifth in the production of condensed milk.

Of the total value of products, butter formed 44.8 per cent; cheese, 5.3 per cent; and condensed milk, 37.7 per cent. The total value of products increased \$43,237,001, or 200.6 per cent, during the five-year period 1914 to 1919. Values increased to such a degree, influenced largely by industrial conditions brought about by the World War, that they can not properly be used to measure the growth of manufactures between the industrial censuses of 1914 and 1919.

TABLE 23.—BUTTER, CHEESE, AND CONDENSED MILK: 1919, 1914, AND 1909.

	1919	1914	1909
Total value ¹	\$64,786,598	\$21,549,597	\$14,287,499
Butter:			
Pounds.....	55,842,680	43,220,077	35,511,760
Value.....	\$29,041,657	\$12,416,504	\$10,043,137
Packed solid—			
Pounds.....	29,358,134	32,925,588	30,323,760
Value.....	\$16,650,919	\$9,365,152	\$8,586,270
Prints or rolls—			
Pounds.....	26,484,546	10,294,489	5,183,000
Value.....	\$12,390,738	\$3,051,352	\$1,456,867
Cream sold:			
Pounds.....	6,173,016	7,604,889	2,672,764
Value.....	\$1,476,030	\$901,054	\$249,276
Cheese:			
Pounds.....	12,857,230	13,267,145	13,382,160
Value.....	\$3,454,423	\$1,773,576	\$1,911,875
Full-cream—			
Pounds.....	9,201,576	11,045,712	13,028,317
Value.....	\$2,928,357	\$1,588,655	\$1,860,879
Other kinds—			
Pounds.....	3,655,654	2,221,432	353,843
Value.....	\$526,066	\$184,020	\$50,996
Condensed and evaporated milk:			
Pounds.....	181,700,256	76,514,655	32,404,944
Value.....	\$24,422,946	\$5,200,640	\$1,924,621
Sweetened—			
Pounds.....	63,915,861	37,057,100	27,695,886
Value.....	\$10,442,798	\$2,930,006	\$1,693,030
Unsweetened—			
Pounds.....	117,784,395	39,457,555	4,709,078
Value.....	\$13,980,148	\$2,270,634	\$231,591
All other butter, cheese, and condensed-milk factory products, value.....	\$5,551,485	\$650,716	\$105,378
All other products, value.....	\$841,057	\$607,107	\$53,212

¹ In addition, in 1919, butter valued at \$59,175 was manufactured in establishments engaged primarily in the manufacture of products other than those covered by the industry designation.

A consideration of quantity production will give a unit of measure for comparative purposes. During

the five-year period 1914 to 1919 butter increased in quantity 12,622,603 pounds, or 29.2 per cent; cheese decreased 409,915 pounds, or 3.1 per cent; and condensed milk increased 105,185,601 pounds, or 137.5 per cent. The remarkable growth of the condensed-milk industry was due largely to the increased production of unsweetened condensed milk, the output of which in 1919 formed 64.8 per cent of the total condensed and evaporated milk reported.

Slaughtering and meat packing (Table 24).—This table presents detailed statistics for materials and products for the census years 1919, 1914, and 1909.

TABLE 24.—SLAUGHTERING AND MEAT PACKING: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$49,774,348	\$18,813,865	\$11,253,120
Animals slaughtered, cost.....	\$45,783,152	\$17,054,123	\$9,498,922
Beef—			
Number.....	106,975	62,035	50,157
Cost.....	\$8,652,036	\$3,715,884	\$2,072,350
Calves—			
Number.....	74,242	24,505	27,284
Cost.....	\$1,876,206	\$308,055	\$288,412
Sheep and lambs—			
Number.....	193,345	125,537	88,285
Cost.....	\$2,010,375	\$644,913	\$404,087
Hogs—			
Number.....	881,030	761,380	444,756
Cost.....	\$33,244,535	\$12,325,271	\$6,734,073
All other materials, cost.....	\$3,991,196	\$1,759,742	\$1,754,198
PRODUCTS.			
Total value.....	\$59,584,740	\$20,665,737	\$12,842,201
Fresh meat, value.....	\$31,010,401	\$9,883,613	\$4,656,040
Beef—			
Pounds.....	44,582,280	28,050,744	24,099,494
Value.....	\$7,669,863	\$3,517,274	\$1,931,128
Veal—			
Pounds.....	7,215,770	2,800,785	2,603,074
Value.....	\$1,808,948	\$408,809	\$309,568
Mutton and lamb—			
Pounds.....	6,757,427	4,782,158	3,509,894
Value.....	\$1,767,650	\$608,761	\$363,474
Pork—			
Pounds.....	74,392,478	30,382,616	16,479,567
Value.....	\$19,111,063	\$5,232,513	\$2,014,770
Edible offal, and other fresh meat—			
Pounds.....	5,272,424	1,278,456	631,000
Value.....	\$652,857	\$116,256	\$37,100
Pork, pickled and other cured:			
Pounds.....	53,360,220	43,017,100	36,145,040
Value.....	\$13,782,791	\$5,697,111	\$4,707,180
Sausage:			
Pounds.....	10,758,433	8,409,965	8,174,244
Value.....	\$2,582,906	\$1,103,762	\$804,620
Tallow:			
Pounds.....	3,041,759	1,496,222	751,470
Value.....	\$449,496	\$106,308	\$38,531
Lard:			
Pounds.....	26,271,409	27,342,302	13,351,255
Value.....	\$7,078,212	\$2,744,866	\$1,859,703
Grease and soap stock:			
Pounds.....	5,326,001	2,766,045	(1)
Value.....	\$809,048	\$166,617	(1)
Fertilizers and fertilizer materials:			
Tons.....	8,527	(1)	(1)
Value.....	\$505,787	(1)	(1)
Hides and pelts:			
Cattle—			
Number.....	106,975	62,035	
Pounds.....	5,398,013	3,457,996	
Value.....	\$1,839,138	\$531,873	57,635
Calf—			
Number.....	37,137	9,716	2,982,942
Pounds.....	452,770	118,828	\$365,080
Value.....	\$265,807	\$20,772	
Sheep—			
Number.....	192,998	125,534	88,285
Value.....	\$619,420	\$128,392	\$94,862
All other products, value.....	\$661,784	\$283,423	\$316,186

¹ Not reported separately.

² Included in "All other products" to avoid disclosing individual operations.

"All other materials" includes the cost of poultry, dressed meat purchased for curing, cottonseed oil, refrigeration, curing materials, seasoning, fuel, rent of power, containers, mill supplies, and freight; and "All other products" includes the value of beef, pickled and other cured, compound lard, casings, and hog and cattle hair.

The industry made a substantial growth in the last census period, as indicated by the increase of 282,135, or 29 per cent, in the total number of animals slaughtered. This was not as rapid as that from 1909 to 1914, when the increase in the number slaughtered was 362,975, or 59.4 per cent. The increase in the cost of animals slaughtered, however, from 1914 to 1919, was \$28,729,029, or 167.3 per cent.

The industry is centered in Detroit, with a production of \$57,648,125, or 96.7 per cent of the entire product of the state.

Leather, tanned, curried, and finished (Table 25).—This table gives for 1919, 1914, and 1909 the quantity and cost of materials used and the quantity and value of the principal products.

The number of cattle hides treated decreased by 439,211, or 25.7 per cent, in 1919 as compared with 1914; and by 161,144, or 11.3 per cent, as compared with 1909. Despite this decrease the total cost of the hides was considerably greater than at previous censuses. All other raw stock, which consisted principally of horsehides, and calf, kip, and sheep skins, showed an increase of 798 per cent for the census period 1914 to 1919. Fuel, rent of power, and all other materials also showed substantial increases for the same period.

TABLE 25.—LEATHER, TANNED, CURRIED, AND FINISHED: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$32,451,798	\$20,982,247	\$12,120,971
Cattle hides:			
Number.....	1,269,741	1,708,952	1,430,885
Cost.....	\$17,295,185	\$15,807,830	\$8,022,645
All other raw stock, cost.....	\$6,532,693	\$727,628	\$1,055,188
Fuel and rent of power, cost.....	\$786,723	\$290,913	\$194,423
All other materials, cost.....	\$7,857,197	\$4,155,876	\$2,848,715
PRODUCTS.			
Total value.....	\$45,800,786	\$25,503,573	\$15,331,104
Leather:			
Sole—			
Sides.....	1,149,381	1,871,940	1,603,512
Value.....	\$11,646,441	\$12,641,509	\$7,326,276
Upper (other than patent), value.....	\$14,873,789	\$4,823,697	\$3,087,868
Upholstery (automobile, furniture, and carriage), value.....	\$4,405,467	\$1,395,076	\$5,722
Harness—			
Sides.....	239,588	403,345	214,879
Value.....	\$3,285,618	\$2,580,218	\$1,210,132
All other, value.....	\$4,365,614	\$3,493,495	\$3,311,462
All other products, value.....	\$905,385	\$451,361	\$225,619
Work on materials for others, value.....	\$6,318,672	\$618,327	\$164,025

¹ Does not include upper leather made from skins.

The total value of products increased in 1919 by \$20,297,213, or 79.6 per cent, as compared with 1914. Upper leather (other than patent), with an increase of \$10,550,192, or 244 per cent, made the greatest gain. Upholstery and harness leather showed greater values in 1919 than 1914, but sole leather showed a lesser value. Both sole and harness leather fell off in production, the former especially, showing a decrease of 722,559 sides, or 38.6 per cent. "All other leather" covers case, bag, and strap, glove, horse, finished splits, bookbinders' leather, etc.

"All other products," consisting of wool, hair, etc., has doubled since 1914, and the amount received for tanning, currying, and finishing for others was more than ten times as great in 1919 as it was in 1914.

Flour-mill and gristmill products (Table 26).—This table presents the quantity and value of the principal kinds of products of flour mills and gristmills for the census years 1919, 1914, and 1909.

Although there was a general decrease in quantities in 1919 for all important products of this industry, as compared with 1914, it was still one of the leading industries in the state. This decrease was probably due to the decrease in acreage and the scarcity of labor for agricultural purposes.

Wheat flour, the product of greatest value in the industry, formed 64.3 per cent of the total value of products in 1919 and 58.6 per cent in 1914.

TABLE 26.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILLS): 1919, 1914, AND 1909.

	1919	1914	1909
Products, total value.....	\$44, 144, 434	\$27, 381, 474	\$34, 860, 803
Wheat flour:			
Barrels.....	2, 537, 386	3, 056, 744	3, 447, 800
Value.....	\$28, 306, 273	\$16, 056, 043	\$18, 838, 501
Rye flour:			
Barrels.....	137, 750	74, 602	61, 063
Value.....	\$1, 248, 024	\$377, 707	\$206, 698
Corn meal and corn flour:			
Barrels.....	04, 175	131, 646	177, 180
Value.....	\$812, 361	\$461, 630	\$606, 706
Buckwheat flour:			
Pounds.....	7, 981, 873	15, 773, 401	20, 161, 026
Value.....	\$596, 503	\$447, 545	\$547, 024
Bran and middlings:			
Tons.....	103, 752	140, 893	
Value.....	\$4, 548, 040	\$3, 208, 041	\$520, 810
Feed and offal:			
Tons.....	135, 190	216, 760	
Value.....	\$8, 342, 228	\$6, 350, 156	\$13, 970, 486
All other cereal products, value.....	\$212, 801	\$201, 053	\$310, 037
All other products, value.....	\$17, 535	\$98, 699	\$311, 361

Beet sugar (Table 27).—This table shows the quantity of domestic sugar beets used in the production of beet sugar during 1919, 1914, and 1909, and the quantity and value of the different products made from sugar beets.

In 1914 Michigan ranked third in value of products among the states producing beet sugar, being exceeded by California and Colorado while in 1919 its rank was second, being exceeded only by Colorado.

TABLE 27.—BEET SUGAR: 1919, 1914, AND 1909.

	1919	1914	1909
Beets used, tons.....	992, 938	862, 053	816, 609
Products, total value.....	\$26, 378, 870	\$11, 023, 058	\$10, 476, 876
Sugar:			
Granulated—			
Tons.....	122, 539	111, 570	103, 894
Value.....	\$23, 887, 805	\$9, 944, 717	\$9, 756, 587
Raw—			
Tons.....	169	305	551
Value.....	\$12, 505	\$22, 239	\$41, 404
Molasses:			
Gallons.....	3, 435, 572	4, 133, 121	5, 016, 748
Value.....	\$504, 445	\$277, 266	\$337, 200
Pulp, value.....	\$1, 860, 475	\$778, 536	\$339, 025
All other products, value.....	\$113, 640		\$2, 660

Chemicals (Table 28).—This table presents the statistics of products for the chemical industries in 1919. The production includes all products reported by 40 establishments engaged primarily in the manufacture of chemicals, including those of coal-tar origin, and subsidiary chemicals to the value of \$3,194,793 manufactured by establishments included under other industry classifications.

In 1914 there were 36 establishments with products valued at \$13,891,415 and in 1909, 36 establishments with products of \$12,890,000 in value, these figures being comparable with the 40 establishments and the products of the classified industries, valued at \$38,667,887 in 1919. The increase in value of products for the period 1914 to 1919 was at the rate of 201 per cent, and for 1909 to 1914, 8 per cent.

A considerable portion of the production was made with the aid of electricity. The value of the chemicals made by electrochemical or electrometallurgical methods was \$10,284,831, equal to 27.2 per cent of all chemicals for the state, and 14.2 per cent of all electrochemical and electrometallurgical chemicals in the United States.

TABLE 28.—CHEMICALS: 1919.

	1919
Products, total value.....	\$41, 872, 200
The classified industries:	
Chemicals.....	37, 850, 834
Coal-tar products.....	817, 053
Subsidiary chemical products from other industries.....	3, 204, 313
Acids.....	942, 011
Sodas, sodium, and compounds.....	22, 131, 154
Potash.....	588, 834
Bleaching compounds.....	1, 267, 678
Compressed and liquefied gases.....	1, 527, 723
Other chemicals.....	13, 437, 068
All other products, value.....	1, 977, 732

Printing and publishing (Table 29).—This table shows the number and aggregate circulation per issue for all publications reported in Michigan for the census years 1919, 1914, and 1909.

Although the total number of publications decreased during the five-year period 1914 to 1919 there was

an increase of 564,842, or 15.6 per cent, in their aggregate circulation. The increase in the circulation of dailies was 131,668, or 14.8 per cent. Of these dailies, 17 were published in the morning, reporting a circulation of 274,911, and 56, with a circulation of 745,738, were published in the afternoon. These increases in circulation were 12.3 and 15.8 per cent, respectively, over the figures reported for 1914.

During the five years the circulation of weekly newspapers and periodicals increased 310,846, or 9.2 per cent.

The foreign-language publications numbered 39 with an aggregate circulation of 201,509, as compared with 53 in 1914 with a circulation of 169,612. The great increase in circulation was principally in publications printed in Polish. In 1914 there were reported for this language 3 dailies, 1 Sunday, 1 weekly, 1 semi-weekly, and 1 monthly publication, the total circulation being 43,793. In 1919 there were 3 dailies, 1 Sunday, and 4 weeklies with a total circulation of 92,409. Other foreign-language publications were 1 daily and 1 Sunday in German; 1 daily and 1 Sunday in Yiddish; 1 weekly in Croatian; 4 weeklies, 1 triweekly, and 2 monthlies in Dutch; 2 weeklies, 2 triweeklies, 3 monthlies, 1 semimonthly, and 1 quarterly in Finnish; 1 weekly and 1 monthly in Hungarian; 2 weeklies and 1 triweekly in Italian; 1 weekly each in Flemish, Slovenian, Swedish, and English and German; and 1 monthly in Magyar.

TABLE 29.—PRINTING AND PUBLISHING: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1919	1914	1909	1919	1914	1909
Total.....	630	736	747	4,192,771	3,627,929	2,766,282
Daily.....	73	80	87	1,020,649	888,981	681,919
Sunday.....	14	14	15	507,910	312,163	256,583
Semiweekly.....	6	21	28	6,854	33,080	66,560
Triweekly.....	5	7	6	18,150	12,803	16,080
Weekly.....	443	517	526	1,104,022	793,176	750,298
Semimonthly.....	4	7	4	14,200	106,437	13,991
Monthly.....	72	84	73	1,464,830	1,428,889	927,601
Quarterly ¹	13	6	8	56,150	22,400	63,250

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

Lumber and timber products (Table 30).—This table presents statistics pertaining to the chief products of the lumber industry for 1919, 1914, and 1909. Michigan has been prominent in the lumber industry in the United States for the past 80 years, and was the leading state in the production of lumber in 1869, 1879, and 1889. In 1899 it occupied second place. The

state's rank in production has decreased rapidly, and in 1909 it ranked tenth; in 1914, thirteenth; and in 1919, fourteenth.

Until 1904 the cut consisted principally of white pine. This wood has been largely cut out, and in 1919 60 per cent of the total cut of the state was from hard woods, the principal species being maple. In the production of lumber from this wood the state ranked first. In 1919 the cut from all woods decreased 27.9 per cent compared with that for 1914, and 53.7 per cent compared with that for 1909.

The lumber cut from the principal species in 1919 was reported as follows: Maple 321,409,000 feet, or 36.7 per cent of the total cut from all species in the state; hemlock 267,824,000 feet, or 30.6 per cent; birch 63,533,000 feet, or 7.3 per cent; white pine 57,501,000 feet, or 6.6 per cent; beech 49,125,000 feet, or 5.6 per cent; basswood 33,532,000 feet, or 3.8 per cent; and elm 30,745,000 feet, or 3.5 per cent. Among other woods sawed into lumber in considerable quantities were oak, larch, and spruce.

TABLE 30.—LUMBER, LATH, AND SHINGLES: 1919, 1914, AND 1909.

PRODUCT.	QUANTITY. ¹		
	1919	1914	1909
Lumber.....M feet b. m.	875,891	1,214,435	1,889,724
Lath.....thousands	51,469	(?)	218,393
Shingles.....thousands	144,173	(?)	891,649

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

² Not reported.

Laundries (Table 31).—Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. Table 31, however, summarizes the statistics for such laundries in Michigan for 1919 and 1914.

TABLE 31.—POWER LAUNDRIES: 1919 AND 1914.

	NUMBER OR AMOUNT.		Percent of increase, ¹ 1914-1919
	1919	1914	
Number of establishments.....	197	234	-15.8
Persons engaged.....	5,746	5,637	1.9
Proprietors and firm members.....	218	270	-19.3
Salaried employees.....	615	465	32.3
Wage earners (average number).....	4,013	4,902	0.2
Primary horsepower.....	7,151	6,457	10.7
Capital.....	\$5,421,984	\$3,172,343	70.9
Salaries and wages.....	4,725,134	2,619,264	80.4
Salaries.....	935,955	458,146	104.3
Wages.....	3,789,179	2,161,118	75.3
Paid for contract work.....	26,372	675	3,807.0
Rent and taxes.....	210,054	151,940	38.2
Cost of materials.....	2,192,476	928,502	136.1
Amount received for work done.....	9,416,373	5,115,286	84.1

¹ A minus sign (—) denotes decrease.

Dyeing and cleaning (Table 32).—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 32.—DYEING AND CLEANING: 1919.

	Number or amount.
Number of establishments.....	73
Persons engaged.....	895
Proprietors and firm members.....	70
Salaried employees.....	135
Wage earners (average number).....	681
Primary horsepower.....	714
Capital.....	\$1,240,651
Salaries and wages.....	950,798
Salaries.....	164,400
Wages.....	792,308
Paid for contract work.....	10,328
Rent and taxes.....	83,311
Cost of materials.....	445,540
Amount received for work done.....	2,043,559

Custom sawmills and custom gristmills (Tables 33 and 34).—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 in 1914. Tables 33 and 34, however, summarize the statistics for such mills for 1919 and 1909. The value of products for custom sawmills represents the amount charged for

the work performed, and that for custom gristmills the selling value of the grain milled.

TABLE 33.—CUSTOM SAWMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	103	197	-47.7
Persons engaged.....	199	580	-65.7
Proprietors and firm members.....	128	271	-52.8
Salaried employees.....		3	
Wage earners (average number).....	71	306	-76.8
Primary horsepower.....	2,576	4,894	-47.4
Capital.....	\$148,240	\$322,255	-54.0
Salaries and wages.....	44,986	103,029	-56.3
Salaries.....		370	
Wages.....	44,986	102,659	-56.2
Rent and taxes.....	1,695	2,094	-19.3
Cost of materials.....	8,695	4,051	113.9
Amount received for work done.....	94,317	230,209	-60.1

¹ A minus sign (-) denotes decrease.

TABLE 34.—CUSTOM GRISTMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	185	208	-11.1
Persons engaged.....	313	357	-12.3
Proprietors and firm members.....	183	256	-28.5
Salaried employees.....	24	8	
Wage earners (average number).....	100	93	
Primary horsepower.....	0,898	7,172	-3.8
Capital.....	\$1,588,117	\$722,877	119.7
Salaries and wages.....	151,911	39,798	281.7
Salaries.....	28,160	3,260	763.8
Wages.....	123,752	36,538	238.7
Rent and taxes.....	23,391	6,947	238.7
Cost of materials ²	4,523,400	1,792,317	152.4
Value of products ²	5,302,793	2,140,461	147.7

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 35 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 Detroit, Grand Rapids, and Saginaw; and for Flint and Lansing and 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 36 presents, for 1919, for the state as a whole and for each city having a population of more than 50,000, 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, for which figures can be given without disclosing the operations of individual establishments.

MANUFACTURES—MICHIGAN.

TABLE 35.—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).	Primary horse- power.	Expressed in thousands of dollars.			INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Primary horse- power.	Expressed in thousands 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	8,305	471,212	1,202,128	639,708	1,919,243	3,466,188	Coffins, burial cases, and undertakers' goods.	1919	24	416	1,087	379	1,340	2,622
	1914	8,724	271,000	730,383	182,252	592,801	1,086,162		1914	23	540	1,077	315	948	1,355
	1909	9,159	231,499	598,288	118,968	368,612	685,109		1909	18	439	711	208	493	1,085
Agricultural implements..	1919	23	2,708	6,197	3,003	5,048	11,091	Confectionery and ice cream. ²	1919	184	1,746	3,738	1,462	7,168	12,627
	1914	30	2,143	5,041	1,456	2,640	7,731		1914	124	1,187	2,774	555	2,858	4,843
	1909	32	2,359	5,106	1,261	2,890	9,273	Cooperage and wooden goods, not elsewhere specified.	1919	53	1,067	4,553	765	1,970	3,880
Artificial stone products..	1919	191	480	834	612	980	2,434		1914	82	1,967	7,316	912	2,063	3,839
	1914	217	483	1,258	306	400	1,060		1909	101	2,642	8,500	1,016	2,004	3,989
	1909	191	514	634	255	349	908	Copper, tin, and sheet- iron products. ³	1919	142	2,797	2,781	3,270	8,230	16,058
Automobiles, including bodies and parts.	1919	271	175,985	284,127	272,989	959,767	1,620,383		1914	162	2,397	2,789	1,437	2,807	5,650
	1914	205	67,538	79,379	57,792	219,215	398,289		1909	152	2,386	1,875	1,122	2,545	4,929
	1909	113	25,444	25,938	15,491	53,882	96,651	Corsets.....	1919	12	1,529	724	1,031	2,013	7,298
Awnings, tents, and sails.	1919	22	190	117	213	920	1,645		1914	16	2,149	959	873	1,899	4,982
	1914	24	154	45	104	261	502		1909	14	2,461	734	835	1,877	4,368
	1909	17	129	44	67	199	349	Cutlery and tools, not elsewhere specified.	1919	94	3,352	3,662	4,810	3,507	12,078
Baskets, and rattan and willow ware.	1919	9	296	263	216	198	539		1914	28	453	1,194	320	387	965
	1914	13	238	574	113	285	537		1909	37	668	1,379	307	384	1,124
	1909	18	373	900	159	174	480	Electrical machinery, ap- paratus, and supplies.	1919	54	4,190	5,659	4,685	9,035	25,020
Boots and shoes.....	1919	15	1,120	660	921	4,184	6,046		1914	35	1,144	1,584	650	1,740	5,416
	1914	24	2,035	1,596	932	3,181	5,357		1909	40	1,218	1,355	494	1,030	2,327
	1909	23	2,455	786	936	3,341	5,256	Flour-mill and gristmill products.	1919	345	1,128	20,928	1,257	38,185	44,144
Boxes, paper and other, not elsewhere specified.	1919	22	2,336	5,226	2,161	5,286	10,935		1914	427	1,370	35,321	860	23,099	27,381
	1914	23	1,461	5,935	748	2,131	3,748		1909	520	1,530	38,991	806	29,359	34,861
	1909	19	1,326	1,564	447	1,618	2,653	Food preparations, not elsewhere specified.	1919	37	2,483	12,157	3,108	18,813	35,702
Brass, bronze, and copper products.	1919	80	10,306	27,912	14,579	38,849	62,708		1914	56	1,683	9,700	1,110	7,039	16,005
	1914	64	4,731	14,251	3,030	11,473	16,889		1909	49	1,303	8,983	724	4,750	11,492
	1909	60	4,771	11,622	2,450	8,993	13,890	Foundry and machine- shop products. ⁴	1919	975	64,623	134,422	88,511	150,126	324,354
Bread and other bakery products.	1919	944	5,088	6,339	5,895	28,116	44,923		1914	705	26,497	52,085	18,992	27,120	64,576
	1914	922	4,014	3,479	2,459	9,308	16,000		1909	654	21,640	34,152	12,344	18,711	45,399
	1909	816	2,637	1,953	1,444	6,671	11,082	Fur goods.....	1919	31	426	117	412	1,282	2,444
Brick, tile, pottery, and other clay products. ¹	1919	61	1,666	7,741	2,179	1,579	5,983		1914	35	380	503	183	818	1,680
	1914	102	2,194	11,505	1,245	1,058	3,174		1909	31	619	232	267	984	2,284
	1909	131	1,771	8,772	892	649	2,203	Furniture and refrigera- tors.	1919	183	20,151	32,415	21,236	31,516	76,216
Butter, cheese, and con- densed milk.	1919	318	2,194	9,136	2,483	55,906	64,787		1914	202	16,267	28,204	9,488	14,361	33,887
	1914	364	1,367	6,659	863	18,463	21,550		1909	202	16,610	27,485	8,300	11,718	28,642
	1909	435	1,073	4,776	554	12,377	14,287	Gas and electric fixtures and lamps and reflec- tors.	1919	21	1,042	1,847	1,519	2,910	6,981
Canning and preserving, fruits and vegetables.	1919	52	2,109	4,185	1,135	7,971	11,172		1914	13	597	993	445	936	2,094
	1914	49	1,687	3,712	583	2,640	4,422		1909	20	395	398	219	642	1,546
	1909	72	1,311	2,216	391	1,442	2,368	Gas, illuminating and heating.	1919	59	2,846	13,593	3,965	8,270	17,993
Carriages and wagons and materials.	1919	46	367	1,134	389	714	1,523		1914	59	2,340	4,935	1,584	3,356	10,441
	1914	177	1,417	2,739	982	1,928	3,775		1909	55	1,771	6,055	1,096	2,129	6,748
	1909	212	4,034	6,362	2,240	5,262	10,159	Ice, manufactured.....	1919	18	742	8,137	1,186	717	2,822
Carriages and sleds, chil- dren's.	1919	10	799	609	737	1,397	3,410		1914	11	443	4,433	389	128	765
	1914	8	402	598	224	443	970		1909	5	87	1,959	77	40	199
	1909	9	555	484	214	257	682	Iron and steel, blast fur- naces.	1919	11	1,101	6,367	1,719	10,298	13,534
Cars and general shop con- struction and repairs by electric-railroad com- panies.	1919	15	1,401	849	2,088	1,625	3,828		1914	12	991	14,045	782	3,877	5,450
	1914	18	885	413	629	932	1,326		1909	11	1,016	17,403	632	4,224	5,824
	1909	15	574	1,704	318	949	1,301	Iron and steel, steel works and rolling mills.	1919	7	1,455	9,142	2,471	2,902	8,845
Cars and general shop con- struction and repairs by steam-railroad com- panies.	1919	36	7,025	11,079	9,862	6,229	17,223		1914	9	718	4,683	498	871	1,716
	1914	26	5,803	8,595	3,905	3,264	7,569		1909	8	1,183	4,290	661	1,598	2,670
	1909	32	5,401	5,742	3,500	2,916	6,838	Iron and steel, forgings, not made in steel works or rolling mills.	1919	15	1,596	6,757	2,387	4,862	8,559
Cement.....	1919	11	1,387	35,470	1,739	3,963	9,643		1914	11	552	1,532	476	807	1,493
	1914	11	1,340	24,158	975	2,408	4,529		1909	4	307	483	182	240	602
	1909	13	1,306	21,773	826	1,403	2,915	Knit goods.....	1919	31	3,170	3,073	2,114	6,790	12,039
Chemicals.....	1919	36	5,712	74,943	8,950	15,744	37,851		1914	34	2,714	3,373	1,000	2,610	5,233
	1914	36	4,509	45,944	3,405	6,373	13,891		1909	35	2,545	3,291	769	2,047	4,029
	1909	36	3,174	26,594	2,012	5,072	12,890	Leather goods.....	1919	75	625	463	603	2,309	4,181
Clothing, men's, includ- ing shirts.	1919	41	2,227	1,102	1,616	6,632	10,916		1914	103	675	402	379	1,413	2,426
	1914	39	2,502	1,075	1,094	2,996	5,306		1909	57	834	760	434	1,458	2,660
	1909	40	3,580	1,151	1,221	3,389	6,532	Leather, tanned, curried, and finished.	1919	28	3,464	12,243	4,163	32,452	45,801
Clothing, women's.....	1919	33	1,036	262	750	2,273	3,923		1914	23	2,773	6,787	1,739	20,982	25,504
	1914	32	1,672	552	715	1,194	2,661		1909	24	2,291	6,719	1,133	12,121	15,331
	1909	52	2,194	581	745	1,710	3,587	Liquors, malt.....	1919	25	779	6,658	1,052	2,027	5,276
Coffee, roasting and grind- ing.	1919	19	99	461	74	2,133	2,514		1914	70	2,097	13,039	1,703	4,328	15,041
	1914	16	88	205	50	1,316	1,618		1909	79	1,527	9,219	1,073	2,421	9,840
	1909	12	76	278	40	680	938								

¹ Includes "sand-lime brick" in 1919 and 1914.² Includes "chewing gum" in 1914.³ Includes "stamped ware, not elsewhere specified" and "tinware, not elsewhere specified."⁴ Includes "automobile repairing"; "engines, steam, gas, and water"; "gas machines and gas and water meters"; "hardware"; "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"; "structural ironwork, not made in steel works or rolling mills"; and "textile machinery and parts" in all years; and "hard-ware, saddlery" in 1919 and 1914.⁵ Includes "saddlery and harness" and "trunks and valises."

MANUFACTURES—MICHIGAN.

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TABLE 35.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Contd.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earners (aver- age num- ber).	Primary horse- power.	Wages.	Cost of mater- ials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earners (aver- age num- ber).	Primary horse- power.	Wages.	Cost of mater- ials.	Value of prod- ucts.
					Expressed in thousands of dollars.								Expressed in thousands of dollars.		
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
Lumber and timber prod- ucts. ¹	1919 1914 1909	633 748 1,180	21,979 28,527 35,027	114,319 112,584 133,730	22,021 15,195 16,208	43,813 29,356 20,042	90,007 58,523 61,514	Slaughtering and meat packing. ²	1919 1914 1909	53 36 45	1,871 1,181 902	5,522 3,275 3,404	2,503 815 481	52,088 19,238 11,666	62,515 21,267 13,435
Marble and stone work....	1919 1914 1909	103 111 118	365 461 551	2,098 1,644 1,570	547 390 393	1,021 937 592	2,580 1,561 1,504	Springs, steel, car and car- riage, not made in steel works or rolling mills.	1919 1914 1909	6 6 6	1,870 658 588	1,786 1,000 908	2,242 472 309	5,426 1,183 558	8,472 2,175 1,308
Mattresses and spring beds, not elsewhere specified.	1919 1914 1909	16 23 14	171 278 300	487 517 508	196 162 140	785 619 407	1,369 877 689	Stoves and furnaces, in- cluding gas and oil stoves.	1919 1914 1909	28 27 33	5,241 4,074 4,482	9,382 5,918 5,910	6,950 2,988 2,832	9,281 8,715 2,816	27,986 10,757 9,123
Mineral and soda waters..	1919 1914 1909	131 120 97	602 391 252	1,921 814 606	772 246 138	2,865 819 368	5,467 1,606 910	Sugar, beet.....	1919 1914 1909	16 10 11	1,836 1,326 1,460	20,550 10,306 8,854	2,765 932 910	16,682 8,244 6,228	26,379 11,023 10,477
Musical instruments, pianos.	1919 1914 1909	8 12 14	1,122 925 1,611	1,767 1,451 2,363	1,170 587 983	2,823 1,128 1,882	5,397 2,416 3,944	Tobacco manufactures....	1919 1914 1909	363 626 729	6,272 9,075 7,870	1,184 1,343 937	4,915 3,779 3,076	13,213 8,903 7,208	27,693 20,067 16,179
Oil, essential.....	1919 1914 1909	29 53 23	62 38 54	715 619 395	57 17 17	609 226 415	951 492 486	Toys and games.....	1919 1914 1909	12 7 8	361 251 279	632 198 994	362 149 135	393 246 174	1,010 529 432
Paper and wood pulp.....	1919 1914 1909	39 37 32	9,561 6,051 4,327	95,729 3,559 48,700	11,177 14,545 2,142	40,353 22,050 9,025	66,300 22,050 13,022	Wall plaster and compo- sition flooring.	1919 1914 1909	10 13 16	585 631 746	4,924 4,295 3,029	726 421 276	1,491 743 412	3,501 2,074 1,421
Paper goods, not else- where specified. ³	1919 1914 1909	14 14 18	556 750 1,181	693 2,000 2,580	577 402 483	2,513 2,252 1,953	4,203 3,588 3,551	Window shades and fix- tures.	1919 1914 1909	5 8 7	766 702 636	1,057 1,149 1,236	633 295 261	865 983 807	2,894 1,755 1,296
Patent medicines and compounds and drug- gists' preparations. ³	1919 1914 1909	107 142 159	4,751 3,369 3,240	2,642 2,694 2,270	4,151 1,904 1,509	14,690 7,003 4,941	34,045 16,434 13,475	Wirework, not else- where specified.	1919 1914 1909	38 33 37	2,516 1,314 900	3,822 2,269 1,900	2,721 788 428	10,808 3,918 3,446	17,065 5,861 5,285
Printing and publishing ⁴	1919 1914 1909	1,045 1,113 1,045	7,880 8,166 7,219	11,587 13,033 7,661	9,590 5,602 4,000	15,536 7,498 4,935	46,829 24,953 17,348	Wood distillation.....	1919 1914 1909	16 10 12	1,586 645 806	5,985 2,644 5,012	1,988 415 504	5,798 1,708 1,155	10,651 2,678 2,399
Salt.....	1919 1914 1909	12 15 27	2,063 1,434 1,363	10,321 8,316 6,028	2,539 991 745	6,330 1,040 1,643	14,054 4,421 3,653	Wood, turned and carved.	1919 1914 1909	34 45 58	622 576 1,137	1,997 2,901 4,695	⁶ 115 313 548	837 339 634	1,998 950 1,708
Scales and balances.....	1919 1914 1909	3 3 4	420 276 223	380 298 310	516 200 137	513 208 229	2,340 612 524	Woolen goods.....	1919 1914 1909	9 9 15	812 477 554	1,502 1,311 1,900	719 230 235	2,881 798 863	4,572 1,215 1,571
Shipbuilding, including boat building.	1919 1914 1909	33 62 91	16,541 1,201 2,344	31,153 7,565 6,485	28,921 1,040 1,380	36,121 1,259 2,490	85,155 2,823 5,034	All other industries.....	1919 1914 1909	857 795 874	35,311 62,363 21,672	91,119 13,681 37,710	45,325 13,681 10,912	134,243 60,747 56,914	288,680 104,104 92,648
Show cases.....	1919 1914 1909	6 6 11	261 410 823	685 845 1,403	395 272 450	482 493 706	1,158 1,035 1,806								

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

DETROIT	1919	2,176	167,016	308,250	245,434	655,913	1,234,520	DETROIT—Contd.								
All industries.	1914	2,039	99,003	176,808	69,447	222,249	400,348	Bread and other bakery products.	1919	284	2,338	3,258	3,121	13,542	22,631	
	1909	2,036	81,011	114,100	43,007	130,218	252,939		1914	275	1,850	1,827	1,200	4,363	7,480	
Artificial stone products..	1909								1909	265	1,108	1,112	638	2,897	4,826	
	1919	13	98	119	157	207	526	Brick, tile, pottery, and other clay products. ⁵	1919	7	141	619	251	235	795	
	1914	16	77	98	49	50	151		1914	9	160	864	110	95	269	
	1909	13	104	25	48	51	142		1909	13	220	625	129	90	329	
Automobiles, including bodies and parts.	1919	136	65,090	90,141	104,001	328,733	550,228	Butter.....	1919	10	199	1,395	321	6,758	7,777	
	1914	122	33,439	39,468	26,368	101,882	164,076		1914	5	56	180	40	896	1,107	
	1909	68	15,675	14,666	9,621	31,363	59,536		1909	3	12	91	4	57	72	
Awnings, tents, and sails.	1919	10	141	87	174	761	1,380	Chemicals.....	1919	10	1,708	20,339	2,756	3,561	11,355	
	1914	8	114	22	80	172	336		1914	7	1,489	13,899	1,106	1,633	3,875	
	1909	7	100	20	54	133	238		1909	5	1,198	9,564	769	1,938	5,012	
Boots and shoes.....	1919	4	104	129	180	552	932	Clothing, men's, including shirts.	1919	21	1,251	840	1,037	4,531	7,301	
	1914	6	965	531	430	1,014	2,255		1914	20	1,632	812	765	2,273	3,897	
	1909	8	1,327	362	491	1,702	2,744		1909	22	2,788	951	963	2,352	4,761	
Boxes, paper and other, not elsewhere specified.	1919	8	289	156	221	436	987	Clothing, women's.....	1919	13	395	96	354	827	1,559	
	1914	11	352	193	144	189	491		1914	19	1,070	229	484	505	1,406	
	1909	7	366	142	115	148	382		1909	27	921	164	357	661	1,494	
Brass, bronze, and copper products.	1919	50	8,664	24,866	12,429	29,292	49,240	Coffee, roasting and grind- ing.	1919	10	61	390	57	1,698	2,004	
	1914	38	3,880	13,074	2,485	10,290	14,630		1914	5	40	143	29	701	905	
	1909	37	4,032	10,651	2,049	8,273	12,297		1909	6	41	186	24	452	617	

¹ 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."² Includes "envelopes."³ Includes "perfumery and cosmetics."⁴ Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithographing."⁵ Includes "sausage, not made in slaughtering and meat-packing establishments."⁶ Includes "sand-lime brick."

TABLE 35.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Contd.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Expressed in thousands of dollars.			INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Expressed in thousands of dollars.		
					Wages.	Cost of materials.	Value of products.						Wages.	Cost of materials.	Value of products.
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
DETROIT—Contd. Coffins, burial cases, and undertakers' goods.	1919	8	105	189	123	336	775	FLINT All industries. ⁶	1919	107	24,603	33,610	38,093	172,824	275,780
	1914	7	102	170	67	128	275		1914	94	8,722	10,576	7,235	34,333	53,375
	1909	5	95	148	56	117	208		1909	104	7,088	8,240	4,429	13,971	24,118
Copper, tin, and sheet-iron products. ¹	1919	60	1,419	1,473	1,639	4,346	9,017	GRAND RAPIDS. All industries.	1919	611	23,548	44,048	20,170	51,162	109,135
	1914	68	1,957	2,106	1,163	2,108	4,369		1914	594	17,427	30,393	10,206	23,905	49,792
	1909	72	1,932	1,453	851	1,932	3,534		1909	524	17,690	27,676	9,217	19,786	42,231
Electrical machinery, apparatus, and supplies.	1919	29	1,894	3,084	2,094	4,584	12,970	Automobiles, including bodies and parts.	1919	22	1,232	2,131	1,750	3,251	6,911
	1914	20	591	1,097	334	1,223	2,240		1914	8	87	94	61	114	250
	1909	23	541	575	226	493	1,148		1909	3	86	110	58	147	389
Foundry and machine-shop products. ²	1919	286	25,503	47,566	38,459	50,512	123,065	Brass and bronze products.	1919	4	310	478	329	325	911
	1914	221	11,250	20,210	8,558	12,351	29,465		1914	7	432	560	257	281	707
	1909	215	8,694	10,336	4,828	7,614	18,243		1909	5	405	401	209	243	680
Fur goods.	1919	17	310	46	320	1,064	2,032	Bread and other bakery products.	1919	74	588	424	442	2,228	3,005
	1914	18	207	190	155	626	1,102		1914	67	441	244	227	943	1,682
	1909	19	371	24	181	707	1,738		1909	66	301	185	185	872	1,476
Iron and steel, forgings, not made in steel works or rolling mills.	1919	6	638	2,979	979	1,219	2,416	Butter.	1919	5	57	234	70	1,434	1,647
	1914	7	399	1,268	329	583	1,012		1914	6	27	126	19	621	747
	1909	9	28	88	43	204	559		1909	4	16	134	12	216	240
Jewelry.	1919	19	109	72	152	418	938	Clothing, men's, including shirts.	1919	6	70	26	66	188	404
	1914	18	133	57	101	154	386		1914	8	199	45	66	192	397
	1909	9	92	28	68	43	204		1909	6	239	70	84	220	513
Knit goods.	1919	8	236	316	194	620	1,103	Coffins, burial cases, and undertakers' goods.	1919	6	78	238	67	282	537
	1914	9	280	245	102	365	615		1914	4	58	206	37	137	305
	1909	9	334	214	91	326	559								
Leather goods. ³	1919	17	169	127	158	699	1,137	Confectionery and ice cream.	1919	23	287	426	183	1,285	2,345
	1914	32	239	228	145	534	913		1914	12	203	326	95	406	644
	1909	22	403	530	211	819	1,396		1909	6	193	115	71	477	694
Leather, tanned, curried, and finished.	1919	3	349	1,072	603	6,212	8,624	Flour-mill and gristmill products.	1919	9	124	1,937	143	4,952	5,454
	1914	3	301	765	203	1,282	1,715		1914	9	107	1,537	78	2,662	3,142
	1909	3	301	765	203	1,282	1,715		1909	8	118	1,510	72	3,045	3,781
Liquors, malt.	1919	9	504	3,905	755	1,424	3,763	Foundry and machine-shop products. ⁷	1919	66	2,704	4,940	3,131	4,011	10,013
	1914	19	1,165	6,088	1,020	2,623	9,410		1914	61	1,532	2,831	989	1,086	3,023
	1909	18	646	3,886	495	1,185	4,942		1909	49	1,532	2,107	825	1,134	2,740
Lumber, planing-mill products, not including planing mills connected with sawmills.	1919	32	1,232	5,895	1,754	5,717	9,114	Knit goods.	1919	4	526	290	440	1,270	2,479
	1914	34	1,410	5,503	989	3,357	5,567		1914	4	422	251	148	555	1,064
	1909	46	1,607	3,496	809	3,414	5,346		1909	4	216	109	74	393	647
Marble and stone work.	1919	22	205	1,309	316	434	1,186	Leather, tanned, curried, and finished.	1919	4	208	963	220	945	1,885
	1914	19	202	650	178	203	622		1914	3	177	620	115	1,031	1,304
	1909	19	194	580	131	172	413		1909	3	98	437	56	545	705
Mineral and soda waters.	1919	28	282	803	406	1,059	2,384	Liquors, malt.	1919	3	77	936	96	143	490
	1914	19	166	148	117	240	539		1914	3	174	1,328	123	315	1,201
	1909	13	81	85	45	113	260		1909	3	136	725	94	108	912
Models and patterns, not including paper patterns.	1919	29	693	438	1,484	312	2,703	Lumber and timber products. ⁸	1919	11	438	2,530	466	1,133	2,269
	1914	15	201	149	186	43	306		1914	16	539	2,469	345	1,240	1,925
	1909	17	188	95	125	24	238		1909	20	594	2,504	343	907	1,097
Photo-engraving.	1919	12	144	117	271	101	851	Printing and publishing. ⁴	1919	81	906	1,302	1,145	1,404	4,651
	1914	9	104	61	105	35	282		1914	84	942	1,145	673	888	2,886
	1909	7	153	116	116	60	351		1909	68	832	781	489	587	2,067
Pickles, preserves, and sauces.	1919	12	111	100	112	486	893	Tobacco, cigars.	1919	25	678	27	507	793	1,983
	1914	13	460	417	198	1,379	1,974		1914	32	667	4	261	712	1,238
	1909	9	408	549	157	855	1,568		1909	36	458	5	188	302	735
Printing and publishing. ⁵	1919	281	3,806	5,736	5,202	10,138	27,940	Wood, turned and carved.	1919	10	116	288	138	99	342
	1914	265	3,472	7,098	2,629	4,044	13,168		1914	10	47	204	31	17	77
	1909	224	2,519	2,602	1,570	2,044	7,291		1909	8	128	240	65	57	154
Slaughtering and meat packing. ⁶	1919	20	1,707	4,678	2,291	49,502	59,341	All other industries.	1919	258	15,083	26,878	16,977	27,419	63,209
	1914	13	1,102	3,047	761	18,489	20,321		1914	260	17,373	18,403	6,771	12,795	28,905
	1909	29	811	3,092	433	11,221	12,850		1909	235	12,178	18,237	6,392	10,423	24,732
Tobacco, cigars and cigarettes.	1919	73	3,421	123	2,821	5,557	11,606	LANSING. All industries. ⁶	1919	147	12,349	23,602	13,957	64,981	104,722
	1914	143	5,352	156	2,165	3,811	8,504		1914	180	6,231	12,614	4,373	13,887	26,984
	1909	187	4,354	99	1,586	2,780	6,490		1909	109	5,285	8,720	2,707	8,802	16,567
Wirework, not elsewhere specified.	1919	17	790	1,104	994	1,357	2,930								
	1914	10	206	177	108	166	424								
	1909	12	207	175	81	127	357								
All other industries.	1919	612	42,790	84,683	59,149	118,083	292,417								
	1914	533	25,130	55,648	16,544	44,856	96,292								
	1909	457	29,491	47,578	15,694	40,105	92,287								

¹ Includes "stamped ware, not elsewhere specified," in all years and "tinware, not elsewhere specified," in 1914 and 1909.
² Includes "automobile repairing," "engines, steam, gas, and water," "hardware," "iron and steel, tempering and welding," "machine tools," "plumbers' supplies, not elsewhere specified," "steam fittings and steam and hot-water heating apparatus," and "structural ironwork, not made in steel works or rolling mills" in all years; and "gas machines and gas and water meters," and "pumps, steam and other power," in 1914 and 1909.
³ Includes "trunks and valises," in all years, and "saddlery and harness" in 1914 and 1909.
⁴ Includes "bookbinding and blank-book making," "engraving, steel and copper plate, including plate printing," and "lithography."
⁵ Includes "sausage, not made in slaughtering and meat-packing establishments."
⁶ Comparative statistics by industries for 1914 and 1909 not available.
⁷ Includes "automobile repairing," "hardware," "machine tools," "plumbers' supplies, not elsewhere specified," "steam fittings and steam and hot-water heating apparatus," "structural ironwork, not made in steel works or rolling mills," and "textile machinery and parts" in all years; "gas machines and gas and water meters," in 1919, and "engines, steam, gas, and water," in 1914.
⁸ Includes "lumber, planing-mill products, not including planing mills connected with sawmills," and "window and door screens and weather strips" in all years; and "boxes, wooden packing, except cigar boxes" in 1919.

MANUFACTURES—MICHIGAN.

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TABLE 35.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Contd.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Primary 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).	Primary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
					Expressed in thousands of dollars.								Expressed in thousands of dollars.		
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
SAGINAW..... All industries.	1919	208	9,472	31,402	9,963	21,316	43,146	SAGINAW—Contd. Liquors, malt.....	1919	3	70	246	47	80	106
	1914	241	6,342	15,959	3,671	10,656	19,009		1914	5	84	308	71	125	499
	1909	202	5,368	11,867	2,750	7,634	14,192		1909	5	74	170	58	110	393
Bread and other bakery products.	1919	18	240	291	170	914	1,480	Lumber and timber prod- ucts. ²	1919	14	496	4,692	400	1,676	2,886
	1914	18	149	135	90	378	602		1914	11	652	4,162	367	1,868	2,503
	1909	9	83	76	42	223	328		1909	12	696	2,682	335	1,629	2,404
Confectionery and ice cream.	1919	7	29	107	27	185	310	Patent medicines and compounds.	1919	4	12	21	14	58	113
	1914	7	51	39	21	116	170		1914	4	6	28	5	37	61
Copper, tin, and sheet- iron work.	1919	10	24	18	24	59	118	Printing and publishing ³ .	1919	19	148	327	159	299	872
	1914	14	42	15	29	51	120		1914	22	150	316	120	207	542
	1909	3	44	41	40	76	154		1909	22	164	411	100	127	428
Foundry and machine- shop products. ¹	1919	28	3,356	15,664	3,771	7,019	15,901	All other industries.....	1919	105	5,097	10,036	5,351	11,026	21,300
	1914	18	792	2,082	565	932	2,265		1914	142	4,407	8,374	2,403	6,942	12,247
	1909	23	698	1,674	432	788	1,838		1909	128	3,609	6,813	1,743	4,681	8,047
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.															
ADRIAN.....	1919	02	1,870	3,317	1,714	10,153	14,549	JACKSON.....	1919	156	9,620	18,744	10,899	29,089	49,518
	1914	68	1,256	2,840	998	3,783	5,442		1914	147	4,906	9,740	3,263	9,529	16,810
	1909	80	1,059	3,211	540	4,150	6,085		1909	168	4,788	6,355	2,487	8,156	13,984
ALPENA.....	1919	38	1,372	23,318	1,528	4,887	9,356	KALAMAZOO.....	1919	185	7,629	26,147	8,162	24,236	46,255
	1914	54	1,494	11,537	895	2,398	4,102		1914	213	5,625	10,648	3,284	10,917	20,214
	1909	58	1,432	10,070	711	2,301	3,904		1909	193	6,272	14,440	3,149	9,605	17,904
ANN ARBOR.....	1919	78	1,612	3,629	2,102	5,377	9,794	MARQUETTE.....	1919	34	1,415	6,138	1,593	4,665	7,210
	1914	75	842	2,376	516	1,302	2,003		1914	34	589	2,156	378	678	1,395
	1909	63	573	1,458	287	1,010	1,866		1909	35	509	1,575	313	565	1,278
BATTLE CREEK.....	1919	118	6,080	22,432	8,668	27,989	56,140	MUSKEGON.....	1919	141	9,716	24,026	10,853	25,676	55,069
	1914	135	4,599	17,049	3,191	8,158	23,248		1914	103	4,646	12,499	2,641	5,317	11,148
	1909	105	4,175	14,923	2,354	7,068	20,174		1909	101	4,522	10,436	2,107	4,938	9,648
BAY CITY.....	1919	108	5,057	14,540	5,363	15,262	28,215	OWOSSO.....	1919	40	1,781	4,220	2,221	5,209	9,949
	1914	142	3,771	15,911	2,129	6,403	11,119		1914	45	1,231	4,266	724	1,851	3,469
	1909	182	4,737	17,872	2,118	5,647	10,294								
BENTON HARBOR.....	1919	05	2,328	3,374	2,563	4,632	11,345	PONTIAC.....	1919	78	7,682	12,841	10,881	66,786	104,990
	1914	62	1,285	2,245	723	1,210	3,022		1914	46	2,409	3,111	2,010	10,449	15,102
									1909	42	1,739	2,854	1,087	3,241	5,894
ESCANABA.....	1919	45	842	2,201	876	1,153	3,018	PORT HURON.....	1919	83	2,231	5,884	2,482	4,931	9,546
	1914	45	777	2,591	469	936	1,507		1914	89	1,206	4,400	735	2,227	4,090
	1909	39	720	1,416	405	364	1,074		1909	82	1,580	3,130	791	1,950	3,588
HOLLAND.....	1919	64	2,748	4,937	2,709	10,225	17,711	SAULT STE. MARIE.....	1919	26	1,248	5,598	1,533	6,760	10,700
	1914	61	2,165	3,696	1,162	5,843	8,684		1914	44	938	2,326	621	2,362	3,821
	1909	61	2,162	3,446	1,069	3,478	5,802		1909	46	825	2,949	432	2,441	3,729
IRONWOOD.....	1919	28	399	725	587	554	1,381	TRAVERSE CITY.....	1919	56	960	3,131	847	2,282	4,100
	1914	24	516	641	305	414	793		1914	60	950	4,553	499	1,087	2,251
	1909	14	201	521	88	201	377		1909	61	1,220	4,231	444	1,183	2,289
LANSING.....	1919	21	107	370	124	483	1,007								
	1914	19	79	230	46	136	229								
	1909	19	66	73	37	52	132								

¹ Includes "automobile repairing"; engines, steam, gas, and water"; "iron and steel, welding"; "machine tools"; and "structural ironwork, not made in steel works or rolling mills."

² Includes "lumber, planing-mill products, not including planing mills connected with sawmills," in all years; and "window and door screens and weather strips" in 1919.

³ Includes "bookbinding and blank-book making" in 1919 and 1909 and "engraving, steel and copper plate, including plate printing," in 1919.

MANUFACTURES—MICHIGAN.

TABLE 36.—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.

																	Dollars.
1	All industries.....	8,305	549,069	6,762	20,402	31,258	19,405	471,242	No 522,876	Ja 421,493	(3)	(3)	(3)	(3)	(3)	2,340,954,312	
2	Agricultural implements.....	23	3,259	8	138	273	132	2,708	Ap 3,113	Se 2,110	2,727	2,665	61	1	.....	14,405,102
3	Aluminum manufactures.....	6	328	7	16	6	2	297	Se 363	Ja 201	405	395	10	.....	.....	700,083
4	Artificial limbs.....	9	23	8	2	2	1	10	Jy 4	Ja 1	13	12	1	.....	.....	31,041
5	Artificial stone products.....	191	790	218	51	25	16	480	Se 676	Ja 226	608	607	1	.....	.....	1,693,206
6	Automobile bodies and parts.....	203	54,905	91	1,696	2,672	1,398	40,048	No 61,438	Ja 36,649	60,175	57,016	3,107	52	.....	186,318,075
7	Automobiles.....	68	142,970	4	3,084	8,120	4,831	126,937	De 145,241	Ja 99,563	145,578	140,810	4,590	178	.....	806,185,383
8	Automobile repairing.....	259	1,454	322	48	50	66	968	Au 1,064	Ja 774	1,047	1,032	11	4	.....	2,904,980
9	Awnings, tents, and sails.....	22	289	20	25	33	21	190	Jy 248	Fe 135	180	90	81	.....	.....	636,959
10	Bags, other than paper, not including bags made in textile mills.	5	25	5	3	.....	2	15	Ja 25	Je 9	12	2	10	.....	.....	127,692
11	Baskets, and rattan and willow ware.	9	326	9	10	8	3	296	My 341	Ja 103	327	232	95	.....	.....	335,133
12	Belted, leather.....	3	141	3	9	7	9	113	Au 135	Je 98	133	116	17	.....	.....	1,088,702
13	Bookbinding and blank-book making.	24	687	19	43	81	62	482	De 556	Ja 445	557	268	279	8	2	1,422,432	
14	Boot and shoe findings.....	3	15	6	1	.....	8	.....	Oc 4	Ap 13	13	10	3	.....	.....	41,009
15	Boots and shoes.....	15	1,314	6	60	78	50	1,120	De 1,192	Ja 1,061	1,193	663	503	18	9	2,871,813	
16	Boxes, cigar.....	9	326	4	13	3	5	301	De 328	Ja 262	327	78	246	3	.....	239,910
17	Boxes, paper and other, not elsewhere specified.	22	2,521	10	90	41	44	2,336	.....	.....	2,448	752	1,608	8	20	6,511,322
18	Shipping containers.....	9	1,876	.....	60	30	31	1,755	No 1,811	Ja 1,700	1,793	610	1,177	1	5	5,761,743
19	All other.....	13	645	10	30	11	13	581	No 704	Ja 500	655	142	491	7	15	749,679	
20	Boxes, wooden packing, except cigar boxes.	46	1,650	44	78	20	27	1,481	Au 1,670	Mh 1,285	1,741	1,540	180	21	.....	3,727,416
21	Brass, bronze, and copper products.....	80	11,630	36	392	582	314	10,300	.....	.....	11,307	10,402	900	5	.....	40,284,256
22	Brass and bronze products.....	74	9,844	36	371	545	289	8,603	Oc 10,459	Mh 7,353	9,580	8,737	838	5	.....	30,709,734
23	Copper and other products.....	6	1,780	.....	21	37	25	1,703	No 2,010	Jy 1,268	1,727	1,605	62	.....	.....	8,574,522
24	Bread and other bakery products.....	944	7,714	1,112	222	327	465	5,088	.....	.....	5,504	4,088	1,364	32	20	17,064,978
25	Biscuit and crackers.....	6	1,084	5	21	154	43	861	No 962	Fe 704	926	395	531	.....	.....	2,492,504
26	Bakery products, other than biscuit and crackers.	938	6,630	1,107	201	673	422	4,227	De 4,436	Fe 3,934	4,578	3,693	833	32	20	14,572,414	
27	Brick and tile, terra-cotta, and fire-clay products.	48	972	43	48	14	15	852	.....	.....	973	963	1	9	.....	4,350,383
28	Building brick.....	22	652	17	31	9	12	583	Ja 749	Ja 320	674	674	.....	.....	.....	3,093,637
29	Sewer pipe, drain tile, and terra-cotta products.	26	320	26	17	5	3	269	Au 338	Ja 178	299	289	1	9	.....	1,265,746
30	Brooms, from broom corn.....	21	120	25	3	5	3	84	De 98	Ap 72	91	62	29	.....	.....	239,439
31	Brushes.....	10	212	14	4	11	7	176	Ja 4	Se 162	171	91	80	.....	.....	618,575
32	Butter.....	231	1,509	135	144	114	132	984	Jy 1,161	Fe 826	954	815	138	1	.....	9,147,141
33	Canning and preserving, fruits and vegetables.	52	2,366	32	149	34	42	2,109	.....	.....	3,462	1,392	1,879	62	129	6,010,871
34	Canned vegetables.....	25	1,187	9	84	14	19	1,061	Jy 2,440	Mh 250	1,379	801	553	2	23	3,037,862	
35	Canned and dried fruits.....	27	1,179	23	65	20	23	1,048	Jy 2,579	Fe 143	2,083	591	1,326	60	106	2,973,009	
36	Carpets, rag.....	10	38	13	.....	1	1	2	Je 2	Ja 4	24	16	5	2	1	24,437
37	Carriage and wagon materials.....	7	140	4	6	.....	4	135	De 160	Jy 106	160	159	1	.....	.....	474,879
38	Carriages and sleds, children's.....	10	981	3	49	74	56	799	De 972	Ja 657	972	795	177	.....	.....	2,636,992
39	Carriages and wagons, including repairs.	39	303	47	12	5	7	232	.....	.....	211	208	3	.....	.....	914,069
40	Carriages and wagons.....	27	250	32	12	4	7	195	Ja 228	My 176	179	176	3	.....	.....	820,752
41	Repair work only.....	12	53	15	.....	1	.....	37	Se 4	No 35	32	32	.....	.....	.....	93,317
42	Cars and general shop construction and repairs by electric-railroad companies.	15	1,513	.....	18	84	10	1,401	My 1,433	Je 1,318	1,381	1,377	2	2	.....	3,139,419
43	Cars and general shop construction and repairs by steam-railroad companies.	36	7,579	.....	297	170	87	7,025	De 7,208	Ap 6,910	7,280	7,214	65	1	.....	14,479,362
44	Cement.....	11	1,566	1	78	81	19	1,387	Se 1,647	Ja 958	1,294	1,277	17	.....	.....	10,540,992
45	Cheese.....	55	212	31	13	12	10	146	No 158	Ja 125	161	146	15	.....	.....	760,562
46	Chemicals.....	36	6,721	14	314	492	189	5,712	Ja 7,494	My 4,980	5,999	5,938	53	8	.....	62,841,234
47	Cleaning and polishing preparations.....	20	463	15	23	197	90	138	.....	.....	162	136	26	.....	.....	1,604,052
48	Cleansing preparations.....	12	435	10	16	195	88	126	Se 4	Mh 99	144	128	16	.....	.....	1,565,317
49	Metal and other polishing preparations.	8	28	5	7	2	2	12	De 17	Ja 4	18	8	10	.....	.....	86,735
50	Clothing, men's.....	31	2,041	24	51	112	104	1,750	.....	.....	2,068	300	1,763	2	3	6,125,030
51	Regular factory products.....	23	1,987	13	51	112	104	1,707	.....	.....	2,021	292	1,729	.....	.....	6,105,205
52	Men's and youths'.....	6	719	3	17	58	28	613	De 735	Mh 545	735	153	552	.....	.....	2,086,318
53	All other.....	17	1,263	10	34	54	76	1,094	De 1,276	My 972	1,286	139	1,147	.....	.....	3,458,887
54	Contract work.....	8	54	11	.....	.....	.....	43	Mh 48	Ja 38	47	8	34	2	3	19,825
55	Clothing, women's.....	33	1,188	20	69	32	31	1,036	.....	.....	1,230	102	1,128	.....	.....	1,810,718
56	Regular factory products.....	30	1,128	19	65	32	30	982	.....	.....	1,146	97	1,049	.....	.....	1,789,158
57	Shirt waists and dresses, except house dresses.	9	641	1	39	15	13	573	Se 627	Je 618	653	50	597	.....	.....	882,002
58	Wrappers and house dresses.	4	78	.....	9	9	1	59	Jy 67	Ja 53	72	4	68	.....	.....	103,790
59	All other.....	17	409	18	17	8	16	350	No 426	Ja 273	421	37	384	.....	.....	853,866
60	Contract work.....	3	60	1	4	.....	1	54	Au 95	Fe 4	84	5	79	.....	.....	21,560
61	Coal-tar products.....	4	131	.....	9	7	2	113	Je 138	Oc 85	134	133	1	.....	.....	1,208,864
62	Coffee, roasting and grinding.....	19	173	21	12	17	24	99	Jy 110	De 93	102	39	63	.....	.....	969,175
63	Coffins, burial cases, and undertakers' goods.	24	538	17	32	48	25	416	Fe 449	Jy 384	426	333	92	1	.....	1,819,185
64	Condensed milk.....	32	1,270	3	81	56	66	1,064	Je 1,143	Ja 972	1,035	914	119	2	.....	11,224,584
65	Confectionery and ice cream.....	184	2,308	239	113	117	93	1,746	No 1,687	Je 1,013	2,091	903	1,183	3	2	5,725,381	
66	Confectionery.....	92	1,599	114	69	92	40	1,284	.....	.....	1,612	485	1,125	.....	.....	3,372,272
67	Ice cream.....	92	709	125	44	25	53	462	Jy 634	Ja 341	479	418	58	3	.....	2,353,119

* 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.

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.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	
79,454,081	69,580,917	639,708,083	8,232,883	5,291,962	164,878,414	1,852,906,090	66,337,153	3,466,188,483	1,546,945,240	1,202,128	440,130	152,781	19,095	40,346	549,176	277,514	1			
404,968	504,629	3,003,362	427	2,061	442,721	4,837,772	210,196	11,090,609	6,042,701	6,197	2,693		50		3,154	382	2			
47,828	10,044	276,850		3,007	10,428	915,064	38,849	1,377,584	423,671	383	30				353		3			
4,940	4,160	12,895		4,780	129	11,670	755	63,149	50,724	16					108		4			
88,349	37,420	611,561		810,854	20,729	950,856	20,569	2,434,213	1,453,788	834	115		216		563		5			
6,040,391	5,150,127	75,221,256		285,253	9,084,787	147,613,334	2,949,108	288,306,858	137,744,416	103,425	14,919	1,470	8,421	18	78,597	4,634	6			
21,405,794	17,128,611	197,768,186		642,476	83,140,040	801,202,501	8,002,488	1,332,076,488	522,871,509	180,702	22,620	57,707	146		100,229	79,625	7			
98,485	114,589	1,288,441		114,734	48,883	1,780,480	82,461	4,226,691	2,363,750	1,362	2		182		1,178		8			
88,388	66,684	213,004		27,093	80,591	913,430	6,470	1,045,060	725,151	117					1,117		9			
5,625	2,230	10,080		1,386	496	280,506	836	307,434	20,092	59					69		10			
14,050	15,667	215,663		2,350	16,475	194,314	4,129	538,969	340,526	263	225		4		34		11			
40,585	22,321	127,198		799	56,775	1,015,535	17,909	1,595,982	592,538	585	330				255		12			
138,076	222,144	405,144	693	20,805	140,367	531,725	11,823	2,001,826	1,548,278	174					174		13			
1,500		8,801		168	268	22,232	1,750	40,455	16,473	22					22		14			
155,888	280,858	920,703		19,435	70,978	4,153,194	30,787	6,046,310	1,862,329	660	132				528	70	15			
36,807	8,487	213,624	720	4,477	7,234	250,412	6,823	600,088	342,853	219			100		119		16			
319,460	123,110	2,161,400	3,025	23,987	653,118	4,076,235	309,810	10,934,722	5,648,677	5,226	3,900		35		1,291		17			
229,598	101,610	1,782,649		5,015	617,807	4,435,906	296,881	9,632,246	4,899,459	5,005	3,900				1,105		18			
89,862	21,500	378,751	3,025	18,972	35,311	540,329	12,929	1,302,470	749,218	221			35		186		19			
197,020	54,356	1,331,974	7,512	21,702	65,855	2,695,958	50,134	4,977,560	2,231,468	6,772	4,871	85	12		1,804	360	20			
1,814,957	1,405,332	14,578,780	16,608	72,722	1,075,233	37,357,127	1,401,851	62,708,335	23,859,357	27,912	7,880	1,000	230		18,802	671	21			
1,631,567	1,319,003	12,323,394	15,074	68,162	880,063	28,210,516	1,117,013	48,393,780	19,066,251	14,809	2,680		230		11,999	671	22			
183,390	85,729	2,255,386	634	4,560	195,170	9,146,611	874,838	14,314,555	4,793,106	13,003	5,200	1,000			6,893		23			
712,522	1,930,301	5,895,407	22,868	389,282	392,870	27,262,941	852,848	44,923,454	16,807,665	6,339	395			163	5,781	184	24			
50,610	412,877	506,877		15,030	42,164	2,031,292	42,192	3,841,637	1,768,153	393	305				88	150	25			
661,912	1,517,424	5,388,530	22,868	374,252	350,706	25,231,649	810,656	41,081,817	15,039,512	5,946	90			163	5,693	34	26			
159,029	36,256	1,180,743	9,010	3,619	87,031	189,406	628,508	3,339,381	2,521,467	6,047	5,884		90		73		27			
136,320	27,965	879,594	9,010	3,599	52,304	122,172	440,107	2,530,064	1,961,695	3,887	3,838		16		33		28			
22,709	8,291	301,149		20	34,727	67,234	182,311	809,317	559,772	2,160	2,040		74		40		29			
6,437	10,267	74,864		2,580	2,027	296,248	2,075	487,873	188,950	89			6		83		30			
14,400	25,347	156,507	269	3,140	6,031	331,084	8,174	668,828	328,670	171	1,883				171		31			
287,013	276,978	1,173,610	19,667	31,978	143,126	20,346,320	234,593	33,385,520	3,801,628	4,943	3,451	192	167		2,701	100	32			
302,658	95,678	1,185,224	2,576	8,575	97,460	7,849,401	121,541	11,172,169	3,201,227	4,185	3,451		38		696	183	33			
134,865	54,102	498,014	2,576	629	51,434	3,192,569	62,002	4,889,660	1,634,195	2,406	2,032		5		369	145	34			
167,793	41,576	637,210		7,946	46,026	4,656,832	58,639	6,282,503	1,507,032	1,779	1,419		33		327	38	35			
23,113	1,390	19,315	126	2,675	247	9,531	1,782	50,219	47,906	63					53		36			
101,035	4,516	138,863		48	10,936	268,344	9,709	605,937	227,884	569	350		10	25	184		37			
23,291	77,406	736,711		300	163,824	1,365,263	31,410	3,410,047	2,013,374	609	250				359	41	38			
	11,992	252,379	1,515	5,406	21,945	19,839	15,991	1,010,954	581,124	565	125			25	2	413		39		
23,291	11,042	206,942	1,515	3,090	20,366	383,374	14,136	902,545	505,035	502	125			10		367		40		
	950	45,437		1,416	1,579	36,405	1,855	114,409	76,089	63				15	2	46		41		
35,956	36,362	2,088,383		9,266	25,451	1,580,149	45,050	3,828,271	2,203,072	849	385				464		42			
763,239	309,385	9,862,344	965		66,485	5,751,556	477,086	17,223,189	10,994,547	11,079	3,250	260	33		7,536	955	43			
203,492	155,121	1,738,993	814	38,537	204,450	2,094,766	1,807,821	9,643,454	5,680,867	35,470	15,105	15,600	305	2,000	2,460	19,398	44			
21,946	32,643	171,563	200	3,227	6,256	3,161,993	50,288	3,603,131	444,850	668	530	21	35		82	5	45			
1,121,081	957,788	8,949,577	1,940	20,050	2,399,240	9,292,541	6,451,534	37,850,834	22,106,759	74,943	22,710	37,237	22	100	14,874	20,541	46			
163,948	455,207	181,667		5,195	127,130	1,780,623	11,481	3,598,751	1,707,647	312	150				154	120	47			
152,785	452,274	171,030		1,755	126,675	1,745,784	10,570	3,445,939	1,689,285	302	150			8	144	120	48			
11,163	2,933	10,037		3,440	455	43,830	611	152,812	108,362	10					10		49			
318,376	522,938	1,379,564	24,100	38,537	132,451	5,508,057	38,102	9,189,112	3,642,953	1,034	750				284	370	50			
318,376	522,938	1,338,102	23,340	36,058	131,862	5,507,502	36,738	9,054,507	3,510,267	1,022	750				272	370	51			
136,797	175,339	493,951	23,340	8,475	72,533	1,660,999	11,589	2,870,908	1,189,380	491	375				116	5	52			
181,579	844,151	44,462		27,583	59,329	3,837,503	25,149	6,183,539	2,320,887	531	375				156	365	53			
				700	2,479	589	1,364	134,005	132,686	12					12		54			
220,862	110,001	750,422	1,528	32,259	60,939	2,255,644	17,359	3,923,300	1,650,297	262	15				247		55			
214,282	109,281	717,040	722	20,409	60,866	2,253,944	16,883	3,865,380	1,594,763	249	15				234		56			
121,306	65,714	431,215	412	12,221	46,751	922,076	6,183	1,861,695	633,436	118					118		57			
22,930	16,386	30,956	10	3,612	1,811	121,104	1,096	233,348	111,148	22					22		58			
70,046	27,181	254,869	300	13,576	12,304	1,210,764	9,404	1,770,337	550,169	109	15				94		59			
6,580	720	33,382	806	2,850	73	1,700	676	57,920	55,544	13					13		60			
25,011	11,994	163,801		40,748	10,682	406,470	53,272	817,053	367,311	521	312				209	220	61			
43,690	42,636	73,968		21,050	7,139	2,117,703	15,730	2,514,184	380,751	461					461		62			
136,558	164,921	379,320	999	8,610	87,571	1,310,576	20,510	2,522,213	1,182,118	1,087										

MANUFACTURES—MICHIGAN.

TABLE 36.—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	Cooperage.....	35	122	26	8	3	2	83	Oc	120	Mh	61	112	112	.....	.....	238,480
2	Copper, tin, and sheet-iron work.....	115	963	117	83	34	35	694	Oc	801	Fe	577	785	780	.....	.....	2,060,440
3	Corsets.....	12	1,848	4	75	92	148	1,529	De	1,744	Je	1,402	1,744	196	1,540	2	4,223,201	
4	Cutlery and edge tools.....	5	112	2	11	6	2	91	No	100	Fe	84	90	91	6	2	187,970	
5	Dairymen's, poultrymen's, and apsarists' supplies.....	13	162	9	13	6	9	125	Se	145	De	97	122	109	13	.....	533,487
6	Dental goods.....	8	112	4	9	8	6	85	Jy	95	Ja	71	90	56	34	.....	190,589
7	Druggists' preparations.....	16	3,991	7	112	326	327	3,219	No	3,317	Ap	3,145	3,309	1,459	1,850	.....	20,343,212
8	Electrical machinery, apparatus, and supplies.....	54	5,105	19	230	377	349	4,190	No	4,908	Ap	3,775	4,657	2,876	1,776	2	15,967,238	
9	Electroplating.....	21	228	20	22	4	5	177	No	214	Fe	127	201	194	7	.....	216,936
10	Enameling.....	6	71	8	5	1	1	56	No	82	Ja	23	66	62	2	1	77,438	
11	Engines, steam, gas, and water.....	35	16,050	4	492	777	519	14,258	Ja	16,691	Ap	10,460	16,328	15,738	587	5	62,506,989	
12	Engraving, steel and copper plate, including plate printing.....	10	93	16	2	4	4	67	De	85	Ja	61	78	58	21	1	76,018	
13	Envelopes.....	4	131	.....	11	8	7	105	De	121	Jy	96	121	36	84	.....	369,032
14	Fancy articles, not elsewhere specified.....	8	156	5	12	14	8	117	No	136	Mh	86	137	39	95	1	230,459	
15	Files.....	5	59	2	5	2	.....	50	De	56	Ja	45	56	53	3	.....	125,611
16	Flags and banners.....	4	45	2	5	1	2	35	No	50	Oc	24	39	8	31	.....	52,952
17	Flavoring extracts.....	11	76	6	19	22	4	25	De	28	Ja	20	28	12	15	1	179,247	
18	Flax and hemp, dressed.....	4	44	3	8	1	1	40	De	53	Jy	27	53	53	.....	.....	147,515
19	Flour-mill and gristmill products.....	345	1,947	400	106	145	108	1,128	Ja	1,266	Je	1,022	1,224	1,125	99	.....	18,066,143
20	Food preparations, not elsewhere specified.....	37	3,312	20	113	480	216	2,483	.....	.....	.....	.....	2,524	1,780	744	.....	18,823,565
21	Breadstuff preparations, cereals and breakfast foods.....	5	2,907	.....	78	462	194	2,263	Au	3,124	Ja	1,605	2,102	1,440	662	.....	16,654,018
22	Macaroni, vermicelli, and noodles.....	6	97	3	8	3	2	81	De	99	Je	51	99	78	21	.....	743,584
23	Peanut butter.....	3	29	2	2	2	3	20	De	24	Ja	16	19	9	10	.....	131,456
24	All other.....	23	189	15	25	13	17	119	Oc	284	Ja	71	304	253	51	.....	1,293,807
25	Foundry and machine-shop products.....	523	45,532	282	2,126	2,123	1,571	39,430	45,584	42,925	2,590	65	4	183,114,339
26	Boiler shops.....	24	943	20	51	50	34	788	De	890	Mh	678	882	881	1	.....	3,475,800
27	Foundries.....	101	15,653	49	540	442	236	14,386	No	17,307	Ja	11,453	17,559	16,592	945	21	1	43,557,610
28	Machine shops.....	303	25,393	199	1,380	1,400	1,210	21,144	No	23,479	Ap	20,148	23,445	21,790	1,616	36	3	77,486,087
29	Machine shop and foundry combined.....	35	3,543	14	155	171	91	3,112	No	3,764	Ap	2,607	3,698	3,662	28	8	8,694,872
30	Fur goods.....	31	582	30	24	51	51	426	De	502	Ap	394	480	175	305	.....	2,224,096
31	Furnishing goods, men's, neckwear.....	3	42	3	2	5	4	28	Au	32	De	26	27	5	22	.....	77,964
32	Furniture.....	171	20,765	68	791	795	615	18,496	21,347	18,325	2,828	141	53	53,725,259
33	Wood, including rattan and willow.....	140	17,943	54	680	504	410	16,295	De	18,823	Ja	14,017	18,810	15,964	2,657	136	53	45,892,299
34	Metal furniture and store and office fixtures.....	31	2,822	14	111	291	205	2,201	De	2,542	Ja	1,891	2,537	2,361	171	5	7,832,960
35	Furs, dressed.....	4	37	1	1	1	2	28	Fe	32	Au	20	27	12	15	.....	46,725
36	Gas and electric fixtures.....	13	184	6	26	22	12	118	De	142	Ja	92	145	126	18	1	433,142
37	Gas, illuminating and heating.....	59	4,044	2	208	362	626	2,846	De	3,275	Fe	2,387	3,286	3,282	4	.....	60,125,709
38	Glass, cutting, staining, and ornamenting.....	14	139	10	16	1	8	104	No	130	Ja	80	129	126	3	.....	2,186,742
39	Gloves and mittens, cloth, not including gloves made in textile mills.....	9	155	9	9	3	2	132	Au	149	Ap	113	148	11	137	.....	229,826
40	Grease and tallow, not including lubricating greases.....	14	179	9	14	4	8	144	Au	150	Ap	135	148	147	1	.....	1,364,848
41	Hand stamps.....	11	49	13	6	3	7	20	Au	21	De	15	21	18	2	1	46,673
42	Hardware.....	30	2,473	12	92	104	91	2,174	2,562	1,952	591	18	1	5,621,907
43	Locks and builders' hardware.....	9	499	2	22	17	17	441	De	550	Ja	334	550	373	177	.....	1,047,641
44	Vehicle hardware.....	7	1,087	.....	45	52	41	949	Oc	1,107	Ja	764	1,063	928	135	.....	2,528,276
45	All other.....	14	887	10	25	35	33	784	De	990	Mh	628	949	651	279	18	1	2,045,990
46	House-furnishing goods, not elsewhere specified.....	10	478	7	19	32	19	401	De	473	Ja	222	497	289	200	4	4	1,673,948
47	Ice, manufactured.....	18	868	14	66	12	34	742	Jy	1,084	Ja	460	769	748	21	.....	5,105,412
48	Iron and steel, blast furnaces.....	11	1,203	39	45	18	1	1,101	Ja	1,173	No	1,033	1,139	1,137	2	.....	15,820,266
49	Iron and steel, steel works and rolling mills.....	7	1,675	68	118	34	1,455	No	1,675	My	1,110	1,454	1,454	4	.....	10,081,631	
50	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	6	476	1	16	23	13	423	Se	468	No	387	395	369	35	1	1,620,926
51	Iron and steel forgings, not made in steel works or rolling mills.....	15	1,806	.....	74	97	39	1,596	Oc	1,919	Ja	1,046	1,778	1,696	82	.....	6,970,591
52	Iron and steel, tempering and welding.....	26	177	25	24	6	3	119	No	143	Ap	102	122	122	.....	.....	304,087
53	Jewelry.....	22	195	24	17	8	25	121	De	144	Ja	104	143	121	22	.....	602,325
54	Knit goods.....	31	3,437	8	89	98	72	3,170	De	3,416	Je	2,971	3,542	835	2,638	17	52	9,122,918
55	Labels and tags.....	7	115	1	17	6	10	81	No	89	Mh	75	89	48	38	.....	218,304
56	Lamps and reflectors.....	8	1,034	1	67	22	20	924	Se	1,168	Ja	731	811	590	221	.....	2,730,728
57	Leather goods, not elsewhere specified.....	14	225	11	24	8	9	173	Ap	192	Ja	145	187	117	70	.....	728,731
58	Leather, tanned, curried, and finished.....	28	3,748	1	158	81	44	3,464	Au	3,622	Ja	3,302	3,528	3,350	172	.....	32,886,376
59	Lime.....	6	241	2	7	6	4	222	Au	263	Mh	162	227	227	.....	.....	601,900
60	Liquors, malt.....	25	1,011	7	104	97	24	779	Jy	1,087	Ja	517	692	688	4	.....	7,224,012
61	Lithographing.....	10	550	4	43	49	16	438	De	504	Ja	361	504	384	120	.....	1,912,267
62	Looking-glass and picture frames.....	8	62	4	7	7	5	46	Fe	50	Oc	42	43	35	8	.....	71,409
63	Lumber and timber products.....	380	16,139	410	363	317	126	14,923	Fe	16,575	Je	13,649	18,170	17,927	221	22	49,093,440
64	Lumber, planing-mill products, not including planing mills connected with sawmills.....	192	6,434	153	380	372	273	5,256	De	5,953	Ja	4,251	5,333	5,454	332	47	24,835,940
65	Machine tools.....	31	3,685	5	137	212	135	3,196	No	3,436	Je	3,030	3,385	3,177	202	6	14,438,803

* 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).

MANUFACTURES—MICHIGAN.

35

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.							
11,913	5,095	97,297	3,475	1,728	4,597	458,584	2,383	654,342	193,395	139	55	24	60	1		
183,376	90,272	958,254	8,800	47,405	63,755	1,701,078	20,029	3,790,651	2,068,944	471	416	26	445	2		
288,011	458,374	1,030,652		15,891	141,187	2,890,568	22,154	7,207,824	4,385,104	724	65	34	274	3	160	
21,879	7,307	76,415		1,852	1,712	41,825	5,797	179,373	131,751	151		19	86	4		
30,598	15,689	118,130	49	2,892	3,578	274,369	11,224	635,464	349,871	120			101	5		
34,736	18,181	98,348	3,229	6,046	13,312	94,829	2,315	310,089	222,145	54			54	6		
549,113	1,180,893	2,830,077		14,441	2,207,430	9,880,817	115,376	23,903,866	13,907,663	1,471	540	500	431	7		
1,062,059	949,048	4,685,479	7,565	100,420	1,597,016	8,812,100	222,806	25,025,528	15,990,472	5,659	285		5,357	8		
42,617	9,243	242,722		16,649	2,192	77,797	24,087	535,620	433,736	619			41	9		
16,850	1,146	84,636		4,930	1,088	53,129	24,806	211,639	133,704	53			37	10		
1,870,985	2,039,218	21,362,743	800	43,014	5,103,583	56,214,185	836,508	101,989,440	44,638,747	30,488	3,350	50	27,009	11	8,026	
3,000	6,088	81,748	300	7,570	187	38,572	1,207	201,395	161,616	27			27	12		
22,221	15,849	96,594	2,720	5,135	11,048	213,775	3,673	455,305	237,857	116				13		
28,160	14,959	71,012	887	0,892	4,407	185,973	2,914	399,221	210,334	27				14		
11,812	1,000	74,557		475	2,455	52,207	9,312	177,138	121,609	370	40		40	15		
10,592	8,120	23,285	225	4,675	1,801	52,647	1,385	108,137	49,105	20				16		
30,777	33,289	21,096		2,490	2,422	106,254	1,465	350,330	149,611	37			15	17		
8,151	1,402	31,963			670	135,213	1,304	184,208	47,691	48				18		
399,982	266,556	1,266,772	10,144	43,809	251,841	37,760,280	408,815	44,144,434	5,059,839	29,028	9,560	845	2,044	19	2,210	
722,166	772,309	3,107,993	3,034	57,609	1,830,598	18,096,732	717,334	35,701,760	16,888,694	12,157	2,930	500	12	20	4,000	
638,635	734,522	2,917,006		49,089	1,786,609	16,490,810	651,830	33,158,108	16,015,461	10,761	2,650	500		21	4,800	
14,860	6,069	80,524		780	13,230	390,247	18,347	574,382	165,788	398	150			22	100	
4,960	3,853	14,549		1,130	2,472	334,275	2,875	380,983	43,838	125				23		
63,711	27,865	95,914	3,034	6,610	27,227	880,303	44,282	1,588,287	663,612	873	130		12	24		
7,345,593	4,688,654	52,415,677	1,203,839	396,745	6,810,539	64,642,116	4,158,028	169,492,545	100,662,401	84,776	10,307	1,507	625	25	11,187	
213,738	183,929	1,167,093	35,556	10,049	419,281	2,017,965	87,094	5,277,320	3,152,261	2,100	1,265		43	26	586	
883,297	811,261	19,597,140	1,040,783	50,418	1,771,611	21,497,154	2,102,822	60,322,084	32,722,708	36,891	2,630	32	42	27	1,170	
4,699,093	3,352,090	27,647,338	108,200	267,732	4,126,636	36,076,473	1,701,067	95,296,966	57,456,426	39,577	4,646	1,475	540	28	7,054	
577,043	371,374	4,003,506	26,300	68,546	493,611	5,027,524	207,045	12,505,575	7,331,006	6,208	1,706		1,452	29	1,751	
75,390	175,983	411,618	1,838	38,895	52,099	1,272,008	9,034	2,443,527	1,161,885	117				30		
7,000	9,277	22,290		2,815	2,627	110,104	255	201,085	90,726	0				31		
3,021,947	2,943,921	19,659,909	805,890	89,615	2,056,189	27,527,005	783,207	69,497,237	41,187,025	28,947	19,809	1,694	30	32	4,564	
2,573,744	1,908,767	17,148,788	296,064	84,370	1,818,322	22,816,109	676,420	58,569,672	35,077,143	25,133	17,629	1,079	18	33	8,044	
448,203	1,040,164	2,511,121	9,826	5,245	237,867	4,710,896	106,787	10,927,565	6,109,882	3,814	2,180	15	12	34	920	
15,060	1,892	33,286		2,040	534	75,038	2,552	152,654	75,064	113	80			35		
70,446	40,165	179,040		25,850	10,004	812,426	5,386	1,417,303	599,491	75			8	36		
503,947	1,159,831	8,965,259	6,510	1,520	1,247,040	2,514,834	5,755	17,993,314	9,722,982	13,593	10,484	1,032	1,272	37	3,149	
39,945	11,085	167,883	572	0,790	4,851	324,200	6,761	619,497	289,540	137	35			38		
22,888	4,241	68,604		6,073	4,312	397,569	1,934	532,652	133,149	107	21			39		
37,935	12,960	244,047	244	115	20,488	810,416	80,947	1,410,631	510,268	583	137			40		
9,300	10,203	21,646		5,987	407	52,893	1,647	151,038	96,498	25				41		
334,060	258,304	2,497,723	11,108	53,451	204,192	3,101,526	90,458	8,780,825	5,568,943	2,671	755		40	42	1,876	
76,078	50,507	505,511	11,100	22,180	17,800	637,030	15,899	1,748,739	1,045,801	319	76			43	244	
187,530	99,768	1,224,411		28,652	124,453	1,512,501	47,145	4,206,711	2,647,065	1,419	150		40	44	1,229	
90,457	108,029	767,801	2,619	61,939	901,986	27,412	27,412	2,806,375	1,875,977	933	530			45	403	
126,964	133,432	347,894	7,009	64,789	780,797	21,137		1,954,741	1,162,807	1,608	1,010		75	46	523	
163,121	80,101	1,186,323		81,209	452,670	264,706	2,821,688	2,104,252	3,235,318	8,137	1,328			47	6,809	
123,442	95,927	1,719,380		865,518	4,904,809	5,393,552	13,533,739	3,235,318	5,442,840	6,367	4,805	1,125		48	437	
311,943	268,358	2,471,088	12,000	641,542	2,393,307	609,406	8,344,643	5,442,840		9,142	2,710			49	6,432	
91,592	69,922	544,432	32,554	3,802	51,369	865,167	78,595	1,941,884	908,122	970				50	970	
282,425	178,109	2,386,888		10,300	266,535	4,474,800	389,911	8,559,180	3,697,479	6,757	2,420	150		51	4,187	
77,915	15,246	184,256	242	17,588	11,049	123,218	42,993	616,279	450,068	371			76	52	206	
54,207	58,850	159,954	4,010	18,221	3,000	422,250	1,495	961,685	537,940	76				53	76	
324,152	324,895	2,114,908	226,850	108,524	658,361	6,655,330	135,058	12,030,377	5,248,991	3,073	1,460		15	54	1,598	
33,043	14,380	78,868	1,668	6,225	7,190	131,892	3,665	328,712	193,165	78				55	78	
210,981	60,760	1,940,320		6,676	52,142	2,065,882	56,484	5,563,932	3,471,566	1,772				56	1,772	
89,895	22,428	139,079		11,380	14,094	824,185	5,479	1,258,893	426,226	132			42	57	60	
626,698	302,105	4,162,546		1,270	9,110,150	31,685,075	786,723	45,800,786	13,348,988	12,243	8,278	520	1,110	58	2,335	
23,150	10,286	182,546		200	11,044	142,424	142,424	625,750	334,730	1,195	1,000		118	59	77	
348,821	179,353	1,052,491		20,100	703,979	777,029	249,956	5,278,052	3,249,007	6,658	3,279			60	3,379	
138,474	117,924	467,455	33,844	14,705	57,172	186,042	18,817	1,926,149	1,144,290	687	517		25	61	145	
17,640	4,436	46,187		11,750	961	50,025	1,833	189,123	137,765	17				62	17	
1,077,905	589,560	14,593,524	2,332,752	10,886	1,432,794	15,471,880	211,676	46,043,855	30,360,299	79,449	70,028	4,245	850	63	2,307	
1,334,351	782,287	5,821,510	141,616	54,293	719,063	23,643,702	365,706	37,869,230	13,859,822	27,070	14,968	1,752	237	64	10,113	
663,481	547,780	4,408,088	25,476	32,501	619,855	3,789,355	182,818	12,656,492	8,684,319	5,905	400		3.0		5,185	

¹ Same number reported for one or more other months.

MANUFACTURES—MICHIGAN.

TABLE 36.—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	Marble and stone work.....	103	595	115	47	48	365									1,904,119
2	Monuments and tombstones.....	83	341	99	19	32	176	Se	187	Ja	152	414	412	2		916,033
3	Other marble and stone work, except slate.....	20	254	16	28	16	189	No	281	Ja	105	224	224			988,086
4	Mattresses and spring beds, not elsewhere specified.....	16	222	15	16	12	8	Se	207	Ja	125	188	151	37		540,661
5	Millinery and lace goods, not elsewhere specified.....	12	427	6	25	27	50	Au	380	Je	284	325	132	181	8	1,441,479
6	Mineral and soda waters.....	131	929	160	70	35	62	Jy	717	Ja	351	529	519	7	3	4,066,587
7	Mineral and carbonated waters.....	126	814	159	58	32	54	Se	177	Ja	37	455	448	4	3	3,148,638
8	Fruit beverages.....	5	115	1	12	3	8	De	1,043	Ja	727	74	71	3		1,517,949
9	Models and patterns, not including paper patterns.....	52	1,009	41	71	16	20	De	1,043	Ja	727	1,069	1,064	4	1	1,232,471
10	Musical instruments and materials, not specified.....	11	474	7	31	9	49	Ja	407	Se	362	360	266	33	1	562,327
11	Musical instruments, pianos.....	8	1,257		34	77	24	De	1,288	My	1,038	1,288	1,103	132	44	7,882,678
12	Needles, pins, and hooks and eyes.....	3	162		11	2	7	De	158	Ap	130	148	90	58		440,871
13	Oil, essential.....	29	115	31	12	7	3	Au	116	Ja	47	117	114	3		974,755
14	Oil, vegetable and composite.....	3	117		10	17	3	De	143	Ja	31	96	96			1,806,195
15	Optical goods.....	11	272	7	18	13	39	Au	207	De	176	178	120	58		513,282
16	Paints.....	24	1,800	6	119	423	233	Oc	1,167	Fe	887	1,124	1,004	118	1	12,174,996
17	Paper and wood pulp.....	39	10,225	3	279	241	141	No	346	Mh	157	9,825	8,558	1,265	2	53,680,651
18	Paper exclusively.....	27	7,533	3	176	182	100	De	7,343	Ap	6,723	7,339	6,217	1,120	2	86,481,698
19	Pulp exclusively.....	4	309		7	9	3	No	346	Mh	157	313	310	3		2,227,672
20	Paper and pulp.....	8	2,383		96	50	29	No	2,310	Ap	2,063	2,173	2,031	142		14,971,281
21	Paper goods, not elsewhere specified.....	10	568	7	30	57	23	Au	503	No	433	446	293	143	10	2,533,806
22	Patent medicines and compounds.....	70	2,146	41	223	248	242	No	1,324	Jy	1,102	1,485	645	838	2	6,827,919
23	Patent and proprietary medicines.....	49	1,983	27	187	227	218	No	1,432	Jy	1,102	1,396	580	814	2	5,883,231
24	Patent and proprietary compounds, not elsewhere specified.....	21	163	14	36	21	24	Au	74	Je	61	89	65	24		744,668
25	Paving materials.....	9	293	10	14	17	2	Au	341	Mh	111	325	325			2,305,555
26	Perfumery and cosmetics.....	21	222	11	25	14	32	Oc	169	Ja	101	103	60	97	4	565,248
27	Phonographs and graphophones.....	10	929	1	46	42	42	De	1,036	Mh	637	1,019	907	106	6	2,599,218
28	Photo-engraving.....	18	263	9	39	26	20	No	183	Ja	139	182	175	7		222,010
29	Pickles, preserves, and sauces.....	44	653	27	51	56	36	Jy	174	Ja	18	551	411	137	3	3,196,311
30	Preserves.....	4	82	1	7	2	2	De	1,035	Ja	662	51	42	9		493,766
31	Pickles and sauces.....	40	571	26	44	54	34	Se	614	Ap	301	500	369	128	3	2,752,545
32	Plumbers' supplies, not elsewhere specified.....	11	1,032	9	55	80	51	De	1,035	Ja	662	989	910	79		2,272,829
33	Pottery.....	6	835	3	71	16	37					819	487	329	3	1,860,703
34	China ware.....	3	780		67	15	36	Ja	812	Au	615	766	434	329	3	1,775,122
35	Earthen and stone ware.....	3	55	3	4	1	1	No	55	Jy	37	53	53			85,511
36	Printing and publishing, book and job.....	436	5,216	413	399	318	369					3,986	2,726	1,208	47	11,366,835
37	Job printing.....	405	4,750	387	366	197	273	De	4,017	Ja	3,535	3,812	2,583	1,177	47	10,273,161
38	Book publishing and printing.....	5	65	5	4	5	10	Oc	49	Je	31	43	30	13		218,499
39	Book publishing without printing.....	16	219	10	15	115	77	(*)	2	(*)	2	2	2			498,830
40	Linotype work and typesetting.....	10	182	11	14	1	9	De	163	Ap	135	129	111	18		375,805
41	Printing and publishing, newspapers and periodicals.....	565	6,643	483	1,021	1,142	821					3,392	2,723	596	66	14,562,346
42	Printing and publishing.....	44	3,069	14	199	890	452	De	1,637	Ja	1,410	1,633	1,528	94	10	8,918,066
43	Printing, publishing, and job printing.....	438	3,248	432	753	178	250	De	1,703	Fe	1,597	1,732	1,175	496	55	5,191,083
44	Publishing without printing.....	83	326	87	69	74	119	Au	29	Ja	24	27	20	6	1	453,175
45	Printing materials.....	3	12		3	1	1	(*)	7	(*)	7	7	7			33,001
46	Pumps, not including power pumps.....	6	294	2	14	15	16	Se	336	Fe	175	263	129	5	97	479,837
47	Refrigerators.....	12	1,918	4	88	99	72	De	1,938	Jy	1,511	1,929	1,745	177	5	6,190,766
48	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	7	7,053	4	173	1,481	351	De	5,968	Ja	4,184	5,881	5,439	438	4	57,418,022
49	Saddlery and harness.....	51	326	50	11	5	7	No	317	My	185	300	217	83		942,557
50	Salt.....	12	513		95	257	98	De	2,255	Mh	1,923	2,274	2,110	154	10	12,804,898
51	Sand-lime brick.....	7	123		14		3	Au	136	Mh	46	137	137			428,081
52	Sausage, not made in slaughtering and meat-packing establishments.....	29	228	32	10	18	9					163	143	19	1	483,363
53	Sausage.....	18	131	19	6	12	6	Oc	92	Ja	84	88	79	8	1	283,025
54	Sausage casings.....	11	97	13	4	6	3	De	75	Ap	67	75	64	11		200,338
55	Saws.....	9	109	8	14	9	8	De	75	Ja	67	75	64	11		405,667
56	Scales and balances.....	3	575		29	43	88	Oc	534	Ja	292	506	487	19		2,253,891
57	Screws, machine.....	20	1,854	11	103	55	61	No	1,811	Ja	1,440	1,754	1,562	192	1	6,655,739
58	Shipbuilding, steel, new vessels and small boats.....	7	17,061	1	428	526	110	Mh	20,269	De	9,460	19,133	19,073	59	1	21,826,060
59	Shipbuilding, wooden, including boat building.....	26	613	17	25	15	11					906	904	2		2,270,552
60	New vessels and small boats.....	20	307	13	20	7	9	Mh	327	Se	204	299	297	2		1,093,075
61	Repair work only.....	6	306	4	5	8	2	Oc	575	Ja	88	607	607			1,177,477
62	Shirts.....	10	524	3	15	20	9	No	495	Je	458	477	37	416	5	440,185

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 manufac- ture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Elec- tric horse- power gener- ated in estab- lish- ments report- ing.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.				
											Steam en- gines (not tur- bines).	Steam tur- bines.	Inter- com- bus- tion en- gines.	Wate- r pow- er. ¹		Rent- ed.^{2}

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

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	2,098	135	40	1,917	3	1
109,395	91,708	547,499	30,756	17,453	23,506	985,338	36,152	2,579,563	1,558,073	602	602	135	40	646	3	2
30,340	65,779	256,095	17,433	6,989	12,370	612,332	18,792	1,488,541	857,417	1,406	1,406	135	40	1,271	3	3
70,055	24,927	201,404	13,323	10,464	11,217	373,006	17,360	1,091,022	700,056	487	487	135	40	487	4	4
45,431	18,998	195,076	355	10,450	12,721	773,410	11,563	1,360,403	584,430	245	245	200	6	45	231	5
140,015	141,606	222,820	14,770	14,046	195,251	1,038,329	8,820	2,221,578	1,174,420	1,921	1,921	497	6	1,410	246	6
184,356	114,873	772,395	1,360	35,772	222,783	2,784,938	80,178	5,465,851	2,601,735	1,622	1,622	207	3	1,410	7	7
143,189	103,325	666,352	1,360	33,672	207,253	72,256	25,590	2,089,634	857,417	290	290	290	3	6	246	8
41,167	11,548	106,043	204	2,100	15,530	1,082,184	7,922	1,602,207	512,101	636	636	290	6	630	33	9
257,901	43,722	1,724,836	200	4,126	26,221	245,348	13,121	866,101	607,632	268	268	268	6	268	10	10
64,173	59,899	389,258	7,357	181,570	2,774,186	49,311	5,397,445	2,573,948	1,767	1,037	1,037	1,037	25	730	482	11
247,497	149,824	1,170,048	650	47,021	112,089	8,744	667,035	547,102	204	35	35	35	25	169	5	12
74,707	12,347	135,803	2,000	11,857	589,599	9,291	951,250	282,360	715	690	690	690	25	121	82	13
55,451	13,683	56,849	2,078	10,218	2,550,973	20,325	2,810,776	248,478	321	200	200	200	104	74	1,214	14
31,612	42,643	81,422	4,010	355,337	6,188	1,008,542	647,017	6,870,813	3,850	1,875	1,875	1,875	104	1,811	1,214	15
40,000	60,042	183,212	31,621	478,599	9,400,905	103,437	16,435,155	6,870,813	3,850	1,875	1,875	1,875	104	1,811	1,214	16
449,812	1,034,354	1,275,903	32,722	3,034,802	30,428,304	3,925,143	66,239,513	25,940,066	95,729	57,347	57,347	57,347	10,050	5,313	33,594	17
1,237,077	652,642	11,177,009	31,122	2,166,950	30,057,967	2,734,183	52,433,859	19,041,709	58,890	46,096	46,096	46,096	6,448	3,060	21,171	18
778,803	529,641	8,200,540	1,600	52,337	725,303	109,567	1,470,960	636,090	13,360	470	470	470	80	10,900	500	19
25,150	14,131	353,874	815,515	5,045,034	1,081,393	12,394,694	6,268,267	23,479	10,181	3,527	3,527	3,527	3	1,552	11,923	20
438,124	108,870	2,562,595	6,320	114,385	2,250,505	39,104	3,747,514	1,451,905	290	610	610	610	3	287	808	21
119,757	128,741	480,642	11,612	49,853	333,938	4,143,426	69,380	9,948,329	5,735,523	1,026	1,026	1,026	3	413	842	22
660,907	683,520	1,204,359	7,412	32,181	315,747	3,450,289	61,084	8,685,235	5,176,862	814	814	814	3	279	842	23
540,386	635,524	1,117,761	4,200	17,702	18,191	693,137	8,296	1,260,094	558,661	212	212	75	3	134	24	24
120,521	47,996	86,598	2,175	35,156	283,821	71,056	883,991	528,514	7,414	2,720	2,720	12	4,682	25	25	25
33,151	32,407	346,064	135	20,511	32,201	474,034	7,268	1,002,499	611,197	145	145	30	115	26	26	26
79,524	59,934	116,688	2,069	114,070	1,032,731	40,112	4,230,492	2,557,649	611	300	300	300	143	311	27	27
110,525	140,431	668,203	24,175	7,179	113,777	7,345	964,044	845,822	143	214	214	30	55	143	28	28
102,714	65,623	308,257	6,991	127,283	2,071,623	37,326	4,835,452	1,827,004	661	94	94	45	302	29	29	29
141,266	139,150	404,588	3,705	23,404	765,306	6,248	1,129,361	1,827,004	94	45	45	30	55	49	30	30
29,402	3,386	64,853	3,286	103,819	2,206,317	31,577	3,707,091	1,469,197	567	169	169	30	55	313	31	31
111,393	135,764	389,735	7,234	48,850	1,488,933	46,019	3,299,739	1,764,787	1,938	700	700	700	1,178	130	32	32
148,409	873,042	873,708	53,977	394,878	147,083	2,113,252	1,671,291	879	520	879	520	46	22	359	33	33
216,363	67,913	851,180	52,270	359,396	139,441	1,985,760	1,486,029	735	420	735	420	46	22	315	34	34
207,303	66,330	799,249	1,098	55,482	7,542	127,486	84,362	144	100	144	100	46	22	44	35	35
9,000	1,583	51,931	253,518	6,318,042	152,854	17,676,925	11,204,129	4,261	540	4,261	540	46	22	3,653	433	36
1,146,866	990,327	4,681,124	562,319	372,228	253,518	6,318,042	152,854	17,676,925	11,204,129	4,261	540	46	22	3,653	433	36
1,069,549	531,857	4,426,327	381,571	347,265	242,884	6,122,828	145,131	16,063,502	9,825,543	4,121	540	46	22	3,513	433	37
7,930	13,377	38,429	1,669	4,140	2,553	50,503	3,169	226,678	137,306	90	90	15	2,236	38	38	38
31,746	434,040	2,548	179,079	11,053	5,297	73,508	529	880,230	806,193	50	50	15	2,236	38	38	38
37,641	10,453	213,820	9,770	2,684	36,103	4,025	475,215	435,087	50	15	15	15	15	6,012	14	40
13,781,009	2,394,038	3,935,040	589,320	199,152	985,318	7,506,072	100,073	24,930,421	17,234,276	0,438	0,438	396	15	6,012	14	41
726,595	1,740,190	2,235,540	13,478	61,791	868,506	5,609,063	84,448	17,019,172	11,325,061	3,725	3,725	396	15	3,725	42	42
470,458	455,305	1,671,831	98,982	108,254	70,598	1,677,240	104,490	6,297,947	4,516,217	2,602	2,602	396	15	2,236	14	43
180,956	198,543	27,669	470,560	31,107	40,214	219,169	1,135	1,613,302	1,392,098	51	51	150	5	51	44	44
7,780	1,049	8,739	344	3,282	1,475	8,060	454	50,884	42,370	6	6	150	5	6	45	45
45,836	27,530	293,378	8,575	3,358	343,100	11,210	515,711	450,401	298	298	298	150	5	298	46	46
263,493	221,111	1,575,915	9,000	194,900	3,140,671	65,263	6,718,348	3,512,514	3,498	2,705	2,705	150	5	613	1,858	47
803,667	2,449,238	7,181,166	3,780	2,008,780	20,747,228	432,386	50,318,116	29,138,502	8,752	2,025	2,025	4,500	5	2,227	6,435	48
35,692	11,914	267,090	17,026	80,398	1,088,026	10,953	2,101,341	1,002,362	188	188	188	328	5	188	49	49
413,813	490,017	2,539,083	1,350	511,348	4,207,499	2,131,420	14,053,709	7,714,880	10,321	5,538	5,538	1,743	2	3,038	1,582	50
30,865	2,348	146,855	18,076	184,736	32,995	530,069	312,938	312,938	816	750	750	328	5	60	10	51
25,876	38,828	226,047	3,613	6,110	7,140	2,283,468	29,966	2,930,736	617,302	776	776	328	5	028	52	52
13,786	24,524	128,314	3,500	2,470	3,560	1,310,511	12,144	1,750,880	419,225	524	524	328	5	376	53	53
12,080	14,304	97,733	113	2,649	3,580	963,957	17,822	1,179,856	188,077	252	252	328	5	252	54	54
39,971	19,424	87,133	500	3,867	35,152	174,737	5,430	466,106	285,930	195	195	328	5	65	55	55
80,770	172,818	515,975	21,036	84,309	500,296	12,028	2,340,245	1,827,321	380	80	80	328	5	300	56	56
875,995	149,752	2,114,463	26,149	18,407	595,708	3,502,023	120,752	7,035,902	4,313,127	4,337	4,337	328	5	3,837	57	57
1,006,431	669,223	28,183,839	16,120	3,744,860	34,301,460	655,177	83,124,336	48,077,699	30,047	2,835	2,835	1,200	328	25,684	2,838	58
73,070	33,739	787,381	5,510	14,498	1,046,933	26,678	2,030,366	956,755	1,106	385	385	53	608	59	59	59
57,627	16,679	445,810	4,840	4,118	868,138	14,277	1,498,168	615,753	695	155	155	35	405	60	60	60
15,452	17,060	291,571	670	10,380	178,795	12,401	532,198	341,002	511	230	230	18	263	61	61	61
28,367	10,208	236,509	1,608	7,292	3,884	1,078,875	7,378	1,726,477	640,224	68	68	18	263	62	62	62

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

MANUFACTURES—MICHIGAN.

TABLE 36.—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.	Fe- male.	Aver- age num- ber.	Number, 15th day of—		Male.	Fe- male.	Male.	Fe- male.		
								Maximum month.							Minimum month.

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

1	Show cases.....	6	310	2	14	24	9	261	No	277	Ja	239	265	252	13	.....	Dollars.
2	Signs and advertising novelties.....	25	355	32	25	15	23	260	Jy	131	Fe	88	306	234	72	.....	902,553
3	Signs, other than electric.....	17	152	24	10	3	3	112	Oc	198	Ja	90	111	110	1	.....	705,575
4	Electric signs and advertising novelties.....	8	203	8	15	12	20	148	Oc	198	Ja	90	195	124	71	.....	174,980
5	Slaughtering and meat packing.....	24	2,083	18	73	193	87	1,712	De	2,073	My	1,465	2,073	1,773	297	2	16,431,187	
6	Smelting and refining, copper.....	4	759	.....	9	37	4	709	Mh	973	Je	537	598	598	.....	.....	5,940,624
7	Smelting and refining, not from the ore.....	4	41	.....	10	3	3	25	Ja	26	Au	24	24	23	1	.....	188,783
8	Sporting and athletic goods.....	12	423	7	24	9	10	373	De	447	Ja	290	445	324	121	.....	913,735
9	Springs, steel, car and carriage, not made in steel works or rolling mills.....	6	1,072	.....	39	37	26	1,870	Se	2,100	My	1,549	1,952	1,835	117	.....	3,707,451
10	Stamped ware, not elsewhere specified.....	21	1,350	4	72	37	52	1,185	Au	1,380	Ap	845	1,125	870	254	1	4,200,572	
11	Statuary and art goods.....	4	22	7	.....	.....	1	14	De	16	Fe	12	16	16	.....	.....	11,829
12	Steam fittings and steam and hot-water heating apparatus.....	15	865	2	31	45	25	762	.....	.....	.....	.....	1,253	1,224	29	.....	3,101,564
13	Radiators and cast-iron heating boilers.....	4	766	.....	13	36	16	701	Oc	1,203	My	138	1,174	1,145	20	.....	2,840,865
14	All other.....	11	99	2	18	9	9	61	De	79	Fe	38	79	79	.....	.....	200,689
15	Steam packing.....	6	326	1	16	19	15	275	No	325	Ap	195	303	164	139	.....	1,300,305
16	Stencils and brands.....	4	33	2	6	.....	2	23	De	36	My	17	37	24	12	1	49,163
17	Stereotyping and electrotyping.....	8	228	3	22	13	13	177	De	199	Ja	136	200	193	6	1	332,864	
18	Stoves and hot-air furnaces.....	21	5,040	5	188	397	210	4,240	No	3,021	Ja	2,423	4,601	4,502	91	8	18,843,360	
19	Stoves and ranges.....	8	3,190	.....	87	232	128	2,743	No	1,658	Ja	1,392	2,928	2,837	83	8	11,406,813
20	Hot-air furnaces and fireless cookers.....	13	1,850	5	101	165	82	1,497	No	1,658	Ja	1,392	1,673	1,665	8	.....	7,436,547
21	Stoves, gas and oil.....	7	1,252	.....	38	177	36	1,001	De	1,132	Ja	870	1,169	1,101	68	.....	4,594,041
22	Structural ironwork, not made in steel works or rolling mills.....	34	3,118	22	128	487	168	2,313	De	2,727	My	1,932	2,731	2,657	73	1	12,116,532	
23	Sugar, beet.....	16	2,221	.....	106	210	69	1,836	De	4,383	Mh	590	4,807	4,733	74	.....	27,673,865
24	Surgical appliances.....	9	108	10	8	1	5	84	Mh	91	Ja	76	82	20	62	.....	81,620
25	Tinware, not elsewhere specified.....	6	1,022	.....	41	34	29	918	Oc	993	Mh	848	967	575	392	.....	3,200,475
26	Tobacco, chewing and smoking, and snuff.....	14	1,004	11	16	140	21	816	.....	.....	.....	.....	784	266	518	.....	5,041,982
27	Chewing and smoking.....	8	908	5	16	140	21	816	Ja	932	Ap	752	784	266	518	.....	5,020,452
28	Snuff.....	6	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21,630
29	Tobacco, cigars and cigarettes.....	349	6,224	300	268	92	58	5,456	De	5,918	Je	4,656	6,103	1,000	5,088	5	10	9,221,680
30	Tools, not elsewhere specified.....	89	3,827	57	205	165	139	3,261	3,803	3,246	554	3	8,464,898
31	Machinists' tools.....	54	2,344	30	130	93	95	1,990	No	2,425	De	1,344	2,434	2,231	102	1	5,118,078	
32	All other.....	35	1,483	27	75	72	44	1,265	No	1,498	Ap	1,146	1,469	1,015	452	2	3,346,322
33	Toys and games.....	12	403	12	16	7	7	361	Au	466	Ja	267	353	248	104	1	910,837
34	Trunks and valises.....	10	237	11	12	4	11	199	Jy	201	My	196	199	126	73	.....	519,606
35	Upholstering materials, not elsewhere specified.....	9	236	4	18	6	4	204	No	223	Mh	184	228	183	45	.....	1,127,682
36	Varnishes.....	6	452	1	47	119	92	193	No	222	Mh	169	200	187	19	.....	3,408,004
37	Vinegar and cider.....	42	169	50	13	1	5	100	.....	.....	.....	.....	142	122	20	.....	1,079,167
38	Vinegar.....	10	84	15	7	.....	2	00	Oc	118	Ja	39	74	54	20	.....	847,923
39	Cider.....	32	85	35	6	1	3	40	Oc	111	Je	17	68	68	.....	.....	231,244
40	Wall plaster and composition flooring.....	10	744	1	33	91	34	585	No	700	Ja	401	653	630	23	.....	2,847,954
41	Window and door screens and weather strips.....	15	379	10	16	16	18	319	.....	.....	.....	.....	377	313	60	4	1,723,212
42	Window and door screens.....	11	347	8	12	9	10	308	Ja	360	Jy	230	365	301	60	4	1,537,795	
43	Weather strips.....	4	32	2	4	7	8	11	De	12	Au	10	12	12	.....	.....	185,417
44	Window shades and fixtures.....	5	864	.....	24	34	40	766	De	941	Ap	588	941	624	316	1	2,369,200
45	Wirework, not elsewhere specified.....	38	2,901	19	135	140	91	2,516	2,775	2,154	601	13	7	8,093,804
46	Woven-wire fencing.....	11	747	2	34	74	23	614	Mh	697	Jy	542	735	735	.....	.....	3,455,055
47	All other.....	27	2,154	17	101	66	63	1,902	Jy	2,170	Ja	1,434	2,040	1,419	601	13	7	5,538,749
48	Wood distillation.....	16	1,764	.....	72	69	37	1,586	Fe	1,773	Je	1,444	1,591	1,591	.....	.....	15,381,952
49	Wood, turned and carved.....	34	715	27	41	8	17	622	Je	723	Ja	550	759	692	64	3	1,525,818	
50	Wooden goods, not elsewhere specified.....	18	1,118	13	42	57	22	984	De	1,142	Se	872	1,185	919	338	24	4	2,490,201
51	Woolen goods.....	6	880	2	35	14	17	812	De	892	Ja	652	892	505	377	5	5	3,624,687
52	All other industries *.....	199	20,856	105	880	1,166	694	18,011	.....	.....	.....	.....	.....	.....	.....	.....	90,404,045

*All other industries embrace—
 Ammunition..... 1
 Artificial flowers..... 1
 Babbitt metal and solder..... 6
 Bags, paper, not including bags made in paper mills..... 1
 Baking powders and yeast..... 2
 Belting, woven, other than rubber..... 1
 Billiard tables and accessories..... 2
 Blacking, stains, and dressings..... 2
 Bluing..... 2
 Boot and shoe cut stock..... 2
 Buttons..... 5
 Canning and preserving, fish..... 2
 Card cutting and designing..... 1
 Cars, steam-railroad, not including operations of railroad companies..... 1

Cash registers and calculating machines..... 8
 Charcoal, not including production in the lumber and wood distillation industries..... 2
 Chewing gum..... 2
 China decorating, not including that done in potteries..... 1
 Clocks..... 3
 Cloth, sponging and refinishing..... 1
 Coke, not including gas-house coke..... 2
 Cordage and twine..... 2
 Cordials and flavoring syrups..... 2
 Cotton goods..... 3
 Dyeing and finishing textiles, exclusive of that done in textile mills..... 1

Dyestuffs and extracts—natural..... 2
 Emery and other abrasive wheels..... 2
 Engraving and diesinking..... 2
 Engraving, wood..... 1
 Explosives..... 1
 Felt goods..... 1
 Fertilizers..... 1
 Firearms..... 1
 Fire extinguishers, chemical..... 2
 Fireworks..... 1
 Foundry supplies..... 2
 Galvanizing..... 1
 Gas machines and gas and water meters..... 3
 Glass..... 1

Gloves and mittens, leather..... 4
 Glucose and starch..... 2
 Gold and silver, reducing and refining, not from the ore..... 2
 Graphite, ground and refined..... 2
 Grindstones..... 1
 Hair work..... 1
 Hardware, saddlery..... 1
 Hat and cap materials..... 1
 Hats and caps, other than felt, straw, and wool..... 5
 Hats, fur-felt..... 1
 Hats, straw..... 1
 Horseshoes, not made in steel works or rolling mills..... 1
 Ink, printing..... 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).

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[illegible][illegible]

^a Same number reported for one or more other months.

MANUFACTURES—MICHIGAN.

TABLE 36.—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	DETROIT—All industries.....	2,176	198,144	1,489	7,709	13,377	8,553	107,016	No	185,910	Mh	151,248	183,996	160,796	22,724	414	62	Dollars. 788,329,200	
2	Artificial limbs.....	6	20	5	2	2	1	10	Jy ^a	11	Ja ^s	7	12	11	1			28,566	
3	Artificial stone products.....	13	129	17	10	1	3	98	Oc	135	Ja	38	126	126				338,212	
4	Automobile bodies and parts.....	110	36,395	54	911	1,425	957	33,048	Oc	38,780	Ja	26,049	37,760	36,164	1,565	31		120,928,578	
5	Automobiles.....	26	37,694	2	1,070	1,775	1,775	32,042	Oc	37,599	Ja	26,290	35,338	33,863	1,304	171		172,900,788	
6	Automobile repairing.....	25	308	24	18	15	19	232	Oc	300	Fe	171	299	298	1			261,140	
7	Awings, tents, and sails.....	10	214	7	21	29	16	141	Jy	189	Fe	94	133	74	59			431,170	
8	Bookbinding and blank-book making.....	9	217	5	17	8	11	176	De	205	Ja	157	205	55	150			294,902	
9	Boots and shoes.....	4	183	3	7	6	3	164	Oc	169	Ja	155	164	104	60			302,607	
10	Boxes, cigar.....	4	228	1	8	2	3	214	Se	241	Ja	180	223	58	162	3		148,865	
11	Boxes, paper and other, not elsewhere specified.....	8	331	5	20	8	9	289	Jy ^s	303	Se	261	266	95	160	5		529,804	
12	Boxes, wooden packing, except cigar boxes.....	11	518	7	27	6	10	468	No	543	My	405	530	515	15			1,500,652	
13	Brass, bronze, and copper products.....	50	9,686	14	300	474	234	8,664	Se	10,422	Ap	7,701	9,228	8,512	714	2		30,600,102	
14	Bread and other bakery products.....	284	3,573	316	114	589	216	2,338	No	2,487	Fe	2,111	2,598	2,066	528	3	1	8,544,442	
15	Brick, building.....	4	125		9	1	3	112	Se	154	Ja ^s	88	131	131				488,227	
16	Butter.....	10	309	1	31	38	40	199	Je	247	Fe	155	186	139	46	1		5,149,536	
17	Carpets, rag.....	3	4	4														1,203	
18	Carriages and sleds, children's.....	3	5	3				2	(¹)	2	(¹)	2	2	2				11,000	
19	Chemicals.....	10	2,263	148	295	112	1,708	Ja	2,214	Je	1,497	1,679	1,638	40	1			14,961,887	
20	Cleansing and polishing preparations.....	11	36	7	10	8	15	15	De	22	Ja ^s	11	24	13	11			30,304	
21	Clothing, men's.....	18	1,431	17	32	92	80	1,210	De	1,405	Mh	1,112	1,405	220	1,180	2	3	5,184,553	
22	Clothing, women's.....	13	465	8	35	15	12	395					438	43	395			652,822	
23	Shirt waists and dresses, except house dresses.....	6	382	1	30	12	11	328	Ja ^s	352	Je	293	363	38	325			602,801	
24	All other.....	7	82	6	5	3	1	67	Jy ^s	71	Oc ^s	61	75	5	70			60,021	
25	Coffee, roasting and grinding.....	10	113	8	10	14	20	61	Jy	68	My	55	63	30	33			818,364	
26	Coffins, burial cases, and undertakers' goods.....	8	138	7	9	13	4	105	Fe	119	Je	94	103	75	27	1		465,994	
27	Confectionery and ice cream.....	38	1,015	44	43	48	39	841	No	2,096	My	1,519	1,030	423	607			2,023,346	
28	Copper, tin, and sheet-iron work.....	45	487	40	38	22	17	364	Oc	423	Fe	307	399	399				1,028,773	
29	Electrical machinery, apparatus, and supplies.....	29	2,448	7	146	191	210	1,894	De	2,244	Ap	1,654	2,244	1,344	896	2	3	7,859,733	
30	Electroplating.....	12	171	12	19	3	4	133	No	158	Ja	91	147	144	3			177,596	
31	Engines, steam, gas, and water.....	13	7,543	2	224	534	300	6,483	Ja	8,520	Fe	5,651	6,934	6,695	239	9	1	31,231,060	
32	Engraving, steel and copper plate, including plate printing.....	6	60	8	2	3	3	44	De	58	Ja ^s	39	54	44				47,369	
33	Food preparations, not elsewhere specified.....	8	69	5	11	5	4	44	My	58	Mh ^s	33	49	30	13			428,010	
34	Foundry and machine-shop products.....	171	15,674	64	846	737	627	13,400					14,934	13,974	951	6	3	39,839,344	
35	Foundries.....	20	3,615	8	148	89	37	3,388	No	3,922	Ap	2,739	3,879	3,769	110			6,596,335	
36	Machine shops.....	140	10,890	55	663	610	560	9,002	No	10,189	Fe	8,123	9,796	8,969	828	6	3	81,496,732	
37	All other.....	11	1,169	6	35	38	30	1,060	De	1,259	Ap	833	1,259	1,240	13			1,976,277	
38	Fur goods.....	17	429	17	18	46	39	310	De	355	Ja	276	346	117	229			1,610,609	
39	Furnishing goods, men's, neckwear.....	3	42	.....	2	5	4	28	Au	32	De	25	27	5	22			77,964
40	Furniture.....	16	1,285	7	62	32	51	1,133					1,185	965	228	2		3,442,500	
41	Wood furniture, other than rattan and willow.....	12	1,222	3	54	29	48	1,088	My	1,142	Ja	1,044	1,117	887	228	2		3,290,557	
42	All other.....	4	63	4	8	3	3	45	De	68	Ja	12	68	68				151,843	
43	Glass, cutting, staining, and ornamenting.....	9	89	8	10	1	4	66	No ^s	87	Ja	48	87	84	3			2,025,853	
44	Hand stamps.....	8	41	10	5	3	5	18	Ja ^s	20	De	9	18	16	2			39,237	
45	Hardware.....	15	1,443	2	62	71	53	1,255	No	2,627	De	1,753	1,416	1,207	209			2,910,619	
46	House-furnishing goods, not elsewhere specified.....	5	70	5	9	3	6	47	Ja	71	My	34	70	36	34			128,459	
47	Iron and steel, forgings, not made in steel works or rolling mills.....	6	720	.....	30	38	14	638	Au	864	Ja	320	705	705				3,443,281
48	Iron and steel, tempering and welding.....	13	146	8	24	6	3	105	No	127	Mh	92	108	108				209,690	
49	Jewelry.....	19	177	22	16	8	22	109	De	127	Ja	92	126	115	11			478,701	
50	Knif goods.....	8	275	2	21	6	10	236	De	204	Ap	192	306	75	231			1,009,883	
51	Leather goods, not elsewhere specified.....	10	163	8	20	4	8	123	Ap	143	Ja	95	129	80	49			531,175	
52	Leather, tanned, curried, and finished.....	3	403	.....	25	22	7	349	Se	369	Ap	300	301	284	17			3,758,497
53	Liquors, malt.....	9	648	5	69	60	20	604	Jy	701	Fe	348	449	445	4			4,606,553	
54	Lumber, planing-mill products, not including planing mills connected with sawmills.....	32	1,400	18	69	55	26	1,232	Au	1,403	Mh	1,047	1,324	1,311	8	5		5,164,142	
55	Machine tools.....	14	2,318	2	60	114	93	2,049	No	2,176	My	1,949	2,142	1,945	191	0		9,997,264	
56	Marble and stone work.....	22	279	21	27	20	6	205					232	232				1,030,041	
57	Monuments and tombstones.....	8	50	12	2	4	2	30	My	35	Fe	25	31	31				169,213	
58	Other marble and stone work, except slate.....	14	229	9	25	16	4	175	No	258	Ja	104	201	201				870,828	
59	Mattresses and spring beds, not elsewhere specified.....	6	109	0	7	5	0	85	Se	114	Ja	59	100	78	22			291,265	
60	Millinery and lace goods, not elsewhere specified.....	7	70	5	4	2	15	44	Se	48	Je	36	42	4	38			57,555	

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.						
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	Electric horsepower generated in establishments reporting.
											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.

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
31,073,381	31,642,425	245,433,882	1,208,522	3,292,484	54,797,732	639,955,795	15,957,068	1,234,519,842	578,606,379	308,250	82,379	22,453	3,406	.....	200,012	79,688	1
4,940	4,160	12,762	.....	4,650	129	10,501	784	57,509	46,274	16	.....	.....	.....	.....	16	.....	2
23,878	4,585	156,614	.....	8,968	3,832	200,974	6,039	526,061	319,048	119	.....	.....	.....	.....	112	.....	3
4,490,610	3,506,466	55,660,205	61,972	185,253	6,117,025	95,672,059	2,038,643	201,465,182	103,744,480	52,020	5,140	020	414	.....	46,746	1,961	4
5,158,737	5,841,759	48,441,007	.....	492,033	17,975,236	229,020,653	1,993,113	348,772,599	117,749,833	37,221	8,746	40	414	.....	28,395	16,465	5
38,394	81,668	360,356	290	46,827	1,251	257,561	9,204	827,985	561,220	145	.....	.....	.....	.....	145	.....	6
79,418	56,826	173,921	.....	19,983	73,436	756,292	4,604	1,379,577	618,681	87	.....	.....	.....	.....	87	.....	7
44,787	21,148	134,781	.....	15,315	5,540	122,742	1,821	484,158	359,595	81	.....	.....	.....	.....	81	.....	8
19,094	43,424	179,908	.....	7,663	18,888	546,276	5,886	932,107	379,945	129	80	.....	.....	.....	49	70	9
27,076	5,806	161,426	.....	4,057	8,325	152,893	4,749	409,544	251,902	146	.....	.....	.....	.....	56	.....	10
71,149	22,475	221,177	1,045	19,132	23,831	426,734	9,281	987,132	551,117	156	.....	.....	.....	.....	156	.....	11
87,834	21,350	512,234	.....	19,790	30,983	921,073	21,591	1,812,856	870,192	1,750	925	.....	.....	.....	825	.....	12
1,602,318	1,132,674	12,429,050	16,404	59,030	888,507	28,106,593	1,185,737	49,239,768	19,947,438	24,866	7,230	1,000	.....	.....	16,636	311	13
454,927	1,455,127	3,120,705	8,563	199,824	222,118	13,121,250	420,085	22,631,347	9,089,412	3,258	145	.....	.....	.....	3,105	.....	14
66,750	4,852	199,806	9,010	1,800	25,909	33,510	92,452	614,736	488,774	480	450	.....	.....	.....	20	.....	15
95,425	106,001	321,121	.....	14,753	63,873	6,715,643	42,443	7,777,022	1,018,936	1,395	.....	.....	.....	.....	1,325	.....	16
.....	.....	2,623	.....	1,205	1,955	1,955	240	8,835	7,040	2	.....	.....	.....	.....	2	.....	17
541,928	544,687	2,765,963	751	20,638	418,867	2,361,237	1,100,354	11,355,383	7,704,702	20,339	10,444	8,122	.....	.....	1,778	9,375	18
12,663	2,513	13,637	.....	4,775	420	47,555	603	172,111	123,953	14	.....	.....	.....	.....	14	.....	19
245,453	450,709	1,006,451	22,360	29,704	109,184	4,390,316	25,139	7,124,219	2,708,764	833	750	.....	.....	.....	83	370	20
92,083	44,389	354,355	722	16,559	33,157	821,230	5,946	1,559,372	732,196	96	.....	.....	.....	.....	96	.....	21
80,858	41,309	297,583	412	9,054	32,642	603,711	4,421	1,210,545	602,413	77	.....	.....	.....	.....	77	.....	22
6,725	2,860	52,932	310	4,405	467	216,019	1,525	348,827	129,783	19	.....	.....	.....	.....	19	.....	23
39,660	33,890	56,663	.....	15,800	4,760	1,685,136	12,834	2,004,404	306,434	390	.....	.....	.....	.....	300	.....	24
55,353	46,680	123,351	720	5,429	50,041	300,837	5,297	774,567	438,433	189	54	.....	.....	.....	135	.....	25
117,219	146,361	731,226	.....	123,466	253,301	2,866,320	65,392	5,363,154	2,461,442	2,021	277	.....	.....	.....	1,744	1	26
87,843	53,755	548,165	8,660	20,620	23,379	856,991	8,276	2,043,402	1,178,135	313	.....	.....	.....	.....	313	.....	27
719,330	496,450	2,094,059	800	99,331	703,908	4,461,297	122,967	12,970,284	8,380,020	3,084	.....	.....	.....	.....	3,059	.....	28
37,677	7,058	188,571	.....	14,223	1,738	60,908	17,309	426,434	348,217	489	26	.....	.....	.....	463	10	29
1,007,885	1,276,643	10,429,954	500	33,763	1,156,046	14,141,983	330,769	36,611,142	22,132,390	16,109	1,400	50	.....	.....	14,669	7,681	30
3,000	3,748	60,425	300	5,610	8	26,303	855	149,559	122,301	14	.....	.....	.....	.....	14	.....	31
15,080	9,974	48,245	.....	5,240	7,904	216,660	10,611	374,536	147,265	187	150	.....	.....	.....	37	100	32
2,932,965	1,898,766	19,800,679	65,606	272,992	1,923,268	21,088,054	1,235,422	58,384,369	36,060,893	22,956	4,184	.....	.....	.....	18,346	1,735	33
643,161	167,221	5,359,399	12,000	42,426	554,774	4,223,388	564,781	13,324,581	8,536,412	6,822	1,344	.....	.....	.....	5,468	461	34
2,139,877	1,600,855	12,650,495	28,306	191,733	1,093,589	15,432,144	600,597	40,708,491	24,669,750	14,543	2,150	.....	.....	.....	11,977	1,159	35
149,627	130,690	1,760,785	25,300	38,833	274,905	1,432,522	64,044	4,351,297	2,854,731	1,591	690	.....	.....	.....	901	115	36
63,390	159,553	328,994	1,000	32,230	46,310	1,059,576	8,955	2,031,793	968,262	46	.....	.....	.....	.....	46	.....	37
7,000	9,277	22,290	.....	2,816	527	110,104	255	201,085	90,726	6	.....	.....	.....	.....	6	.....	38
202,115	203,072	1,225,460	3,645	12,044	144,456	1,483,347	50,087	3,965,855	2,416,421	1,454	1,215	30	.....	.....	209	802	39
194,141	197,673	1,177,637	3,645	10,104	143,072	1,380,234	53,797	3,766,491	2,332,460	1,328	1,165	30	.....	.....	133	802	40
7,974	5,899	47,823	.....	1,940	1,384	103,113	2,290	189,364	83,961	126	50	.....	.....	.....	76	.....	41
25,295	6,905	108,617	572	8,020	3,694	159,279	3,150	354,080	191,651	67	.....	.....	.....	.....	67	.....	42
8,000	8,485	19,426	.....	5,417	351	49,420	1,571	133,170	88,170	23	.....	.....	.....	.....	23	.....	43
220,412	145,018	1,582,377	11,106	50,449	128,637	2,053,416	57,871	5,325,168	3,215,168	1,599	180	.....	.....	.....	1,379	.....	44
25,390	20,596	41,951	.....	6,465	2,702	189,226	2,797	343,017	150,994	611	450	.....	.....	.....	161	.....	45
120,087	61,272	978,849	.....	9,400	53,769	1,118,560	100,522	2,416,250	1,197,168	2,979	1,775	150	.....	.....	1,054	900	46
77,915	15,246	163,661	242	12,064	10,928	93,157	30,885	532,091	199,049	322	.....	.....	.....	.....	252	70	47
52,707	55,959	151,942	.....	17,561	2,775	416,620	1,402	937,784	519,762	72	.....	.....	.....	.....	72	.....	48
71,029	15,740	193,767	4,010	27,840	55,316	608,629	11,040	1,102,769	483,100	316	220	.....	.....	.....	96	140	49
78,406	16,562	99,469	.....	10,720	8,720	600,016	3,304	933,871	329,651	105	.....	.....	.....	.....	63	.....	50
111,423	155,717	803,374	.....	483,277	6,164,997	47,402	8,624,215	2,411,816	2,411,816	1,072	835	.....	.....	.....	237	900	51
247,847	123,065	754,735	.....	24,000	511,885	1,287,422	142,166	2,339,842	3,905	1,735	.....	.....	.....	.....	2,170	180	52
286,396	126,320	1,764,346	357	27,449	143,800	5,618,003	98,695	9,114,453	3,397,755	5,895	3,613	.....	.....	.....	2,122	1,114	53
379,185	311,921	2,894,785	25,476	21,002	436,741	2,556,309	94,647	8,245,106	5,594,150	2,547	275	.....	.....	.....	1,952	.....	54
75,880	32,715	316,027	11,827	10,826	12,918	414,610	19,022	1,186,101	752,599	1,309	135	.....	.....	.....	1,100	.....	55
12,425	5,828	43,611	300	600	2,185	92,457	2,841	148,742	148,742	95	.....	.....	.....	.....	81	.....	56
63,455	23,887	272,416	11,527	9,726	10,733	322,053	10,181	942,061	603,827	1,214	135	.....	.....	.....	1,079	.....	57
27,451	13,933	120,615	355	9,670	5,028	449,275	6,521	818,698	362,902	185	.....	.....	.....	.....	185	.....	58
11,909	9,608	38,589	2,000	8,133	13,114	122,004	414	246,387	123,969	10	.....	.....	.....	.....	10	.....	59

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

TABLE 36.—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.

DETROIT—Continued.																Dollars.	
1	Mineral and soda waters.....	28	403	35	32	16	38	282	Jy	397	Ja	104	245	242	2	1	1,837,898
2	Models and patterns, not including paper patterns.....	29	792	19	53	15	12	693	De	804	Ja	574	855	882	3	1	1,018,107
3	Oil, vegetable and composite.....	3	117	10	17	3	87	De	143	Ja	31	96	90	94	54	1	1,306,195
4	Optical goods.....	4	225	1	13	9	37	165	Au	178	De	140	148	94	54	1	451,008
5	Paints.....	11	812	2	59	213	119	410	Oc	536	Fe	300	422	386	84	1	4,411,002
6	Patent medicines and compounds.....	25	1,739	14	181	183	193	1,168	No	1,215	Jy	1,021	1,209	533	674	2	5,312,434
7	Patent and proprietary medicines.....	18	1,047	10	160	169	178	1,131	No	1,215	Jy	1,021	1,107	506	659	2	4,928,209
8	Patent and proprietary compounds, not elsewhere specified.....	7	92	4	22	14	15	37	No	46	Fe	28	42	27	15	1	387,225
9	Perfumery and cosmetics.....	15	155	10	18	2	21	104	Oc	133	Ja	66	122	41	79	2	422,945
10	Photo-engraving.....	12	221	7	30	22	18	144	No	157	Ja	110	150	149	7	1	278,537
11	Pickles, preserves, and sauces.....	12	159	10	20	13	5	111	Oc	124	De	98	97	52	45	1	406,738
12	Plumbers' supplies, not elsewhere specified.....	5	110	5	6	7	5	87	De	124	Ja	49	124	110	8	1	310,176
13	Printing and publishing, book and job.....	186	2,958	157	242	229	232	2,098	De	2,108	Ja	1,835	2,227	1,511	697	18	6,089,385
14	Job printing.....	171	2,623	147	218	134	160	1,904	De	2,108	Ja	1,835	2,113	1,415	679	18	5,897,391
15	Book publishing without printing.....	8	172	3	10	94	63	2	(3)	2	(3)	2	2	2	2	1	301,047
16	Book publishing and printing, linotype work and typesetting.....	7	103	7	14	1	9	132	No	149	Ap	119	112	94	18	1	327,347
17	Printing and publishing, newspapers and periodicals.....	70	2,307	25	177	619	404	1,082	De	896	Ja	751	1,181	1,100	62	10	7,034,682
18	Printing and publishing.....	7	1,607	2	93	498	258	816	De	896	Ja	751	891	873	18	1	5,924,365
19	Printing, publishing, and job printing.....	19	392	5	33	60	41	253	De	277	Ja	239	277	220	42	0	772,081
20	Publishing without printing.....	44	248	18	51	61	105	13	My	14	Ja	12	13	10	2	1	338,286
21	Sausage, not made in slaughtering and meat-packing establishments.....	9	116	9	7	13	2	85	De	88	Ap	82	88	78	10	1	219,889
22	Screws, machine.....	15	1,391	7	67	53	52	1,212	No	1,347	Ja	1,071	1,281	1,111	170	1	5,287,072
23	Shipbuilding, wooden.....	4	110	7	1	3	99	Mh	127	Se	81	111	111	38	1	189,936	
24	Shirts.....	3	48	2	2	1	41	De	42	Mh	40	42	4	38	1	23,609	
25	Signs and advertising novelties.....	14	91	18	5	2	62	Se	72	Ja	43	68	65	3	1	107,021	
26	Slaughtering and meat packing.....	11	1,967	5	57	188	85	1,622	De	1,983	My	1,375	1,983	1,683	297	2	16,082,329
27	Stamped ware, not elsewhere specified.....	15	1,197	1	67	31	43	1,055	Ja	1,223	Ap	845	954	747	236	1	3,147,044
28	Statuary and art goods.....	4	22	7	1	14	1	De	16	Fe	12	16	16	6	1	11,829	
29	Steam fittings and steam and hot-water heating apparatus.....	9	549	23	12	19	495	Oc	788	My	181	771	742	29	1	2,031,229	
30	Stereotyping and electrotyping.....	5	154	3	14	8	121	De	131	Ja	92	131	126	4	1	191,007	
31	Stoves and hot-air furnaces.....	5	2,715	02	204	93	2,356	No	2,553	Ja	2,098	2,442	2,415	19	8	9,859,356	
32	Structural ironwork, not made in steel works or rolling mills.....	21	1,990	10	70	317	127	1,457	De	1,872	My	1,101	1,872	1,849	22	1	7,792,391
33	Tobacco, cigars and cigarettes.....	73	3,735	65	177	47	25	3,421	No	3,627	Je	2,717	3,612	346	3,264	1	6,485,293
34	Tools, not elsewhere specified.....	74	2,729	47	162	92	101	2,327	No	2,843	Fe	1,955	2,737	2,630	106	1	6,095,985
35	Toys and games.....	6	22	10	3	3	12	Jy	11	Mh	4	28	4	23	1	35,748	
36	Trunks and valises.....	7	65	9	3	4	46	Jy	47	Ja	7	46	40	6	1	121,057	
37	Window and door screens and weather strips.....	6	40	7	3	5	20	Je	30	Fe	14	30	30	30	6	1	178,002
38	Wirework, not elsewhere specified.....	17	890	13	44	17	20	790	Au	978	Jy	477	772	575	197	1	1,696,659
39	Wood, turned and carved.....	4	65	2	5	4	54	Oc	66	Ja	40	64	62	2	1	101,337	
40	All other industries*.....	280	38,301	137	1,416	3,152	1,739	31,857	De	31,857	Ja	24,189	34,189	27,858	6,178	116	211,983,760

*All other industries embrace—

Agricultural implements.....	1
Aluminum manufactures.....	2
Babbitt metal and solder.....	6
Bags, other than paper, not including bags made in textile mills.....	4
Belting, leather.....	1
Blowing.....	2
Brooms, from broom corn.....	4
Brushes.....	3
Buttons.....	6
Card cutting and designing.....	1
Carriages and wagons, including repairs.....	2
Cars and general shop construction and repairs by steam-railroad companies.....	2
Cars, steam-railroad, not including operations of railroad companies.....	1

Cash registers and calculating machines.....	5
Cement.....	1
Chewing gum.....	1
Clocks.....	2
Cloth, sponging and refinishing.....	1
Coal-tar products.....	1
Condensed milk.....	1
Cooperage.....	3
Cordials and flavoring sirups.....	1
Corsets.....	2
Cotton goods.....	1
Cutlery and edge tools.....	1
Dairymen's, poultrymen's, and apiarists' supplies.....	1
Dental goods.....	7
Druggists' preparations.....	10
Dyeing and finishing textiles, exclusive of that done in textile mills.....	1

Emery and other abrasive wheels.....	3
Enameling.....	5
Engraving and diesinking.....	1
Engraving, wood.....	1
Envelopes.....	3
Fancy articles, not elsewhere specified.....	1
Fed.....	1
Fertilizers.....	1
Files.....	4
Fire extinguishers, chemical.....	2
Flags and banners.....	3
Flavoring extracts.....	5
Flour-mill and gristmill products.....	4
Foundry supplies.....	2
Furs, dressed.....	2
Galvanizing.....	1
Gas and electric fixtures.....	12
Gas and water meters.....	1
Gas, illuminating and heating.....	1

Gloves and mittens, cloth, not including gloves made in textile mills.....	2
Gloves and mittens, leather.....	1
Gold and silver, reducing and refining, not from the ore.....	1
Graphite, ground and refined.....	1
Grease and tallow, soap stock.....	1
Hat and cap materials.....	1
Hats and caps, other than felt, straw, and wool.....	4
Hats, straw.....	1
Horseshoes, not made in steel works or rolling mills.....	2
Ice, manufactured.....	1
Ink, printing.....	1
Ink, writing.....	1
Instruments, professional and scientific.....	3
Iron and steel, blast furnaces.....	1

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—MICHIGAN.

43

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.					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.	

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.						
118,743	73,232	408,130	1,000	14,718	148,453	1,026,670	31,877	2,384,184	1,325,637	803	40				763	1
212,916	36,980	1,483,832		43,373	38,543	296,172	16,178	2,703,024	2,390,674	438					438	2
31,612	42,643	81,422		2,678	10,218	2,550,973	20,325	2,819,776	248,478	321	200				121	3
28,440	55,892	153,646		1,700	3,408	322,255	4,851	866,904	539,798	141	90				51	4
237,565	407,107	576,905	1,667	28,510	239,104	3,742,397	54,476	7,036,782	3,239,909	1,826	875				1,161	5
550,050	500,133	1,021,230	8,876	44,910	295,970	3,373,310	56,060	8,091,447	4,601,477	794	535				269	6
464,507	468,006	980,888	4,676	28,398	283,298	2,890,212	53,228	7,280,137	4,336,697	719	535				184	7
86,152	32,127	40,342	4,200	16,512	12,672	483,098	3,432	811,310	324,780	75					75	8
46,642	18,210	91,044		17,096	25,685	330,886	4,088	717,050	381,476	125	30				95	9
87,002	60,231	270,900	21,066	21,216	6,455	95,345	6,107	850,812	749,300	117					117	10
55,309	37,978	112,477		6,849	17,920	477,494	8,638	892,635	406,505	100	30				70	11
17,630	14,344	114,212		6,904	7,013	200,041	10,600	516,194	305,553	210	125				94	12
769,897	782,773	2,769,607	441,130	245,545	188,521	4,121,348	73,102	11,430,857	7,236,407	2,023					2,018	13
706,290	353,591	2,572,516	310,865	227,805	181,808	4,033,006	69,273	10,270,385	6,167,756	1,977					1,972	14
22,966	418,729	2,548	128,593	8,508	4,276	55,802	424	720,265	664,039						46	15
37,611	10,453	194,543	1,060	9,142	2,437	32,540	3,405	440,567	404,612	46					46	16
587,335	1,495,641	1,783,875	363,137	60,659	608,914	4,945,757	50,067	14,017,463	9,020,739	2,048					2,008	17
833,311	1,160,110	1,358,841	379	19,885	547,712	4,277,812	37,140	11,321,031	7,006,079	2,466					2,466	18
88,040	145,910	408,219	1,300	17,055	21,568	469,250	13,230	1,318,577	836,097	446					406	19
165,975	180,621	16,815	361,458	29,719	39,634	198,695	597	1,377,855	1,178,563	36					36	20
18,280	24,704	119,857	2,119	3,473	1,313,923	16,643		1,693,309	362,743	326	15				311	21
288,093	135,952	1,575,027	26,084	2,750	344,448	2,658,853	82,554	6,019,583	3,278,176	2,920	500				2,420	22
18,664	4,324	147,048		3,770	792	103,359	2,576	287,998	182,063	85					85	23
2,500	3,700	30,228		5,576	500	116,295	210	176,915	61,410	7					7	24
21,697	8,231	94,477	7,269	6,279	1,305	101,511	780	305,208	202,917	2					2	25
289,548	341,273	2,170,786		1,640	172,595	47,993,092	178,125	57,648,125	9,476,908	4,382	2,615	500			1,237	26
230,342	92,985	1,090,826	4,850	10,117	480,768	3,414,620	65,670	6,973,264	3,492,965	1,160					1,100	27
	780	19,415		2,850	44	8,348	459	54,787	45,950							28
74,383	109,811	767,442		8,395	28,219	882,597	75,317	1,950,840	992,926	728	315				413	29
56,282	15,207	174,078	404	13,079	5,739	77,035	10,278	535,989	448,676	265					265	30
390,236	487,761	3,499,130		329,073	2,667,070	187,679	187,679	10,144,806	7,320,066	3,591	2,100	30	80		1,981	31
360,559	483,740	2,345,906		22,879	411,050	7,200,330	179,008	11,271,015	3,891,677	2,941					2,937	32
321,306	141,733	2,820,710	10,910	70,357	1,347,641	5,532,945	23,936	11,606,301	6,049,420	123					123	33
704,464	296,335	3,838,302	10,300	109,138	311,502	2,322,691	105,534	9,216,733	6,788,508	2,351	100		12		2,239	34
		9,034		2,540		10,262	388	42,807	23,167	5					5	35
5,890	6,684	58,725	200	93,214	3,135	1,294	1,294	202,955	108,447	22					22	36
16,438	9,075	38,141	750	4,721	4,180	90,816	997	190,227	98,414	54					54	37
128,815	68,497	664,416	5,115	18,683	78,268	1,323,661	33,150	2,930,334	1,573,523	1,104	400				704	38
16,060	4,587	66,244		2,988	3,358	24,524	2,567	199,032	171,941	152	100				52	39
5,282,328	7,028,604	45,019,210	137,381	409,616	17,449,699	88,555,444	5,107,130	233,407,399	139,744,825	65,877	24,075	11,911	1,539		28,352	40

Iron and steel, steel works and rolling mills.....	5	Musical instruments, pianos.....	1	Saws.....	2	Tobacco, chewing and smoking, and snuff.....	12
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	4	Needles, pins, and hooks and eyes.....	2	Scales and balances.....	2	Typewriters and supplies.....	1
Iron and steel, doors and shutters.....	3	Oleomargarine and other butter substitutes.....	1	Shipbuilding, steel, new vessels.....	4	Umbrellas and canes.....	2
Japanning.....	1	Paper and wood pulp.....	1	Show cases.....	1	Upholstering materials, not elsewhere specified.....	3
Lamps and reflectors.....	5	Paper goods, not elsewhere specified.....	2	Smelting and refining, not from the ore.....	2	Varnishes.....	3
Lead, bar, pipe, and sheet.....	1	Paving materials.....	2	Soap.....	1	Wall plaster, and composition flooring.....	2
Lithographing.....	6	Pottery.....	2	Sporting and athletic goods.....	3	Washing machines and clothes wringers.....	1
Looking-glass and picture frames.....	9	Printing and publishing, music.....	2	Springs, steel, automobile.....	1	Window shades and fixtures.....	2
Malt.....	2	Printing materials.....	2	Stationery goods, not elsewhere specified.....	1	Wire.....	1
Mirrors, framed and unframed, not elsewhere specified.....	1	Pumps, not including power pumps.....	3	Steam packing.....	3	Wood preserving.....	1
Motorcycles, bicycles, and parts.....	1	Refrigerators.....	2	Steel barrels, drums, and tanks.....	2	Wooden goods, not elsewhere specified.....	1
Mucilage, paste, and other adhesives, not elsewhere specified.....	2	Roofing materials.....	1	Stencils and brands.....	1		
Musical instruments and materials, not specified.....	1	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	2	Scores, gas and oil.....	3		
		Saddlery and harness.....	2	Surgical appliances.....	2		
		Salt.....	1	Suspenders, garters, and elastic woven goods.....	1		
		Sand-lime brick.....	1	Tinware, not elsewhere specified.....	4		

* Same number reported throughout the year.

* Same number reported for one or more other months.

MANUFACTURES—MICHIGAN.

TABLE 36.—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.

															Dollars.
1	FLINT—All industries.....	107	28,575	95	1,065	1,650	1,162	24,603	De 29,414	Ja 18,356	29,411	27,021	2,380	10	124,142,377
2	Artificial stone products.....	5	19	6	1	1	1	12	Jy 16	Ja 7	13	13			47,510
3	Automobile bodies and parts.....	3	1,218	38	61	25	1,094	Se 1,357	Ja 827	1,215	1,203	12			3,433,227
4	Automobile repairing.....	4	29	4	1	1	22	Se 24	Ja 20	25	24	1			18,885
5	Bread and other bakery products.....	20	285	12	60	22	170	Au 198	Fe 152	178	153	24	1		679,649
6	Confectionery and ice cream.....	6	54	11	2	2	40	Jy 48	Ja 36	38	23	15			55,184
7	Copper, tin, and sheet-iron work.....	5	26	3	1	1	18	Se 23	Ap 14	21	21				54,768
8	Foundry and machine-shop products.....	5	521	2	18	33	27	441	Jy 523	Ja 328	448	297	151		906,796
9	Lumber, planing-mill products, not including planing mills connected with sawmills.....	3	93	14	4	3	72	My 76	Ap 67	70	70				251,043
10	Mineral and carbonated waters.....	3	20	7	1	1	11	Au 19	Ja 5	8	8				33,992
11	Printing, job.....	9	103	6	11	6	78	Jy 93	Ap 60	83	47	35	1		249,750
12	Tobacco, cigars.....	7	67	10	1	1	55	De 78	Je 43	75	19	56			69,453
13	All other industries *.....	37	26,140	25	967	1,483	1,075	22,500			27,237	25,143	2,086	8	118,352,116

*All other industries embrace—
 Automobiles..... 4
 Awnings, tents, and sails..... 1
 Blacking, stains, and dressings..... 1
 Brass and bronze products..... 1

Brooms, from broom corn..... 1
 Butter..... 1
 Carriage and wagon materials..... 1
 Clothing, men's..... 1
 Clothing, women's..... 1
 Electroplating..... 1

Electrical machinery, apparatus, and supplies..... 3
 Flour-mill and gristmill products..... 3
 Gas, illuminating and heating..... 1

Ice, manufactured..... 1
 Iron and steel, forgings, not made in steel works or rolling mills..... 1

1	GRAND RAPIDS.....	611	27,927	452	1,242	1,641	1,044	23,548	De 26,918	Ja 20,724	27,431	22,146	4,928	214	143	80,670,385
2	All industries.....	19	10	2	1	1	1	6	Jy ^s 7	Ja ^s 4	6	6				83,472
3	Artificial stone products.....	5	19	6	1	1	1	12	No 1,447	My 705	1,434	1,363	70	1		3,836,494
4	Automobile bodies and parts.....	3	1,263	12	76	42	44	1,089	De 180	Se 128	180	177	3			915,494
5	Automobiles.....	3	181	20	7	11	13	143	Jy 191	Ja 106	131	128		3		473,540
6	Automobile repairing.....	8	202	11	14	18	9	73	De 92	My 60	92	45	44	3		121,818
7	Bookbinding and blank-book making.....	4	86	4	6	3	3	316	No 392	Je 245	383	321	62			825,566
8	Brass and bronze products.....	4	380	4	20	20	20	316	No 632	Je ^s 550	633	363	266		4	1,797,637
9	Bread and other bakery products.....	74	787	84	9	68	38	588	No 632	Je ^s 550	633	363	266			541,663
10	Butter.....	5	99	1	5	14	22	57	Jy 77	No 44	47	37	10			19,908
11	Cleaning and polishing preparations.....	3	38	2	3	2	1	30	Ja ^s 32	My ^s 28	31	12	19			67,655
12	Clothing, men's.....	3	68	2	4	4	6	62	Au 84	Ja 25	70	2	68			113,845
13	Clothing, women's.....	4	120	4	6	22	10	78	De 87	Ap ^s 72	87	61	26			498,645
14	Coffins, burialcases, and undertakers' goods.....	23	370	25	10	38	10	287			298	143	151	3	1	1,141,360
15	Confectionery and ice cream.....	13	311	14	7	33	7	250	Oc 290	Jy 199	249	102	146		1	898,842
16	Confectionery.....	7	60	11	3	5	3	37	Jy 71	Ja ^s 20	49	40	5	3		242,518
17	Ice cream.....	10	69	6	8	2	1	44	Jy 58	Ja 26	52	50	2			146,244
18	Copper, tin, and sheet-iron work.....	3	26	1	3	1	1	21	No 29	Je ^s 15	28	24	4			17,300
19	Electroplating.....	9	201	10	19	29	19	124	Au 133	Mh 112	123	122	1			1,787,967
20	Flour-mill and grist-mill products.....	41	1,430	27	75	60	52	1,210			1,491	1,438	53			3,494,018
21	Foundry and machine-shop products.....	7	450	3	14	18	3	412	De 518	Ap 340	522	487	35			1,158,628
22	Foundries.....	30	832	22	53	44	45	668	De 821	Ja 568	821	803	18			2,131,906
23	Machine shops.....	4	148	2	8	4	4	130	De 148	Mh 116	148					202,484
24	Boiler shops and machine shop and foundry combined.....	71	10,444	37	359	427	249	9,372			11,086	9,910	1,122	47	7	27,452,997
25	Furniture.....	58	8,731	34	306	239	185	7,967	De 9,416	Ja 6,650	9,396	8,374	977	40	5	22,546,800
26	Wood, other than rattan and willow.....	4	281	2	19	5	9	246			333	262	67	2	2	454,430
27	Rattan and willow, and metal furniture.....	9	1,432	1	34	183	55	1,159	De 1,356	Ja 940	1,357	1,274	78	5		4,451,787
28	Store and office fixtures.....	9	818	7	19	32	32	728	De 961	Fe 522	941	904	318	18	1	1,961,588
29	Hardware.....	4	597	15	31	25	25	526	No 622	Je 455	615	124	487		4	2,290,461
30	Knit goods.....	4	230	13	7	2	208	Fe 30	De 179		216	211	5			932,300
31	Leather, tanned, curried, and finished.....	3	105	8	19	1	77	Jy 120	De ^a 53		53	53				729,776
32	Liquors, malt.....	7	431	6	21	19	20	365	De 403	Ja 300	362	317	20	15		1,766,094
33	Lumber, planing-mill products, not including planing mills connected with sawmills.....	6	46	8	1	7	2	28	Ja ^a 30	Ja 19	30	30				115,601
34	Marble and stone work, monuments and tombstones.....	7	30	5	3	2	2	40	Jy 33	Ja 11	15	15				76,083
35	Mineral and carbonated waters.....	13	70	10	7	3	1	29			63	7	56			123,139
36	Patent medicines and compounds.....	10	59	8	5	1	45	De 55	Au ^a 38		55	3	52			36,683
37	Patent and proprietary medicines.....	3	11	2	2	3	4	Je ^s 9	Ja 6		8	4	4			86,456
38	Patent and proprietary compounds, not elsewhere specified.....	4	182	1	19	29	25	108	De 216	Ja 27	268	206	62			1,144,819
39	Photographs and graphophones.....	54	667	45	59	52	54	457			505	373	119	13		1,372,522
40	Printing and publishing, book and job.....	46	607	37	56	33	40	441	Oc ^s 473	Ja 409	488	356	119	13		1,285,515
41	Job printing.....	4	35	3	2	19	11	16								26,530
42	Book publishing without printing.....	4	25	5	1	3	3	16	De ⁿ 17	Ja ^a 14	17	17				60,178
	Book publishing and printing, and linotype work and type-setting.....															

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

[illegible]

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

<i>Dollars.</i> 2,829,557	<i>Dollars.</i> 3,403,437	<i>Dollars.</i> 38,092,615	<i>Dollars.</i> 18,111	<i>Dollars.</i> 190,352	<i>Dollars.</i> 12,134,492	<i>Dollars.</i> 170,650,052	<i>Dollars.</i> 2,173,712	<i>Dollars.</i> 275,779,638	<i>Dollars.</i> 102,955,874	33,610	2,198	2,150	127	100	20,035	1,625	1
1,200	15,390	3,472	1,684	516	26,303	2,606	82,731	53,822	37	15	22	-----	-----	-----	1,854	200	2
122,818	87,114	1,857,508	-----	111,840	5,792,502	62,610	8,537,634	2,682,513	2,354	500	-----	-----	-----	-----	47	-----	3
2,600	1,816	39,866	247	266	76,600	1,612	142,688	64,476	47	-----	-----	-----	-----	-----	147	-----	4
30,560	45,213	195,652	-----	12,810	22,336	21,889	1,621,915	586,045	147	-----	-----	-----	-----	-----	27	-----	5
-----	3,405	36,934	-----	9,700	1,331	4,585	383,438	175,184	9	-----	-----	-----	-----	-----	9	-----	6
6,800	9,385	26,716	-----	1,730	6,759	45,306	115,721	70,093	338	-----	-----	-----	-----	-----	338	-----	7
53,010	62,934	503,084	-----	10,136	51,379	1,093,704	22,936	1,082,119	475	120	-----	-----	-----	-----	355	-----	8
14,617	3,405	91,208	-----	-----	6,518	337,705	8,010	484,834	-----	-----	-----	-----	-----	-----	-----	-----	9
1,668	779	12,286	-----	910	394	49,295	1,152	103,099	13	-----	-----	-----	-----	-----	13	-----	10
30,718	10,885	86,714	-----	12,294	2,318	134,245	4,556	393,703	90	-----	-----	5	-----	-----	85	-----	11
1,300	1,000	100,098	-----	2,415	17,656	80,475	480	173,701	1	-----	-----	-----	-----	-----	26,159	-----	12
2,555,441	3,176,301	35,627,169	14,392	130,656	11,913,119	161,790,220	2,042,895	261,621,365	30,072	1,563	2,150	100	100	26,159	1,425	-----	13

Marble and stone work, monuments
and tombstones.....
Mattresses and spring beds, not else-
where specified.....

Paints.....
Patent medicines and compounds...
Printing and publishing, news-
papers and periodicals.....

Sand-lime brick.....
Sausage, not made in slaughtering
and meat-packing establishments.
Screws, machine.....

Slaughtering and meat packing.....	1
Springs, steel, automobile.....	1
Varnishes.....	1

4,556,267	4,184,226	26,170,377	1,228,015	440,774	3,503,391	40,213,898	1,947,863	100,135,055	57,973,204	44,048	22,578	3,053	679	922	16,816	6,817	1
100	75	7,580	600	500	80	11,557	824	29,782	17,401	7		2			5		2
271,164	61,541	1,544,058	1,040	35,583	358,468	2,608,235	62,980	5,656,674	2,985,469	1,940	1,110				830		3
51,067	17,573	206,125		16,491	16,491	569,819	6,652	1,254,478	675,007	191	15				176		4
39,040	35,383	156,446	12,062	8,090	6,712	010,484	5,040	1,038,425	422,001	133					132		5
34,680	2,596	65,623		2,290	1,976	83,476	1,618	260,566	181,472	33					83		6
62,231	40,438	329,081		8,112	13,003	302,526	22,309	910,555	585,720	478					278	210	7
24,910	180,835	441,746		10,422	20,882	2,173,459	54,530	3,605,027	1,377,038	424	70		200	10	344	1	8
15,635	48,180	60,658	42	3,452	11,026	1,422,753	11,284	1,647,484	213,447	234					234		9
1,300	780			180		2,256	9	7,200	4,935								10
6,800	4,203	39,551	1,740	4,386	1,252	113,736	2,119	227,142	111,287	18					18		11
12,765	19,742	29,039		2,876	3,137	83,747	484	190,917	106,680	14					14		12
35,038	70,085	67,159	279	2,200	13,466	234,962	7,115	537,458	265,381	238					238		13
67,104	111,219	182,801		23,607	210,395	1,260,838	18,649	2,344,079	1,059,492	426	185				241	256	14
61,723	103,554	186,312		20,397	217,785	910,523	11,390	1,847,950	926,037	204	185				19	256	15
6,331	7,685	46,679		3,210	1,610	356,315	7,269	497,029	133,455	222					222		16
15,360	5,224	53,715		1,889	1,184	117,638	1,599	243,122	128,888	38					36		17
4,340	1,435	23,736		1,278	209	6,131	3,554	49,805	40,180	53					45		18
73,013	64,340	143,060		423	33,043	4,921,985	30,420	5,453,586	501,181	1,937	850				462	345	19
226,218	121,375	1,484,304	1,002	70,393	92,419	1,520,210	156,723	3,987,657	2,310,724	2,569	675	25		625	1,722	254	20
63,650	29,469	568,195		375	31,542	471,272	100,619	1,479,088	907,497	731	360	25		147	346	115	21
134,046	84,732	761,086	4,032	35,496	43,851	944,409	46,087	2,170,741	1,180,245	1,616	240			147	1,120	130	22
28,222	7,174	155,113		34,522	17,026	104,520	9,717	337,228	222,982	322	75				247	3	23
1,603,827	1,516,798	10,594,498	54,599	65,092	909,706	13,562,587	320,803	34,962,294	21,079,404	11,815	9,067				2,683	1,591	24
1,340,065	797,524	8,942,732	46,893	60,694	837,770	10,893,533	251,555	28,400,720	17,255,332	9,015	7,722			75	1,818	831	25
62,140	11,879	250,437	7,706	4,308	7,385	344,540	9,293	804,654	540,821	337	250				87		26
201,622	707,395	1,401,329		90	124,651	2,324,214	59,455	5,666,920	3,283,251	1,863	1,085				778	760	27
88,784	86,440	778,809		2,991	65,334	820,065	22,977	2,802,248	1,953,206	809	575				234	113	28
86,156	25,100	440,044	141,341	91,392	1,254,395	15,802	1,254,395	2,478,656	1,208,399	200	200				90		29
76,943	12,107	219,552		1,270	28,466	916,484	28,631	1,885,337	940,222	963		45			550	501	30
26,225	27,442	96,088		40,045	107,809	35,031	489,563	346,723	346,723	936	700				236	31	31
122,829	54,211	397,512	119,863	36	32,755	1,010,278	23,704	2,015,250	981,208	1,728	1,500				228		32
500	23,394	44,266	400	108	1,534	85,838	3,328	190,403	101,237	168					168		33
2,430	1,320	21,316	25	2,270	4,294	39,981	1,336	81,370	40,053	16					16		34
13,996	3,102	28,788		1,700	2,640	90,545	2,365	122,553	132,652	36					36		35
10,746	1,002	25,988		1,580	684	29,845	756	129,657	99,056	6					6		36
3,250	2,100	2,800		120	1,956	60,700	1,600	95,596	33,696	30					30		37
36,273	99,812	121,133	712,169	2,456	86,686	559,039	5,130	1,096,429	1,432,260	133					133		38
135,467	89,631	710,884	81,229	27,497	18,798	906,678	17,388	1,775,419	1,151,353	594	120				474	98	39
28,897	77,521	691,607	61,596	24,564	17,967	558,526	10,851	1,635,918	1,060,541	591	120				471	98	40
4,550	10,788	1,945	10,633	1,545	236	1,394		51,849	50,465								41
1,040	1,322	19,277		988	595	46,753	537	67,652	40,357	3					3		42

* Same number reported for one or more other months.

MANUFACTURES—MICHIGAN.

TABLE 36.—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.

GRAND RAPIDS—Continued.																Dollars.		
1	Printing and publishing, newspapers and periodicals.	20	530	11	34	164	62	309					333	264	63	4	2	1,169,067
2	Printing and publishing.	7	417	2	16	145	45	209	De	220	Fe	196	220	197	19	3	1	792,213
3	Printing, publishing, and job printing.	5	146	3	13	14	17	99	De	112	Fe	88	112	66	44	1	1	369,372
4	Publishing without printing.	8	17	6	5	5		1	(3)	1	(3)	1	1	1				7,482
5	Saddlery and harness.	4	27	2	2			23	(5)	23	(9)	23	23	23				105,155
6	Sausage, not made in slaughtering and meat-packing establishments.	3	15	5			1	9	Jy	10	Ja	8	10	10				328,900
7	Saws.	3	15	2	4	1	2	6	(3)	6	(3)	6	7	7				23,860
8	Shirts.	3	66	1	4	18	3	40	Oc	43	Ja	34	37	8	29			58,086
9	Signs, other than electric.	3	23	4	3			10	Au	20	Ja	13	16	16				21,785
10	Tobacco, cigars.	25	761	24	32	18	9	678	Au	795	De	625	779	106	604	2	7	809,468
11	Tools, not elsewhere specified.	3	7	3				4	(3)	4	(3)	4	6	4		2		17,875
12	Wood, turned and carved.	10	139	11	7	2	3	116	De	152	Ja	85	151	141	10			220,044
13	All other industries*.	134	7,350	74	352	479	304	6,141					6,839	5,425	1,194	103	117	24,069,566

*All other industries embrace—

Aluminum manufactures. 1
Artificial limbs. 1
Awnings, tents, and sails. 1
Baskets, and rattan and willow ware. 1
Belting, leather. 2
Blacking, stains, and dressings. 2
Boots and shoes. 2
Boxes, cigar. 1
Boxes, paper and other, not elsewhere specified. 2
Boxes, wooden packing, except cigar boxes. 1
Brick, building. 1
Brooms, from broom corn. 2

Brushes. 2
Buttons. 1
Canning and preserving, fruits. 1
Carpets, rag. 2
Carriages and wagons, including repairs. 2
Cars and general shop construction and repairs by electric-railroad companies. 1
Cars and general shop construction and repairs by steam-railroad companies. 2
Cash registers and calculating machines. 1
China decorating. 1

Cordage and twine. 2
Cordials and flavoring sirups. 2
Cutlery and edge tools. 1
Dental goods. 1
Electrical machinery, apparatus, and supplies. 2
Engraving, steel and copper plate, including plate printing. 2
Fancy articles, paper novelties. 2
Flavoring extracts. 2
Food preparations, not elsewhere specified. 3
Fur goods. 2
Gas, illuminating and heating. 1
Gas machines and gas and water meters. 1

Glass, cutting, staining, and ornamenting. 1
Gloves and mittens, cloth, not including gloves made in textile mills. 1
Grease and tallow, not including lubricating greases. 1
Hair work. 1
Hand stamps. 1
Hats and caps, other than felt, straw, and wool. 1
House-furnishing goods, not elsewhere specified. 1
Ice, manufactured. 1
Ink, writing. 1

LANSING—All industries....		147	14,297	100	509	739	600	12,349	No 13,712	Ja 10,185	12,770	11,705	987	17	1	61,031,609
2	Artificial stone products.....	4	28	5	9	2		19	Jy ⁴ 31	Fe ⁴ 9	14	14				58,328
3	Automobile bodies and parts.....	6	2,351		52	66	31	2,202	No 2,301	Ja 1,842	2,204	1,919	285			6,596,260
4	Automobile repairing.....	8	39	10		1	3	25	Jy ⁴ 30	Ja 20	22	21	1			85,072
5	Bread and other bakery products.....	10	99	16	4	1	9	69	Au ⁴ 71	Mh 67	66	59	7			166,163
6	Copper, tin, and sheet-iron work.....	5	37	4	5	1	2	25	Oc 35	Ap 18	36	36				94,314
7	Engines, steam, gas, and water.....	4	950		46	36	30	838	De 939	Ja 715	939	884	52	3		3,271,744
8	Flour-mill and gristmill products.....	3	33	3	2	4	4	20	Oc 25	Je 14	24	22	2			334,882
9	Foundry and machine-shop products.....	16	1,143	4	60	29	67	983	De 1,148	Mh 866	1,143	1,036	98	9		4,189,119
10	Iron and steel, forgings, not made in steel works or rolling mills.....	4	783		21	56	17	689	Oc 927	Ja 515	780	717	63			2,609,799
11	Iron and steel, welding.....	3	6	3				3	(3)	3 (3)	3	2				13,605
12	Lumber, planing-mill products, not including planing mills connected with sawmills.....	6	208		23	20	7	158	Se 180	Fe 125	173	173				1,146,001
13	Models and patterns, not including paper patterns.....	3	8	3				5	De ⁴ 6	Mh ⁴ 4	6	6				15,885
14	Printing, job.....	17	210	14	13	3	5	175	My 183	Ja 160	182	108	71	2	1	390,224
15	Printing and publishing, newspapers and periodicals.....	5	147		6	33	27	82	De ⁴ 93	Au 62	93	54	38	1		399,006
16	Tobacco, cigars.....	4	15	4			1	10	Ja 13	Se 8	12	3	9			19,689
17	All other industries*.....	49	8,240	34	276	487	397	7,046			7,074	6,711	361	2		41,741,430

*All other industries embrace—

Automobiles. 3
Awnings, tents, and sails. 1
Bags, other than paper, not including bags made in textile mills. 1
Baking powders. 1
Bookbinding and blank-book making. 2

Boxes, cigar. 1
Brass and bronze products. 1
Brick, building. 1
Brooms, from broom corn. 1
Butter. 2
Carpets, rag. 1
Carriages and wagons, repair work only. 1

Chewing gum. 1
Clothing, women's, undergarments and petticoats. 1
Coffee, roasting and grinding. 1
Coffins, burial cases, and undertakers' goods. 1
Condensed milk. 1

Confectionery and ice cream. 2
Dairymen's, poultrymen's, and apirists' supplies. 1
Druggists' preparations. 1
Electrical machinery, apparatus, and supplies. 2
Furniture, store and office fixtures. 1

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—MICHIGAN.

47

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.					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.								
133, 818	253, 034	306, 834	64, 950	18, 256	98, 975	582, 223	17, 153	2, 343, 763	1, 744, 387	600					600	1	
98, 170	214, 091	209, 375	150	16, 320	92, 518	485, 081	13, 371	1, 771, 394	1, 272, 942	492					492	2	
32, 533	32, 126	96, 575	50, 000	1, 108	6, 395	93, 712	3, 782	531, 343	433, 849	108					108	3	
3, 115	6, 817	884	14, 800	828	62	3, 430		41, 026	37, 596							4	
2, 900		23, 338		250	328	192, 399	220	253, 775	61, 156	7					7	5	
	600	13, 090		780	126	94, 639	2, 412	121, 993	24, 942	53					53	6	
10, 200	2, 025	7, 355	500	1, 015	359	12, 824	540	40, 177	26, 813	13					13	7	
6, 022	2, 750	26, 753		1, 716	489	72, 026	435	176, 500	104, 039	8					8	8	
6, 307		18, 138		675	328	16, 077	64	57, 331	41, 190	1					1	9	
42, 941	78, 540	507, 493	5, 588	11, 363	313, 859	790, 054	3, 162	1, 982, 897	1, 180, 681	27					27	10	
		4, 200	16, 866	720		12, 410	187	23, 900	11, 303	10					10	11	
25, 078	7, 553	137, 721		6, 494	2, 001	89, 710	9, 105	342, 335	243, 520	288					288	12	
1, 208, 597	1, 136, 727	6, 828, 763	9, 960	109, 653	937, 064	12, 202, 025	1, 049, 570	27, 433, 945	14, 132, 350	16, 822	7, 153	2, 083	458	75	6, 153	3, 448	13

Iron and steel, forgings, not made in steel works or rolling mills.....	1	Mirrors, framed and unframed, not elsewhere specified.....	1	Photographic materials, motion-picture films, not exposed.....	1	Stereotyping and electrotyping....	1
Jewelry.....	1	Models and patterns, not including paper patterns.....	2	Pickles and sauces.....	1	Stoves and hot-air furnaces.....	1
Labels and tags.....	2	Motorcycles, bicycles, and parts.....	2	Plumbers' supplies, not elsewhere specified.....	1	Structural ironwork, not made in steel works or rolling mills.....	2
Lamps and reflectors.....	2	Musical instruments and materials, not specified.....	3	Refrigerators.....	1	Surgical appliances.....	1
Leather goods, not elsewhere specified.....	1	Musical instruments, pianos.....	2	Roofing materials.....	2	Textile machinery and parts.....	1
Lithographing.....	1	Musical instruments, piano materials.....	2	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	2	Toys and games.....	1
Looking-glass and picture frames.....	1	Optical goods.....	2	Sand-lime brick.....	2	Trunks and valises.....	2
Lumber and timber products.....	1	Paints.....	2	Soap.....	1	Typewriters and parts.....	1
Machine tools.....	2	Paper and wood pulp.....	1	Steam fittings and steam and hot-water heating apparatus.....	3	Upholstering materials, excelsior.....	2
Mattresses and spring beds, not elsewhere specified.....	2	Paper goods, not elsewhere specified.....	3	Stencil and brands.....	5	Varnishes.....	1
Millinery and lace goods, not elsewhere specified.....	3	Perfumery and cosmetics.....	5			Vinegar and cider.....	1
		Photo-engraving.....	5			Window and door screens and weather strips.....	2
						Wirework, not elsewhere specified..	3

1, 435, 320	1, 535, 491	13, 957, 051	14, 370	55, 651	3, 776, 420	63, 783, 131	1, 198, 209	104, 722, 115	39, 740, 775	23, 602	4, 907	100	6	243	18, 346	2, 129	1
2, 500	1, 300	27, 876		400	186	46, 673	1, 904	114, 415	65, 838	17					17		2
129, 627	121, 095	2, 485, 552	335	6, 009	270, 825	4, 057, 424	64, 426	9, 229, 855	4, 208, 005	4, 420	1, 875				2, 545	1, 310	3
	4, 520	35, 710		8, 725	12, 804	111, 654	4, 540	207, 429	91, 235	46					46		4
9, 300	10, 356	88, 832		1, 840	3, 897	514, 412	12, 987	840, 135	312, 736	122					122		5
10, 925	4, 747	31, 664		1, 366	1, 078	93, 270	366	168, 453	74, 817	2					2		6
116, 625	85, 813	936, 176		1, 500	283, 466	1, 382, 055	86, 104	3, 227, 820	1, 758, 761	1, 182	460		6		716	300	7
2, 900	8, 960	24, 735			3, 021	757, 650	5, 157	846, 933	84, 126	503				213	290		8
162, 548	102, 722	1, 092, 396	9, 054	2, 074	349, 476	2, 055, 379	53, 325	4, 556, 250	2, 447, 546	1, 822	550	100		30	1, 142	489	9
90, 696	112, 527	913, 826			149, 683	2, 310, 385	169, 741	4, 174, 718	1, 685, 592	2, 500	520				1, 989		10
		4, 732		2, 400	15	8, 900	426	25, 198	15, 812	11					11		11
63, 400	44, 813	175, 068		3, 080	20, 008	1, 632, 779	10, 971	2, 226, 531	582, 781	564	60				504		12
		5, 538		540	50	6, 241	759	17, 825	10, 825	23					23		13
38, 860	9, 620	214, 072	2, 613	15, 937	6, 050	239, 463	5, 775	665, 197	419, 959	139					139		14
39, 860	34, 800	82, 651	2, 368	1, 440	17, 592	143, 413	4, 694	495, 507	347, 430	117					117		15
	720	9, 852		1, 500	4, 240	13, 997	227	35, 537	21, 313								16
769, 079	993, 490	7, 826, 371		8, 840	2, 054, 029	49, 499, 476	776, 837	77, 890, 312	27, 613, 999	12, 125	1, 442				10, 683	39	17

Gas, illuminating and heating.....	1	Mattresses and spring beds, not elsewhere specified.....	1	Screws, machine.....	1	Sugar, beet.....	1
Glass, cutting, staining, and ornamenting.....	1	Mineral and carbonated waters.....	1	Show cases.....	1	Tinware, not elsewhere specified.....	1
Hardware.....	1	Patent and proprietary medicines.....	1	Signs, other than electric.....	1	Tools, not elsewhere specified.....	1
Ice, manufactured.....	1	Pumps, power, other than steam.....	1	Stoves and hot-air furnaces.....	1	Windmills.....	1
Marble and stone work, monuments and tombstones.....	2			Structural ironwork, not made in steel works or rolling mills.....	2	Window and door screens.....	1

¹ Same number reported throughout the year.

² Same number reported for one or more other months.

MANUFACTURES—MICHIGAN.

TABLE 36.—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.

	208	11,116	180	424	625	415	9,472	No 11,379	Ja 7,990	11,350	9,415	1,881	38	16	Dollars. 45,240,435
1 SAGINAW—All industries.....	208	11,116	180	424	625	415	9,472	No 11,379	Ja 7,990	11,350	9,415	1,881	38	16	Dollars. 45,240,435
2 Artificial stone products.....	6	44	6	6	1	9	31	Se 59	Mh 5	43	43	34	.....	.....	89,653
3 Automobile bodies and parts.....	5	270	1	23	15	9	222	De 327	Fe 116	327	293	34	.....	.....	768,536
4 Automobile repairing.....	4	8	4	.....	.....	.....	4	(²) 4	.....	4	4	.....	.....	.....	3,926
5 Brass and bronze products.....	3	27	5	2	.....	1	19	Se 41	Mh 5	27	27	.....	.....	.....	36,199
6 Bread and other bakery products.....	18	313	23	8	24	18	240	De 248	Ja 234	234	117	115	2	.....	565,201
7 Butter.....	3	24	3	3	2	4	15	Jy 19	Ja 12	10	8	2	.....	.....	99,721
8 Confectionery and ice cream.....	7	47	8	8	2	2	20	Jy 35	Ja 23	27	21	6	.....	.....	115,113
9 Copper, tin, and sheet-iron work.....	10	51	10	7	4	4	24	De 33	Ap 15	34	33	1	.....	.....	84,788
10 Foundry and machine-shop products.....	17	3,182	3	82	169	101	2,827	.....	.....	3,855	3,687	160	2	.....	19,355,869
11 Machines.....	11	757	3	38	29	35	682	De 755	Ja 637	756	749	5	2	.....	3,321,225
12 All other.....	6	2,395	4	44	140	66	2,145	No 3,097	Ja 1,107	3,099	2,938	161	.....	.....	16,034,634
13 Iron and steel, welding.....	3	9	6	.....	.....	.....	3	No 4	Mh 2	4	4	.....	.....	.....	4,949
14 Liquors, malt.....	3	9	2	0	5	.....	70	Au 108	De 26	62	62	.....	.....	.....	499,651
15 Lumber, planing-mill products, not including planing mills connected with sawmills.....	11	537	15	27	31	28	436	De 497	Mh 368	500	487	13	.....	.....	2,216,696
16 Marble and stone work.....	5	29	8	2	6	2	11	Oc 13	Ja 7	12	11	1	.....	.....	38,188
17 Mineral and carbonated waters.....	3	18	2	2	1	.....	13	Au 19	Mh 10	10	10	.....	.....	.....	33,847
18 Patent medicines and compounds.....	4	21	4	1	4	.....	12	(²) 12	(²) 12	8	3	5	.....	.....	125,467
19 Printing and publishing, book and job.....	14	139	17	12	2	17	91	No 98	Ap 88	96	80	16	.....	.....	397,067
20 Tobacco, cigars.....	18	113	21	4	2	.....	86	De 103	Jy 74	110	66	44	.....	.....	95,481
21 All other industries *.....	74	6,198	43	225	366	225	5,339	.....	.....	5,987	4,459	1,478	34	16	20,740,103

*All other industries embrace—
 Automobiles.....
 Awnings, tents, and sails.....
 Bookbinding and blank-book making.....
 Boxes, cigar.....
 Boxes, set-up paper boxes.....
 Canning and preserving, vegetables.....
 Carriages and wagons, including repairs.....

Cars and general shop construction and repairs by steam-railroad companies.....
 Cash registers and parts.....
 Chemicals.....
 Clothing, women's, shirt waists and dresses, except house dresses.....
 Coal-tar products.....
 Coffee, roasting and grinding.....

Coffins, burial cases, and undertakers' goods.....
 Coopersage, hogsheads and barrels.....
 Corsets.....
 Electrical machinery, apparatus, and supplies.....
 Electroplating.....
 Enameling.....
 Engines, steam, gas, and water.....

Engraving, steel and copper plate, including plate printing.....
 Flags and banners.....
 Flour-mill and gristmill products.....
 Fur goods.....
 Furniture.....
 Gas, illuminating and heating.....
 Glass, cutting, staining, and ornamenting.....

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

1 ADRIAN.....	62	2,260	58	95	163	74	1,870	Oc 2,082	My 1,715	2,217	1,775	431	11	.....	7,070,996
2 ALPENA.....	38	1,500	30	45	36	17	1,372	Oc 1,590	Fe 1,218	1,570	1,406	164	.....	.....	7,140,433
3 ANN ARBOR.....	78	1,899	69	89	61	68	1,612	Jy 1,711	Ap 1,502	1,674	1,503	171	.....	.....	7,381,026
4 BATTLE CREEK.....	118	3,346	85	338	794	449	6,050	Au 7,554	Ja 5,868	6,723	5,724	992	3	4	38,863,882
5 BAY CITY.....	108	6,173	73	313	439	201	5,057	De 6,127	Au 4,305	5,820	4,635	1,104	20	1	21,878,831
6 BENTON HARBOR.....	65	2,879	45	136	219	151	2,328	De 2,507	My 2,092	2,682	2,280	393	9	.....	8,117,588
7 ESCANABA.....	45	992	42	83	60	15	842	De 882	Au 774	870	657	212	1	.....	2,358,546
8 HOLLAND.....	64	3,281	36	158	192	144	2,748	Se 3,089	Ja 2,432	3,243	2,628	573	22	20	14,024,531
9 IRONWOOD.....	28	479	29	20	18	13	399	De 451	My 271	453	425	17	11	.....	1,182,500
10 ISHPEMING.....	21	191	20	18	32	14	107	Oc 164	Fe 61	154	141	12	1	.....	1,531,533
11 JACKSON.....	156	11,205	110	445	586	444	9,620	No 11,075	Ja 8,145	11,161	9,408	1,668	22	3	37,870,437
12 KALAMAZOO.....	185	9,535	120	482	778	525	7,629	De 8,724	My 7,080	8,670	6,703	1,910	31	26	36,865,912
13 MARQUETTE.....	34	1,605	18	62	70	40	1,415	My 1,469	Je 1,266	1,457	1,405	40	12	.....	9,494,813
14 MONROE.....	41	3,224	19	114	108	79	2,904	De 3,135	Ja 2,678	3,145	1,998	1,145	1	1	10,654,823
15 MUSKOGON.....	141	10,954	101	362	372	403	9,716	De 10,993	Mh 8,669	11,155	9,421	1,606	16	22	36,751,190
16 OWOSSO.....	40	2,043	31	90	93	48	1,781	De 2,121	Fe 1,488	2,121	1,898	211	12	.....	7,537,438
17 PONTIAC.....	78	9,167	96	282	590	517	7,682	No 9,345	Ja 5,622	9,317	8,618	699	.....	.....	42,693,253
18 PORT HURON.....	83	2,631	67	123	119	91	2,231	Oc 2,767	Ja 1,717	2,861	2,420	422	12	1	10,001,596
19 SAULT STE. MARIE.....	26	1,421	18	51	76	28	1,248	No 1,325	Mh 1,170	1,321	1,207	113	1	.....	22,410,301
20 TRAVERSE CITY.....	56	1,182	52	66	63	41	960	No 1,094	Ja 843	1,110	896	210	4	.....	3,141,365
21 WYANDOTTE.....	26	6,806	20	81	332	159	6,214	Ja 6,957	Jy 4,729	7,215	6,921	289	5	.....	26,345,649
22 ALL OTHER CITIES.....	50	69,956	38	797	3,244	1,248	64,629	No 74,426	Ja 50,186	74,698	73,228	1,367	3	.....	442,141,599

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. 1,450,249	Dollars. 1,373,206	Dollars. 9,963,356	Dollars. 1,262,078	Dollars. 58,590	Dollars. 1,121,658	Dollars. 20,546,630	Dollars. 769,132	Dollars. 43,146,125	Dollars. 21,830,363	31,402	9,006	802	35	21,500	2,541	1
9,252	2,170	42,232	500,000	1,059	914	50,817	1,176	118,760	66,767	68			6	62		2
71,191	25,043	237,603	1,014	736	65,733	235,067	14,816	695,137	445,254	404	150			314	232	3
		4,116		1,101	1,059	588	10,808	10,808	8,561	5				5		4
6,892	1,091	35,343		950	27	17,034	1,171	117,303	99,128	23				23		5
36,044	53,666	169,982		5,590	6,619	893,939	10,801	1,479,984	506,154	291	150			141	150	6
8,000	7,352	14,806		1,200	1,071	645,972	3,684	754,126	104,470	54				54		7
9,653	1,360	26,685		1,279	1,279	181,119	3,521	309,904	125,264	107				107		8
8,200	1,855	23,575		2,160	693	58,556	701	118,020	54,763	18			15	3		9
329,724	355,185	3,020,118	743,595	322,198	5,905,959	231,681	13,598,454	7,450,814	14,586	880			4	13,902	469	10
115,700	106,707	1,048,590	8,400	106,210	828,756	41,726	3,023,729	2,153,247	1,620	175			4	1,447	50	11
214,024	278,478	1,980,528	735,165	50	215,988	5,078,203	189,955	10,574,725	5,306,567	12,900				12,455	619	12
		5,762		710	1,551	04	11,207	9,502	7					7		13
17,129	8,731	46,903		2,100	38,351	64,240	15,384	165,744	85,120	246	210			36	86	14
105,970	74,489	343,514	8,994		40,982	1,401,133	16,159	2,474,337	997,045	2,515	1,740	675		100	644	15
3,000	5,025	10,163	3,852	144	423	25,998	754	86,162	50,410	29				29		16
3,205	1,200	12,811		757	1,592	32,717	437	81,744	48,590	8				8		17
10,374	5,662	14,082		909	909	57,407	496	112,602	54,699	21				21		18
24,554	16,064	90,137	190	11,331	2,976	189,763	7,843	401,874	204,268	308	160			58	125	19
4,191	2,125	68,228		1,735	23,208	114,984	915	239,512	123,613	5				5		20
801,970	781,188	5,783,326	4,454	25,593	614,638	10,577,715	440,821	22,370,387	11,342,851	12,747	5,925	127	10	6,085	835	21

Gloves and mittens, cloth, not including gloves made in textile mills.	1	Matches.	1	Printing and publishing, newspapers and periodicals.	3	Tobacco, smoking.	1
Drapiles, ground and refined.	1	Mattresses and spring beds, not elsewhere specified.	1	Saddlery and harness.	1	Tools, not elsewhere specified.	2
Grease and tallow, not including lubricating greases.	1	Models and patterns, not including paper patterns.	2	Sausage, not made in slaughtering and meat-packing establishments.	2	Vinegar.	1
Hand stamps.	1	Musical instruments, piano materials.	1	Saws.	1	Window and door screens and weather strips.	1
Leather, tanned, curried, and finished.	2	Optical goods.	1	Shipbuilding, wooden, small boats.	1	Window shades and fixtures.	1
Lumber and timber products.	2	Photographs and graphophones.	1	Show cases.	1	Wood, turned and carved.	1
Machine tools.	1	Pickles and sauces.	2	Structural ironwork, not made in steel works or rolling mills.	1	Wooden goods, not elsewhere specified.	2

227,368	353,169	1,714,133	1,327	25,805	188,498	0,973,070	178,958	14,549,081	4,396,103	3,317	1,396	33	68	1,820	1,225	1
181,336	79,249	1,528,379	20,980	4,908	335,107	4,060,087	826,788	9,356,190	4,408,715	23,318	4,300	14,350	35	2,100	2,533	11,047	2
238,415	134,476	2,102,025	61,708	16,366	400,172	5,083,603	203,554	9,793,098	4,417,049	3,029	1,030	13	2,588	143	3
1,500,811	1,806,827	8,067,501	58,509	95,131	2,708,882	20,610,926	1,377,965	50,199,095	28,151,002	22,432	7,457	644	13	1,881	12,437	5,187	4
1,133,186	730,588	5,392,522	6,490	91,867	1,245,158	14,795,768	465,828	28,214,625	12,952,929	14,540	5,772	1,692	7,076	4,620	5
510,759	632,023	2,503,222	324,232	30,718	058,386	4,285,508	340,015	11,345,034	6,713,511	3,374	378	20	2,676	8	6
84,190	95,203	875,692	150	6,810	66,253	1,063,448	89,483	5,017,912	7,804,981	2,201	1,817	21	363	7	8
513,375	628,862	2,708,869	5,828	9,078	420,350	9,908,362	256,029	17,711,055	7,486,104	4,937	2,538	400	1,999	845	8
36,145	23,208	586,658	191	5,160	15,834	519,093	34,458	1,381,290	827,130	735	512	213	4	10
58,456	63,125	124,413	24	3,041	12,843	441,074	41,624	1,007,432	524,734	370	210	160	198	11
1,371,181	1,376,060	10,898,509	437,842	97,874	605,391	20,006,420	982,202	49,517,712	19,629,000	18,744	1,715	30	40	16,950	410	10
1,497,768	1,730,242	8,162,310	32,537	82,099	1,611,751	22,857,060	1,378,274	46,254,917	22,018,574	26,147	10,013	1,432	115	140	8,547	6,987	13
151,086	143,807	1,592,983	445	8,949	69,171	3,817,158	846,138	7,210,375	2,545,079	6,138	2,580	1,000	2	2,456	1,281	12
426,438	362,519	3,362,497	1,422	6,025	683,110	7,595,395	766,792	16,062,331	7,601,204	14,563	11,137	1,425	73	20	1,908	3,571	14
1,129,120	1,078,576	10,852,919	84,395	43,125	2,843,277	24,585,375	1,090,354	55,969,247	30,393,618	24,026	5,253	300	14	18,459	1,317	15
308,206	274,211	2,220,984	17,404	4,260	513,735	4,873,287	339,353	9,948,736	4,739,046	4,220	2,195	450	1,575	1,015	16
1,462,366	983,694	10,880,753	58,398	5,908	5,271,983	66,076,008	708,564	104,990,133	38,203,972	12,841	1,033	2	94	11,712	1,554	17
372,273	272,268	2,482,382	30,183	10,440	205,889	4,447,905	483,052	9,545,578	4,614,621	5,884	1,880	181	3,823	97	18
146,505	168,878	1,532,761	0,354	553,611	4,696,114	2,004,327	10,699,767	3,939,326	5,598	508	524	4,506	3	19
137,022	96,771	846,635	11,211	0,845	93,443	2,198,400	83,575	4,699,960	1,817,979	3,131	1,140	70	1,921	20	20
425,341	741,088	10,650,415	200	1,900	1,369,706	10,562,077	2,877,907	33,382,791	19,942,8								

⁴ Same number reported for one or more other months.

⁶ All other cities comprise Hamtramck and Highland Park.

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON

FOURTEENTH CENSUS OF THE UNITED STATES
MANUFACTURES: 1919

MINNESOTA

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.

MINNESOTA.

GENERAL STATISTICS.

General character of the state.—Minnesota has a gross area of 84,682 square miles, of which 80,858 represent land surface. The inhabitants of the state in 1900 numbered 1,751,394; in 1910, 2,075,708; and in 1920, 2,387,125. In total population Minnesota ranked seventeenth among the states in 1920. The number of inhabitants per square mile in 1910 was 25.7, the corresponding figure for 1920 being 29.5. Minnesota ranked twenty-ninth among the states in this respect.

In 1920 there were 11 cities in the state—Austin, Duluth, Faribault, Hibbing, Mankato, Minneapolis, Rochester, St. Cloud, St. Paul, Virginia, and Winona—having more than 10,000 inhabitants. Statistics for the cities of Austin and Virginia, however, can not be shown separately without disclosing the operations of individual establishments. The combined population of the remaining 9 cities in that year was 801,582, which formed 33.6 per cent of the total population for Minnesota, and in 1919 they reported 63.3 per cent of the value of the state's manufactured products.

Importance and growth of manufactures (Table 1).—The increases in wages, cost of materials, and value of products as presented in Table 1 are to a great extent 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 between the industrial censuses of 1914 and 1919. However, a comparison of the number of establishments, persons engaged, and the horsepower used, in 1919 and 1914, shows a considerable increase in the manufacturing activities of the state.

Statistics for the state, by counties (Table 2).—Figures are not available for comparison of county totals for 1919 with those for other censuses. The statistics emphasize the importance from a manufacturing standpoint of the counties in which are located the cities of over 10,000 population. Hennepin and Ramsey counties, which include the cities of Minneapolis and St. Paul, reported 54.1 per cent of the total number of wage earners, and 53.7 per cent of the total value of products for the state.

Principal industries, ranked by value of products (Table 3).—The ranking of industries by value of products does not always show their true importance from a manufacturing standpoint. Their rank would in many instances materially change 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 30.

Average number of wage earners for selected industries (Table 5).—The industries covered by this table are those which employed more than 400 wage earners in 1919, and for which statistics can be shown without 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).—General increases are shown in practically all of the details for the seven cities for which comparative figures are given for 1914 and 1919.

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 that there were a number of industries in the state in 1919 in which the number of female wage earners predominated.

Prevailing hours of labor (Table 9).—Since 1914 there has been a marked shortening of the working day in Minnesota. In that year 15.1 per cent of the wage earners were included in the group "48 and under," as against 51.2 per cent in 1919. In 1914 the "60" and "Over 60" groups constituted 41.4 per cent of the total wage earners, as compared with 19.6 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 96.7 per cent were in the several classes having fewer than 101 wage earners, while such establishments

employed but 36.7 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 3.3 per cent of the total manufacturing establishments in the state, but reported 63.3 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 for 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 an industry with those of another 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 the corporations owned but 29.1 per cent of the number of establishments in the state in 1919, they reported 86.5 per cent of the average number of wage earners and 87.8 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 24,143, or 31.8 per

cent, and the value of products, \$654,528,635, or 157.8 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 the 9 cities for which figures can be shown in 1919 represented 44.6 per cent of the total in the state. They reported in that year 67.3 per cent of the average number of wage earners, 63.3 per cent of the value of products, and 71.4 per cent of the value added by manufacture.

Principal industries in Duluth, Minneapolis, and St. Paul, with per cent of total for state (Table 16).—This table includes all industries in each of the three cities in the state having 50,000 inhabitants or more in 1920 which reported products of \$600,000 and over, figures being given for those which can be shown without disclosing the operations of individual establishments.

Number and horsepower of types of prime movers (Table 17).—The total horsepower reported shows an increase from 1914 to 1919 of 115,220 horsepower, or 32.1 per cent. The owned steam power shows a decrease of 7,958 horsepower, or 3.9 per cent, while for internal combustion engines there was an increase of 26,394 horsepower, or 354.1 per cent. By far the largest actual increase, 96,741 horsepower, or 135.8 per cent, was shown for rented electric power.

Fuel consumed (Table 18).—This table shows the total quantities of the principal kinds of fuel used by manufacturing plants in the state in 1919 and 1914, and in the cities of over 10,000 population in 1919. It also gives separately for 1919 the amounts consumed by a number of important industries which use considerable quantities of fuel. The largest consumption of bituminous coal, 34.2 per cent, was in the manufacture of coke, not including gas-house coke. The iron and steel blast furnaces consumed 81.7 per cent of the coke, and 69.8 per cent of the fuel oils was used in the manufacture of gas.

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.....	6,225	5,974	5,561	4,756	4,096	4.2	7.4	16.9	16.1
Persons engaged.....	147,678	115,690	101,406	83,301	(²)	27.6	10.8	25.3	.....
Proprietors and firm members.....	5,128	5,233	5,376	4,524	(²)	-2.0	-2.7	13.8	.....
Salaried employees.....	26,927	17,623	14,263	9,141	6,625	52.8	23.6	56.0	38.0
Wage earners (average number).....	115,623	92,834	84,767	69,636	64,557	24.5	9.5	21.7	7.9
Primary horsepower.....	473,957	358,737	297,670	220,934	180,124	32.1	20.5	34.7	22.7
Capital.....	\$679,386,486	\$354,434,177	\$275,416,029	\$184,903,271	\$133,076,669	91.7	28.7	49.0	38.9
Salaries and wages.....	172,466,431	80,591,183	62,922,303	44,875,985	35,093,419	114.0	28.1	40.2	27.9
Salaries.....	45,359,926	22,084,170	15,451,500	9,032,840	6,004,229	105.4	42.9	71.1	49.0
Wages.....	127,106,505	58,507,013	47,470,803	35,843,145	29,029,190	117.2	23.2	32.4	23.5
Paid for contract work.....	4,005,045	2,600,106	2,483,017	4,378,700	(²)	54.0	4.7	-43.3	.....
Rent and taxes.....	25,061,934	7,381,132	4,979,543	2,138,692	(²)	239.5	48.2	.....	30.1
Cost of materials.....	883,089,777	336,849,214	281,622,287	210,553,949	150,299,277	162.2	19.6	33.8	37.6
Value of products.....	1,218,129,735	493,354,136	409,419,621	307,858,073	223,692,922	146.9	20.5	33.0	32.6
Value added by manufacture.....	335,039,958	156,504,922	127,797,334	97,304,124	73,393,645	114.1	22.5	31.3	.....

¹ A minus sign (-) denotes decrease.

² Figures not available.

³ Exclusive of internal revenue.

⁴ Value of products less cost of materials.

MANUFACTURES—MINNESOTA.

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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.....	6,225	115,623	\$127,106,505	\$25,061,934	\$883,080,777	\$1,218,129,735	\$335,039,958	473,957
Aitkin.....	33	643	621,989	14,113	871,361	1,802,384	931,023	1,468
Anoka.....	32	550	618,623	60,128	2,780,927	3,933,584	1,143,657	1,420
Becker.....	56	264	280,588	122,041	1,454,186	2,035,107	580,921	2,250
Beltrami.....	82	1,708	1,625,243	159,302	2,509,556	5,626,554	3,116,998	6,240
Benton.....	31	121	142,799	8,127	1,069,297	1,385,523	316,226	766
Big Stone.....	15	47	53,412	5,647	1,099,973	1,306,245	206,272	289
Blue Earth.....	91	826	785,125	132,136	9,347,199	11,300,296	1,953,097	3,953
Brown.....	58	538	552,368	177,833	18,107,122	20,195,606	2,088,384	0,101
Carlton.....	30	2,904	2,384,332	1,104,157	4,421,073	10,374,567	5,953,494	14,010
Carver.....	57	414	295,123	51,878	3,443,604	4,400,733	963,129	2,400
Cass.....	41	503	540,503	150,707	956,489	2,111,958	1,155,469	2,137
Chippewa.....	25	292	402,806	9,004	1,201,395	1,902,325	670,930	953
Chisago.....	39	99	117,003	18,814	2,630,735	2,963,413	326,678	939
Clay.....	30	331	463,801	10,341	651,806	1,287,359	635,553	454
Clearwater.....	24	40	34,883	2,073	351,691	443,233	91,542	311
Cook.....	9	36	36,157	775	118,130	170,916	52,786	94
Cottonwood.....	22	30	33,879	4,324	377,592	477,438	99,846	493
Crow Wing.....	51	1,744	2,127,548	74,358	3,505,140	6,140,239	2,655,090	8,678
Dakota.....	51	4,064	5,382,280	220,210	93,075,882	106,820,870	12,144,978	10,434
Dodge.....	42	57	71,442	4,245	1,339,726	1,496,441	153,715	420
Douglas.....	43	93	99,377	41,079	3,722,853	4,105,286	382,433	900
Faribault.....	48	156	185,824	69,510	5,050,139	5,579,430	523,291	1,157
Filmore.....	57	125	186,143	18,635	2,152,853	2,452,302	299,444	880
Freeborn.....	138	2,298	2,206,510	368,106	46,150,084	54,354,951	8,204,867	8,216
Goodhue.....	112	1,478	2,050,001	394,090	14,946,499	21,705,898	6,760,399	5,529
Grant.....	16	42	46,004	1,066	783,526	903,686	120,160	328
Hennepin.....	1,464	39,232	42,653,090	11,805,072	366,738,485	499,421,454	132,632,969	135,363
Houston.....	34	65	66,245	5,249	929,605	1,037,563	110,958	502
Hubbard.....	31	134	119,116	6,718	357,342	654,004	296,662	513
Isanti.....	38	66	54,951	11,786	911,075	1,088,800	176,825	597
Itasca.....	54	760	784,373	53,890	1,498,286	3,282,926	1,784,640	6,893
Jackson.....	34	112	127,817	7,157	677,757	909,303	231,546	819
Kanabec.....	19	33	32,878	3,618	550,175	636,216	86,041	257
Kandiyohi.....	50	318	411,517	10,054	1,305,604	1,915,686	550,082	736
Kittson.....	18	16	14,964	1,041	264,228	314,724	50,496	92
Koochiching.....	52	2,035	2,100,690	200,692	5,359,616	10,785,615	5,425,999	19,538
Lac qui Parle.....	22	52	40,495	10,368	329,048	437,616	108,568	399
Lake.....	13	635	881,261	6,695	399,211	1,045,958	1,246,747	3,306
Le Sueur.....	67	502	453,673	129,915	12,987,245	15,188,361	2,201,116	3,438
Lincoln.....	22	33	34,907	5,696	516,735	631,281	114,546	124
Lyon.....	36	277	356,254	31,365	7,103,598	8,192,842	1,089,244	1,785
McLeod.....	54	171	166,957	17,201	2,861,482	3,250,560	389,078	1,191
Mahnomen.....	12	54	48,490	1,547	134,384	225,768	91,384	251
Marshall.....	29	38	36,545	5,051	577,728	690,298	112,540	402
Martin.....	38	252	227,395	32,808	1,640,407	2,198,513	558,106	669
Meeker.....	50	85	81,480	21,932	1,701,253	1,979,634	278,881	689
Mille Lacs.....	33	88	90,036	4,458	1,475,159	1,637,786	162,627	546
Morrison.....	49	287	251,796	28,434	3,119,607	3,866,964	747,357	4,458
Murray.....	19	26	27,257	3,483	287,426	359,215	71,789	259
Nikollet.....	44	182	160,811	56,650	1,384,467	1,828,648	444,181	708
Notles.....	26	97	120,395	7,321	591,405	802,507	211,102	308
Norman.....	20	48	47,254	11,784	690,334	824,305	124,971	443
Olmsted.....	60	393	376,701	64,347	2,441,500	3,492,457	1,050,957	1,095
Otter Tail.....	108	327	336,631	73,149	4,613,487	5,692,174	1,078,657	2,528
Pennington.....	27	206	241,035	16,120	958,640	1,349,059	390,419	320
Pine.....	32	67	64,073	11,881	1,066,881	1,249,537	182,656	501
Pipestone.....	31	180	196,699	12,518	1,267,906	1,630,486	362,580	637
Polk.....	70	364	378,288	46,280	3,807,428	4,850,912	1,943,484	1,471
Pope.....	25	134	186,977	5,892	985,576	1,201,336	305,700	498
Ramsey.....	812	23,292	25,211,956	5,060,487	88,363,157	154,840,006	66,476,849	45,522
Red Lake.....	18	10	22,758	2,818	593,833	570,027	66,194	389
Redwood.....	30	54	51,763	4,576	581,935	722,265	140,339	184
Renville.....	65	152	165,095	13,830	2,282,224	2,688,697	406,473	1,264
Rice.....	85	982	854,490	166,804	12,793,100	15,321,879	2,618,779	4,042
Rock.....	20	84	94,605	16,834	467,548	734,442	266,894	262
Roseau.....	21	41	32,827	3,338	262,389	341,237	78,857	353
St. Louis.....	332	15,546	19,402,065	2,058,079	50,626,858	89,702,203	39,076,405	101,481
Scott.....	51	307	271,689	26,698	3,925,357	5,490,439	1,535,073	1,950
Sherburne.....	13	21	20,716	1,119	484,702	580,280	95,558	141
Sibley.....	43	106	93,133	11,751	1,335,908	1,577,598	241,690	848
Slemons.....	191	2,708	3,126,766	274,791	11,493,179	16,938,784	5,445,605	20,586
Steele.....	62	247	277,135	33,984	2,915,312	3,570,750	652,438	865
Stevens.....	14	28	28,106	3,604	344,742	426,361	81,619	187
Swift.....	26	81	81,090	20,701	2,512,260	3,422,119	909,859	1,037
Todd.....	44	241	368,120	12,039	2,019,348	2,550,705	531,362	731
Traverse.....	11	24	21,127	2,146	129,965	189,118	59,153	68
Wabasha.....	50	224	275,893	67,576	7,497,459	8,317,299	819,840	1,221
Wadena.....	41	88	96,658	8,009	1,138,966	1,383,109	244,143	516
Waseca.....	33	266	319,223	31,254	8,890,962	9,845,870	954,917	2,333
Washington.....	55	1,098	1,080,993	199,842	4,008,513	6,990,949	1,982,436	2,685
Watsonwan.....	31	131	164,082	11,501	2,293,657	2,560,064	266,407	1,438
Wilkin.....	9	133	165,327	1,184	227,252	409,912	182,660	129
Winona.....	102	2,579	2,205,975	505,283	20,436,176	26,384,747	5,948,571	10,823
Wright.....	82	196	170,288	28,623	3,378,990	3,874,567	495,577	1,890
Yellow Medicine.....	28	63	77,336	14,792	1,783,166	2,024,546	241,380	587

¹ Includes Mower County, to avoid disclosure of individual operations.

MANUFACTURES—MINNESOTA.

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.....	6,225	115,623	100.0	\$1,218,130	100.0	\$335,040	100.0	Mattresses and spring beds, not elsewhere specified.....	9	459	0.4	\$3,872	0.3	\$1,470	0.4
Flour-mill and gristmill products.....	248	6,049	5.2	381,249	31.3	43,376	12.9	Copper, tin, and sheet-iron work.....	128	753	0.6	3,803	0.3	1,740	0.5
Slaughtering and meat packing.....	13	5,231	4.5	146,361	12.0	17,855	5.3	Boxes, wooden packing, except cigar boxes.....	28	695	0.6	3,454	0.3	1,264	0.4
Butter.....	832	1,062	1.7	85,882	7.3	6,061	2.1	Tobacco, cigars and cigarettes.....	216	891	0.8	3,205	0.3	1,733	0.5
Lumber and timber products.....	244	12,602	10.9	37,321	3.1	20,150	6.0	Cooperage.....	11	575	0.5	3,199	0.3	1,174	0.4
Cars and general shop construction and repairs by steam-railroad companies.....	75	15,970	13.8	35,351	2.9	22,658	6.8	Artificial stone products.....	171	766	0.7	3,047	0.3	1,763	0.5
Oil, linseed.....	6	483	0.4	33,238	2.7	4,442	1.3	Carriages and wagons, including repairs.....	67	565	0.5	2,970	0.2	1,470	0.4
Foundry and machine-shop products.....	216	6,183	5.3	31,865	2.6	19,151	5.7	Malt.....	7	96	0.1	2,920	0.2	637	0.2
Bread and other bakery products.....	423	2,975	2.6	22,815	1.9	8,809	2.6	Woolen goods.....	11	574	0.5	2,864	0.2	1,084	0.3
Paper and wood pulp.....	9	2,523	2.2	20,138	1.7	8,730	2.6	Cheese.....	66	89	0.1	2,838	0.2	332	0.1
Printing and publishing, newspapers and periodicals.....	701	3,058	2.6	20,089	1.6	14,210	4.2	Paints.....	12	117	0.1	2,512	0.2	901	0.3
Food preparations, not elsewhere specified.....	41	624	0.5	14,707	1.2	4,289	1.3	Agricultural implements.....	12	501	0.4	2,341	0.2	986	0.3
Knit goods.....	16	3,564	3.1	13,985	1.1	6,498	1.9	Brick and tile, terra-cotta, and fire-clay products.....	34	799	0.7	2,293	0.2	1,484	0.4
Printing and publishing, book and job.....	277	3,062	2.6	12,995	1.1	8,644	2.6	Tinware, not elsewhere specified.....	7	455	0.4	2,182	0.2	1,023	0.3
Engines, steam, gas, and water.....	14	1,529	1.3	12,946	1.1	8,367	2.5	Poultry, killing and dressing, not done in slaughtering and meat-packing establishments.....	10	88	0.1	2,108	0.2	231	0.1
Boots and shoes.....	16	2,153	1.9	12,045	1.0	4,902	1.5	Boxes, set-up paper boxes and cartons.....	16	711	0.6	2,086	0.2	1,123	0.3
Coffee, roasting and grinding.....	13	532	0.5	12,186	1.0	1,921	0.6	Millinery and lace goods, not elsewhere specified.....	23	541	0.5	2,008	0.2	1,021	0.3
Lumber, planing-mill products, not including planing mills connected with sawmills.....	94	2,188	1.9	11,804	1.0	5,276	1.6	Condensed milk.....	5	84	0.1	1,865	0.2	282	0.1
Confectionery and ice cream.....	117	1,959	1.7	10,056	0.8	4,368	1.3	Belting, leather.....	3	116	0.1	1,909	0.1	613	0.2
Structural ironwork, not made in steel works or rolling mills.....	19	2,183	1.9	9,953	0.8	4,328	1.3	Canning and preserving, vegetables.....	25	456	0.4	1,792	0.1	727	0.2
Automobile repairing.....	502	1,842	1.6	9,282	0.8	7,119	2.1	Automobile bodies and parts.....	48	405	0.4	1,763	0.1	886	0.3
Fur goods.....	45	905	0.8	8,063	0.7	2,859	0.9	Pickles, preserves, and sauces.....	13	227	0.2	1,708	0.1	444	0.1
Liquors, malt.....	28	1,036	0.9	7,713	0.6	5,666	1.7	Coffins, burial cases, and undertakers' goods.....	7	247	0.2	1,593	0.1	931	0.3
Clothing, men's.....	34	1,561	1.3	7,065	0.6	2,226	0.7	Mineral and soda waters.....	114	213	0.2	1,544	0.1	751	0.2
Furniture.....	69	1,567	1.4	6,805	0.6	3,743	1.1	Steam packing.....	5	208	0.2	1,528	0.1	699	0.2
Coke, not including gas-house coke.....	3	426	0.4	6,469	0.5	1,497	0.6	Chemicals.....	9	162	0.1	1,456	0.1	832	0.2
Patent medicines and compounds.....	51	461	0.4	6,303	0.5	3,581	1.1	Shirts.....	9	253	0.2	1,180	0.1	555	0.2
Gas, illuminating and heating.....	23	707	0.6	5,518	0.5	3,110	0.9	Cars and general shop construction and repairs by electric-railroad companies.....	8	436	0.4	1,065	0.1	625	0.2
Marble and stone work.....	109	1,021	0.9	4,721	0.4	2,819	0.8	Stoves and hot-air furnaces.....	12	236	0.2	1,055	0.1	649	0.2
Electrical machinery, apparatus, and supplies.....	20	942	0.8	4,354	0.4	2,321	0.7	Brass, bronze, and copper products.....	10	213	0.2	1,018	0.1	467	0.1
Saddlery and harness.....	51	436	0.4	4,159	0.3	1,330	0.4	All other industries.....	691	16,255	14.0	143,813	11.8	51,611	15.4
Signs and advertising novelties.....	31	989	0.8	4,083	0.3	2,841	0.8								
Leather goods, not elsewhere specified.....	11	683	0.6	4,052	0.3	1,495	0.5								

¹ Among the industries for which statistics can not be shown separately without the possibility of disclosing individual operations 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"; "bags, other than paper, not including bags made in textile mills"; "cement"; "cordage and twine"; "drug grinding"; "gas machines and gas and water meters"; "iron and steel, blast furnaces"; "iron and steel works and rolling mills"; "leather, tanned, curried, and finished"; "linens and matting, from cocoa fiber, grass, and coir"; "oleomargarine and other butter substitutes"; "refrigerators"; "sand and emery paper and cloth"; "shipbuilding, steel"; and "window and door screens and weather strips."

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	147,678	121,609	26,069	82.3	17.7	Clerks and other subordinate salaried employees.....	1919	20,024	13,288	6,736	66.4	33.6
	1914	115,690	100,158	15,532	86.6	13.4		1914	13,314	10,103	3,211	76.3	23.7
	1909	104,406	90,058	14,348	85.3	13.7		1909	10,497	7,891	2,606	75.2	24.8
Proprietors and officials.....	1919	12,031	11,617	414	96.6	3.4	Wage earners (average number).....	1919	115,623	96,704	18,919	83.6	16.4
	1914	9,542	9,300	242	97.5	2.5		1914	92,834	80,695	12,139	86.9	13.1
	1909	9,142	8,908	234	97.4	2.6		1909	84,767	73,259	11,508	86.4	13.6
Proprietors and firm members.....	1919	5,128	4,943	185	96.4	3.6	16 years of age and over.....	1919	115,261	96,387	18,874	83.6	16.4
	1914	5,233	5,071	162	96.9	3.1		1914	92,560	80,509	12,051	87.0	13.0
	1909	5,376	5,206	170	96.8	3.2		1909	84,461	73,038	11,423	86.5	13.5
Salaried officers of corporations.....	1919	2,416	2,312	104	95.7	4.3	Under 16 years of age.....	1919	362	317	45	87.6	12.4
	1914	1,731	1,681	50	97.1	2.9		1914	274	186	88	67.9	32.1
	1909	1,596	1,560	36	97.7	2.3		1909	306	221	85	72.2	27.8
Superintendents and managers.....	1919	4,487	4,362	125	97.2	2.8							
	1914	2,578	2,548	30	98.8	1.2							
	1909	2,170	2,142	28	98.7	1.3							

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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	115,023	83.4	16.3	0.3	Foundry and machine-shop products ¹	1919	6,360	98.7	1.2	(¹)
	1914	92,834	80.7	13.0	0.3		1914	3,023	99.6	0.3	0.1
	1909	84,767	86.2	13.5	0.4						
Agricultural implements.....	1919	501	99.2	0.8	.....	Fur goods.....	1919	905	38.2	61.7	0.1
	1914	372	100.0	.....	.....		1914	838	37.7	62.3	.....
Artificial stone products.....	1919	766	99.5	0.4	0.1	Furniture.....	1919	1,587	94.6	5.0	0.4
	1914	738	99.9	0.1	.....		1914	1,473	98.6	1.0	0.4
Automobile bodies and parts.....	1919	405	97.0	3.0	.....	Gas, illuminating and heating.....	1919	707	99.0	1.0	.....
	1914	141	99.3	0.7	.....		1914	1,038	100.0	.....	.....
Automobile repairing.....	1919	1,842	99.2	0.7	0.1	Knit goods.....	1919	3,564	16.2	83.8	(¹)
	1914	456	99.6	0.2	0.2		1914	2,088	14.6	85.4	.....
Boots and shoes.....	1919	2,153	57.0	42.5	0.4	Leather goods, not elsewhere specified ²	1919	683	37.5	62.5	.....
	1914	2,012	71.1	28.2	0.7						
Boxes, set-up paper boxes and cartons.....	1919	711	35.9	62.7	1.4	Liquors, malt.....	1919	1,036	99.7	0.3	.....
	1914	650	43.7	55.4	0.9		1914	2,052	99.8	0.2	.....
Boxes, wooden packing, except cigar boxes.....	1919	695	99.5	5.8	3.7	Lumber and timber products.....	1919	12,602	99.0	0.9	0.1
	1914	708	99.7	.....	0.3		1914	10,814	99.9	0.1	.....
Bread and other bakery products.....	1919	2,075	61.3	37.9	0.8	Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	1919	2,188	98.2	0.9	0.9
	1914	2,169	72.2	27.1	0.7		1914	3,137	99.4	0.2	0.4
Brick and tile, terra-cotta, and fire-clay products.....	1919	799	98.0	.....	2.0	Marble and stone work.....	1919	1,021	99.8	0.1	0.1
	1914	1,215	100.0	.....	.....		1914	1,579	100.0	.....	.....
Butter.....	1919	1,902	91.2	8.6	0.2	Mattresses and spring beds, not elsewhere specified.....	1919	459	34.3	15.7	.....
	1914	1,420	97.6	2.1	0.3		1914	440	87.3	12.7	.....
Canning and preserving, vegetables.....	1919	456	60.1	39.9	.....	Millinery and lace goods, not elsewhere specified.....	1919	541	5.4	94.3	0.4
	1914	317	59.9	38.8	1.3		1914	308	10.1	89.9	.....
Carriages and wagons, including repairs.....	1919	565	99.5	0.5	.....	Oil, linseed.....	1919	483	98.6	1.4	.....
	1914	838	99.9	0.1	.....		1914	400	100.0	.....	.....
Cars and general shop construction and re- pairs by electric-railroad companies.....	1919	436	95.9	4.1	.....	Paper and wood pulp.....	1919	2,523	93.1	6.9	.....
	1914	435	100.0	.....	.....		1914	1,345	97.4	2.6	.....
Cars and general shop construction and re- pairs by steam-railroad companies.....	1919	15,070	98.8	1.2	.....	Patent medicines and compounds.....	1919	461	44.3	54.4	1.3
	1914	10,551	99.9	(¹)	(¹)		1914	561	43.3	56.5	0.2
Clothing, men's.....	1919	1,561	15.2	84.8	.....	Printing and publishing, book and job.....	1919	3,062	66.3	32.8	0.9
	1914	2,110	19.3	80.7	.....		1914	2,901	71.0	28.4	0.6
Coffee, roasting and grinding.....	1919	532	52.6	47.4	.....	Printing and publishing, newspapers and periodicals.....	1919	3,058	76.7	21.2	2.1
	1914	313	44.4	55.6	.....		1914	2,042	83.3	14.9	1.8
Coke, not including gas-house coke ²	1919	426	90.5	0.5	.....	Saddlery and harness.....	1919	436	94.5	5.3	0.2
							1914	530	94.1	5.7	0.2
Confectionery and ice cream.....	1919	1,050	34.1	65.8	0.1	Signs and advertising novelties.....	1919	989	34.7	65.3	.....
	1914	978	41.7	58.2	0.1		1914	238	62.2	37.8	.....
Cooperage.....	1919	575	97.0	3.0	.....	Slaughtering and meat packing.....	1919	5,231	90.9	0.1	.....
	1914	706	98.0	2.0	.....		1914	2,565	97.5	2.5	.....
Copper, tin, and sheet-iron work.....	1919	758	98.8	0.9	0.3	Structural ironwork, not made in steel works or rolling mills.....	1919	2,183	99.3	0.6	0.1
	1914	855	100.0	.....	.....		1914	2,058	99.9	0.1	.....
Electrical machinery, apparatus, and sup- plies.....	1919	942	63.9	34.8	1.3	Tinware, not elsewhere specified ²	1919	455	62.0	38.0	.....
	1914	236	94.1	5.5	0.4						
Engines, steam, gas, and water.....	1919	1,529	99.4	0.6	.....	Tobacco, cigars and cigarettes.....	1919	891	55.4	43.5	1.0
	1914	508	99.8	0.2	.....		1914	1,261	69.6	29.7	0.7
Flour-mill and gristmill products.....	1919	6,040	97.1	2.8	0.1	Woolen goods.....	1919	574	48.3	51.7	.....
	1914	4,564	98.0	2.0	.....		1914	448	54.2	45.5	0.3
Food preparations, not elsewhere specified..	1919	624	50.2	49.7	0.2	All other industries.....	1919	18,427	82.7	16.8	0.5
	1914	426	45.1	54.7	0.2		1914	10,842	75.8	23.1	1.1

¹ Less than one-tenth of 1 per cent.

² Not shown separately in 1914.

³ Includes "iron and steel, welding" and "machine tools."

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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. ¹	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
Duluth.....	10,472	5,538	6,083	9,381	4,956	5,615	1,075	574	444	16	8	24	\$75,261,387	\$19,729,283	\$17,180,063
Faribault.....	806			612			180			14			10,155,358		
Hibbing.....	50	65		37	56		13	9					320,427	254,400	
Mankato.....	771	755	807	612	637	662	158	118	135	1		10	9,766,306	4,344,114	3,722,736
Minneapolis.....	38,154	28,295	26,962	29,393	22,791	22,822	8,606	5,470	4,074	155	34	66	491,382,975	187,854,159	165,404,680
Rochester.....	359			304			55						2,250,242		
St. Cloud.....	1,998	1,429	626	1,889	1,320	595	86	108	30	23	1	1	7,733,764	2,695,492	2,299,063
St. Paul.....	22,640	19,483	19,339	16,766	15,340	14,553	5,845	4,106	4,742	38	37	44	149,638,290	68,682,206	58,990,025
Winona.....	2,534	2,070	2,032	1,858	1,639	1,630	672	422	396	4	9	6	25,119,522	14,304,780	11,199,622

¹ Excludes Austin and Virginia to avoid disclosure of individual operations.

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.....	114,763	98,336	<i>79,918</i>	93.9	98.2	88.2	July.....	114,430	92,007	84,667	93.6	91.9	93.4
February.....	113,885	100,110	80,909	93.2	100.0	89.3	August.....	116,607	91,128	85,847	95.4	91.0	94.7
March.....	113,326	96,982	82,081	92.7	96.9	90.6	September.....	118,627	89,739	87,643	97.0	89.6	96.7
April.....	110,691	92,417	81,134	90.5	92.3	89.5	October.....	120,020	90,525	90,620	98.2	90.4	100.0
May.....	<i>109,489</i>	92,257	82,952	92.2	91.5	91.5	November.....	120,930	89,202	89,503	98.9	89.1	98.8
June.....	112,458	92,310	85,038	92.0	92.2	93.8	December.....	122,250	<i>88,995</i>	86,896	100.0	88.9	95.9

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.....	115,623	114,763	113,885	113,326	110,691	<i>109,489</i>	112,458	114,430	116,607	118,627	120,020	120,930	122,250	88.6
Males.....	96,704	97,018	95,400	95,083	92,650	<i>91,332</i>	94,275	96,281	98,972	100,263	100,678	100,978	102,271	89.3
Females.....	18,919	<i>17,745</i>	18,485	18,243	18,041	18,157	18,183	18,505	20,326	19,655	19,342	19,952	19,979	87.3
Agricultural implements.....	501	475	485	481	451	<i>448</i>	480	512	511	559	503	544	533	80.1
Artificial stone products.....	766	478	489	522	741	847	943	1,009	961	949	891	753	609	47.4
Automobile bodies and parts.....	405	328	340	361	397	386	403	422	452	422	446	446	454	72.2
Automobile repairing.....	1,842	<i>1,453</i>	1,475	1,550	1,794	1,933	2,044	2,131	2,120	2,058	1,916	1,846	1,775	68.2
Boots and shoes.....	2,153	<i>2,026</i>	2,078	2,062	2,069	2,086	2,102	2,057	2,204	2,231	2,248	2,340	2,339	86.6
Boxes, set-up paper boxes and cartons.....	711	650	660	676	690	705	719	726	794	712	744	770	746	84.4
Boxes, wooden packing, except cigar boxes.....	695	621	642	634	654	668	731	752	773	746	727	705	687	80.3
Bread and other bakery products.....	2,075	2,710	<i>2,699</i>	2,710	2,784	2,798	2,904	3,070	3,179	3,056	3,211	3,300	3,270	81.8
Brick and tile, terra-cotta, and fire-clay products.....	799	<i>348</i>	381	397	616	841	1,077	1,146	1,150	1,115	977	880	660	30.3
Butter.....	1,962	<i>1,702</i>	1,707	1,733	1,897	2,125	2,278	2,231	2,228	2,010	1,906	1,892	1,826	74.7
Canning and preserving, vegetables.....	456	72	66	80	131	167	320	573	1,630	1,611	438	254	130	4.0
Carriages and wagons, including repairs.....	565	550	543	551	540	525	621	541	606	592	603	608	598	85.7
Cars and general shop construction and repairs by electric-railroad companies.....	436	445	467	403	438	388	<i>346</i>	430	425	422	434	433	511	67.7
Cars and general shop construction and repairs by steam-railroad companies.....	15,976	16,290	16,279	16,153	15,944	15,853	15,818	15,971	<i>15,190</i>	16,375	15,991	15,922	15,926	92.8
Clothing, men's.....	1,561	<i>1,299</i>	1,325	1,322	1,322	1,367	1,438	1,572	1,752	1,778	1,850	1,834	1,867	99.6
Coffee, roasting and grinding.....	532	528	518	480	489	509	584	582	545	531	531	531	531	82.5
Coke, not including gas-house coke.....	426	409	429	428	412	416	367	401	377	425	450	455	483	76.0
Confectionery and ice cream.....	1,959	1,722	1,865	1,809	1,660	1,660	<i>1,594</i>	1,696	2,083	2,126	2,357	2,429	2,507	63.6
Cooperage.....	575	599	597	563	551	607	557	562	575	589	595	603	602	81.1
Copper, tin, and sheet-iron work.....	758	566	542	592	650	673	733	838	880	897	906	941	878	57.6
Electrical machinery, apparatus, and supplies.....	942	<i>916</i>	925	971	918	918	938	928	924	940	954	967	1,005	91.1
Engines, steam, gas, and water.....	1,529	1,750	1,834	1,893	1,709	1,567	1,454	1,489	1,420	1,380	1,378	1,320	<i>1,154</i>	61.0
Flour-mill and gristmill products.....	6,049	6,228	5,645	<i>5,607</i>	5,881	5,967	5,822	5,715	5,972	6,261	6,456	6,500	6,504	86.2
Food preparations, not elsewhere specified.....	624	574	588	535	542	550	580	661	668	708	768	674	690	69.0
Foundry and machine-shop products.....	6,183	<i>7,463</i>	6,102	5,898	5,974	5,748	<i>5,537</i>	5,827	6,035	6,162	6,434	6,453	6,563	74.2
Furniture.....	1,587	<i>1,271</i>	1,362	1,442	1,470	1,513	1,535	1,615	1,650	1,692	1,745	1,848	1,892	67.2
Gas, illuminating and heating.....	707	661	692	639	699	751	783	701	681	706	744	756	736	80.7
Knit goods.....	3,564	3,972	4,170	4,171	4,055	3,900	3,712	3,367	3,129	3,087	3,106	3,063	<i>3,026</i>	72.5
Leather goods, not elsewhere specified.....	683	632	597	588	595	625	649	687	703	717	756	813	834	70.5
Liquors, malt.....	1,036	778	790	977	1,024	1,073	1,389	1,341	1,216	971	1,028	1,028	817	59.0
Lumber and timber products.....	12,602	15,376	15,810	15,139	11,602	<i>9,755</i>	10,504	10,500	9,937	11,260	12,559	13,473	15,365	61.7
Lumber, planing-mill products, not including planing mills connected with sawmills.....	2,188	<i>1,566</i>	1,609	1,657	1,795	2,076	2,341	2,440	2,537	2,530	2,539	2,586	2,590	60.1

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

[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.	
Marble and stone work.....	1,021	<i>810</i>	834	917	968	1,005	1,035	1,080	1,092	1,121	1,135	1,109	1,137	72.0
Mattresses and spring beds, not elsewhere specified.....	450	<i>340</i>	370	401	415	443	478	499	533	502	517	513	491	64.9
Millinery and lace goods, not elsewhere specified.....	541	404	806	564	528	482	417	403	778	615	549	462	487	51.7
Oil, linseed.....	483	461	453	449	454	476	476	577	517	498	500	492	503	72.1
Paper and wood pulp.....	2,523	2,681	2,660	2,545	2,590	2,590	2,556	2,337	2,305	2,372	2,452	2,524	2,655	86.0
Patent medicines and compounds.....	461	<i>398</i>	420	432	442	457	510	541	514	464	479	445	432	73.2
Printing and publishing, book and job.....	3,082	2,911	2,977	3,005	3,027	3,032	3,015	3,012	3,020	3,080	3,134	3,223	3,299	88.2
Printing and publishing, newspapers and periodicals.....	3,053	2,941	2,964	2,904	3,006	3,011	3,006	3,018	3,081	3,096	3,169	3,230	3,210	91.1
Saddlery and harness.....	436	427	438	436	428	417	407	410	434	441	457	458	479	85.0
Signs and advertising novelties.....	980	<i>720</i>	787	837	870	920	963	994	1,059	1,126	1,212	1,212	1,162	99.4
Slaughtering and meat packing.....	5,231	5,843	5,379	5,889	4,989	<i>4,885</i>	4,870	5,091	5,022	4,858	4,953	5,605	6,018	80.7
Structural ironwork, not made in steel works or rolling mills.....	2,183	2,370	2,241	2,253	2,040	1,915	1,748	1,937	2,134	2,257	2,399	2,459	2,443	71.1
Tinware, not elsewhere specified.....	455	<i>369</i>	433	483	431	374	409	437	555	552	406	401	460	63.1
Tobacco, cigars and cigarettes.....	801	861	879	889	891	880	867	849	901	879	912	943	941	90.0
Woolen goods.....	574	580	559	548	563	561	573	589	583	578	580	598	599	90.0
All other industries.....	18,604	17,307	<i>17,269</i>	17,315	17,727	17,984	19,120	19,218	19,823	19,613	19,858	19,201	18,719	87.0
<i>Industries showing large proportion of females.</i>														
Boots and shoes.....	917	901	904	<i>890</i>	870	893	906	871	941	946	957	975	980	87.8
Boxes, set-up paper boxes and cartons.....	451	<i>422</i>	426	438	430	450	453	458	467	444	466	489	469	80.3
Bread and other bakery products.....	1,134	1,015	1,014	<i>1,111</i>	1,059	1,024	1,081	1,176	1,231	1,135	1,271	1,325	1,260	70.3
Clothing, men's.....	1,323	<i>1,111</i>	1,140	1,152	1,125	1,165	1,227	1,344	1,488	1,491	1,554	1,534	1,565	71.0
Coffee, roasting and grinding.....	240	240	246	225	224	243	279	291	257	237	243	250	280	77.0
Confectionery and ice cream.....	1,290	1,183	1,266	1,220	1,089	1,096	993	1,049	1,342	1,351	1,549	1,633	1,700	58.4
Electrical machinery, apparatus, and supplies.....	328	361	365	364	333	328	322	313	297	304	290	316	334	81.4
Food preparations, not elsewhere specified.....	310	310	312	288	276	265	280	325	348	331	341	313	331	70.1
Fur goods.....	558	509	481	478	478	485	513	558	573	629	644	679	660	70.4
Knit goods.....	2,085	3,416	3,575	3,593	3,448	3,288	3,094	2,778	2,562	2,504	2,551	2,513	2,498	69.5
Leather goods, not elsewhere specified.....	427	399	301	361	362	392	403	425	436	452	479	510	536	67.5
Millinery and lace goods, not elsewhere specified.....	512	377	776	536	498	453	301	376	751	585	510	450	453	48.3
Patent medicines and compounds.....	251	209	225	238	239	245	284	317	295	252	271	244	235	64.0
Printing and publishing, book and job.....	1,005	981	988	998	997	1,004	985	977	976	997	1,011	1,040	1,097	89.0
Printing and publishing, newspapers and periodicals.....	656	632	635	625	652	657	646	647	664	643	686	696	689	80.8
Signs and advertising novelties.....	446	<i>440</i>	467	536	565	607	616	642	693	747	815	803	782	55.1
Slaughtering and meat packing.....	475	519	489	497	492	490	408	476	473	420	455	472	449	80.9
Tobacco, cigars and cigarettes.....	388	374	388	391	396	385	375	356	392	384	399	408	408	87.3
Woolen goods.....	297	<i>296</i>	269	278	293	293	295	304	301	301	305	317	312	84.9
Total for cities.....	77,793	74,718	75,046	75,128	75,200	75,328	76,548	77,900	80,117	80,476	81,383	81,088	80,500	91.8
Males.....	61,060	58,952	58,540	58,861	59,149	59,162	60,539	61,641	62,637	63,534	63,793	63,242	62,070	91.8
Females.....	16,733	<i>15,766</i>	16,506	16,267	16,051	16,166	16,009	16,259	17,480	16,941	17,590	17,846	17,920	88.0
DULUTH.....	10,472	11,174	10,855	10,720	10,020	9,973	10,849	10,646	10,819	10,883	10,581	9,768	9,370	83.9
Males.....	9,304	10,211	9,856	9,728	9,053	8,972	9,815	9,610	9,771	9,749	9,339	8,509	8,115	79.5
Females.....	1,078	<i>963</i>	999	998	967	1,001	1,034	1,036	1,048	1,134	1,242	1,259	1,255	70.5
FARIBAULT.....	806	727	717	736	753	761	781	826	948	919	829	835	840	75.6
Males.....	625	572	578	594	595	601	615	628	675	663	660	650	663	84.7
Females.....	181	155	139	142	158	160	166	198	273	256	169	179	177	50.9
HIBBING.....	50	45	47	47	51	51	53	51	51	51	51	51	52	84.9
Males.....	37	33	35	35	38	38	40	38	37	37	37	37	38	82.5
Females.....	13	12	12	12	13	13	13	13	13	13	14	14	14	85.7
MANKATO.....	771	<i>692</i>	708	706	761	756	704	752	814	797	859	862	841	80.3
Males.....	613	537	548	546	602	601	545	594	655	643	703	703	679	70.4
Females.....	158	155	160	160	159	155	159	158	159	154	156	159	162	95.1
MINNEAPOLIS.....	38,154	35,829	36,065	36,283	37,220	37,515	37,340	38,216	39,229	39,572	40,073	40,233	40,201	88.9
Males.....	29,520	27,513	27,441	27,583	28,569	28,833	28,913	29,730	30,480	31,216	31,266	31,372	31,324	87.5
Females.....	8,634	<i>8,316</i>	8,624	8,700	8,650	8,682	8,427	8,486	8,749	8,356	8,807	8,861	8,880	93.2
ROCHESTER.....	359	334	344	344	340	345	359	376	364	370	372	381	379	87.7
Males.....	304	285	289	288	288	296	306	317	308	314	311	327	319	87.2
Females.....	55	49	55	56	52	49	53	59	56	56	61	54	60	80.3
SAINT CLOUD.....	1,998	1,907	1,923	1,970	1,976	1,903	1,950	2,079	2,101	2,103	2,145	2,012	1,898	88.7
Males.....	1,912	1,826	1,844	1,893	1,895	1,827	1,880	2,000	2,001	2,003	2,035	1,926	1,814	80.1
Females.....	86	81	79	77	81	76	70	79	100	100	110	86	84	99.1
SAINT PAUL.....	22,640	<i>21,518</i>	21,834	21,802	21,725	21,612	22,124	22,555	23,197	23,235	23,857	24,165	24,164	89.0
Males.....	16,796	16,140	16,114	16,344	16,351	16,214	16,837	16,929	16,854	16,998	17,500	17,733	17,720	90.9
Females.....	5,843	<i>5,378</i>	5,720	5,458	5,374	5,398	5,287	5,626	6,343	6,237	6,348	6,432	6,443	83.5
WINONA.....	2,534	2,487	2,553	2,514	2,345	2,412	2,379	2,399	2,595	2,545	2,616	2,721	2,842	82.5
Males.....	1,859	1,835	1,850	1,850	1,758	1,780	1,788	1,795	1,856	1,910	1,933	1,979	1,989	88.4
Females.....	675	652	718	664	587	632	591	604	739	635	683	742	853	68.8

¹ Excludes Austin and Virginia to avoid disclosure of individual operations.

MANUFACTURES—MINNESOTA.

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 1914 1909	115,623 82,834 81,767	5,258 (²) (²)	8,947 (²) (²)	44,940 14,041 7,745	12,215 8,499 6,452	10,030 18,116 12,754	11,517 13,753 14,206	16,823 35,563 40,103	5,893 2,882 3,507
Agricultural implements.....	1919 1914	501 872	(²)	(²)	6 1	230	14 9	111 179	140 683	
Artificial stone products.....	1919 1914	766 738	4 (²)	1 (²)	93 49	3 11	232 234	21 23	412 421	
Automobile bodies and parts.....	1919 1914	405 141	21	2	5	138 63	142 15	47 44	50 19	
Automobile repairing.....	1919 1914	1,842 456	1 (²)	32 (²)	213 36	203	744 201	110 28	518 149	21 42
Boots and shoes.....	1919 1914	2,153 2,012	5 (²)	(²)	400 39	1,299	432	449 779	762	
Boxes, set up paper boxes and cartons.....	1919 1914	711 650	17 (²)	7 (²)	335 65	149 137	203 42	170	236	
Boxes, wooden packing, except cigar boxes.....	1919 1914	695 768	7 (²)	(²)	2	62 8	158 25	326 40	142 687	
Bread and other bakery products.....	1919 1914	2,975 2,109	29 (²)	906 (²)	1,201 232	74 74	609 983	19 75	113 776	21 29
Brick and tile, terra-cotta, and fire-clay products.....	1919 1914	799 1,215	(²)	(²)	132 107	11	157 127	8	510 955	7
Butter.....	1919 1914	1,962 1,426	68 (²)	10 (²)	497 230	14 18	366 306	74 10	833 796	100 66
Canning and preserving, vegetables.....	1919 1914	456 317	13 (²)	9 (²)	46 111	4 13	19 19	6	351 122	14 46
Carriages and wagons, including repairs.....	1919 1914	565 838	(²)	(²)	9 10	8 27	29 160	473 411	46 230	
Cars and general shop construction and repairs by electric-railroad companies.....	1919 1914	436 435	(²)	(²)	1 7		303 3	45	121 369	11 11
Cars and general shop construction and repairs by steam-railroad companies.....	1919 1914	15,976 10,551	(²)	5,883 (²)	9,565 2,081	96 1,746	302 2,257	39 3,049	1,067	1 401
Clothing, men's.....	1919 1914	1,561 2,119	1,231 (²)	(²)	244 619	86 974	473	22	31	
Coffee, roasting and grinding.....	1919 1914	532 313	34 (²)	(²)	137 42	75 100	2 61	110	284	
Coke, not including gas-house coke ³	1919	426								426
Confectionery and ice cream.....	1919 1914	1,959 978	108 (²)	45 (²)	672 23	656 36	273 436	65 331	119 73	21 79
Cooperage.....	1919 1914	575 766	(²)	(²)	22 129	113	54 175	236 85	150 377	
Copper, tin, and sheet-iron work.....	1919 1914	758 855	220 (²)	15 (²)	201 472	197 24	42 141	30 61	53 157	
Electrical machinery, apparatus, and supplies.....	1919 1914	942 236	39 (²)	(²)	14 19	404 76	68 18	417 122		1
Engines, steam, gas, and water.....	1919 1914	1,529 508		32	763	81 20	86 96	418 196	149 196	
Flour-mill and gristmill products.....	1919 1914	6,049 4,564	16 (²)	(²)	4,800 1,458	29	100 904	249 18	646 1,646	209 538
Food preparations, not elsewhere specified.....	1919 1914	624 426	23 (²)	6 (²)	133 6	62 15	59 148	232 179	109 68	10
Foundry and machine-shop products ⁴	1919 1914	6,360 3,623	238 (²)	27 (²)	1,222 84	710 360	1,109 653	2,596 1,494	458 1,032	
Fur goods.....	1919 1914	905 838	786 (²)	(²)	76 23	16 472	5 340	2 3	20	
Furniture.....	1919 1914	1,587 1,473	2 (²)	30 (²)	87 14	276	292 396	507 212	393 851	
Gas, illuminating and heating.....	1919 1914	707 1,038	6 (²)	22 (²)	5 13	1	8 18	631 633	6 43	28 331
Knit goods.....	1919 1914	3,504 2,088	1 (²)	80 (²)	403 35	3,080 32	2,021			
Leather goods, not elsewhere specified ³	1919	683		446	237					

¹ Includes 48 and under for 1914 and 1909.
² Corresponding figures not available.

³ Not shown separately in 1914.

⁴ Includes "iron and steel, welding" and "machine tools."

MANUFACTURES—MINNESOTA.

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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—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.
Liquors, malt.....	1919	1,036			823		59	60	94	
	1914	2,052	(²)	(²)	1,057	3	645		347	
Lumber and timber products.....	1919	12,002	7		330	43	1,553	221	7,698	2,760
	1914	16,814	(²)	(²)	16	280	1,456	25	14,687	350
Lumber, planing-mill products, not including planing mills connected with sawmills.	1919	2,188	1	129	11	302	738	721	286	
	1914	3,137	(²)	(²)	7	137	187	635	2,171	
Marble and stone work.....	1919	1,021	288		458	71	128	30	46	
	1914	1,579	(²)	(²)	971	14	184	107	213	
Mattresses and spring beds, not elsewhere specified.....	1919	450			21	11	11	387	29	
	1914	440	(²)	(²)	6	22	49	63	300	
Millinery and lace goods, not elsewhere specified.....	1919	541	35	233	57	216				
	1914	308	(²)	(²)	4	8	295		1	
Oil, linseed.....	1919	483				25	140		248	64
	1914	400							131	260
Paper and wood pulp.....	1919	2,523			1,072				544	307
	1914	1,345							900	445
Patent medicines and compounds.....	1919	461	27	54	111	76	173	15	5	
	1914	561	(²)	(²)	74	81	177	215	14	
Printing and publishing, book and job.....	1919	3,062	248	446	2,224	135	8	1		
	1914	2,901	(²)	(²)	1,426	1,233	215	14	3	10
Printing and publishing, newspapers and periodicals.....	1919	3,058	121	111	2,285	211	200	11	28	1
	1914	2,942	(²)	(²)	1,376	291	553	50	169	3
Saddlery and harness.....	1919	436	1		143	6	4	257	25	
	1914	530	(²)	(²)	4	116	88	273	49	
Signs and advertising novelties.....	1919	989	53		873	56	2			5
	1914	238	(²)	(²)	68	137	10		16	7
Slaughtering and meat packing.....	1919	5,231			5,059		103	45	3	21
	1914	2,505				15	4	8	2,538	
Structural ironwork, not made in steel works or rolling mills.....	1919	2,183	16		1,542	11	375	220	19	
	1914	2,058					31	1,973	54	
Tinware, not elsewhere specified ³	1919	455			8	420		27		
Tobacco, cigars and cigarettes.....	1919	891	222	121	355	126	34	1	24	8
	1914	1,261	(²)	(²)	925	210	78	2	46	
Woolen goods.....	1919	574			269	186	31	80	8	
	1914	448					114	290	44	
All other industries.....	1919	18,427	924	746	7,180	2,350	1,205	2,036	2,104	1,832
	1914	16,842	(²)	(²)	1,750	1,735	3,337	1,669	2,134	217
Total for cities ⁴	1919	77,793	4,827	6,317	32,117	10,988	6,712	9,486	4,989	2,357
	1914	57,635	(²)	(²)	12,207	7,773	14,315	10,484	11,380	1,470
DULUTH.....	1919	10,472	286	235	4,926	702	1,031	407	972	1,853
	1914	5,538	(²)	(²)	404	308	1,364	797	2,264	341
FARIBAULT.....	1919	806	3		135	7	2	346	271	42
HIBBING.....	1919	50	1		33		2	3	5	3
	1914	65	(²)	(²)	42		5		18	
MANKATO.....	1919	771	5		244	95	63	156	208	
	1914	755	(²)	(²)	55	24	239	9	397	31
MINNEAPOLIS.....	1919	38,154	1,876	4,066	15,232	6,288	3,043	5,367	1,941	341
	1914	28,295	(²)	(²)	6,403	1,612	9,013	5,464	5,359	444
ROCHESTER.....	1919	359		72	174		61	23	29	
ST. CLOUD.....	1919	1,998	158	323	1,256	19	163	14	33	19
	1914	1,429	(²)	(²)	486	96	95	49	678	25
ST. PAUL.....	1919	22,649	2,440	1,598	8,997	3,453	1,964	2,606	1,397	95
	1914	19,483	(²)	(²)	4,592	5,230	2,980	3,667	2,406	608
WINONA.....	1919	2,534	49	20	1,107	424	383	414	133	4
	1914	2,070	(²)	(²)	165	503	619	498	264	21

¹ Includes 48 and under for 1914 and 1919.
² Corresponding figures not available.

³ Not shown separately in 1914.

⁴ Excludes Austin and Virginia to avoid disclosure of individual operations.

MANUFACTURES—MINNESOTA.

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 earn- ers.	1 to 5 wage earn- ers, inclusive.	6 to 20 wage earn- ers, inclusive.	21 to 50 wage earn- ers, inclusive.	51 to 100 wage earn- ers, inclusive.	101 to 250 wage earn- ers, inclusive.	251 to 500 wage earn- ers, inclusive.	501 to 1,000 wage earn- ers, inclusive.	Over 1,000 wage earn- ers.								
			Establish- ments.	Establish- ments.	Wage earn-ers.	Establish- ments.	Wage earn-ers.	Establish- ments.	Wage earn-ers.	Establish- ments.	Wage earn-ers.	Establish- ments.	Wage earn-ers.	Establish- ments.	Wage earn-ers.				
All industries.....	6,225	115,623	771	3,707	7,318	902	11,129	383	12,234	107	11,748	127	19,300	48	15,895	18	12,633	12	25,306
Agricultural implements.....	16	501	.....	5	14	5	56	4	141	.....	2	290	.....	.....	.....	.....	.....	.....	.....
Artificial stone products.....	171	766	10	128	235	24	254	9	277	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Automobile bodies and parts.....	48	405	9	26	63	7	89	5	167	1	86	.....	.....	.....	.....	.....	.....	.....	.....
Automobile repairing.....	592	1,842	21	500	996	63	607	8	239	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boots and shoes.....	16	2,153	.....	3	6	2	31	1	43	3	225	5	718	2	542	1	588	.....	.....
Boxes, set-up paper boxes and cartons.....	16	711	.....	3	14	7	92	3	87	1	64	1	203	1	251	.....	.....	.....	.....
Boxes, wooden packing, except cigar boxes.....	28	695	.....	9	23	9	105	7	252	2	180	1	135	.....	.....	.....	.....	.....	.....
Bread and other bakery products.....	426	2,975	77	279	553	51	493	11	305	3	174	2	290	3	1,160	.....	.....	.....	.....
Brick and tile, terra-cotta, and fire-clay products.....	34	799	.....	5	15	20	264	5	165	3	210	1	145	.....	.....	.....	.....	.....	.....
Butter.....	832	1,962	37	754	1,177	31	320	8	263	1	76	1	126	.....	.....	.....	.....	.....	.....
Canning and preserving, vegetables.....	25	450	.....	2	5	17	231	5	138	1	82	.....	.....	.....	.....	.....	.....	.....	.....
Carriages and wagons, including repairs.....	67	565	16	41	78	6	60	.....	1	84	3	343	.....	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by electric-railroad companies.....	8	436	.....	4	9	2	23	.....	.....	.....	1	105	1	299	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	75	15,976	.....	14	32	11	135	11	326	10	765	13	2,147	5	1,056	8	5,635	3	5,280
Clothing, men's.....	34	1,561	.....	6	20	8	96	14	494	3	232	2	395	1	324	.....	.....	.....	.....
Coffee, roasting and grinding.....	13	532	.....	1	2	7	59	2	67	2	120	.....	.....	.....	.....	.....	.....	.....	.....
Coke, not including gas-house coke.....	3	426	.....	.....	.....	.....	.....	.....	.....	.....	91	2	335	.....	.....	.....	.....	.....	.....
Confectionery and ice cream.....	117	1,959	18	53	118	27	347	9	255	6	306	3	449	1	394	.....	.....	.....	.....
Cooperage.....	11	575	1	1	2	.....	5	176	2	131	2	266	.....	.....	.....	.....	.....	.....	.....
Copper, tin, and sheet-iron work.....	128	758	12	86	193	23	241	5	182	2	142	.....	.....	.....	.....	.....	.....	.....	.....
Electrical machinery, apparatus, and supplies.....	20	942	2	6	23	5	52	2	55	3	173	.....	.....	.....	.....	.....	.....	.....	.....
Engines, steam, gas, and water.....	14	1,529	.....	2	8	2	27	4	140	3	241	1	138	1	273	1	702	.....	.....
Flour-mill and gristmill products.....	248	6,049	23	151	334	31	346	23	661	12	823	4	550	2	703	.....	.....	2	2,632
Food preparations, not elsewhere specified.....	41	624	2	22	51	9	94	4	127	3	180	1	172	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products.....	216	6,183	15	74	179	76	901	28	866	9	657	9	1,331	4	1,344	1	905	.....	.....
Fur goods.....	45	905	2	22	59	15	176	2	65	2	106	1	229	1	270	.....	.....	.....	.....
Furniture.....	59	1,587	3	18	52	14	181	16	590	4	309	4	455	1	420	.....	.....	.....	.....
Gas, illuminating and heating.....	23	707	.....	14	34	7	85	.....	.....	.....	1	158	.....	.....	.....	.....	.....	.....	.....
Knit goods.....	16	3,564	1	4	7	7	73	1	43	1	74	.....	.....	.....	.....	.....	.....	1	3,013
Leather goods, not elsewhere specified.....	11	683	.....	2	6	.....	4	113	3	228	2	336	.....	.....	.....	.....	.....	.....	.....
Liquors, malt.....	28	1,036	1	6	28	12	133	3	72	4	275	1	184	1	344	.....	.....	.....	.....
Lumber and timber products.....	244	12,602	8	139	246	43	486	20	644	9	687	15	2,157	5	1,501	4	3,136	1	3,745
Lumber, planing-mill products, not including planing mills connected with sawmills.....	94	2,188	8	36	67	22	281	12	404	11	720	5	707	.....	.....	.....	.....	.....	.....
Marble and stone work.....	109	1,021	16	55	119	20	205	14	410	3	165	1	122	.....	.....	.....	.....	.....	.....
Mattresses and spring beds, not elsewhere specified.....	9	459	.....	1	2	3	40	2	74	1	80	2	263	.....	.....	.....	.....	.....	.....
Millinery and lace goods, not elsewhere specified.....	23	541	.....	13	21	7	89	.....	.....	.....	1	82	2	349	.....	.....	.....	.....	.....
Oil, linseed.....	6	483	.....	.....	.....	.....	2	50	2	137	2	296	.....	.....	.....	.....	.....	.....	.....
Paper and wood pulp.....	9	2,523	.....	.....	.....	.....	1	32	1	96	.....	2	269	3	1,011	2	1,115	.....	.....
Patent medicines and compounds.....	51	461	9	24	39	14	140	3	109	.....	1	173	.....	.....	.....	.....	.....	.....	.....
Printing and publishing, book and job.....	277	3,062	52	123	279	66	761	26	876	6	403	3	341	1	402	.....	.....	.....	.....
Printing and publishing, newspapers and periodicals.....	701	3,058	211	417	798	57	598	7	212	4	284	3	473	2	693	.....	.....	.....	.....
Saddlery and harness.....	51	436	7	36	47	1	19	4	127	3	243	.....	.....	.....	.....	.....	.....	.....	.....
Signs and advertising novelties.....	31	989	1	20	48	5	52	1	43	2	123	1	171	.....	.....	.....	.....	.....	.....
Slaughtering and meat packing.....	13	5,231	.....	3	8	2	23	3	90	1	92	1	144	1	362	.....	.....	2	4,512
Structural ironwork, not made in steel works or rolling mills.....	19	2,183	.....	4	8	9	97	1	25	2	122	2	390	.....	.....	.....	.....	1	1,541
Tinware, not elsewhere specified.....	7	455	.....	.....	.....	2	19	1	27	1	72	.....	.....	.....	.....	.....	.....	.....	.....
Tobacco, cigars and cigarettes.....	216	891	86	101	212	24	290	2	66	1	53	2	270	.....	.....	.....	.....	.....	.....
Woolen goods.....	11	574	.....	3	9	4	58	.....	.....	.....	2	130	1	111	1	266	.....	.....	.....
All other industries.....	973	18,604	121	492	1,079	215	2,390	85	2,736	31	2,126	21	3,564	6	2,006	.....	.....	2	4,643
Total for cities ¹	2,776	77,793	327	1,214	2,825	685	7,790	283	9,173	122	8,531	87	13,310	39	12,837	11	7,545	8	15,782
DULUTH.....	226	10,472	17	85	213	65	733	23	715	17	1,167	14	2,109	3	892	.....	.....	2	4,043
FARIBAULT.....	53	806	3	33	65	10	109	3	125	3	255	.....	.....	.....	.....	.....	.....	.....	.....
HIBBING.....	16	50	4	9	20	3	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
MANKATO.....	56	771	10	23	60	12	149	7	264	4	298	.....	.....	.....	.....	.....	.....	.....	.....
MINNEAPOLIS.....	1,421	38,154	158	642	1,497	352	3,982	143	4,621	60	4,063	40	5,988	19	6,352	1	512	6	11,139
ROCHESTER.....	41	359	7	22	53	10	108	1	24	.....	.....	1	174	.....	.....	.....	.....	.....	.....
St. CLOUD.....	72	1,998	5	29	80	22	271	13	404	.....	.....	1	122	.....	.....	.....	.....	.....	.....
St. PAUL.....	818	22,649	115	346	780	195	2,225	80	2,603	32	2,313	28	4,490	14	4,621	1	795	.....	.....
WINONA.....	73	2,534	8	25	57	16	183	13	417	6	430	3	427	1	394	.....	.....	.....	.....

¹ Excludes Austin and Virginia to avoid disclosure of individual operations.

MANUFACTURES—MINNESOTA.

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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.....	6,225	5,974	5,561	115,623	92,834	84,757	\$1,218,129,735	\$493,354,136	\$409,410,621	\$335,039,958	\$156,504,922	\$127,797,334
Less than \$5,000.....	1,541	2,040	1,909	1,000	2,108	2,194	4,053,239	5,094,063	4,663,743	2,674,854	3,358,140	3,080,907
\$5,000 to \$20,000.....	1,753	1,894	1,743	4,507	7,238	6,767	21,302,797	19,742,774	18,742,090	13,440,914	10,370,932	9,419,792
\$20,000 to \$100,000.....	1,850	1,476	1,347	13,228	16,170	14,180	90,269,656	83,588,461	56,703,495	31,841,810	23,117,977	20,748,523
\$100,000 to \$500,000.....	783	407	437	24,092	38,311	37,726	157,105,175	88,521,085	130,802,555	58,274,724	56,613,265	51,618,590
\$500,000 to \$1,000,000.....	132	79	65	14,509	30,007	23,900	93,021,686	56,156,041	198,507,720	36,378,265	63,044,608	42,929,522
\$1,000,000 and over.....	166	72		58,278			851,777,182	280,254,712		192,429,391		
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.....	24.8	34.2	35.4	0.9	2.3	2.6	0.3	1.0	1.1	0.8	2.1	2.4
\$5,000 to \$20,000.....	28.2	31.7	31.3	3.9	7.8	8.0	1.7	4.0	4.6	4.0	6.6	7.4
\$20,000 to \$100,000.....	29.7	24.7	24.2	11.4	16.3	16.7	7.4	12.9	13.8	9.5	14.8	16.2
\$100,000 to \$500,000.....	12.6	6.8	7.9	20.8	41.3	44.5	12.9	17.9	31.0	17.4	36.2	40.4
\$500,000 to \$1,000,000.....	2.1	1.3		12.5			7.7	11.4		10.9		
\$1,000,000 and over.....	2.7	1.2	1.2	50.4	32.3	28.2	69.9	52.8	48.5	57.4	40.3	33.6

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
BOOTS AND SHOES.....	16	14	100.0	100.0	2,153	2,012	100.0	100.0	\$12,644,659	\$5,918,031	100.0	100.0	\$4,901,556	\$1,937,639	100.0	100.0
\$20,000 to \$100,000.....	4	4	25.0	28.6	137	63	1.7	3.1	1,165,253	172,583	1.3	2.9	153,297	93,257	1.1	4.8
\$100,000 to \$500,000.....	4	5	25.0	35.7	281	1,040	13.1	96.9	1,287,405	1,059,415	10.2	28.0	682,274	1,844,382	13.9	95.2
\$500,000 to \$1,000,000.....	5	5	31.2	35.7	752		34.9		4,003,671	4,080,033	31.7	69.0	1,467,794		29.7	
\$1,000,000 and over.....	3		18.8		1,083		50.3		7,188,330		56.8		2,708,191		55.8	
BREAD AND OTHER BAKERY PRODUCTS.....	426	443	100.0	100.0	2,975	2,169	100.0	100.0	22,815,456	8,724,162	100.0	100.0	8,809,372	3,929,774	100.0	100.0
Less than \$5,000.....	78	172	18.3	38.8	34	118	1.1	5.4	221,460	522,307	1.0	6.0	90,252	257,057	1.0	6.5
\$5,000 to \$20,000.....	108	212	46.5	47.9	275	553	0.2	25.5	2,129,286	2,068,581	9.3	23.7	784,661	937,066	8.9	23.8
\$20,000 to \$100,000.....	126	47	29.6	10.6	680	427	22.0	10.7	5,032,207	1,769,884	22.1	20.3	1,716,868	723,036	19.5	18.4
\$100,000 to \$500,000.....	19	9	4.5	2.0	459	1,071	18.0	49.4	4,990,021	1,804,978	21.9	21.4	1,743,166	2,012,585	19.8	51.2
\$500,000 to \$1,000,000.....	5	3	0.7		1,450		48.7		2,498,412		28.6		4,474,425		50.8	
\$1,000,000 and over.....	6		1.2		1,450		48.7		10,442,473		45.8		4,474,425		50.8	
BUTTER.....	832	773	100.0	100.0	1,962	1,426	100.0	100.0	88,882,271	33,294,003	100.0	100.0	6,951,120	2,932,801	100.0	100.0
Less than \$5,000.....	7	27	0.8	3.5	30	14	0.1	1.0	21,883	85,956	(¹)	0.3	4,059	10,165	0.1	0.3
\$5,000 to \$20,000.....	53	220	6.4	28.5	30	209	1.5	14.7	717,502	3,038,415	0.8	0.1	79,927	330,527	1.1	11.3
\$20,000 to \$100,000.....	532	488	63.9	63.1	719	817	36.6	57.3	29,702,947	20,136,706	33.4	60.5	2,111,150	1,759,793	30.4	60.0
\$100,000 to \$500,000.....	222	34	26.7	4.4	706	386	36.0	27.1	36,541,071	6,658,733	41.1	20.0	2,225,219	1,832,316	32.0	28.4
\$500,000 to \$1,000,000.....	12	4	1.4	0.5	196		10.0		9,075,211	3,374,193	10.2	10.1	1,159,266		16.7	
\$1,000,000 and over.....	6		0.7		310		15.8		12,823,657		14.4		1,371,499		19.7	
CARS AND GENERAL SHOP CONSTRUCTION AND REPAIRS BY STEAM-RAILROAD COMPANIES..	75	38	100.0	100.0	15,976	10,551	100.0	100.0	35,350,784	14,594,018	100.0	100.0	22,658,210	8,266,790	100.0	100.0
Less than \$5,000.....	8		10.7		10		0.1		18,983		0.1		14,500		0.1	
\$5,000 to \$20,000.....	8	3	10.7	7.9	37	21	0.2	0.2	104,676	23,361	0.3	0.2	62,973	14,515	0.3	0.2
\$20,000 to \$100,000.....	20	13	26.7	34.2	446	455	2.8	4.3	983,611	728,611	2.8	5.0	728,972	439,736	3.2	5.3
\$100,000 to \$500,000.....	22	13	29.3	34.2	2,787	6,250	17.4	50.2	5,535,273	3,381,037	15.7	23.2	3,881,343	4,763,030	17.1	57.6
\$500,000 to \$1,000,000.....	6	6	8.0	16.8	1,781		11.1		3,933,701	4,611,267	11.1	31.6	2,792,438		12.3	
\$1,000,000 and over.....	11	3	14.7	7.9	10,915	3,825	68.3	36.3	24,774,520	5,840,742	70.1	40.1	15,177,984	3,049,509	67.0	36.0
CLOTHING, MEN'S.....	34	32	100.0	100.0	1,561	2,119	100.0	100.0	7,065,358	4,738,607	100.0	100.0	2,225,556	1,614,680	100.0	100.0
Less than \$5,000.....	7	3		9.4	132	66	2.0	3.1	161,161	9,460	0.9	1.4	169,179	8,014	2.7	0.5
\$5,000 to \$20,000.....	11	13	32.4	40.6	224	462	14.3	21.8	562,743	706,998	8.0	14.9	244,839	288,177	11.0	17.8
\$20,000 to \$100,000.....	12	6	35.3	18.8	486	1,583	31.1	74.7	2,867,343	1,105,366	40.6	23.3	1,171,550	1,269,920	52.6	78.6
\$500,000 and over.....	4	4	11.8	12.5	819		52.5		3,574,111	2,849,278	50.6	60.1	750,008		33.7	
CONFECTIONERY AND ICE CREAM	117	102	100.0	100.0	1,959	978	100.0	100.0	10,055,805	3,870,914	100.0	100.0	4,368,203	1,632,507	100.0	100.0
Less than \$5,000.....	23	28	19.7	27.5	10	25	0.5	2.6	55,275	65,887	0.5	1.7	27,339	30,154	0.6	2.2
\$5,000 to \$20,000.....	28	36	23.9	35.3	50	100	2.9	10.2	277,511	340,000	2.8	8.8	111,817	108,397	2.6	10.3
\$20,000 to \$100,000.....	45	27	38.5	26.5	420	309	21.4	31.6	1,910,342	1,209,602	19.0	31.2	842,318	534,234	19.3	32.7
\$100,000 to \$500,000.....	15	11	12.8	10.8	863	544	44.1	56.0	3,329,548	2,200,819	33.1	58.3	1,490,892	863,722	34.3	54.7
\$500,000 and over.....	6		5.1		610		31.1		4,483,129		44.6		1,880,842		43.2	

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

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

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

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

5 Less than one-tenth of 1 per cent.

MANUFACTURES—MINNESOTA.

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

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.				
	1919 1914		Percent distribution.		1919 1914		Percent distribution.		1919 1914		Percent distribution.		1919 1914		Percent distribution.		
			1919	1914			1919	1914			1919	1914			1919	1914	
FLLOUR-MILL AND GRISTMILL PRODUCTS.	248	286	100.0	100.0	6,049	4,564	100.0	100.0	\$381,248,891	\$148,243,708	100.0	100.0	\$43,376,370	\$20,929,137	100.0	100.0	
Less than \$5,000.	9	17	3.6	5.9	3	8	(1)	0.2	28,149	49,388	(1)	(1)	6,654	14,198	(1)	0.1	
\$5,000 to \$20,000.	24	55	9.7	19.2	15	59	0.2	1.3	319,507	686,228	0.1	0.5	54,386	138,387	0.1	0.7	
\$20,000 to \$100,000.	104	131	41.9	45.8	192	347	3.2	7.6	5,692,696	6,074,304	1.5	4.1	841,143	1,033,926	1.9	4.9	
\$100,000 to \$500,000.	57	47	23.0	16.4	308	248	5.1	14.2	11,025,747	10,462,497	2.9	7.1	1,350,294	2,310,184	3.1	11.0	
\$500,000 to \$1,000,000.	6	11	2.4	3.9	84	84	1.4	.....	4,176,771	8,132,086	1.1	5.5	450,399	.....	1.0	.....
\$1,000,000 and over.	48	25	19.4	8.7	5,447	3,502	90.0	76.7	360,005,021	122,839,205	94.4	82.9	40,673,503	17,432,442	93.8	83.3	
FOOD PREPARATIONS, NOT ELSE- WHERE SPECIFIED.	41	27	100.0	100.0	624	426	100.0	100.0	14,706,653	4,978,745	100.0	100.0	4,288,519	1,929,386	100.0	100.0	
Less than \$5,000.	7	9	17.1	33.3	7	8	1.1	1.9	17,761	26,741	0.1	0.5	8,519	14,357	0.2	0.7	
\$5,000 to \$20,000.	10	6	24.4	22.2	19	27	3.0	6.3	119,901	70,861	0.8	1.4	45,431	17,533	1.1	0.9	
\$20,000 to \$100,000.	12	8	29.3	29.6	71	88	11.4	20.7	521,333	504,305	3.5	10.1	188,034	160,161	4.4	8.2	
\$100,000 to \$500,000.	8	4	19.5	14.8	185	303	29.6	71.1	1,883,393	4,376,838	12.8	87.9	682,723	1,738,332	15.9	90.1	
\$1,000,000 and over.	4	.....	9.8	.....	342	.....	54.8	.....	12,164,355	.....	82.7	.....	3,303,812	.....	78.4	.....
FOUNDRY AND MACHINE-SHOP PRODUCTS.	231	205	100.0	100.0	6,360	3,623	100.0	100.0	32,787,137	10,549,183	100.0	100.0	19,830,311	5,889,644	100.0	100.0	
Less than \$5,000.	31	61	13.4	29.8	17	95	0.3	2.6	78,078	173,794	0.2	1.6	56,633	124,683	0.3	2.1	
\$5,000 to \$20,000.	63	70	27.3	34.1	188	363	3.0	10.0	636,119	727,513	1.9	6.9	438,050	508,748	2.2	8.6	
\$20,000 to \$100,000.	83	53	35.9	25.0	995	862	15.7	23.8	3,912,203	2,164,383	11.9	20.5	2,290,458	1,240,970	11.6	21.2	
\$100,000 to \$500,000.	39	15	16.9	7.3	1,591	2,303	25.0	63.6	7,923,102	2,996,713	24.2	28.4	4,485,479	2,009,249	22.6	68.1	
\$500,000 to \$1,000,000.	8	6	3.5	2.9	1,119	.....	17.6	.....	5,181,747	4,486,780	15.8	42.5	3,017,983	.....	15.2	.....
\$1,000,000 and over.	7	.....	3.0	.....	2,449	.....	38.5	.....	15,055,888	.....	45.9	.....	9,541,708	.....	48.1	.....
FUR GOODS.	45	36	100.0	100.0	905	838	100.0	100.0	8,062,860	4,207,488	100.0	100.0	2,858,587	1,530,828	100.0	100.0	
Less than \$5,000.	6	10	13.3	27.8	4	7	0.4	0.8	16,211	24,991	0.2	0.6	9,933	19,023	0.3	1.2	
\$5,000 to \$20,000.	11	8	24.4	22.2	40	35	4.4	4.2	102,168	94,457	1.3	2.2	68,903	43,125	2.4	2.8	
\$20,000 to \$100,000.	18	12	40.0	33.3	131	178	14.5	21.2	761,215	489,682	9.4	11.6	368,014	270,084	12.9	17.6	
\$100,000 and over.	10	6	22.2	16.7	730	618	80.7	73.7	7,183,216	3,698,338	89.1	85.5	2,411,737	1,198,596	84.4	78.3	
LUMBER AND TIMBER PRODUCTS.	244	318	100.0	100.0	12,602	16,814	100.0	100.0	37,321,051	32,412,302	100.0	100.0	20,150,453	16,432,885	100.0	100.0	
Less than \$5,000.	103	161	42.2	50.6	111	292	0.9	1.7	250,812	320,942	0.7	1.0	177,383	233,010	0.9	1.4	
\$5,000 to \$20,000.	59	80	24.2	25.2	281	808	2.2	4.8	600,921	838,054	1.6	2.6	449,055	617,604	2.2	3.8	
\$20,000 to \$100,000.	41	39	16.8	12.3	801	1,201	6.4	7.1	2,029,719	1,601,808	5.4	4.9	1,305,177	1,074,876	6.8	6.5	
\$100,000 to \$500,000.	25	23	10.2	7.2	2,275	2,047	18.1	30.0	6,345,425	5,447,119	17.0	16.8	3,975,000	2,420,087	19.7	28.4	
\$500,000 to \$1,000,000.	7	6	2.9	1.9	1,320	.....	10.5	.....	4,725,582	4,313,137	12.7	13.3	2,031,632	.....	13.1	.....
\$1,000,000 and over.	9	9	3.7	2.8	7,814	9,466	62.0	56.3	23,368,592	10,891,182	62.6	61.4	11,551,600	9,680,708	57.3	58.9	
LUMBER, PLANING-MILL PRO- DUCTS, NOT INCLUDING PLANING MILLS CONNECTED WITH SAW- MILLS.	94	100	100.0	100.0	2,188	3,137	100.0	100.0	11,804,330	9,463,993	100.0	100.0	5,276,173	4,202,128	100.0	100.0	
Less than \$5,000.	21	19	22.3	19.0	10	12	0.5	0.4	52,968	42,593	0.4	0.5	25,293	22,315	0.5	0.5	
\$5,000 to \$20,000.	17	21	18.1	21.0	36	63	1.6	2.0	181,114	177,983	1.5	1.0	79,218	89,890	1.5	2.1	
\$20,000 to \$100,000.	28	31	29.8	31.0	343	537	15.7	17.1	1,570,714	1,533,942	13.3	10.2	736,770	643,531	14.0	15.3	
\$100,000 to \$500,000.	21	29	22.8	29.0	1,039	2,525	47.5	80.5	4,766,489	7,709,475	40.3	81.5	2,235,114	3,446,422	42.4	82.0	
\$500,000 to \$1,000,000.	7	.....	7.4	.....	760	.....	34.7	.....	5,243,045	.....	44.4	.....	2,199,818	.....	41.7	.....
PRINTING AND PUBLISHING, BOOK AND JOB.	277	258	100.0	100.0	3,062	2,901	100.0	100.0	12,994,804	7,652,223	100.0	100.0	8,044,155	5,541,263	100.0	100.0	
Less than \$5,000.	79	96	28.5	37.2	34	72	1.1	2.5	199,501	218,652	1.5	2.9	134,346	164,028	1.6	3.0	
\$5,000 to \$20,000.	96	92	34.7	35.7	279	404	9.1	13.9	1,101,979	924,832	8.5	12.1	735,105	666,550	8.5	12.0	
\$20,000 to \$100,000.	67	56	24.2	21.7	821	1,046	26.8	36.1	3,171,429	2,440,599	24.4	31.9	2,027,923	1,672,994	23.5	30.2	
\$100,000 to \$500,000.	32	14	11.6	5.4	1,295	1,379	42.3	47.5	5,747,635	4,068,140	44.2	53.2	3,054,501	3,037,601	42.3	54.8	
\$500,000 and over.	3	.....	1.1	.....	633	.....	20.7	.....	2,774,260	.....	21.3	.....	2,092,880	.....	24.2	.....
PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS.	701	705	100.0	100.0	3,058	2,942	100.0	100.0	20,088,590	11,927,678	100.0	100.0	14,209,849	8,685,303	100.0	100.0	
Less than \$5,000.	363	456	51.8	64.7	240	493	7.8	16.8	980,976	1,147,899	4.9	9.6	745,669	929,572	5.2	10.7	
\$5,000 to \$20,000.	239	187	34.1	26.5	544	575	17.8	19.5	2,171,141	1,669,669	10.8	14.0	1,605,707	1,403,169	11.9	16.2	
\$20,000 to \$100,000.	82	47	11.7	6.7	648	385	21.2	13.1	3,180,062	1,722,868	15.8	14.4	2,432,120	1,338,608	17.1	15.7	
\$100,000 to \$500,000.	10	11	1.4	1.6	331	635	10.8	21.6	2,780,331	2,534,288	13.8	21.2	2,197,709	1,901,497	15.5	21.9	
\$500,000 to \$1,000,000.	67	.....	1.0	.....	1,295	.....	42.3	.....	10,976,080	.....	54.6	.....	7,138,635	.....	50.2	.....
\$1,000,000 and over.	4	0.6	854	29.0	4,852,954	40.7	3,087,467	35.5
SLAUGHTERING AND MEAT PACKING.	13	19	100.0	100.0	5,231	2,565	100.0	100.0	146,361,046	47,535,803	100.0	100.0	17,855,069	5,944,308	100.0	100.0	
Less than \$20,000.	3	15.8	8	0.3	26,940	0.1	11,053	0.2
\$20,000 to \$100,000.	3	6	23.1	31.6	.....	33	0.3	1.3	171,562	434,619	0.1	0.9	124,661	51,651	0.3	0.9
\$100,000 to \$500,000.	2	6	23.1	31.6	38	117	0.7	4.6	1,131,219	2,132,747	0.8	4.5	124,039	278,325	0.7	4.7	
\$1,000,000 and over.	7	4	53.8	21.1	5,179	2,407	99.0	93.8	145,058,265	44,941,497	99.1	94.5	17,682,360	5,633,279	99.0	91.3	

¹ Less than one-tenth of 1 per cent.² Includes the group "\$500,000 to \$1,000,000."³ Includes the groups "\$500,000 to \$1,000,000" and "\$1,000,000 and over."⁴ Includes "iron and steel, welding" and "machine tools."⁵ Includes the group "\$1,000,000 and over."⁶ Includes the group "\$5,000 to \$20,000."

MANUFACTURES—MINNESOTA.

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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. ¹	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT. ¹	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.
DULUTH.....	226	10,472	100.0	\$75,261,387	100.0	\$32,231,933	100.0	ROCHESTER.....	41	359	100.0	\$2,250,242	100.0	\$943,433	100.0
Less than \$5,000.....	26	18	0.2	72,471	0.1	44,693	0.1	Less than \$5,000.....	11	4	1.1	18,110	0.8	11,091	1.2
\$5,000 to \$20,000.....	62	200	1.9	690,551	0.9	417,516	1.3	\$5,000 to \$20,000.....	13	32	8.9	146,093	6.5	74,126	7.9
\$20,000 to \$100,000.....	73	718	6.9	3,453,412	4.6	1,926,775	6.0	\$20,000 to \$100,000.....	11	85	23.7	389,621	17.3	198,976	21.1
\$100,000 to \$500,000.....	37	1,079	10.0	7,941,816	10.6	4,168,063	12.9	\$100,000 and over.....	6	238	66.3	1,696,418	75.4	650,240	69.9
\$500,000 to \$1,000,000.....	15	1,755	16.8	9,923,891	13.2	3,752,847	11.6	St. Cloud.....	72	1,998	100.0	7,733,764	100.0	3,200,540	100.0
\$1,000,000 and over.....	13	6,102	58.3	53,179,246	70.7	21,922,939	68.0	Less than \$5,000.....	7	3	0.2	21,701	0.3	14,508	0.4
FARIBAULT.....	53	806	100.0	10,155,358	100.0	2,076,674	100.0	\$5,000 to \$20,000.....	23	75	3.8	240,285	3.1	142,136	4.4
Less than \$5,000.....	12	10	1.2	35,045	0.3	23,993	1.2	\$20,000 to \$100,000.....	27	326	16.3	1,229,354	15.9	677,837	20.8
\$5,000 to \$20,000.....	20	63	7.8	210,455	2.1	115,497	5.6	\$100,000 to \$500,000.....	12	758	37.9	2,397,719	31.0	1,286,921	39.4
\$20,000 to \$100,000.....	12	77	9.6	587,260	5.8	227,003	10.9	\$1,000,000 and over.....	3	836	41.8	3,844,705	49.7	1,146,138	35.1
\$100,000 and over.....	9	656	81.4	9,322,589	91.8	1,710,271	82.4	St. Paul.....	818	22,649	100.0	149,638,290	100.0	64,467,830	100.0
HIBBING.....	16	50	100.0	320,427	100.0	152,746	100.0	Less than \$5,000.....	172	79	0.3	399,350	0.3	263,289	0.4
Less than \$5,000.....	5	3	6.0	14,697	4.6	8,016	5.8	\$5,000 to \$20,000.....	231	574	2.5	2,533,439	1.7	1,497,010	2.3
\$5,000 to \$20,000.....	5	9	18.0	68,870	21.4	26,254	17.2	\$20,000 to \$100,000.....	232	2,454	10.8	10,947,363	7.3	5,740,191	8.9
\$20,000 to \$100,000.....	6	38	76.0	237,051	74.0	117,576	77.0	\$100,000 to \$500,000.....	115	4,361	19.3	24,748,619	16.5	11,913,952	18.5
MANKATO.....	56	771	100.0	9,766,306	100.0	1,814,261	100.0	\$500,000 to \$1,000,000.....	29	3,434	15.2	21,361,736	14.3	8,533,001	13.2
Less than \$5,000.....	15	7	0.9	36,032	0.4	10,221	1.1	\$1,000,000 and over.....	39	11,747	51.9	80,647,783	59.9	36,520,387	56.6
\$5,000 to \$20,000.....	12	42	5.4	20,381	1.4	71,531	3.9	WINONA.....	73	2,534	100.0	25,119,592	100.0	5,846,416	100.0
\$20,000 to \$100,000.....	18	244	31.6	722,427	7.4	389,908	21.5	Less than \$5,000.....	8	4	0.2	21,075	0.1	12,802	0.2
\$100,000 and over.....	11	478	62.0	8,871,466	90.8	1,333,591	73.5	\$5,000 to \$20,000.....	16	32	1.3	164,029	0.7	91,309	1.6
MINNEAPOLIS.....	1,421	38,154	100.0	401,352,975	100.0	128,548,940	100.0	\$20,000 to \$100,000.....	26	312	12.3	1,442,678	5.7	598,788	10.2
Less than \$5,000.....	247	135	0.4	665,707	0.1	439,573	0.3	\$100,000 to \$500,000.....	18	1,119	44.2	4,834,737	19.2	1,990,100	34.0
\$5,000 to \$20,000.....	423	1,122	2.9	7,698,566	1.9	5,887,388	4.6	\$1,000,000 and over.....	5	1,067	42.1	18,656,403	74.3	3,153,237	53.9
\$20,000 to \$100,000.....	438	4,139	10.8	20,253,921	5.1	10,887,132	8.5								
\$100,000 to \$500,000.....	218	3,359	8.8	48,655,451	12.1	22,513,053	17.5								
\$500,000 to \$1,000,000.....	45	4,492	11.8	30,931,632	7.7	13,311,117	10.3								
\$1,000,000 and over.....	50	10,907	28.2	383,177,698	95.8	75,505,969	58.7								

¹ Excludes Austin and Virginia to avoid disclosure of individual operations.² Includes the group "\$500,000 to \$1,000,000."

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

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTAB- LISHMENTS 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.				
All industries.....	1919	2,653	1,809	1,763	115,623	7,827	99,983	7,813	6.8	86.5	6.8	\$1,218,129,735	\$48,556,598	\$1,060,259,122	\$100,314,015	4.0	87.8	8.2				
	1914	2,825	1,483	1,066	92,834	8,502	76,840	8,492	9.2	81.7	9.1	493,354,136	31,330,735	414,730,487	47,292,914	6.4	84.1	9.6				
	1909	2,654	1,320	1,581	84,767	9,123	67,475	8,169	10.8	79.6	9.0	409,419,621	37,022,048	330,924,567	41,473,006	9.0	80.8	10.1				
Automobile repairing.....	1919	288	71	233	1,842	674	550	618	36.6	29.9	33.6	9,282,481	2,303,878	4,871,096	2,107,507	24.8	52.5	22.7				
	1914	77	22	51	456	162	129	165	35.5	28.3	36.2	1,076,221	400,656	283,307	392,258	37.2	26.3	36.4				
Bread and other bakery products.	1919	318	47	61	2,975	688	2,050	228	23.1	69.2	7.7	22,815,456	5,028,491	16,128,511	1,058,454	22.0	70.7	7.3				
	1914	346	40	57	2,189	738	1,263	168	34.0	68.2	7.7	8,724,102	2,966,004	5,076,418	681,740	34.0	58.2	7.8				
Butter.....	1919	104	80	648	1,962	142	732	1,088	7.2	37.3	55.5	88,882,271	6,586,292	28,337,430	53,958,549	7.4	31.9	60.7				
	1914	115	47	611	1,426	153	353	920	10.7	24.8	64.6	33,294,003	3,196,601	8,413,114	21,684,288	9.6	25.3	65.1				
Cars and general shop construction and repairs by steam-railroad companies.	1919	75	.....	.....	15,976	.....	15,976	.....	100.0	.....	.....	35,350,764	.....	35,350,764	.....	100.0	.....	.....		
	1914	38	.....	.....	10,551	.....	10,551	.....	100.0	.....	.....	14,594,018	.....	14,594,018	.....	100.0	.....	.....		
Clothing, men's.....	1919	9	16	9	1,561	150	1,278	133	9.6	81.9	8.5	7,065,358	738,074	5,705,213	622,071	10.4	80.7	8.8				
	1914	12	14	0	2,119	147	1,588	384	6.9	74.9	18.1	4,738,607	262,932	4,063,542	412,133	5.5	85.8	8.7				
Confectionery and ice cream.	1919	36	38	43	1,959	179	1,598	182	9.1	81.6	9.3	10,055,805	1,245,623	7,805,017	1,005,165	12.4	77.6	10.0				
	1914	41	28	33	978	158	608	152	16.2	68.3	15.5	6,437,014	643,027	2,582,830	651,057	16.6	66.6	16.8				
Flour-mill and gristmill products.	1919	67	131	50	6,040	135	5,749	165	2.2	95.0	2.7	381,248,891	5,641,000	366,266,121	9,341,770	1.5	96.1	2.5				
	1914	105	105	76	4,564	282	3,984	298	6.2	87.3	6.5	148,243,708	5,999,356	134,801,980	7,381,872	4.0	91.0	5.0				
Food preparations, not elsewhere specified.	1919	6	27	8	624	14	579	31	2.2	92.8	5.0	14,706,653	152,645	14,382,630	171,378	1.0	97.8	1.2				
	1914	4	17	6	426	4	405	17	0.9	95.1	4.0	4,207,745	12,377	4,902,391	63,977	0.2	98.5	1.3				
Foundry and machine-shop products. ¹	1919	78	109	44	6,360	533	4,260	1,558	8.4	67.1	24.5	82,787,137	2,474,808	22,453,201	7,859,128	7.5	68.5	24.0				
	1914	73	90	42	3,623	283	2,417	623	7.8	60.7	25.5	10,549,133	634,789	5,083,697	1,830,697	6.0	76.6	17.4				
Fur goods.....	1919	29	11	5	905	222	656	27	24.5	72.5	3.0	8,002,860	1,185,065	6,704,865	172,330	14.7	83.2	2.1				
	1914	21	10	5	838	102	482	254	12.2	67.5	30.3	4,207,468	344,222	3,036,721	826,525	8.2	72.2	19.6				
Knit goods.....	1919	7	8	1	3,564	.....	3,518	246	.....	98.7	1.3	13,984,944	.....	13,731,353	253,591	.....	98.2	1.8
	1914	5	6	2	2,088	.....	2,020	259	.....	97.2	2.8	4,665,325	.....	4,545,870	219,455	.....	97.4	0.6
Liquors, malt.....	1919	5	20	3	1,036	36	985	15	3.5	95.1	1.4	7,712,734	883,820	7,480,729	48,185	2.4	97.0	2.6				
	1914	21	36	8	2,052	86	1,915	51	4.2	93.3	2.5	14,266,296	387,630	13,639,940	238,726	2.7	95.6	1.7				

¹ Includes "iron and steel, welding" and "machine tools."² Includes the group "Individuals."

MANUFACTURES—MINNESOTA.

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

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISH- MENTS 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.	Cor- pora- tions.	All oth- ers.																		
Lumber and timber prod- ucts.	1919	135	55	54	12,602	946	11,016	640	7.5	87.4	5.1	\$37,321,051	\$2,117,916	\$33,483,646	\$1,719,480	5.7	89.7	4.6	1914	176	68	74	16,814	1,046	14,567	1,201	6.2	86.6	7.1	32,412,302	1,402,822	29,695,244	1,314,236	4.3	91.6	4.1
Lumber, planing-mill products, not including planing mills connected with sawmills.	1919	31	45	18	2,188	120	1,805	263	5.5	82.5	12.0	11,804,330	586,198	9,257,051	1,961,081	5.0	78.4	16.6	1914	25	56	19	3,137	193	2,761	180	6.2	88.1	5.7	9,463,993	981,995	8,028,283	453,715	10.4	84.8	4.8
Oil, linseed.	1919	-----	6	-----	483	-----	483	-----	-----	100.0	-----	33,237,740	-----	33,237,740	-----	-----	-----	-----	1914	-----	6	-----	400	-----	400	-----	-----	100.0	-----	-----	-----	-----	100.0	-----		
Printing and publishing, book and job.	1919	140	83	54	3,062	394	2,398	270	12.9	78.3	8.8	12,994,801	1,631,684	10,256,138	1,106,982	12.6	78.9	8.5	1914	119	74	65	2,901	380	2,249	272	13.1	77.5	9.4	7,652,223	908,079	6,021,365	722,779	11.9	78.7	8.4
Printing and publishing, newspapers and peri- odicals.	1919	423	167	111	3,058	600	2,245	213	19.6	73.4	7.0	20,088,590	2,379,728	16,244,239	1,464,623	11.8	80.9	7.3	1914	476	127	102	2,942	743	1,986	213	25.3	67.5	7.2	11,927,678	2,179,605	9,363,473	587,600	16.6	78.5	4.9
Slaughtering and meat packing.	1919	3	7	3	5,231	41	5,142	48	0.8	98.3	0.9	146,361,046	2,021,087	142,516,720	1,823,250	1.4	97.4	1.2	1914	5	8	6	2,565	29	2,458	78	1.1	95.8	3.0	47,535,803	461,621	45,637,593	1,436,589	1.0	98.0	3.0
Structural ironwork, not made in steel works or rolling mills.	1919	4	11	4	2,183	18	2,116	49	0.8	96.9	2.2	9,952,606	75,011	9,513,665	363,930	0.8	95.6	3.7	1914	4	10	4	2,058	43	1,988	27	2.1	96.6	1.3	6,305,596	75,235	6,176,257	54,104	1.2	97.9	0.9
Total for cities ¹	1919	1,098	1,182	496	77,793	4,423	68,837	4,533	5.7	88.5	5.8	771,628,271	23,269,783	720,692,836	27,665,652	3.0	93.4	3.6	1914	1,143	943	502	57,635	4,359	48,490	4,777	7.6	84.1	8.3	207,864,434	13,951,501	268,732,564	15,180,369	4.7	90.2	5.1
DULUTH.	1919	67	128	31	10,472	357	9,878	237	3.4	94.3	2.3	75,261,387	1,566,596	71,124,005	2,570,786	2.1	94.5	3.4	1914	102	101	40	5,638	419	4,794	325	7.6	86.6	5.9	19,720,283	1,301,926	17,012,231	1,415,126	6.6	86.2	7.2
FARIBAULT.	1919	30	17	6	806	74	671	61	9.2	83.3	7.6	10,155,358	315,519	9,492,080	347,759	3.1	93.5	3.4	1919	8	3	5	50	29	8	13	58.0	16.0	26.0	320,427	140,147	101,843	78,437	43.7	31.8	24.5
HIBBING.	1914	15	2	10	65	46		19	70.8		29.2	254,400	183,478		70,922	72.1		27.9																		
MANKATO.	1919	20	15	12	771	120	518	133	15.6	67.2	17.3	9,766,306	373,272	8,645,909	747,125	3.8	88.5	7.7	1914	34	16	14	755	202	384	169	26.8	50.9	22.4	4,344,114	479,308	3,333,364	531,442	11.0	76.7	12.2
MINNEAPOLIS.	1919	547	618	256	38,154	2,122	34,278	1,754	5.6	89.8	4.6	491,382,975	11,141,762	469,518,536	10,722,677	2.3	95.5	2.2	1914	585	511	253	28,295	2,019	24,544	1,782	7.1	86.7	6.1	187,854,159	5,810,546	176,237,770	6,805,813	3.1	93.3	3.6
ROCHESTER.	1919	21	8	12	359	61	272	26	17.0	75.8	7.2	2,250,242	373,100	1,702,724	174,358	16.6	75.7	7.7	1919	30	27	15	1,998	160	1,734	104	8.0	86.8	5.2	7,733,764	536,277	6,770,482	427,005	6.9	87.5	5.5
St. CLOUD.	1914	37	20	20	1,429	157	919	353	11.0	64.3	24.7	2,696,492	680,469	1,511,583	494,460	25.6	56.1	18.3																		
St. PAUL.	1919	343	329	146	22,649	1,414	19,113	2,122	6.2	84.4	9.4	149,638,290	8,338,425	129,453,910	11,845,955	5.6	86.5	7.9	1914	333	255	149	10,483	1,348	16,012	2,123	6.9	82.2	10.9	68,682,206	4,888,220	58,186,900	5,007,086	7.1	84.7	8.2
WINONA.	1919	23	37	13	2,534	86	2,365	83	3.4	93.3	3.3	26,119,522	484,625	23,883,347	751,550	1.9	95.1	3.0	1914	37	38	16	2,070	168	1,846	56	8.1	89.2	2.7	14,304,780	598,564	13,450,716	255,500	4.2	94.0	1.8

¹ Excludes Austin and Virginia to avoid disclosure of individual operations.² Includes the group "Corporations."

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. ¹	
			Total.		10,000 to 25,000. ²		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.	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		9		6		1		2			
	1914		8		5		1		2			
	1909		7		4		1		2			
Population ³ .	1920	2,387,125	801,582	33.6	87,385	3.7	98,917	4.1	615,280	25.8	1,585,543	66.4
	1915	2,213,919	734,276	33.2	64,713	2.9	80,331	4.0	580,232	26.2	1,479,643	66.8
	1910	2,075,708	644,364	31.0	49,746	2.4	79,466	3.8	510,152	24.9	1,431,344	68.9
Number of establishments.	1919	6,225	2,776	44.6	311	5.0	226	3.6	2,239	36.0	3,449	55.4
	1914	5,974	2,622	43.9	293	4.9	243	4.1	2,086	34.9	3,352	56.1
	1909	5,561	2,284	41.1	269	4.8	194	3.5	1,821	32.7	3,277	58.9
Average number of wage earners.	1919	115,623	77,793	67.3	6,518	5.6	10,472	9.1	60,803	52.6	37,830	32.7
	1914	92,834	58,256	62.8	4,940	5.3	5,538	6.0	47,773	51.5	34,678	37.2
	1909	84,767	56,537	66.7	4,153	4.9	6,083	7.2	46,301	54.6	28,290	33.3
Value of products.	1919	\$1,218,120,735	\$771,628,271	63.3	\$55,345,619	4.5	\$75,261,387	6.2	\$641,021,265	52.6	\$446,501,464	36.7
	1914	493,354,136	299,741,311	60.8	23,476,663	4.8	10,729,283	4.0	259,536,365	52.0	193,612,825	39.2
	1909	409,419,621	261,481,912	63.9	19,907,144	4.9	17,180,063	4.2	224,394,705	54.8	147,937,709	36.1
Value added by manufacture.	1919	335,039,958	239,348,773	71.4	14,100,070	4.2	32,231,933	9.6	193,016,770	57.6	95,691,185	28.6
	1914	150,504,922	105,343,602	67.3	7,614,121	4.9	8,211,614	5.2	89,517,867	57.2	51,161,320	32.7
	1909	127,797,334	89,296,852	69.9	6,858,783	5.4	8,336,133	6.5	74,101,636	58.0	38,500,482	30.1

¹ Includes Austin and Virginia in 1919, and Virginia in 1914 and 1909, to avoid disclosure of individual operations.² Includes Stillwater in 1914 and 1909; population less than 10,000 in 1920.³ 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.

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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 ¹ over 1914.			Amount, 1919.	Per cent of total for the state.	Increase ¹ over 1914.	
			Amount.	Per cent.				Amount.	Per cent.
DULUTH.					MINNEAPOLIS—Continued.				
Foundry and machine-shop products.....	\$4,071,297	12.8	\$2,429,907	148.0	Drug grinding.....				
Coffee, roasting and grinding.....	2,309,660	19.0	(²)		Gas, illuminating and heating.....				
Lumber and timber products.....	2,282,944	6.1	-362,001	-13.7	Gloves and mittens, leather.....				
Printing and publishing, newspapers and periodicals.....	1,462,402	7.3	777,535	113.5	Knit goods.....				
Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	1,362,405	11.5	-131,291	-8.8	Leather goods, not elsewhere specified.....				
Cars and general shop construction and repairs by steam-railroad companies.....	1,066,186	3.0	(²)		Liquors, malt.....				
Bread and other bakery products.....	1,022,106	4.5	544,310	113.9	Lumber and timber products.....				
Confectionery.....	682,804	6.8	336,170	97.0	Oil, composite.....				
Printing and publishing, book and job.....	659,636	5.1	230,035	53.5	Cleomargarine and other butter substi- tutes.....				
Copper, tin, and sheet-iron work.....	613,482	16.1	206,575	50.8	Paper and wood pulp.....				
Boots and shoes.....					Petroleum, refining.....	(²)	(²)	(²)	(²)
Butter.....					Pickles, preserves, and sauces.....				
Cement.....					Poultry, killing and dressing, not done in slaughtering and meat-packing estab- lishments.....				
Clothing, men's.....					Rubber tires, tubes, and rubber goods, not elsewhere specified.....				
Coke, not including gas-house coke.....					Steam fittings and steam and hot-water heating apparatus.....				
Flour-mill and gristmill products.....	(²)	(²)	(²)	(²)	Window and door screens and weather strips.....				
Iron and steel, blast furnaces.....					Wooden goods, not elsewhere specified.....				
Iron and steel, steel works and rolling mills.					Woolen goods.....				
Linen goods.....									
Liquors, malt.....									
Matches.....									
Shipbuilding, steel.....									
Slaughtering and meat packing.....									
MINNEAPOLIS.					ST. PAUL.				
Flour-mill and gristmill products.....	227,606,081	59.7	142,473,637	167.4	Foundry and machine-shop products.....	\$12,079,703	37.9	\$8,682,965	255.6
Oil, linseed.....	26,044,475	75.3	(²)		Butter.....	9,038,459	10.2	5,809,156	179.9
Cars and general shop construction and re- pairs by steam-railroad companies.....	12,408,384	35.4	7,948,936	174.7	Cars and general shop construction and repairs by steam-railroad companies.....	8,068,846	22.8	4,252,890	111.5
Bread and other bakery products.....	12,401,478	51.4	7,487,233	152.3	Boots and shoes.....	7,770,683	61.5	4,731,870	155.4
Foundry and machine-shop products.....	12,038,002	35.9	8,257,742	218.1	Flour-mill and gristmill products.....	6,589,872	1.7	(²)	
Structural ironwork, not made in steel works or rolling mills.....	9,439,820	94.8	3,673,791	63.7	Fur goods.....	6,581,808	81.6	3,073,138	87.6
Food preparations, not elsewhere specified.....	9,262,637	63.0	5,469,157	143.5	Printing and publishing, newspapers and periodicals.....	6,579,475	32.8	3,046,243	86.2
Printing and publishing, newspapers and periodicals.....	7,477,616	37.2	2,749,388	58.1	Printing and publishing, book and job.....	5,824,289	44.8	1,627,039	38.8
Engines, steam, gas, and water.....	6,989,318	54.0	6,050,214	649.0	Bread and other bakery products.....	5,599,146	24.5	4,038,268	258.7
Coffee, roasting and grinding.....	6,060,765	51.7	4,023,131	226.9	Food preparations, not elsewhere specified.....	5,073,392	34.5	4,137,754	442.2
Printing and publishing, book and job.....	5,816,417	44.8	3,114,916	115.3	Confectionery and ice cream.....	3,481,190	34.6	(²)	
Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	5,420,155	45.9	959,500	21.5	Leather goods, not elsewhere specified.....	3,070,485	75.8	(²)	
Automobile repairing.....	5,388,366	58.0	4,842,313	886.8	Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	2,506,654	21.2	459,123	22.4
Butter.....	4,336,452	4.9	2,812,617	184.6	Clothing, men's.....	1,821,916	25.8	-542,020	-22.9
Confectionery and ice cream.....	4,312,311	42.9	2,701,408	167.7	Boxes, wooden packing, except cigar boxes.....	1,429,361	41.4	1,185,833	480.9
Electrical machinery, apparatus, and sup- plies.....	4,200,813	96.5	3,612,361	652.2	Carriages and wagons, including repairs.....	1,378,738	46.4	662,020	92.4
Furniture.....	4,166,167	61.7	2,513,602	153.9	Tobacco, cigars.....	1,249,836	39.0	138,741	12.4
Clothing, men's.....	3,250,985	46.1	1,863,036	133.5	Automobile repairing.....	990,800	10.7	858,018	653.8
Mattresses and spring beds, not elsewhere specified.....	2,846,993	73.5	1,731,428	155.9	Patent medicines and compounds.....	948,593	15.1	379,742	66.8
Cooperage.....	2,672,125	82.5	1,251,815	90.0	Furniture.....	802,031	11.8	220,782	38.0
Patent medicines and compounds.....	2,388,819	37.9	1,073,545	81.6	Copper, tin, and sheet-iron work.....	793,219	20.9	206,324	35.0
Copper, tin, and sheet-iron work.....	1,982,153	52.1	889,786	81.5	Brass, bronze, and copper products.....	626,966	61.6	(²)	
Belted, leather.....	1,808,535	100.0	(²)		Boxes, set-up paper boxes and cartons.....				
Paints.....	1,593,013	63.4	613,263	67.7	Cars and general shop construction and re- pairs by electric-railroad companies.....				
Saddlery and harness.....	1,287,034	30.0	684,827	113.7	Coffee, roasting and grinding.....				
Automobile bodies and parts.....	1,275,790	72.4	(²)		Cordage and twine.....				
Fur goods.....	1,155,959	14.3	590,148	104.3	Gas, illuminating and heating.....				
Signs and advertising novelties.....	893,478	21.9	539,254	152.2	Liquors, malt.....				
Clothing, women's.....	806,127	80.9	(²)		Mats and matting, from cocoa fiber, grass, and coir.....				
Boxes, wooden packing, except cigar boxes.....	769,583	22.3	136,816	21.6	Mattresses and spring beds, not elsewhere specified.....				
Chemicals.....	723,701	49.7	(²)		Milinery and lace goods, not elsewhere specified.....	(²)	(²)	(²)	(²)
Boots and shoes.....	694,014	5.5	(²)		Oil, linseed.....				
Tobacco, cigars.....	651,860	20.3	207,302	46.6	Paints.....				
Photo-engraving.....	627,313	61.7	213,587	63.5	Paper and wood pulp.....				
Malt.....	618,112	21.1	-2,250,618	-78.5	Refrigerators.....				
Automobiles.....					Roofing materials.....				
Bags, other than paper, not including bags made in textile mills.....	(²)	(²)	(²)	(²)	Saddlery and harness.....				
Boxes, set-up paper boxes and cartons.....					Sand and emery paper and cloth.....				
Carriages and wagons, including repairs.....					Shirts.....				
Cleaning and polishing preparations.....					Signs and advertising novelties.....				
Coffins, burial cases, and undertakers' goods					Slaughtering and meat packing.....				
Dental goods.....					Soap.....				
					Steam packing.....				
					Tinware, not elsewhere specified.....				

¹ A minus sign (-) denotes decrease.² Figures can not be shown without disclosing individual operations.³ Includes "bookbinding and blank-book making" in 1914.⁴ Includes "iron and steel, welding"; "machine tools"; and "steel barrels, drums, and tanks."⁵ Includes "tobacco, chewing and smoking, and snuff" in 1914.

MANUFACTURES—MINNESOTA.

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.....	20,913	13,463	8,679	473,957	358,737	297,670	100.0	100.0	100.0
Owned.....	2,794	3,402	3,792	305,695	286,939	200,546	64.5	80.0	89.5
Steam.....	1,827	2,190	2,544	198,186	206,144	199,802	41.8	57.5	67.1
Engines.....	1,750	(2)	(2)	173,815	(2)	(2)	36.7	.....	.....
Turbines.....	77	(3)	(3)	24,371	(3)	(3)	5.1	.....	.....
Internal-combustion engines.....	762	650	877	33,848	7,454	7,174	7.1	2.1	2.4
Water.....	205	313	371	73,661	73,341	59,570	15.5	20.4	20.0
Water wheels and turbines.....	190	292	308	73,446	73,688	56,631	15.5	20.4	19.0
Water motors.....	15	21	63	215	253	2,030	(2)	0.1	1.0
Rented.....	18,119	10,001	4,887	168,262	71,798	31,124	35.5	20.0	10.5
Electric.....	18,119	10,001	4,887	167,965	71,224	30,297	35.4	19.8	10.2
Other.....	.....	.....	.....	297	574	827	0.1	0.2	0.3
Electric.....	22,834	12,778	6,791	255,119	121,018	52,212	100.0	100.0	100.0
Rented.....	18,119	10,001	4,887	167,965	71,224	30,297	65.8	58.0	58.0
Generated by establishments reporting.....	4,715	2,777	1,904	87,154	49,794	21,915	34.2	41.1	42.0

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, 2,240 pounds).	Bituminous (tons, 2,000 pounds).				
All industries.....	41,074	2,483,593	440,452	202,661	35,045	1,438,833
Per cent of increase ²	42,659	1,400,702	101,018	303,767	(1)	84,463
	-3.7	77.3	330.0	-7.9	(1)	1,03.6
Artificial stone products.....	55	6,731	37	344	433	6
Automobiles.....	6,504	1,715	43	7,109	10,103	.....
Automobile repairing.....	354	8,996	74	217	687	4,238
Bread and other bakery products.....	5,609	17,017	7,306	4,804	3,689	24,439
Brick and tile, terra-cotta, and fire-clay products.....	(35)	67,212	300	65	253	.....
Butter.....	3,557	47,652	880	492	638	.....
Cars and general shop construction and repairs by steam-railroad companies.....	809	233,644	6,490	12,600	18	.....
Cement.....	.....	63,554	744	.....	.....	.....
Chemicals.....	5,801	5,141	1,040	6,198	106	740
Coal-tar products.....	.....	10,979	.....	4,478	.....	.....
Coffee, roasting and grinding.....	231	1,918	40	.....	.....	10,820
Coke, not including gas-house coke.....	.....	849,288	.....	.....	.....	2,288
Condensed milk.....	.....	6,683	35	.....	.....	.....
Confectionery and ice cream.....	1,527	5,214	735	.....	528	15,293
Electrical machinery, apparatus, and supplies.....	6	1,395	36	.....	5	35,603
Engines, steam, gas, and water.....	102	6,690	1,639	1,572	2,284	1,475
Flour-mill and gristmill products.....	683	225,748	114	7,579	341	37
Food preparations, not elsewhere specified.....	624	7,971	.....	.....	73	7,347
Foundry and machine-shop products.....	418	36,134	24,226	16,780	820	13,681
Furniture.....	308	7,351	58	.....	38	41
Gas, illuminating and heating.....	.....	116,968	16,550	204,251	1,162	.....
Iron and steel, blast furnaces.....	.....	3,177	359,654	.....	.....	1,241,541
Iron and steel, steel works and rolling mills.....	15	160,170	8,164	.....	.....	.....
Knit goods.....	49	9,492	.....	.....	.....	.....
Lime.....	.....	5,084	.....	31	26	.....
Liquors, malt.....	159	35,866	231	2	109	35
Lumber, planing-mill products, not including planing mills connected with saw-mills.....	18	9,892	.....	19	8,051	14
Malt.....	1,922	15,141	.....	.....	.....	.....
Oil, linseed.....	3,500	22,414	.....	.....	.....	.....
Paper and wood pulp.....	.....	198,472	.....	.....	.....	.....
Pottery.....	.....	10,000	.....	.....	.....	.....
Printing and publishing, newspapers and periodicals.....	1,718	7,318	127	77	1,338	29,757
Refrigerators.....	.....	6,878	.....	200	20	.....
Shipbuilding, steel.....	120	11,909	1,200	10,215	1,000	.....
Slaughtering and meat packing.....	221	103,363	12	.....	220	9,815
Steam packing.....	.....	17,138	81	.....	.....	153
Structural ironwork, not made in steel works or rolling mills.....	27	13,424	4,714	2,256	295	.....
Sugar, beet.....	.....	5,957	211	.....	.....	.....
Woolen goods.....	.....	5,946	.....	.....	.....	.....
All other industries.....	6,102	113,550	5,645	13,402	2,687	36,514
Total for cities ³	33,869	1,497,181	426,645	262,134	29,733	1,422,294
DULUTH.....	9,047	776,945	372,393	13,219	1,766	1,255,691
FARGO.....	6	15,275	1,249	.....	57	281
HIBING.....	.....	1,797	.....	.....	6	.....
MANKATO.....	34	17,775	313	.....	75	144
MINNEAPOLIS.....	12,054	498,212	31,570	212,857	12,933	162,251
ROCHESTER.....	.....	8,058	262	667	38	513
ST. CLOUD.....	6,624	7,032	241	8,585	10,102	30
ST. PAUL.....	5,491	208,833	19,553	20,124	4,734	61,812
WINONA.....	613	53,254	1,064	681	32	1,572

¹ Included in figures for fuel oils.

² A minus sign (-) denotes decrease.

³ Excludes Austin and Virginia to avoid disclosure of individual operations.

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 five of these industries in Minnesota are here presented.

Flour-mill and gristmill products (Table 19).—This is the ranking industry in the state, with products for 1919 valued at \$381,248,891, and the table gives the quantity and value of products for 1919, 1914, and 1909. Wheat flour was largely the chief product of the industry, forming 81.8 per cent of the total value in 1919 and 79.6 per cent in 1914. The increase in values from 1914 to 1919 was much greater than in quantities. For wheat flour, while the value increased 164.2 per cent, the quantity increased only 5.1 per cent. For bran and middlings, the product of second importance, there was an increase of 56 per cent in value, but a decrease in quantity during the five-year period of 20.9 per cent.

TABLE 19.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILLS): 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$381,248,891	\$148,243,708	\$130,136,120
Wheat flour:			
Barrels.....	28,505,036	27,132,155	22,737,404
Value.....	\$311,764,407	\$117,988,654	\$114,185,351
Rye flour:			
Barrels.....	1,097,252	579,648	229,651
Value.....	\$8,756,512	\$1,091,445	\$936,066
Buckwheat flour:			
Pounds.....	1,362,611	1,953,028	900,387
Value.....	\$76,910	\$63,000	\$33,047
Rice flour:			
Pounds.....	3,854,000		
Value.....	\$270,102		
Corn meal and corn flour:			
Barrels.....	120,021	53,845	60,705
Value.....	\$1,072,114	\$185,008	\$204,863
Bran and middlings:			
Tons.....	831,293	1,051,260	
Value.....	\$34,940,427	\$22,390,532	1,080,833
Feed and offal:			
Tons.....	404,101	219,263	\$23,112,813
Value.....	\$22,248,059	\$5,517,795	
All other cereal products, value.....	\$2,061,584	\$61,982	\$192,432
All other products, value.....	\$52,716	\$45,286	\$171,557

Slaughtering and meat packing (Table 20).—This table presents for the census years 1919, 1914, and 1909 the total cost of materials, and the kind, number, and cost of animals slaughtered; the cost of all other materials, which includes that for dressed meat purchased for curing and for making lard compounds and oleo oil, cottonseed oil, refrigeration, curing materials, seasoning, 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 item "All other products" includes the value of cured beef, canned goods including canned sausage, meat puddings and scrapple, lard compounds, oleo and other oils, oleo stearin, oleomargarine, hog and cattle hair, glycerin, stock feed, etc.

TABLE 20.—SLAUGHTERING AND MEAT PACKING: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$128,505,977	\$41,591,495	\$22,043,385
Animals slaughtered, cost.....	\$122,093,820	\$39,722,359	\$18,664,082
Beef—			
Number.....	290,462	166,903	125,852
Cost.....	\$23,500,100	\$9,578,618	\$4,195,238
Calves—			
Number.....	288,623	70,539	55,991
Cost.....	\$5,655,226	\$938,138	\$431,438
Sheep and lambs—			
Number.....	208,946	198,665	133,244
Cost.....	\$1,979,333	\$983,664	\$502,993
Hogs—			
Number.....	2,197,152	1,559,491	1,063,655
Cost.....	\$90,902,161	\$28,221,939	\$13,444,413
All other materials, cost.....	\$6,409,157	\$1,869,130	\$3,379,303
PRODUCTS.			
Total value.....	\$146,301,046	\$47,535,803	\$25,608,934
Fresh meat, value.....	\$51,610,517	\$21,791,653	\$8,503,956
Beef—			
Pounds.....	109,239,489	70,992,124	59,276,009
Value.....	\$15,831,153	\$7,714,340	\$3,187,527
Veal—			
Pounds.....	25,542,989	6,987,360	5,765,536
Value.....	\$4,620,716	\$875,264	\$396,210
Mutton and lamb—			
Pounds.....	8,518,336	8,511,931	5,655,124
Value.....	\$1,494,971	\$858,878	\$480,143
Pork—			
Pounds.....	120,359,452	110,312,690	45,709,115
Value.....	\$27,826,610	\$11,808,814	\$4,336,448
Edible offal and other fresh meat—			
Pounds.....	18,473,433	6,539,309	727,938
Value.....	\$1,837,067	\$534,357	\$113,628
Pork, pickled and other cured:			
Pounds.....	236,784,979	115,033,007	82,480,987
Value.....	\$58,548,256	\$10,430,999	\$9,253,591
Sausage:			
Pounds.....	24,657,904	8,845,380	7,632,098
Value.....	\$5,241,525	\$1,114,112	\$696,017
Lard:			
Pounds.....	49,609,701	40,311,585	21,429,517
Value.....	\$13,049,819	\$4,203,173	\$2,581,501
Tallow and oleo stock:			
Pounds.....	5,520,988	1,214,302	2,797,504
Value.....	\$776,082	\$123,800	\$164,479
Grease and soap stock:			
Pounds.....	3,318,345	2,598,228	(²)
Value.....	\$452,403	\$145,323	(²)
Casings:			
Pounds.....	1,841,906	1,556,967	(²)
Value.....	\$327,126	\$102,739	(²)
Hoofs, horns, horn tips, and strips:			
Pounds.....	5,892,005	905,345	(²)
Value.....	\$200,245	\$13,388	(²)
Fertilizers and fertilizer materials:			
Tons.....	6,901	7,610	12,075
Value.....	\$383,708	\$223,358	\$314,060
Hides and pelts:			
Cattle—			
Number.....	299,462	166,903	
Pounds.....	15,300,565	9,453,992	160,948
Value.....	\$5,167,344	\$1,024,345	7,240,972
Calf—			
Number.....	241,563	51,221	\$887,185
Pounds.....	3,112,963	573,867	
Value.....	\$1,921,046	\$118,022	
Sheep—			
Number.....	208,382	193,086	132,574
Value.....	\$492,592	\$202,227	\$143,473
All other products, value.....	\$7,580,783	\$1,322,058	\$3,061,072

¹ No oleo stock reported in 1914.

² Not reported separately.

³ No fertilizers reported in 1914 and 1909.

The growth of the industry in this state in the census period 1914 to 1919, measured by cost of materials and value of products, is remarkable as compared with that of the previous period, 1909 to 1914. The increase in cost of materials from 1914 to 1919 was \$86,914,482, or 209 per cent, and from 1909 to 1914, \$19,548,110, or 88.7 per cent; and in value of products,

\$98,825,243, or 207.9 per cent, in the first period, and \$21,926,869, or 85.6 per cent, in the second period.

The normal increase, however, is better indicated by the number of animals slaughtered, which was 2,994,183 in 1919, 2,004,648 in 1914, and 1,378,742 in 1909, an increase from 1914 to 1919 of 989,535, or 49.4 per cent, and from 1909 to 1914, 625,906, or 45.4 per cent.

This state ranked eighth in value of products for the slaughtering and meat-packing industry in the United States, an advance from thirteenth place since 1914.

Butter, cheese, and condensed milk (Table 21).—Minnesota ranked third in 1919 in the production of butter, cheese, and condensed milk, being exceeded only by Wisconsin and New York in the order given. Minnesota was the leading state in the manufacture of butter, and ranked sixth in the production of cheese. There was an increase in the total value of products from 1914 to 1919 of 177.3 per cent. Of the total value of products, butter formed 86.9 per cent, cheese 2.9 per cent, and condensed and evaporated milk 2.1 per cent. A consideration of quantity production will give a unit of measure for comparative purposes. During the five-year period 1914–1919, the quantity of butter produced increased 35,187,933 pounds, or 31.7 per cent. Cheese for the same period increased 6,099,478 pounds, or 151.9 per cent.

The following table gives the quantities and values of the several products for 1919, 1914, and 1909 where the same can be shown without disclosing the operations of individual establishments:

TABLE 21.—BUTTER, CHEESE, AND CONDENSED MILK: 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$93,585,605	\$33,746,396	\$25,287,462
Butter:			
Pounds.....	146,295,141	111,107,208	88,842,846
Value.....	\$81,365,245	\$30,903,702	\$24,581,058
Packed solid—			
Pounds.....	116,662,006	94,775,407	81,104,848
Value.....	\$64,656,612	\$26,170,426	\$22,359,427
Prints or rolls—			
Pounds.....	29,633,135	16,331,955	7,737,998
Value.....	\$16,708,633	\$4,733,276	\$2,221,631
Cream sold:			
Pounds.....	3,146,692	3,401,449	1,338,833
Value.....	\$1,258,000	\$293,897	\$146,867
Cheese:			
Pounds.....	10,116,048	4,016,570	2,735,883
Value.....	\$2,757,387	\$496,215	\$374,716
Full cream—			
Pounds.....	9,271,766	3,350,598	2,695,883
Value.....	\$2,628,913	\$472,850	\$371,516
Other kinds—			
Pounds.....	844,282	665,972	40,000
Value.....	\$128,474	\$23,365	\$3,200
Condensed and evaporated milk:			
Pounds.....	15,994,195	(¹)	(²)
Value.....	\$1,932,540	(²)	(²)
All other butter, cheese, and condensed-milk factory products, value.....	\$4,623,788	\$1,616,396	\$55,253
All other products, value.....	\$1,648,645	\$436,186	\$129,568

¹ In addition, in 1919 butter valued at \$31,321 was manufactured in establishments engaged primarily in the manufacture of products other than those covered by the industry designation.

² Included in "All other butter, cheese, and condensed-milk factory products."

Printing and publishing (Tables 22 and 23).—Table 22 gives the number and aggregate circulation per issue of the newspapers and periodicals published in Minnesota as reported at the censuses of 1919, 1914, and 1909.

The aggregate circulation of all publications increased 172,460, or 4 per cent, during the five-year period 1914–1919. Of the daily circulation in 1919, 509,257, or 73.6 per cent, was reported for newspapers published in the afternoon, which is an increase of 87,630, or 20.8 per cent, over the afternoon circulation reported for 1914.

Sunday newspaper circulation increased 74,611, or 20.2 per cent, during the five years, and 207,318, or 87.4 per cent, during the decade.

There was a slight decrease in the circulation of weeklies from 1914 to 1919, but the increase for the decade is 416,127, or 32.8 per cent. The circulation of monthly and semimonthly publications increased 188,193, or 14.3 per cent, from 1914 to 1919.

TABLE 22.—PRINTING AND PUBLISHING: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1919	1914	1909	1919	1914	1909
Total.....	767	766	758	4,506,073	4,333,613	3,176,700
Daily.....	50	51	42	662,270	655,070	470,262
Sunday.....	9	7	7	444,523	369,912	237,205
Semiweekly ¹	13	7	8	134,647	117,874	87,662
Weekly.....	616	620	614	1,685,983	1,790,818	1,269,856
Monthly ²	70	75	83	1,503,632	1,315,489	1,132,300
Quarterly ³	9	6	4	45,012	85,000	24,025

¹ Includes, in 1919, 1 triweekly.

² Includes, in 1919, 7, and in 1914, 10 semimonthlies; and in 1909, 12 semimonthlies and 1 "All other."

³ Includes, in 1919, 4 bimonthlies; in 1914, 2 bimonthlies and 1 "semiannual;" and in 1909, 2 "all other."

Table 23 gives the number and aggregate circulation per issue of the foreign-language publications, by principal periods of issue, as reported at the censuses of 1919, 1914, and 1909, compared with like issues of English periodicals.

During the five-year period, 1914–1919, the foreign-language publications decreased in number 12, and in circulation 122,284, or 21.2 per cent.

Three of the foreign-language dailies were published in the morning and were printed in Finnish; 2 were afternoon papers with a circulation of 25,200, 1 being in German and 1 in Norwegian and Danish. Of the 2 Sunday papers, 1 was in German and 1 in Norwegian and Danish.

Of the 35 weeklies and 1 triweekly reported for 1919, 9 with a circulation of 105,767 were published in German; 7 with a circulation of 53,500, in Swedish; 7 with a circulation of 64,129, in Norwegian; and 5 with a circulation of 22,800, in Norwegian and Danish. There were 2 each in Finnish and Polish, and 1 each in Danish, French, and English and Norwegian. The triweekly was in Norwegian.

Three of the 4 foreign-language semimonthly publications were in Swedish, and 1 in German. Of the 13 monthly publications, 6 with a circulation of 10,500 were in Swedish; 3 with a circulation of 30,418 were in Norwegian; 2 were in English and Norwegian, 1 was in Norwegian and Danish, and 1 was in Norwegian and Swedish. The 2 bimonthlies and 1 quarterly were in the Swedish language.

TABLE 23.—PRINTING AND PUBLISHING—CIRCULATION, ENGLISH AND FOREIGN: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	Cen- sus year.	TOTAL.		ENGLISH.		FOREIGN LANGUAGES.	
		Num- ber.	Aggregate circula- tion per issue.	Num- ber.	Aggregate circula- tion per issue.	Num- ber.	Aggregate circula- tion per issue.
Total.....	1910	767	4,506,073	704	4,050,962	63	455,111
	1914	705	4,333,613	691	3,750,218	75	577,395
	1909	758	3,176,700	685	2,635,711	73	540,989
Daily and Sunday.....	1910	50	1,133,790	52	1,054,077	7	82,722
	1914	58	1,024,982	51	953,510	7	71,403
	1909	40	713,457	46	688,752	3	24,705
Weekly ¹	1910	629	1,820,330	592	1,540,861	36	279,469
	1914	627	1,808,102	581	1,552,262	46	355,840
	1909	622	1,308,018	578	945,120	44	362,898
Monthly ²	1910	70	1,503,632	71	1,424,812	17	78,820
	1914	75	1,315,430	53	1,105,437	22	150,002
	1909	83	1,132,300	57	977,805	26	154,495
Quarterly ³	1910	9	45,012	7	25,212	3	19,800
	1914	6	85,000	6	85,000		
	1909	4	24,025	4	24,025		

¹Includes, in 1910, 12 semiweeklies (English) and 1 triweekly (Norwegian); in 1914, 6 semiweeklies (English) and 1 semiweekly (Slovenian); in 1909, 7 semiweeklies (English) and 1 semiweekly (Finnish).

²Includes, in 1910, 3 semimonthly publications in English, 3 in Swedish, and 1 in German; in 1914, 4 semimonthly publications in English, 2 in Danish-Norwegian, 2 in Swedish, 1 in English-Norwegian and 1 in German; in 1909, 6 semimonthly publications in English, 5 in Swedish, 1 English-Norwegian semimonthly, and 1 "all other" in German.

³Includes, in 1910, 2 bimonthly publications in English and 2 in Swedish; in 1914, 2 bimonthly and 1 semiannual publications in English; in 1909, 2 "all other" publications in English.

Lumber and timber products (Table 24).—This table presents statistics pertaining to the chief products of the lumber industry for 1919, 1914, and 1909. The production of lumber in Minnesota has been decreasing rapidly during the past 20 years. In 1899, this state ranked third among the states as a lumber producer, the cut for that year being reported as 2,342,338,000 feet. In 1917, the reported cut dropped below one billion feet for the first time in more than two decades. The cut for 1919 compared with that for 1914 decreased 46.7 per cent, and with that for 1909, 55.2 per cent.

TABLE 24.—LUMBER, LATH, AND SHINGLES: 1919, 1914, AND 1909.

PRODUCT.	QUANTITY. ¹		
	1919	1914	1909
Lumber.....M feet b. m..	999,639	1,312,230	1,561,508
Lath.....thousands..	115,741	(2)	478,008
Shingles.....thousands..	4,451	(2)	74,818

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

²Not reported.

In 1919 Minnesota led in the production of white pine lumber, producing 32.5 per cent of the total cut from this wood in the United States.

The lumber cut from the principal species in 1919 was reported as follows: White pine 560,544,000 feet, or 80.1 per cent of the total cut from all species in the state; larch 35,765,000 feet, or 5.1 per cent; cottonwood 30,135,000 feet, or 4.3 per cent; and spruce 29,298,000 feet, or 4.2 per cent. Other important woods sawed into lumber in considerable quantities were balsam fir, birch, oak, elm, and basswood.

Power laundries (Table 25).—Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. This table, however, summarizes the statistics for such laundries in Minnesota for 1919 and 1914.

TABLE 25.—POWER LAUNDRIES: 1919 AND 1914.

	NUMBER OR AMOUNT.		Per cent of in- crease, ¹ 1914- 1919.
	1919	1914	
Number of establishments.....	156	188	-17.0
Persons engaged.....	3,818	4,024	-5.1
Proprietors and firm members.....	156	203	-23.2
Salaried employees.....	385	327	17.7
Wage earners (average number).....	3,277	3,494	-6.2
Primary horsepower.....	4,706	4,264	11.8
Capital.....	\$3,967,632	\$2,708,038	46.5
Salaries and wages.....	2,950,231	1,972,943	49.5
Salaries.....	334,725	332,555	60.8
Wages.....	2,615,506	1,640,388	47.8
Paid for contract work.....	8,884	17,361	-48.8
Rent and taxes.....	215,946	147,110	46.8
Cost of materials.....	1,437,708	855,442	68.1
Amount received for work done.....	6,087,088	4,100,404	48.4

¹A minus sign (-) denotes decrease.

Dyeing and cleaning (Table 26).—Statistics for dyeing and cleaning establishments that were operated by mechanical power in 1919 are presented in this table. These statistics are not included in the general tables nor in the totals for manufacturing industries. This presentation is the first that has been made since the census statistics were confined to manufacturing industries as distinguished from hand trades.

TABLE 26.—DYEING AND CLEANING: 1919.

	Number or amount.
Number of establishments.....	46
Persons engaged.....	629
Proprietors and firm members.....	48
Salaried employees.....	99
Wage earners (average number).....	482
Primary horsepower.....	593
Capital.....	\$739,214
Salaries and wages.....	614,828
Salaries.....	126,330
Wages.....	488,498
Paid for contract work.....	20,371
Rent and taxes.....	53,260
Cost of materials.....	271,705
Amount received for work done.....	1,308,915

Custom gristmills and custom sawmills (Tables 27 and 28).—Summaries of the more important data for custom gristmills and custom sawmills are presented in these tables. These statistics are not included in the general tables nor in the totals for manufacturing industries.

MANUFACTURES—MINNESOTA.

TABLE 27.—CUSTOM GRISTMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	194	278	-33.8
Persons engaged.....	249	577	-56.8
Proprietors and firm members.....	181	459	-60.6
Salaried employees.....	6	9	-----
Wage earners (average number).....	62	109	-43.1
Primary horsepower.....	4,770	6,516	-26.8
Capital.....	\$777,129	\$792,085	-2.0
Salaries and wages.....	68,869	46,705	47.5
Salaries.....	2,420	4,990	-51.5
Wages.....	66,449	41,715	59.3
Rent and taxes.....	10,692	6,975	53.3
Cost of materials ²	4,330,262	3,190,150	35.7
Value of products ²	4,956,595	3,660,055	35.4

¹ A minus sign (-) denotes decrease; percentage omitted where base is less than 100.² Includes estimate of all grain ground.

TABLE 28.—CUSTOM SAWMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	189	137	38.0
Persons engaged.....	385	367	4.9
Proprietors and firm members.....	262	244	7.4
Salaried employees.....	1	-----	-----
Wage earners (average number).....	122	123	-0.8
Primary horsepower.....	5,054	3,066	64.8
Capital.....	\$250,253	\$203,105	23.2
Salaries and wages.....	92,970	45,250	105.5
Salaries.....	312	-----	-----
Wages.....	92,658	45,250	104.8
Rent and taxes.....	2,514	1,303	92.9
Cost of materials.....	13,230	2,001	561.2
Amount received for work done.....	214,223	132,283	61.9

¹ A minus sign (-) denotes decrease.

GENERAL TABLES.

Table 29 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 Duluth, Minneapolis, and St. Paul, and for the cities having from 10,000 to 50,000 inhabitants, for which comparable statistics are available, similar data for all industries combined.

Table 30 presents, for 1919, for the state as a whole and for Duluth, Minneapolis, and St. Paul, 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 cities having from 10,000 to 50,000 inhabitants, except Austin and Virginia, figures for which could not be shown without disclosing individual operations.

MANUFACTURES—MINNESOTA.

TABLE 29.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Con.

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 of dollars.								Expressed in thousands of dollars.		
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
Millinery and lace goods, not elsewhere specified.	1919	23	541	187	483	1,047	2,068	Shipbuilding, wooden, in- cluding boat building.	1919	21	91	196	105	107	342
	1914	9	308	116	34	648	945		1914	30	125	352	89	157	317
	1909	8	498	12	152	598	931		1909	33	209	419	139	158	377
Mineral and soda waters.	1919	114	213	357	198	793	1,544	Signs and advertising novel- ties.	1919	31	989	504	956	1,243	4,083
	1914	128	369	472	201	527	1,266		1914	28	238	81	158	287	593
	1909	114	246	282	140	318	868		1909	22	116	25	86	96	313
Oil, linseed.....	1919	6	483	4,102	647	28,796	33,238	Slaughtering and meat pack- ing. ³	1919	24	5,264	11,378	6,493	128,906	146,919
	1914	6	400	4,467	326	11,279	12,357		1914	29	2,587	5,260	1,817	41,736	47,710
	1909	6	374	3,821	250	9,685	11,037		1909	30	1,921	4,579	1,129	22,156	25,754
Optical goods.....	1919	11	83	47	84	302	616	Soap.....	1919	7	46	203	41	622	822
	1914	8	54	19	38	75	219		1914	6	46	185	24	463	614
	1909	6	25	8	15	21	82		1909	6	63	148	28	332	495
Paint and varnish.....	1919	17	144	652	133	1,882	2,898	Steam packing.....	1919	5	208	1,643	244	828	1,528
	1914	15	144	1,665	98	1,661	1,684		1914	5	174	1,250	114	351	753
	1909	14	164	420	101	889	1,489								
Paper and wood pulp.....	1919	9	2,523	56,116	2,994	11,449	20,138	Stoves and hot-air furnaces...	1919	12	236	338	232	406	1,055
	1914	8	1,345	53,259	983	3,245	5,573		1914	9	169	212	115	113	316
	1909	9	607	23,440	361	1,438	2,385		1909	10	185	113	121	245	600
Patent medicines and com- pounds and druggists' preparations. ¹	1919	75	646	2,345	414	3,159	7,270	Tobacco, cigars and cigarettes.	1919	216	891	62	742	1,472	3,205
	1914	99	612	945	285	2,341	4,879		1914	316	1,261	31	609	1,121	2,856
	1909	101	475	741	188	1,690	4,412		1909	332	1,611	36	831	1,248	3,350
Paving materials.....	1919	13	160	3,079	202	139	537	Woolen goods.....	1919	11	574	1,491	474	1,780	2,864
	1914	7	184	920	153	267	551		1914	16	448	1,266	229	850	1,298
	1909	9	168	45	157	39	350		1909	16	277	642	123	429	699
Printing and publishing ²	1919	1,003	6,319	7,680	6,778	10,353	33,490	All other industries.....	1919	403	13,678	102,507	18,208	93,775	140,678
	1914	994	6,134	7,101	4,259	5,560	20,187		1914	374	6,009	15,773	3,782	17,472	27,393
	1909	950	5,641	5,765	3,507	4,096	15,982		1909	430	7,438	20,262	3,792	16,616	27,187

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

DULUTH	1919	226	10,472	80,883	15,465	43,029	75,261	MINNEAPOLIS—Con.							
All industries.	1914	243	5,538	14,914	3,365	11,518	19,729	Artificial stone products.....	1919	28	120	333	189	224	590
	1909	194	6,083	17,561	3,393	8,844	17,183		1914	51	192	219	144	194	447
Bread and other bakery products.	1919	15	134	99	147	619	1,022		1909	28	176	141	103	83	261
	1914	18	111	93	64	260	478	Boxes, wooden packing, ex- cept cigar boxes.	1919	9	175	592	174	454	770
	1909	13	59	21	34	189	312		1914	9	244	945	141	456	633
Confectionery.....	1919	12	148	76	113	327	683		1909	5	241	526	114	328	599
	1914	10	81	51	34	187	347	Bread and other bakery products.	1919	115	1,598	1,759	1,372	7,188	12,494
	1909	8	65	22	20	108	219		1914	129	1,255	1,464	671	2,621	4,917
Copper, tin, and sheet-iron work.	1919	10	150	217	192	386	613		1909	100	897	560	481	2,636	3,605
	1914	11	134	84	98	164	407	Butter.....	1919	14	161	1,053	162	3,826	4,336
	1909	6	51	5	42	58	144		1914	8	62	382	35	1,330	1,524
Foundry and machine-shop products.	1919	10	616	2,348	890	1,861	4,071		1909	7	27	324	17	612	675
	1914	15	491	1,767	352	794	1,641	Cars and general shop con- struction and repairs by steam-railroad companies.	1919	6	5,120	3,570	6,696	5,238	12,495
Lumber and timber products ⁴	1919	10	750	4,210	801	1,747	3,645		1914	5	3,140	2,798	2,148	2,142	4,549
	1914	19	2,092	4,887	965	2,523	4,130		1909	3	2,576	1,674	1,863	2,338	4,399
	1909	14	3,074	7,350	1,692	2,636	5,562	Clothing, men's, including shirts.	1919	22	744	176	528	2,369	3,519
Printing and publishing ⁵	1919	34	357	599	434	603	2,122		1914	21	795	160	341	1,125	1,732
	1914	38	350	454	313	303	1,114		1909	17	806	127	257	985	1,611
	1909	35	377	439	281	256	983	Coffee, roasting and grinding..	1919	7	112	499	108	5,588	6,661
Tobacco manufactures.....	1919	10	53	2	49	106	226		1914	5	78	256	40	1,628	2,028
	1914	20	45	.....	26	43	124		1909	4	63	170	29	931	1,247
	1909	15	84	.....	51	68	180	Confectionery and ice cream..	1919	38	678	1,287	540	2,427	4,312
All other industries.....	1919	125	8,264	82,302	12,839	37,580	62,879		1914	38	411	605	199	954	1,611
	1914	112	2,234	7,578	1,513	7,244	11,479	Cooperage.....	1919	8	461	650	464	1,693	2,642
	1909	103	2,370	9,724	1,401	5,529	9,780		1914	11	429	1,028	285	779	1,390
MINNEAPOLIS	1919	1,421	38,154	113,212	41,275	362,834	491,383	Copper, tin, and sheet-iron work.	1919	58	361	178	393	1,075	1,982
All industries.	1914	1,349	28,295	109,040	18,895	131,199	187,854		1914	67	365	180	262	533	1,062
	1909	1,102	26,962	89,247	15,638	119,993	165,405		1909	47	365	162	248	401	599
Agricultural implements.....	1919	5	202	156	154	227	574	Electrical machinery, appa- ratus, and supplies.	1919	17	898	862	707	1,901	4,201
	1914	4	67	178	40	45	177		1914	10	168	302	109	255	358
	1909	7	392	523	277	486	1,099		1909	8	118	144	64	166	391
Artificial limbs.....	1919	9	94	84	123	106	464	Flour-mill and gristmill prod- ucts.	1919	18	3,641	47,710	4,979	201,267	227,606
	1914	5	65	50	42	31	163		1914	19	2,580	61,884	2,026	73,079	85,132
	1909	6	38	30	31	21	162		1909	13	2,279	50,598	1,530	70,553	78,670

¹ Includes "perfumery and cosmetics."² Includes "bookbinding and blank-book making" and "engraving, steel and copper plate, including plate printing" in all years; and "lithography" in 1914 and 1909.³ Includes "sausage, not made in slaughtering and meat-packing establishments."⁴ 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 1909.⁵ Includes "bookbinding and blank-book making" in 1914 and 1909.

TABLE 29.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Con.

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 thousands of dollars.			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 thousands of dollars.		
					Wages.	Cost of mate- rials.	Value of prod- ucts.						Wages.	Cost of mate- rials.	Value of prod- ucts.
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
MINNEAPOLIS—Con.								ST. PAUL.							
Food preparations, not else- where specified.	1919 1914 1909	22 15 16	419 305 222	2,108 956 601	396 188 125	6,462 2,285 1,525	9,263 3,803 2,516	All industries.	1919 1914 1909	818 737 719	22,649 19,483 19,339	40,845 38,886 26,204	24,449 12,796 10,952	85,170 35,819 30,300	149,038 68,682 58,090
Foundry and machine-shop products. ¹	1919 1914 1909	229 150 95	5,727 3,658 2,596	14,387 5,125 3,405	7,251 2,749 1,754	14,534 5,662 3,389	34,760 12,017 7,241	Boots and shoes.	1919 1914 1909	6 4 5	1,191 1,055 1,617	1,308 673 697	1,164 657 830	4,877 2,036 2,076	7,777 3,045 4,265
Fur goods.	1919 1914 1909	21 19 17	192 127 128	47 39 30	228 85 73	542 285 283	1,150 560 511	Bread and other bakery prod- ucts.	1919 1914 1909	68 64 69	745 372 307	815 503 240	596 294 253	3,713 951 743	5,599 1,561 1,368
Furniture.	1919 1914 1909	29 27 28	945 703 800	1,443 1,197 1,073	1,012 465 447	2,000 731 818	4,196 1,653 1,651	Butter.	1919 1914 1909	11 7 6	129 112 50	928 516 535	146 97 39	7,956 3,012 1,018	9,038 3,229 2,120
Hats and caps, other than felt, straw, and wool.	1919 1914 1909	6 5 4	54 21 30	8 11 3	53 12 15	148 38 23	255 54 55	Carriages and wagons, includ- ing repairs.	1919 1914	8 14	289 308	605 733	313 199	700 369	1,379 717
Jewelry.	1919 1914 1909	13 10 8	107 92 76	36 33 31	123 66 48	219 52 55	513 168 156	Cars and general shop con- struction and repairs by steam-railroad companies.	1919 1914 1909	12 7 7	4,016 3,068 2,406	2,471 4,170 3,521	5,248 2,155 1,577	2,516 1,513 1,846	8,069 3,816 3,640
Leather goods. ²	1919 1914 1909	24 20 14	185 208 260	136 78 98	218 148 147	1,041 501 503	1,596 783 923	Copper, tin, and sheet-iron work.	1919 1914	21 23	168 220	121 119	199 144	381 277	793 587
Lumber, planing-mill prod- ucts, not including planing mills connected with saw- mills.	1919 1914 1909	24 25 24	1,070 1,499 1,861	3,630 4,101 4,373	1,268 1,051 1,094	2,908 2,250 2,631	5,420 4,461 4,719	Food preparations, not else- where specified.	1919 1914 1909	10 5 9	173 80 158	498 133 109	147 45 66	3,754 588 917	5,073 936 1,208
Marble and stone work.	1919 1914 1909	13 10 10	92 353 279	988 965 352	120 257 209	170 399 273	479 796 555	Foundry and machine-shop products. ³	1919 1914 1909	109 61 45	2,641 1,768 2,118	3,845 6,406 3,474	3,303 1,256 1,284	4,026 2,082 2,352	13,800 4,474 5,033
Mattresses and spring beds, not elsewhere specified.	1919 1914	5 6	321 292	1,360 1,105	327 195	1,841 609	2,847 1,113	Fur goods.	1919 1914 1909	12 10 14	929 675 897	441 306 242	797 447 469	4,480 2,325 1,840	6,582 3,509 3,110
Models and patterns, not in- cluding paper patterns.	1919 1914 1909	9 7 5	44 30 28	47 37 30	66 21 19	20 10 8	140 48 42	Leather goods. ²	1919 1914 1909	18 22 9	627 229 272	243 200 214	645 149 141	3,279 467 502	5,067 849 797
Paints.	1919 1914	6 6	70 70	223 742	78 58	1,018 636	1,593 950	Lumber and timber products. ⁴	1919 1914 1909	19 19 17	658 747 654	3,285 2,447 2,804	635 438 352	2,270 1,324 1,034	3,936 2,291 1,679
Patent medicines and com- pounds.	1919 1914 1909	22 41 44	185 239 100	111 222 258	132 110 74	1,012 349 394	2,389 1,315 1,362	Marble and stone work.	1919 1914 1909	13 13 10	110 190 216	930 797 519	144 173 178	228 296 287	551 561 619
Photo-engraving.	1919 1914 1909	7 6 5	231 139 104	54 53 22	233 137 93	203 56 25	627 384 204	Paint and varnish.	1919 1914 1909	6 6 6	61 58 48	202 322 243	46 30 24	803 417 371	1,203 706 607
Printing and publishing. ⁵	1919 1914 1909	224 230 216	2,214 2,027 1,755	2,797 2,447 2,180	2,509 1,475 1,162	4,836 7,806 1,693	13,650 7,806 6,478	Patent medicines and com- pounds and druggists' prep- arations. ⁷	1919 1914 1909	22 28 25	191 88 99	243 235 158	126 46 45	414 216 212	1,373 693 728
Signs and advertising novel- ties.	1919 1914	20 17	304 163	78 42	247 107	293 164	893 354	Printing and publishing, book and job.	1919 1914 1909	82 70 66	1,364 1,515 865	1,389 1,250 687	1,334 1,072 537	1,591 1,022 637	5,824 4,197 1,996
Tobacco, cigars. ⁴	1919 1914 1909	32 44 45	193 174 314	33 4 16	164 113 168	261 170 254	652 445 666	Printing and publishing, newspapers and periodicals.	1919 1914 1909	48 44 39	872 735 1,084	677 997 1,063	1,083 1,311 759	1,818 1,311 846	6,579 3,533 3,702
All other industries.	1919 1914 1909	361 320 331	11,436 8,438 10,413	26,808 21,432 21,796	10,282 5,175 5,196	91,583 29,697 28,779	128,389 45,080 44,758	Tobacco, cigars. ⁴	1919 1914 1909	34 53 64	358 520 590	18 15 11	289 269 312	606 432 468	1,250 1,111 1,336
								All other industries.	1919 1914 1909	319 281 328	8,427 7,739 7,928	22,826 19,058 11,687	8,234 4,813 4,086	41,149 17,182 13,651	95,655 32,927 20,782

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

HIBBING.	1919 1914	16 27	50 65	63 28	98 54	198 112	320 254	ST. CLOUD.	1919 1914 1909	72 77 69	1,998 1,429 626	6,883 3,724 3,362	2,328 864 355	4,467 1,288 1,342	7,734 2,695 2,299
MAKATO.	1919 1914 1909	56 64 63	771 755 807	3,291 2,618 3,654	728 434 346	7,052 3,217 2,728	9,766 4,344 3,723	WINONA.	1919 1914 1909	73 91 99	2,634 2,070 2,032	10,458 6,438 8,628	2,161 1,152 1,024	19,273 10,038 7,330	25,120 14,305 11,200

¹ Includes "automobile repairing"; "engines, steam, gas, and water"; "iron and steel, welding"; "machine tools"; "steam fittings and steam and hot-water heating apparatus"; "steel barrels, drums, and tanks"; and "structural ironwork, not made in steel works or rolling mills" in all years; "hardware" in 1919 and 1909; and "gas machines and gas and water meters"; "hardware, saddlery"; and "plumbers' supplies, not elsewhere specified" in 1909.

² Includes "saddlery and harness" and "trunks and valises."

³ Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithography."

⁴ Includes "tobacco, chewing and smoking, and snuff" in 1914 and 1909.

⁵ Includes "automobile repairing"; "engines, steam, gas, and water"; "steel barrels, drums, and tanks"; and "structural ironwork, not made in steel works or rolling mills," in all years; "hardware" in 1914; and "plumbers' supplies, not elsewhere specified" and "steam fittings and steam and hot-water heating apparatus" in 1914 and 1909.

⁶ Includes "boxes, wooden packing, except cigar boxes," and "lumber, planing-mill products, not including planing mills connected with sawmills."

⁷ Includes "perfumery and cosmetics."

TABLE 30.—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- etors and firm mem- bers.	Sala- ried offi- cers, super- inten- dents, 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.							
1	All industries.....	6, 225	147, 678	5, 128	6, 903	13, 288	6, 736	115, 623	De 122, 250	My 109, 489	(3)	(3)	(3)	(3)	(3)	Dollars. 679, 388, 490	
2	Agricultural implements.....	16	618	3	50	41	23	501	Se 559	My 448	554	549	5	.....	.....	2, 623, 032
3	Artificial limbs.....	12	170	13	15	21	25	96	No 101	Ap 91	101	79	22	.....	.....	265, 281
4	Artificial stone products.....	171	1, 095	197	80	37	15	786	Jy 1, 009	Ja 478	982	979	2	1	.....	3, 235, 159
5	Automobile bodies and parts.....	48	537	44	43	26	19	405	De 454	Ja 323	481	467	14	.....	.....	979, 377
6	Automobile repairing.....	592	2, 935	799	128	72	94	1, 842	Jy 2, 131	Ja 1, 453	1, 921	1, 911	8	2	.....	5, 345, 601
7	Awnings, tents, and sails.....	10	133	18	9	10	7	89	Je 114	Ja 65	97	53	44	.....	.....	393, 402
8	Babbitt and type metal.....	3	10	3	3	2	1	11	Se 14	Ja 8	14	13	1	.....	.....	55, 541
9	Belting, leather.....	3	153	20	14	3	116	De 143	Ap 101	143	85	2	56	.....	.....	1, 561, 510
10	Bookbinding and blank-book making	18	151	23	5	2	2	119	Au 123	Se 115	127	57	68	1	1	176, 665	
11	Boots and shoes.....	16	2, 614	4	86	263	108	2, 153	No 2, 249	Ja 1, 967	2, 314	1, 322	983	8	1	10, 617, 683	
12	Regular factory products.....	11	2, 505	76	251	105	2, 073	80	No 91	Ja 59	2, 225	1, 232	934	8	1	10, 357, 310	
13	Overgaiters, moccasins, and leg- gings.....	5	109	4	10	12	3	80	No 91	Ja 59	89	40	49	.....	.....	230, 373
14	Boxes, set-up paper boxes and cartons	16	794	6	44	18	15	711	No 770	Ja 650	750	268	472	5	5	1, 353, 932	
15	Boxes, wooden packing, except cigar boxes.....	28	787	27	41	16	8	695	Au 773	Ja 621	754	690	35	29	.....	1, 897, 027
16	Brass, bronze, and copper products.....	10	252	5	20	6	8	213	De 249	Je 192	256	243	13	.....	.....	800, 171
17	Bread and other bakery products.....	426	4, 288	457	157	413	286	2, 975	No 1, 377	My 1, 018	3, 268	1, 976	1, 268	19	5	8, 981, 750	
18	Biscuit and crackers.....	3	1, 447	27	185	75	1, 160	75	De 1, 951	Ja 1, 060	1, 301	572	726	2	1	3, 181, 804	
19	All other.....	423	2, 841	457	130	228	211	1, 815	De 1, 951	Ja 1, 060	1, 967	1, 404	542	17	4	5, 799, 946	
20	Brick and tile, terra-cotta, and fire- clay products.....	34	929	27	54	32	17	799	De 1, 951	Ja 1, 060	1, 011	1, 018	542	23	.....	4, 800, 734
21	Building brick, including fire brick.....	22	505	25	31	20	9	420	Au 684	Ja 150	601	578	.....	23	.....	2, 361, 792
22	Sewer pipe and drain tile.....	7	274	2	13	7	4	248	Se 302	Ja 165	290	290	.....	.....	.....	1, 759, 303
23	Terra-cotta products.....	5	150	10	5	4	131	103	Oc 186	Ja 33	150	150	.....	.....	.....	679, 659
24	Brooms.....	28	151	33	9	4	2	103	De 126	Fe 90	130	126	2	2	.....	279, 599
25	Butter.....	832	2, 734	217	234	142	179	1, 962	Je 2, 278	Ja 1, 702	1, 905	1, 750	149	6	.....	42, 854, 461
26	Buttons.....	5	63	6	2	1	.....	54	De 82	Ap 31	83	78	5	.....	.....	70, 798
27	Canning and preserving, vegetables.....	25	558	3	81	8	10	456	Au 1, 630	Fe 66	1, 346	673	673	.....	.....	1, 741, 480
28	Carpets, rag.....	9	34	13	1	.....	20	20	De 80	Ja 14	34	20	14	.....	.....	31, 017
29	Carriages and wagons, including repairs.....	67	712	72	36	23	16	565	.....	.....	613	609	4	.....	.....	2, 845, 567
30	Carriages and wagons.....	35	628	32	33	23	15	525	No 568	Je 480	573	560	4	.....	.....	2, 702, 268
31	Repair work only.....	32	84	40	3	.....	1	40	Jy 43	Ja 35	40	40	.....	.....	.....	145, 299
32	Cars and general shop construction and repairs by electric-railroad companies.....	8	479	24	11	8	436	.....	De 511	Je 346	511	498	13	.....	.....	2, 027, 634
33	Cars and general shop construction and repairs by steam-railroad companies.....	75	16, 808	381	294	157	15, 976	.....	Se 16, 375	Au 15, 190	15, 809	15, 620	189	.....	.....	30, 083, 982
34	Cheese.....	66	123	25	6	1	2	89	Je 121	De 59	95	95	.....	.....	.....	255, 982
35	Chemicals.....	9	281	18	67	34	162	162	Je 195	Ja 98	185	185	.....	.....	.....	2, 082, 618
36	Cleansing and polishing preparations.....	6	62	2	11	21	8	20	Jy 104	Ja 16	10	16	3	.....	.....	163, 545
37	Clothing, men's.....	34	1, 793	32	49	110	41	1, 561	.....	.....	1, 819	289	1, 530	.....	.....	3, 736, 233
38	Men's and youths'.....	12	890	4	25	49	16	796	Oc 974	Ja 632	913	161	752	.....	.....	2, 156, 361
39	All other.....	10	131	18	4	1	.....	108	De 755	Mh 579	755	77	678	.....	.....	1, 552, 003
40	Contract work.....	12	772	10	20	61	24	657	Oc 152	Jy 73	151	51	100	.....	.....	27, 869
41	Clothing, women's.....	23	339	20	36	47	16	220	.....	.....	311	17	294	.....	.....	680, 573
42	Suits, skirts, and cloaks.....	4	39	2	9	2	2	24	De 30	Se 20	35	7	28	.....	.....	78, 241
43	All other.....	19	300	18	27	45	14	196	No 267	Ja 89	276	10	266	.....	.....	602, 332
44	Coffee, roasting and grinding.....	13	852	6	68	160	86	532	Jy 582	Mh 480	536	272	264	.....	.....	3, 653, 465
45	Coffins, burial cases, and undertakers' goods.....	7	311	1	23	33	7	247	Mh 281	De 221	219	169	49	1	.....	1, 485, 522
46	Coke, not including gas-house coke.....	3	510	13	67	4	426	.....	De 483	Je 367	483	481	2	.....	.....	9, 508, 441
47	Condensed milk.....	5	117	2	11	9	11	84	Je 102	Ja 63	91	66	25	.....	.....	1, 223, 556
48	Confectionery and ice cream.....	117	2, 516	129	97	227	104	1, 959	.....	.....	2, 488	814	1, 672	1	1	5, 508, 985
49	Confectionery.....	85	2, 195	92	77	206	77	1, 743	De 2, 305	Je 1, 337	2, 275	631	1, 042	1	1	4, 345, 956	
50	Ice cream.....	32	321	37	20	21	27	216	Au 282	Ja 150	213	183	30	.....	.....	1, 162, 999
51	Cooperage.....	11	635	3	32	14	11	575	.....	.....	598	583	15	.....	.....	1, 761, 687
52	Hogsheads and barrels.....	7	318	3	18	3	3	201	Ja 308	Jy 279	302	298	4	.....	.....	862, 415
53	All other.....	4	317	14	11	8	284	.....	Fe 305	My 245	296	285	11	.....	.....	899, 272
54	Copper, tin, and sheet-iron work.....	128	1, 074	132	67	80	37	758	No 941	Fe 542	886	876	7	3	.....	2, 795, 571
55	Dairymen's, poultrymen's, and ap- parists' supplies.....	6	152	1	8	47	10	86	Ap 92	Au 82	97	95	2	.....	.....	724, 245
56	Dental goods.....	8	194	5	3	8	26	152	(C) 152	(C) 152	153	106	46	1	.....	140, 377
57	Druggists' preparations.....	6	217	2	33	6	34	142	Jy 152	Ja 123	148	51	97	.....	.....	1, 075, 297
58	Electrical machinery, apparatus, and supplies.....	20	1, 230	7	54	151	76	942	De 1, 005	Ja 916	982	635	334	13	.....	2, 372, 560
59	Electroplating.....	7	45	7	2	3	3	30	Au 33	My 28	33	30	2	1	.....	50, 458
60	Engines, steam, gas, and water.....	14	2, 377	1	118	576	153	1, 529	Mh 1, 893	De 1, 154	1, 623	1, 618	5	.....	.....	21, 952, 666
61	Engraving and die sinking.....	5	9	5	.....	.....	4	4	(C) 4	(C) 4	5	5	.....	.....	.....	4, 287
62	Engraving, steel and copper plate, including plate printing.....	7	101	7	1	8	5	80	De 96	Jy 73	91	39	51	1	.....	93, 063
63	Envelopes.....	6	458	2	20	25	13	398	Oc 430	Ja 331	400	279	121	.....	.....	459, 569
64	Fancy articles, not elsewhere speci- fied.....	5	139	3	10	9	26	91	De 207	Fe 49	207	22	171	.....	14	195, 539
65	Flour-mill and gristmill products.....	248	10, 686	180	612	2, 988	857	6, 049	De 6, 504	Mh 5, 607	6, 561	6, 380	174	7	.....	111, 366, 440

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).

³ No figures given for reasons stated under "Explanation of terms."

MANUFACTURES—MINNESOTA.

27

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.	Owned.	Owned.	Rented. 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.							
20,985,065	24,374,861	127,106,505	4,005,045	3,427,503	21,634,431	860,607,209	22,482,478	1,218,129,735	331,039,958	473,057	173,815	24,371	33,848	73,661	168,262	87,154
115,826	77,806	498,176	253	1,619	26,929	1,319,700	35,570	2,341,311	986,041	723	340		14		369	221
35,554	40,365	125,607	828	13,551	7,039	108,277	3,273	481,863	370,313	89			10		79	3
142,030	67,036	802,248	25,077	13,090	34,120	1,197,381	86,387	3,046,815	1,763,047	3,111	782		461	75	1,803	35
80,979	38,904	456,559	2,855	35,768	23,417	850,290	26,896	1,763,048	885,862	611			4		607	5
207,516	119,309	2,295,942	44,932	247,694	93,755	1,093,318	170,650	9,282,481	7,118,513	2,830	22		743		2,065	23
14,323	28,234	82,135		13,426	13,224	337,434	3,401	580,467	230,632	62					62	7
6,613	925	11,939		2,436	353	99,337	2,124	141,442	39,981	8					8	8
30,678	29,138	136,028		11,240	33,758	1,189,164	6,584	1,808,535	612,787	120	40				80	9
5,636	2,760	94,239		7,389	1,573	69,144	2,062	245,277	173,471	50					50	10
361,479	692,648	1,917,216		35,856	248,488	7,683,058	60,045	12,644,659	4,901,556	1,738					1,738	11
328,399	668,129	1,845,785		30,065	245,146	7,456,372	59,180	12,228,839	4,713,287	1,705					1,705	12
33,080	24,519	71,401		4,891	3,342	226,686	865	415,820	188,269	33					33	13
119,246	65,778	482,918	2,000	30,836	37,508	936,155	26,775	2,085,980	1,123,050	523					523	14
131,515	29,383	691,745		8,854	46,721	2,161,031	20,340	3,454,239	1,263,862	2,525	1,556				909	15
50,460	19,238	240,771		5,700	20,324	519,471	30,702	1,017,680	467,447	393					393	16
395,833	1,000,450	2,593,161	0,256	249,003	108,575	13,023,931	382,150	22,815,456	8,800,372	3,234	1,241		14		1,079	17
65,719	439,587	806,949		65,791	69,002	3,827,755	83,563	7,360,856	3,455,538	1,052	821				231	18
330,114	560,893	1,786,212	0,256	183,212	98,673	9,706,179	298,587	15,448,600	5,353,834	2,182	420		14		1,748	19
124,810	55,333	834,062	73	8,000	51,682	306,206	503,112	2,293,396	1,484,078	5,224	3,270	370	67		1,617	20
78,820	29,873	441,517	73		26,248	130,321	250,251	1,150,570	770,004	2,618	1,052		30		936	21
25,465	17,145	238,988			20,444	154,179	152,650	742,128	435,299	1,865	1,408	370	7		80	22
20,625	8,315	153,557		8,000	4,090	21,708	100,211	400,692	278,775	741	210		30		501	23
10,182	10,830	118,916		3,294	2,238	312,837	4,063	563,084	246,184	106			10		96	24
378,192	312,057	2,237,808	45,738	46,769	248,379	81,300,204	570,887	88,882,271	0,951,120	14,644	9,716	179	776	71	3,902	25
2,598		43,505		2,690	709	35,688	1,336	88,261	51,337	48					48	26
120,006	8,192	261,511	3,714	647	34,647	1,037,849	27,271	1,792,165	727,045	1,399	647		72		680	27
2,200		15,798	200	2,001	121	0,165	1,464	47,595	36,966	49					49	28
89,092	71,365	648,005		9,581	70,294	1,450,372	40,318	2,960,738	1,470,048	1,501	970		120		411	29
83,865	70,665	603,335		5,014	74,120	1,390,692	44,896	2,787,775	1,343,217	1,337	970		54		313	30
5,227	700	44,070		4,567	2,105	50,680	4,452	181,063	120,831	164			06		98	31
49,552	26,511	548,900		82	4,210	306,585	43,876	1,065,144	624,683	1,285					1,285	32
1,047,752	568,567	21,070,153	57,021			11,503,070	1,098,575	35,350,764	22,658,210	15,157	7,262	1,416	142		6,347	9,725
3,029	403,426	89,729		4,708	1,826	2,481,755	24,125	2,838,135	332,255	505	438		14		53	34
58,107	126,364	188,223		51,732	60,672	484,624	138,008	1,455,658	832,126	1,105	75		100		930	35
23,314	40,711	21,510	2,440	1,976	1,587	520,887	3,373	727,745	203,485	37					37	36
147,119	169,948	1,103,099	43,828	54,328	134,309	4,810,810	28,962	7,065,353	2,225,556	642	220				416	37
74,067	54,214	586,700		35,583	59,010	2,761,054	16,818	3,686,734	908,862	230	2				228	38
67,099	115,609	435,592	43,828	16,055	73,634	2,041,481	10,579	3,237,718	1,185,555	391	224				167	39
5,653	125	80,801		2,690	705	8,302	1,555	140,006	131,039	21					21	40
77,279	19,634	140,894		17,807	5,424	460,119	4,047	896,235	426,099	71					71	41
12,450	2,565	15,640		1,820	0,048	66,580	327	120,885	53,978	10					10	42
64,829	17,069	125,218		16,487	4,476	399,539	3,720	775,350	372,091	61					61	43
165,235	205,538	233,636	5,120	38,007	122,842	10,223,297	41,063	12,185,989	1,921,029	962	100				862	44
123,777	97,467	235,540	184	6,360	140,609	653,112	8,986	1,593,240	931,142	248	168				80	45
46,405	86,495	694,714		118,340	457,473	4,513,873	6,468,654	1,497,308	7,774	2,618	112				5,044	46
23,878	19,781	70,530	500	7,950	7,878	1,541,176	41,812	1,805,199	282,211	724					372	47
325,517	557,482	1,222,405	1,500	140,129	544,287	5,569,950	127,650	10,055,805	4,368,205	2,340	570		8		1,702	48
283,283	499,614	971,979		127,170	460,149	4,117,025	83,126	7,694,102	3,393,351	1,119	545				574	49
62,234	57,568	250,480	000	12,950	84,138	1,442,325	44,524	2,461,703	974,854	1,221	25		8		1,188	50
108,992	35,950	574,677	6,832	1,500	116,336	2,001,202	24,130	3,199,313	1,173,921	985	825	40			120	51
48,234	9,422	322,906	6,882	1,500	23,419	1,050,127	20,068	1,045,936	575,711	525					120	52
60,668	28,528	251,711			92,917	951,135	4,032	1,553,377	598,210	460	420	40			582	53
150,001	73,962	870,165	8,486	34,149	99,621	2,037,028	25,862	3,082,994	1,740,106	586			4		78	54
30,933	69,778	100,311		20	14,348	312,119	4,396	764,899	448,334	128			50			55
2,845	25,590	150,233		8,231	30,738	697,772	1,234	945,906	240,900	36					36	56
72,933	40,668	86,040		8,061	5,102	252,705	5,439	618,798	360,594	87	40				47	57
255,655	290,234	753,004	8,343	17,378	160,213	1,976,575	56,773	4,353,949	2,320,601	881					881	58
4,152	4,930	32,188		4,435	586	20,867	5,520	100,586	74,199	102					102	59
346,530	994,026	1,907,956	318,720	9,411	331,288	4,481,878	97,907	12,946,297	8,366,512	2,235	50		16		2,169	60
		2,160		714	1	103	25	13,219	13,091	2					2	61
2,080	7,238	63,923	1,200	4,745	575	51,242	938	151,126	98,945	30					30	62
41,956	54,657	177,874		11,753	9,210	285,245	6,022	674,393	383,126	131					131	63
33,607	45,480	55,455	7,129	5,260	4,463	126,193	870	331,016	204,453	12					12	64
2,021,226	3,870,348	7,780,555	45,933	660,266	3,355,611	335,682,145	2,190,367	381,248,891	43,376,379	114,764	38,591	14,316	1,017	32,420	30,420	118,947

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

TABLE 30.—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	Food preparations, not elsewhere specified.	41	926	27	79	123	73	624		773	418	354	1			5,287,989
2	Breadstuff preparations, cereals, and breakfast foods.	10	337		33	46	30	228	Se 263 Je 177	245	72	173				2,332,198
3	Macaroni, vermicelli, and noodles.	4	157	1	10	24	7	115	De 164 Je 84	137	63	73	1			462,477
4	Sweetening sirups, other than cane.	7	161	13	11	8	12	117	Se 182 Ap 87	179	117	62				1,251,295
5	All other.	20	271	13	25	45	24	164	Jy 204 Mh 126	212	166	46				1,242,010
6	Foundry and machine-shop products.	216	7,705	165	449	578	330	6,183	Oc 477 Je 336	6,483	6,391	91	1			24,850,387
7	Boiler shops.	10	496	6	30	31	5	424	Oc 477 Je 336	427	426					2,369,740
8	Foundries.	24	1,284	19	46	87	36	1,066	Oc 1,246 Je 921	1,307	1,261	46				2,898,215
9	Machine shops.	151	3,747	108	273	346	229	2,791	De 3,014 Je 2,626	2,874	2,842	31	1			12,821,188
10	Machine shop and foundry combined.	31	2,178	32	100	114	60	1,872	Ja 3,137 My 1,626	1,875	1,862	13				6,791,244
11	Fur goods.	45	1,367	43	68	243	108	905	De 1,070 Mh 785	971	373	507	1			4,454,010
12	Furniture.	59	1,857	44	100	81	45	1,587	De 1,649 Ja 1,109	1,887	1,798	81	7	1		4,500,209
13	Wood furniture, other than rattan and willow.	35	1,584	17	84	74	34	1,375	De 1,649 Ja 1,109	1,648	1,559	81	7	1		3,922,008
14	Rattan and willow, and metal furniture.	6	26	7			2	17	Jy 27 Ja 2	22	22					27,055
15	Store and office fixtures.	18	247	20	16	7	9	195	No 227 Fe 159	217	217					551,146
16	Furs, dressed.	5	103	5	3	2	2	91	De 109 Ap 62	107	100	7				195,956
17	Gas and electric fixtures.	7	109	2	16	12	4	75	De 88 Ap 66	89	83	6				237,108
18	Gas, illuminating and heating.	23	1,028	73	157	91	707	707	Je 783 Fe 632	734	727	7				21,461,659
19	Glass, cutting, staining, and ornamenting.	17	174	5	24	13	13	119	De 136 Ja 99	145	133	12				362,710
20	Glucose and starch.	6	31	14	1		16	Ap 37 Au 6	32	31	1					162,138
21	Grease and tallow, not including lubricating greases.	10	30	11	6		20			21	21					131,706
22	Soap stock.	5	18	5	3		1	9	(*) 9 (*) 9	8	8					64,535
23	All other.	5	21	6	3		1	11	De 13 Ap 9	13	13					67,171
24	Hand stamps.	10	99	17	6	4	13	59	De 65 Ja 51	63	47	16				156,726
25	Hats and caps, other than felt, straw, and wool.	11	116	20	4	5	4	83	Se 89 Ja 77	88	58	30				282,211
26	Ice, manufactured.	5	122	15	7	7	93	Au 105 Ja 76	94	93	1					899,401
27	Ink, writing.	3	9	4		1	4	(*) 4 (*) 4		4	2					7,588
28	Iron and steel, welding.	10	31	10	5	2	14	Ap 15 Ja 13	13	13						70,965
29	Jewelry.	22	206	26	6	9	15	150	De 156 Fe 143	153	145	7	1			265,448
30	Knit goods.	16	4,034	9	56	117	288	3,564	Mh 4,171 De 3,026	3,023	527	2,505	1			11,014,213
31	Leather goods, not elsewhere specified.	11	839	4	37	75	40	683	De 834 Mh 588	753	279	474				2,200,721
32	Lime.	5	198	5	12	8	6	167	My 211 Fe 99	184	184					568,447
33	Liquors, malt.	28	1,415	12	127	197	43	1,036	Je 1,389 Jy 778	975	972	3				18,938,274
34	Looking-glass and picture frames.	12	70	10	8	6	9	37	De 51 Jy 32	44	41	2	1			226,372
35	Lumber and timber products.	244	13,384	261	182	278	61	12,602	Fe 15,810 My 9,753	17,877	17,713	152	11	1		38,601,613
36	Lumber, planing-mill products, not including planing mills connected with sawmills.	94	2,689	78	165	180	78	2,188	De 2,580 Ja 1,556	2,578	2,537	20	21			8,994,879
37	Machine tools.	5	224	3	10	25	23	163	De 198 Je 102	107	197					778,024
38	Mal.	7	129	18	13	2	96	Je 121 De 62	112	112						4,409,012
39	Marble and stone work.	109	1,300	106	73	79	21	1,021	De 744 Ja 600	1,165	1,160	4	1			2,876,443
40	Monuments and tombstones.	90	890	96	37	66	17	684	De 744 Ja 600	771	771	1	1			2,083,639
41	All other, except slate.	19	410	10	36	23	4	337	Se 409 Ja 219	392	389	3				792,894
42	Mattresses and spring beds, not elsewhere specified.	9	592	6	46	41	40	459	Au 533 Ja 346	505	434	71				2,486,943
43	Millinery and lace goods, not elsewhere specified.	23	722	16	41	82	42	541		501	34	555				1,166,836
44	Embroideries.	6	20	6	1		2	11	Ap 12 Ja 10	13	1	11				10,959
45	Trimmed hats and hat frames.	8	620	6	31	82	31	479	Fe 753 Jy 340	523	27	496				1,064,228
46	All other.	9	73	4	9		9	51	De 57 Ja 43	56	6	48				61,649
47	Mineral and soda waters.	114	438	132	36	36	21	213	De 205	212	189	11	12			1,330,966
48	Mineral and carbonated waters.	109	410	130	32	25	18	205	Jy 294 De 158	205	182	11	12			1,284,901
49	All other.	5	28	2	11	3	8	8	Ja 9 De 7	7	7					55,065
50	Models and patterns, not including paper patterns.	16	155	23	1	2	5	124	Oc 167 My 86	134	134					177,610
51	Musical instruments and materials, not elsewhere specified.	3	6	3				3	(*) 3 (*) 3	3	3					3,240
52	Oil, linsced.	6	617	30	65	39	483	Jy 577 My 416	504	498	6					19,648,821
53	Optical goods.	11	157	4	14	29	27	83	Se 85 Ja 78	84	78	6				320,840
54	Paints.	12	244	5	30	72	20	117	Ja 128 No 101	112	85	27				1,948,735
55	Paper and wood pulp.	9	2,771	86	95	67	2,523	Ja 2,681 Au 2,305	2,642	2,479	163					24,634,705
56	Patent medicines and compounds.	51	906	29	82	175	159	461	Ja 426 Ja 326	444	201	187	1	1		7,939,775
57	Patent and proprietary medicines.	33	734	19	56	151	140	368	Jy 426 Ja 326	355	137	196				7,493,837
58	Patent and proprietary compounds, not elsewhere specified.	18	172	10	26	24	19	93	Jy 115 Ja 70	89	44	41	2	2		446,938
59	Paving materials.	13	190	5	16	8	1	160	Jy 223 Fe 75	241	241					745,794
60	Perfumery and cosmetics.	18	197	8	10	121	15	43	Se 50 Fe 35	52	23	28				172,401
61	Photo-engraving.	11	398	4	28	39	30	299	De 302 Ja 295	303	263	40				1,367,424
62	Photographic materials.	6	37	5	3	3	5	21	Au 23 Ja 19	21	16	1	4			74,463
63	Pickles, preserves, and sauces.	13	289	6	25	31	10	227	Au 614 Fe 118	267	138	129				936,505

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. ¹					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. 250,733	Dollars. 278,979	Dollars. 575,851	Dollars. 39,663	Dollars. 39,021	Dollars. 303,540	Dollars. 10,308,757	Dollars. 109,377	Dollars. 14,706,653	Dollars. 4,288,519	3,090	437				2,653	145	1
123,047	128,816	189,214	3,063	5,050	118,024	3,414,260	28,153	5,163,789	1,721,367	658	150				508	85	2
32,485	43,159	102,462		1,000	12,635	613,520	14,100	937,621	309,911	388	50				338		3
43,053	26,668	91,020	30,000	13,398	143,055	3,472,599	19,108	4,029,702	1,136,935	413	223				190	60	4
52,148	80,330	189,555		19,573	29,226	2,808,369	47,866	3,076,541	1,120,306	1,631	14				1,617		5
1,413,803	1,218,270	7,432,071	85,034	100,710	1,101,371	12,001,095	711,652	31,864,771	10,151,124	11,963	1,485	1,333	228	9	8,908	4,206	6
142,515	75,318	530,733	16	526	202,201	1,064,600	39,158	2,551,206	1,447,439	1,714	250		6		1,458		7
205,405	90,933	1,492,768	100	30,695	230,135	2,367,882	285,474	5,809,080	3,215,704	1,820	235		14		1,571		8
770,374	779,088	3,089,240	82,288	73,425	298,252	5,880,017	185,093	16,100,993	10,035,883	4,725	175	1,333	125	9	3,083	3,043	9
235,509	272,931	2,310,330	2,030	2,004	331,783	2,080,487	201,927	7,343,512	4,452,098	3,704	825		88		2,796	1,163	10
267,370	433,287	1,086,583	7,810	113,586	316,480	5,181,310	22,903	8,062,800	2,858,587	515				3	512		11
407,014	184,613	1,635,077	1,403	40,884	173,443	2,979,422	82,815	6,805,090	3,742,853	2,814	1,466				1,348	20	12
335,633	154,180	1,371,442	1,053	37,787	164,331	2,637,993	66,874	5,951,756	3,246,899	2,393	1,301				1,002	20	13
	852	14,582		2,125	180	20,832	276	70,382	40,274	9					9		14
71,381	20,572	240,653	350	6,972	8,932	311,507	15,065	782,952	455,690	412	75				337		15
11,820	5,340	117,458	1,000	1,800	1,377	44,063	8,620	232,370	179,687	192	100	50			42	60	16
32,408	20,016	75,283	5,392	8,209	2,043	200,821	3,164	427,523	223,538	91					91		17
204,349	254,898	865,656		2,300	308,655	658,904	1,748,827	5,517,882	3,110,061	5,908	3,024	2,330	125		429	256	18
51,395	22,468	105,080	401	14,081	5,314	544,632	6,176	832,317	281,609	92					92		19
2,280	53	14,953	135	68	8,352	62,230	5,320	89,016	21,406	263	252		3		8		20
23,817	1,095	28,806		370	9,301	111,120	7,476	262,070	133,465	188	105		8		15		21
5,725	315	15,043		270	3,322	21,305	3,035	87,496	63,156	95	80				15		22
18,692	780	13,703		100	5,079	80,824	4,441	164,574	70,309	93	85		8		42		23
19,100	12,519	50,448	50	12,590	5,630	69,780	2,874	250,301	177,641	42					18		24
7,600	11,664	88,838		10,434	657	288,197	1,025	462,703	173,481	18							25
25,740	11,115	90,634		22,100	34,657	55,194	333,078	243,227	1,671				100		1,571		26
5,240	600	3,231		920	75	27,545	19,536	27,545	19,536								27
9,853	1,461	18,129	4,747	3,367	534	18,949	3,028	95,182	73,205	33					33		28
10,200	16,488	179,017		12,374	2,843	260,281	2,210	663,091	395,200	53					53		29
306,420	615,916	2,207,950	60	33,180	422,443	7,408,285	78,325	13,084,044	6,498,334	1,480	1,200				280	1,452	30
192,685	172,436	623,561		22,014	91,441	2,514,079	12,567	4,052,079	1,494,833	104			12		182		31
32,169	13,620	163,381		250	10,748	77,846	42,073	427,439	807,620	260			18		42	30	32
515,629	232,282	1,842,951	10,958	3,200	1,731,625	1,820,910	216,924	7,712,734	5,665,994	7,125	0,037		15		1,073	1,135	33
18,147	15,681	30,260		11,237	3,090	180,765	2,198	327,133	144,170	36					30		34
607,612	525,761	9,868,133	1,104,788	35,779	1,921,398	17,037,873	132,725	37,321,051	20,150,453	38,478	32,028	2,073	525	35	1,817	2,549	35
399,412	514,549	2,413,479	4,935	24,139	197,323	6,414,026	113,231	11,804,330	5,270,178	8,908	5,587		163	50	3,168	643	36
25,325	32,383	182,168	55,054	6,720	13,116	207,584	13,018	827,184	605,982	384					334		37
70,687	19,673	121,510			97,000	2,168,763	120,318	2,926,102	637,021	2,710	2,187				523	2,150	38
151,254	130,459	1,282,349	40,322	16,364	50,000	1,779,086	122,123	4,721,138	2,819,329	6,341	1,112		173		5,056	75	39
80,250	103,304	894,975	80,322	6,080	43,611	1,431,220	73,712	3,501,505	1,990,573	3,448	480		167		2,801	10	40
71,004	27,065	387,374	10,000	9,084	12,380	348,466	48,411	1,219,633	822,766	2,893	632		6		2,255	65	41
183,380	162,960	474,439		6,250	31,509	2,368,901	33,362	3,871,893	1,469,630	1,654	375				1,279		42
129,749	83,209	483,350		30,351	44,334	1,037,049	9,627	2,068,040	1,020,770	187	125				62	44	43
1,040	1,248	9,553		3,610	72	8,186	163	31,412	23,063	5					5		44
117,761	70,078	440,098		24,849	43,047	985,355	8,710	1,887,109	893,064	167	125				42	44	45
10,948	5,973	33,708		7,892	1,215	44,128	754	149,525	104,643	15					15		46
59,128	59,649	198,411	751	22,187	112,553	771,263	21,891	1,543,808	750,654	357	85		51	1	270		47
33,496	50,215	101,534	751	19,205	109,718	738,085	21,468	1,471,755	712,202	350	35		45	1	269		48
5,632	9,334	6,877		2,982	2,835	33,178	423	72,053	38,452	7					1		49
1,939	5,733	135,196	500	5,860	1,996	111,686	6,300	331,316	213,330	138			6		138		50
		3,914		905	76	926	115	9,981	8,940	5					5		51
342,482	125,260	640,813		333,945	28,623,332	172,652	33,237,740	4,441,756	4,102	2,480					1,622	79	52
42,188	49,435	83,906	1,650	15,131	11,830	616,034	2,036	616,034	313,882	47					47		53
90,846	133,647	118,427		13,294	167,350	1,593,952	17,020	2,612,132	901,160	620	80				540	14	54
410,502	214,269	2,903,895		748,238	10,027,035	1,381,833	20,138,482	8,729,614	56,106	11,350	565			40,036	4,155	8,794	55
308,258	453,160	205,073	9,969	34,621	448,773	2,696,968	25,095	6,302,629	3,580,566	2,234	6		7		2,221		56
216,595	405,172	238,070	8,149	24,257	438,251	2,212,781	20,760	5,468,998	3,235,457	2,187					2,187		57
91,663	47,988	57,003	1,820	10,364	10,522	484,187	4,335	833,631	345,109	47	6		7		34		58
39,030	10,612	202,477	27,644	13,835	125,731	97,118	42,176	537,325	398,031	3,079	879		10		2,190		59
14,424	21,315	33,206	1,964	12,101	5,154	176,054	2,388	348,293	169,851	24					24		60
92,454	92,691	381,039	4,595	20,877	7,830	227,701	4,840	909,063	796,432	82					82		61
6,480	5,856	14,917		3,036	1,278	47,225	1,816	137,772	88,731	24					24		62
59,658	60,260	179,081	1,759	50,906	1,252,650	11,397	1,707,694	443,407	236	35			51		150		63

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

MANUFACTURES—MINNESOTA.

TABLE 30.—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	Poultry, killing and dressing, not done in slaughtering and meat-packing establishments.	10	144	12	6	21	17	88	De	144	Mh	61	146	143	3	Dollars.	339,268
2	Printing and publishing, book and job.	277	4,412	259	301	355	435	3,062	De	2,653	Ja	2,356	2,617	1,824	761	11,725,092	
3	Job printing.	258	3,399	244	243	212	223	2,477	De	2,457	Fe	371	2,458	1,628	26	7,885,447	
4	Book printing and publishing.	8	795	3	48	139	203	402	De	189	Au	170	191	161	29	3,506,034	
5	Linotype work and typesetting.	11	218	12	10	4	9	183	De	189	Au	170	191	161	29	334,211	
6	Printing and publishing, newspapers and periodicals.	701	5,713	641	408	914	692	3,058	De	2,484	Ja	2,409	2,484	683	60	14,794,899	
7	Printing and publishing.	23	910	12	50	256	113	479	No	493	Se	467	490	430	60	4,202,263	
8	Printing, publishing, and job printing.	571	4,370	571	270	566	434	2,529	No	2,685	Ja	2,409	2,686	2,018	59	10,204,011	
9	Publishing without printing.	107	433	58	88	92	145	50	De	53	Fe	49	59	36	18	388,535	
10	Printing materials.	4	23	6	5	1	1	10	De	10	Fe	10	11	11	1	50,169	
11	Saddlery and harness.	51	638	49	42	81	30	436	De	479	Je	407	489	454	34	2,367,647	
12	Sand-lime brick.	3	86	8	5	4	6	69	No	101	Mh	24	106	104	2	242,626	
13	Sausage, not made in slaughtering and meat-packing establishments.	11	62	14	4	9	2	33	Se	36	Ja	30	35	35		95,878	
14	Shipbuilding, wooden, including boat building.	21	126	23	7		5	91	Jy	115	No	67	109	107	2	311,701	
15	Shirts.	9	337	4	19	46	15	253	De	304	Ap	232	261	41	215	845,733	
16	Show cases.	5	90	5	8	4	2	71	De	108	Ja	48	109	109		356,971	
17	Signs and advertising novelties.	31	1,404	20	64	204	127	989	No	221	My	163	1,170	393	783	2,105,690	
18	Electric and other signs.	27	247	20	19	9	11	188	De	1,007	Ja	529	215	153	62	388,885	
19	Advertising novelties.	4	1,157		45	195	116	801	De	6,018	My	4,855	961	240	721	1,736,705	
20	Slaughtering and meat packing.	13	6,630	11	249	855	290	5,231	De	1,007	My	4,855	5,599	5,147	452	24,781,277	
21	Soap.	7	84	3	6	22	7	46	Au	57	De	37	44	33	11	453,144	
22	Statuary and art goods.	5	48	7	4		2	35	No	44	Ja	21	40	37	3	69,401	
23	Steam fittings and steam and hot-water heating apparatus.	6	230	2	19	27	22	160	No	200	My	104	224	223	1	809,766	
24	Steam packing.	5	283	1	17	42	15	208	Oc	227	My	193	214	208	6	1,129,430	
25	Stereotyping and electrotyping.	4	56	1	6	2	3	44	Jy	49	Ja	29	49	49		100,491	
26	Stoves and hot-air furnaces.	12	322	9	18	37	22	236	De	234	Je	205	242	232	10	680,894	
27	Stoves and ranges.	6	281	1	15	32	21	212	De	234	Je	205	206	196	10	608,066	
28	Hot-air furnaces.	6	41	8	3	5	1	24	Se	39	Ja	14	36	36		72,828	
29	Structural ironwork, not made in steel works or rolling mills.	19	2,795	12	66	427	107	2,183	No	2,459	Je	1,748	2,467	2,447	19	12,842,981	
30	Suspenders, garters, and elastic woven goods.	3	49	7		10	2	30	No	34	Ja	28	32	3	29	143,767	
31	Tinware, not elsewhere specified.	7	515	5	17	26	12	455	Au	585	Ja	369	457	294	163	1,688,452	
32	Tobacco, cigars and cigarettes.	216	1,202	224	35	38	14	891	No	943	Jy	849	929	523	397	1,499,855	
33	Tools, not elsewhere specified.	10	66	10	13	1	3	39	Ja	8	Au	6	42	40	2	226,307	
34	Machinists' tools.	3	13	6				7	Ja	36	My	29	7	7		62,670	
35	All other.	7	53	4	13	1	3	32	Ja	36	My	29	35	33	2	163,637	
36	Toys and games.	4	63	2	7		3	51	No	101	Fe	11	100	39	59	60,572	
37	Trunks and valises.	14	111	10	12	6	4	79	De	92	Ja	65	93	84	6	194,765	
38	Upholstering materials, not elsewhere specified.	8	72	3	7	5	2	55	De	65	Au	51	71	71		213,553	
39	Varnishes.	5	51		8	11	5	27	De	29	Ap	26	29	28	1	308,564	
40	Window shades and fixtures.	6	48	9	2	3	3	31	No	33	Ja	30	33	18	15	80,185	
41	Wirework, including woven-wire fencing, not elsewhere specified.	6	77	5	11	1	6	54	Ap	76	Au	32	50	29	21	186,570	
42	Wooden goods, not elsewhere specified.	6	297	1	20	15	3	258	De	336	Jy	227	339	284	55	969,012	
43	Woolen goods.	11	682	1	41	50	16	574	De	599	Fe	539	600	288	312	2,353,331	
44	All other industries*.	187	13,788	121	652	947	535	11,533								88,095,715	

* All other industries embrace—

Ammunition.	2	Brushes.	4	Flavoring extracts.	2	House-furnishing goods, not elsewhere specified.	3
Asbestos products, not including steam packing.	1	Carriage and wagon materials.	3	Flax and hemp, dressed.	1	Ink printing.	1
Automobiles.	5	Carriages and sleds, children's.	2	Furnishing goods, men's, neckwear.	1	Instruments, professional and scientific.	3
Bags, other than paper, not including bags made in textile mills.	5	Cement.	2	Gas machines and gas and water meters.	3	Iron and steel, blast furnaces.	2
Baking powders.	2	Coal-tar products.	2	Gloves and mittens, cloth, not including gloves made in textile mills.	1	Iron and steel, steel works and rolling mills.	2
Baskets, and rattan and willow ware.	1	Cordage and twine.	1	Gloves and mittens, leather.	2	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.	1
Billiard tables, bowling alleys, and accessories.	2	Cordials and flavoring sirups.	3	Gold and silver, reducing and refining, not from the ore.	1	Iron and steel, doors and shutters.	1
Blacking, stains, and dressings.	2	Corsets.	3	Hair work.	1	Iron and steel, forgings, not made in steel works or rolling mills.	1
Bluing.	2	Cutlery and edge tools.	3	Hardware.	3	Japanning.	1
Boot and shoe cut stock.	2	Drug grinding.	1	Hats, wool-felt.	1	Labels and tags.	1
Boot and shoe findings.	2	Dyeing and finishing textiles, exclusive of that done in textile mills.	3	Horsehoes, not made in steel works or rolling mills.	3		
Boxes, cigar.	3	Explosives.	1				
		Fire extinguishers, chemical.	1				
		Flags and banners.	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- ²
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

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

Dollars. 5,263	Dollars. 26,176	Dollars. 58,923	Dollars.	Dollars. 9,279	Dollars. 913	Dollars. 1,872,653	Dollars. 4,213	Dollars. 2,108,219	Dollars. 231,353	117						117	
829,001	844,441	3,088,185	480,288	203,684	214,192	4,232,697	117,952	12,994,804	8,644,155	3,060	100		2			2,948	8
658,411	421,496	2,504,139	410,840	242,715	124,332	3,990,552	95,910	10,660,511	6,574,043	2,729	100		2			2,627	8
147,458	411,031	341,036	57,844	5,459	70,570	209,177	11,507	1,854,163	1,632,609	280						290	4
23,132	11,914	213,010	11,598	15,510	10,290	32,103	10,520	480,140	437,443	31						81	5
1,075,169	1,502,891	3,531,693	1,169,380	257,875	424,678	5,076,389	202,352	20,088,590	14,209,849	4,550	279		373	7		3,891	6
183,081	434,239	550,163	31,690	37,808	173,172	1,493,580	32,577	4,012,482	2,486,325	660						660	7
718,784	889,799	2,927,882	601,720	192,649	245,407	4,024,272	107,407	14,458,811	10,267,132	3,844	279		371	7		3,187	8
168,304	178,853	47,648	535,970	27,518	6,099	158,537	2,368	1,617,297	1,456,392	46			2			44	9
14,072	2,151	10,412		3,420	5,400	10,349	793	83,035	65,893	8						8	10
93,107	145,923	489,246		38,658	32,502	2,812,306	16,947	4,159,286	1,329,973	329	60					269	11
12,405	8,720	67,249		2,388	20,133	13,021	185,130	142,976	599	545			20			25	12
3,064	9,861	44,224		11,050	1,110	388,900	10,824	558,369	158,645	155						155	13
9,600	5,487	105,358		688	7,509	100,859	5,764	341,567	234,944	196	70		33			93	14
59,926	80,097	181,951		13,105	35,733	621,373	3,976	1,180,332	554,983	101	75					26	15
11,160	8,014	49,212		1,808	5,285	118,925	5,697	288,041	103,410	250						250	16
206,766	490,976	955,589	7,903	27,509	130,804	1,218,313	24,405	4,083,462	2,840,744	504	335		5			164	17
77,511	20,248	190,153	7,903	13,509	5,310	229,369	7,000	691,350	454,075	104			5			99	18
129,255	470,728	759,436		14,000	131,494	988,044	17,399	3,392,112	2,385,760	400	335					65	19
624,578	1,602,088	6,448,530	44,708	11,821	470,029	127,850,193	649,784	146,361,046	17,855,069	11,223	5,187	826		535		4,675	20
17,846	41,810	40,015		2,052	18,198	614,120	8,045	822,363	200,189	203	130					73	21
5,700	1,400	43,083		1,896	310	18,339	1,538	107,282	87,405	11						11	22
58,429	50,491	169,027	3,940	1,070	15,033	480,703	10,209	981,413	484,501	182						182	23
61,590	62,085	244,373		405	45,817	725,269	103,090	1,527,526	699,167	1,043	665					978	24
18,898	5,258	58,009		0,225	1,771	28,523	3,180	200,231	168,528	232						232	25
40,093	67,856	232,117	75,713	4,520	8,539	390,009	10,130	1,055,436	649,288	338	48					290	26
37,454	63,189	196,953	8,714	2,700	7,647	339,194	14,800	828,733	474,679	309	48					261	27
2,639	4,167	35,164	66,999	1,820	592	50,815	1,279	226,703	174,609	29						29	28
250,033	709,434	3,047,348	8,594	2,806	95,421	5,454,501	170,105	9,952,606	4,328,000	8,918	2,070		25			6,823	29
	24,620	20,596		0,290	591	153,532	1,069	223,983	69,382	8						8	30
49,545	52,873	369,283	1,867	1,380	164,159	1,142,804	16,031	2,181,855	1,023,020	251	170					81	31
76,520	91,945	741,903	1,162	38,496	849,628	1,456,032	15,441	3,205,020	1,732,647	62						62	32
43,305	4,150	55,886	18,800	3,135	4,888	108,064	8,890	331,381	213,827	261			8			253	33
		7,741		1,088	7,164	5,274	7,726	25,277	18,830	32						32	34
43,305	4,150	48,145	18,800	2,052	4,026	103,300	7,726	206,104	194,988	229			8			221	35
11,425	1,280	33,054	2,732	3,890	7,019	28,593	1,037	121,020	91,390	27						27	36
21,710	8,338	95,975	300	12,871	4,203	254,793	3,638	480,834	222,433	75						75	37
11,967	11,540	94,355		3,042	6,656	170,840	13,378	340,166	140,048	1,115	645					470	38
13,803	21,423	14,402		400	9,754	267,907	3,156	385,010	114,547	32						32	39
3,240	7,324	32,267	350	3,156	341	92,522	666	174,982	81,794	13						13	40
30,986	4,932	39,585		448	4,600	193,063	1,935	326,028	130,430	65						65	41
59,200	22,690	245,806		1,740	20,929	333,976	6,382	928,803	588,445	1,168	585	150				433	42
189,987	87,915	474,386	36,503	9,414	183,052	1,734,652	45,489	2,864,250	1,084,118	1,491	370		25	410		686	43
2,652,443	1,724,434	15,822,944	84,566	124,906	4,026,620	76,530,211	5,114,666	121,362,568	39,717,691	87,209	23,947	611	28,227	9	34,415	27,989	44

² Same number reported for one or more other months.⁴ Same number reported throughout the year.

Lapidary work.....	1	Mucilage, paste, and other adhesives, not elsewhere specified.....	4	Refrigerators.....	2	Sugar, beet.....	1
Lead, bar, pipe, and sheet.....	1	Musical instruments, organs.....	1	Regalia, and society badges and emblems.....	1	Surgical appliances.....	2
Leather, tanned, curried, and finished.....	6	Musical instruments, pianos.....	2	Roofing materials.....	4	Theatrical scenery.....	2
Linen goods.....	2	Oakum.....	1	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	3	Tin plate and terneplate.....	1
Liquors, vinous.....	3	Oil, composite.....	1	Sand and emery paper and cloth.....	1	Tobacco, smoking.....	4
Lithography.....	1	Oleomargarine and other butter substitutes.....	1	Shipbuilding, steel.....	1	Vault lights and ventilators.....	1
Lubricating greases.....	1	Paper goods, not elsewhere specified.....	3	Soda-water apparatus.....	1	Vinegar.....	1
Matches.....	2	Petroleum, refining.....	3	Sporting and athletic goods.....	3	Washing machines and clothes wringers.....	1
Mats and matting, from cocoa fiber, grass, and coir.....	1	Photographs and graphophones.....	4	Springs, steel, automobile.....	2	Wheelbarrows.....	1
Minerals and earths, ground or otherwise treated.....	1	Photographic apparatus.....	2	Stationary goods, not elsewhere specified.....	2	Window and door screens and weather strips.....	5
Mirrors, framed and unframed, not elsewhere specified.....	2	Pulp goods.....	2	Steel barrels, drums, and tanks.....	2	Wood preserving.....	1
		Pumps, not including power pumps.....	1	Stoves, gas and oil.....	3	Wood, turned and carved.....	1

TABLE 30.—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.

1	DULUTH—All industries.....	226	12,513	132	523	938	446	10,472	Ja	11,174	De	9,370	9,979	8,723	1,241	12	3	Dollars.
2	Automobile bodies and parts.....	4	21	6	1	2	2	10	Je	15	Fe ³	7	28	27	1			56,148
3	Automobile repairing.....	12	97	11	9	6	10	61	Au	67	Ja ³	55	57	57				84,672
4	Bread and other bakery products.....	15	187	15	10	21	7	134	De	142	Mh	122	142	86	52	4		378,459
5	Cars and general shop construction and repairs by steam-railroad companies.....	5	578		25	3	4	546	Ja	590	Au	510	552	549	3			742,222
6	Coffee, roasting and grinding.....	3	82		7	6	6	63	Au	70	No	54	58	27	31			519,706
7	Confectionery.....	12	226	17	10	38	13	148	Oc	191	Je	111	189	53	136			572,671
8	Copper, tin, and sheet-iron work.....	10	174	4	12	4	4	150	No	194	Fe	109	181	151				586,417
9	Foundry and machine-shop products.....	10	749	4	39	76	14	616	Ja	650	Ap	548	623	614	9			4,001,220
10	Fur goods.....	4	35	3	2	2	3	25	Oc	33	Mh ³	18	30	11	19			25,100
11	Knit goods.....	5	128	2	9	3	2	112	Fe	148	Je	81	119	25	93	1		453,278
12	Lumber and timber products.....	4	599		14	13	6	566	Ja	1,182	No ³	151	761	742	19			1,980,289
13	Lumber, planing-mill products, not including planing mills connected with sawmills.....	6	230	2	22	16	6	184	Au	213	Mh	143	196	196				364,794
14	Printing and publishing, book and job.....	19	226	15	21	7	16	167	Mh	176	Au	158	170	116	51	3		442,687
15	Printing and publishing, newspapers and periodicals.....	15	409	4	22	151	42	190	Se	198	Ja ²	182	196	170	25	1		687,582
16	Tobacco, cigars and cigarettes.....	10	69	10	2	2	2	53	De ³	60	Mh	46	60	40	20			64,537
17	All other industries*.....	92	8,703	39	320	588	309	7,447					6,617	5,829	782	3	3	60,418,884

* All other industries embrace—
 Artificial limbs..... 1
 Artificial stone products..... 1
 Awnings, tents, and sails..... 2
 Baking powders..... 1
 Bookbinding and blank-book making..... 1
 Boot and shoe cut stock..... 1
 Boot and shoe findings..... 1
 Boots and shoes..... 1
 Boxes, set-up paper boxes and cartons..... 1

Brass and bronze products..... 1
 Brooms, from broom corn..... 1
 Butter..... 3
 Carriages and wagons, including repairs..... 1
 Cars and general shop construction and repairs by electric-railroad companies..... 1
 Cement..... 1
 Chemicals..... 2

Clothing, men's..... 2
 Coffins, burial cases, and undertakers' goods..... 1
 Coke, not including gas-house coke..... 2
 Condensed milk..... 1
 Flour-mill and gristmill products..... 2
 Food preparations, not elsewhere specified..... 2
 Furniture..... 2
 Gas and electric fixtures..... 2

Gas machines and gas and water meters..... 1
 Glass, cutting, staining, and ornamenting..... 2
 Hand stamps..... 1
 Hats and caps, other than felt, straw, and wool..... 2
 Horseshoes, not made in steel works or rolling mills..... 2

1	MINNEAPOLIS—All industries.....	1,421	50,760	1,102	2,399	6,179	2,026	38,154	No	40,293	Ja	35,829	40,649	31,599	8,885	136	29	239,185,093
2	Agricultural implements.....	5	239	1	11	15	10	202	Se	255	Ja	167	208	208				971,500
3	Artificial limbs.....	9	163	9	14	21	25	94	De ³	99	Ap	88	99	77	22			257,551
4	Artificial stone products.....	28	183	33	13	14	3	120	Oc	141	Fe	86	143	143				489,074
5	Automobile bodies and parts.....	25	380	20	28	18	15	299	Au	339	Ja	238	345	335				621,343
6	Automobile repairing.....	103	935	107	67	30	40	661	Au	782	Ja	581	682	680	2			1,022,687
7	Awnings, tents, and sails.....	6	71	5	6	9	3	48	Je	66	Ja	35	45	24	24			247,130
8	Belting, leather.....	3	153		20	14	3	116	De	143	Ap	101	143	85	2	50		1,661,640
9	Bookbinding and blank-book making.....	7	54	10	3	1	1	39	My	41	Mh	36	39	22	16	1		89,781
10	Boots and shoes.....	4	167		17	19	7	124	Se	148	Ja	75	138	44	94			473,023
11	Boxes, wooden packing, except cigar boxes.....	9	203	7	12	6	3	175	Se	210	Mh	146	186	186				290,680
12	Bread and other bakery products.....	115	2,190	112	75	281	124	1,598	De	1,806	Fe	1,406	1,808	1,045	753	7	3	4,789,704
13	Brooms.....	9	61	9	5			47	De	58	Ja ³	42	58	56	2			90,915
14	Butter.....	14	232	3	28	16	24	161	No	220	Mh	115	159	144	15			1,312,098
15	Carpets, rag.....	6	24	9	1			14	My ³	17	Mh	3	14	12	2			24,227
16	Cars and general shop construction and repairs by steam-railroad companies.....	6	5,412		119	109	64	5,120	Se	5,388	No	4,866	4,877	4,807	70			6,371,849
17	Chemicals.....	5	146		8	58	24	56	Jy	62	Mh	50	60	60				979,686
18	Clothing, men's.....	18	815	23	20	64	12	606	Oc	783	Ja	627	742	130	612			1,860,390
19	Clothing, women's.....	17	289	12	31	41	14	191					266	13	253			611,427
20	Suits, skirts, cloaks, shirt waists, dresses, and undergarments.....	6	71	4	8	4	5	50	De	68	Ja	37	65	5	60			161,666
21	All other.....	11	218	8	23	37	9	141	No	204	Ja	51	201	8	193			449,861
22	Coffee, roasting and grinding.....	7	205	6	22	38	27	112	Jy	136	Oc	94	118	54	64			1,062,163
23	Confectionery and ice cream.....	38	901	37	39	102	45	678					774	305	467	1	1	2,084,293
24	Confectionery.....	34	751	35	31	94	33	553	Oc	730	Je	405	666	205	459	1	1	1,492,796
25	Ice cream.....	4	150	2	8	12	12	120	Jy	162	Ja	82	108	100	8			591,497
26	Cooperage.....	8	504	3	22	10	8	461	De	488	My	411	478	463	15			1,326,165
27	Copper, tin, and sheet-iron work.....	58	495	64	25	25	20	361	No	433	Ja	263	403	396	7			1,416,776
28	Electrical machinery, apparatus, and supplies.....	17	1,182	7	51	150	76	898	De	957	Ja	871	936	595	328	13		2,314,533
29	Engines, steam, gas, and water.....	7	1,135	1	58	420	110	546	Mh	812	Se	395	584	584				13,783,337
30	Flour-mill and gristmill products.....	18	6,144	3	174	1,836	490	3,641	No	3,977	Mh	3,265	3,967	3,804	163			71,998,598
31	Food preparations, not elsewhere specified.....	22	621	8	54	85	55	419	Oc	491	Mh	348	479	236	242	1		3,331,184
32	Foundry and machine-shop products.....	88	2,808	53	214	250	153	2,138					2,331	2,314	17			9,148,236
33	Boiler shops and foundries.....	12	698	7	29	55	27	580	Oc	671	Je	421	628	624	4			1,917,584
34	Machine shops.....	70	1,635	42	153	172	107	1,161	De	1,316	Ja	1,024	1,284	1,276	8			6,311,876
35	Machine shop and foundry combined.....	6	475	4	32	23	19	397	De	419	Ja	383	419	414	5			918,776
36	Fur goods.....	21	305	22	31	84	26	192	No	245	Fe	152	206	81	125			1,020,905

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.					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 OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	89,883	22,855	432	28,197	38,399	27,011	1
2,176,588	1,510,880	15,465,074	238,293	204,344	1,527,744	35,815,374	7,214,080	75,231,387	32,231,933								
1,050	3,619	31,746	.....	4,260	1,601	42,614	1,626	114,218	69,978	26	.....	.....	.....	.....	26	.....	2
14,287	9,546	93,906	1,200	12,144	3,462	47,518	4,589	214,420	162,313	84	.....	.....	.....	.....	84	.....	3
27,540	27,948	147,246	.....	10,673	6,526	601,899	16,746	1,022,100	403,461	99	.....	.....	.....	.....	99	.....	4
62,170	11,360	598,435	.....	.....	.....	327,660	66,561	1,066,186	671,965	345	120	.....	.....	.....	225	10	5
18,915	12,820	36,314	.....	13,000	25,930	2,014,543	4,658	2,309,660	290,459	167	.....	.....	.....	.....	167	.....	6
22,343	53,867	112,770	.....	17,394	21,270	319,206	7,458	682,804	356,140	76	.....	.....	.....	.....	76	.....	7
29,536	9,521	191,614	.....	5,190	16,291	380,444	5,058	615,482	227,980	247	.....	.....	.....	.....	247	.....	8
127,972	178,510	889,806	.....	2,242	343,932	1,604,842	56,588	4,071,297	2,409,867	2,348	160	60	.....	2,128	.....	.....	9
7,700	6,550	21,565	.....	6,780	4,020	20,300	220	85,718	65,198	5	.....	.....	.....	5	.....	.....	10
17,185	1,968	76,180	.....	11,130	6,674	234,481	4,906	320,420	81,030	164	.....	.....	.....	164	.....	.....	11
69,130	29,880	576,443	01,429	2,550	63,800	883,100	7,500	2,282,944	1,392,335	3,352	2,800	.....	.....	552	.....	.....	12
70,171	23,460	224,782	.....	8,622	14,533	846,513	9,521	1,362,405	506,371	858	365	.....	.....	493	14	.....	13
48,460	19,573	153,109	10,114	27,097	5,770	232,649	3,310	659,636	423,677	176	.....	.....	.....	176	.....	.....	14
64,614	190,054	281,119	57,855	17,042	36,470	358,952	8,437	1,462,402	1,095,013	423	110	.....	.....	313	31	.....	15
3,360	4,501	48,554	.....	4,200	13,750	105,950	530	225,640	119,154	2	.....	.....	.....	2	.....	.....	16
1,502,255	927,685	11,981,125	107,095	62,011	963,637	27,794,685	7,016,372	58,768,040	23,956,983	81,511	19,300	432	28,137	33,642	26,956	.....	17

House-furnishing goods, not elsewhere specified.....	1	Looking-glass and picture frames.....	2	Optical goods.....	4	Show cases.....	1
Ice, manufactured.....	1	Marble and stone work.....	3	Patent and proprietary medicines.....	1	Signs and advertising novelties.....	2
Iron and steel, blast furnaces.....	2	Matches.....	2	Paving materials.....	1	Slaughtering and meat packing.....	1
Iron and steel, steel works and rolling mills.....	1	Mattresses and spring beds, not elsewhere specified.....	1	Perfumery and cosmetics.....	2	Steam fittings and steam and hot-water heating apparatus.....	1
Iron and steel, welding.....	1	Millinery and lace goods, not elsewhere specified.....	3	Photographic apparatus.....	1	Stoves, gas and oil.....	1
Lime.....	1	Mineral and soda waters.....	3	Roofing materials.....	1	Saddlery and harness.....	2
Linon goods.....	2	Models and patterns, not including paper patterns.....	1	Saddlery and harness.....	2	Shipbuilding, steel.....	1
Liquors, malt.....	3			Shipbuilding, wooden, repair work only.....	1	Trunks and valises.....	2
						Woolen goods.....	1

8,502,510	11,404,181	41,274,016	1,128,970	1,917,727	9,713,638	358,046,681	4,787,354	401,382,975	128,548,040	113,212	41,325	15,205	388	7,370	48,924	26,812	1
24,430	28,258	153,730	253	1,619	8,736	219,916	7,192	574,314	347,206	156	60	.....	.....	.....	96	.....	2
35,754	40,365	122,643	828	12,131	6,967	103,246	3,104	464,361	358,011	84	.....	.....	.....	.....	74	.....	3
29,943	29,636	168,427	17,956	2,832	4,910	210,436	13,390	500,108	366,282	333	222	.....	.....	.....	77	.....	4
50,284	28,161	331,870	2,591	23,010	17,707	664,149	17,541	1,275,790	594,100	381	.....	.....	.....	.....	381	.....	5
110,401	50,211	858,475	31,570	90,058	13,004	848,298	46,332	5,388,366	4,493,736	605	.....	.....	.....	.....	597	14	6
10,239	23,783	42,657	.....	10,204	12,092	232,826	1,300	383,444	149,318	33	.....	.....	.....	.....	33	.....	7
30,678	29,138	136,028	.....	11,240	33,758	1,189,160	6,584	1,808,535	612,787	120	40	.....	.....	.....	80	.....	8
1,106	982	30,847	2,701	3,278	430	19,068	1,179	96,788	76,641	26	.....	.....	.....	.....	26	.....	9
70,980	83,684	104,758	5,868	5,671	12,666	272,040	2,244	694,014	418,830	43	.....	.....	.....	.....	43	.....	10
37,092	9,312	174,367	.....	5,830	9,682	442,905	11,466	769,583	315,122	502	.....	.....	.....	.....	502	.....	11
202,525	716,633	1,372,211	1,500	98,921	93,585	7,007,975	179,029	12,404,478	5,210,874	1,759	871	.....	10	.....	878	509	12
5,475	54,982	.....	.....	980	560	131,210	1,004	232,570	90,450	48	.....	.....	.....	.....	48	.....	13
61,145	43,735	161,542	7,200	5,708	47,763	3,783,560	42,703	4,336,452	610,090	1,053	551	55	.....	.....	447	225	14
2,200	11,402	.....	200	1,356	110	4,375	1,281	34,354	28,098	44	.....	.....	.....	.....	44	.....	15
341,350	231,187	6,695,773	.....	.....	.....	4,923,898	314,444	12,498,384	7,200,042	3,570	2,395	750	90	.....	335	3,706	16
25,482	97,156	62,478	.....	50,422	38,792	244,082	50,115	723,701	428,004	735	.....	.....	.....	.....	660	10	17
56,503	81,448	490,282	21,010	30,412	35,238	2,247,764	14,082	3,259,085	996,339	165	2	.....	.....	.....	163	.....	18
70,029	16,334	127,966	.....	14,909	5,121	420,196	2,883	806,127	383,048	57	.....	.....	.....	.....	57	.....	19
12,250	3,550	35,578	.....	3,680	1,018	147,567	686	249,836	101,583	17	.....	.....	.....	.....	17	.....	20
57,779	12,784	92,388	.....	11,229	4,103	272,029	2,197	555,291	281,465	40	.....	.....	.....	.....	40	.....	21
101,404	104,382	108,489	5,126	14,854	52,004	5,594,051	23,060	6,660,765	1,073,024	499	.....	.....	.....	.....	499	.....	22
108,190	230,497	540,116	.....	68,450	264,485	2,368,073	50,361	4,312,311	1,884,887	1,287	310	.....	.....	.....	977	297	23
128,978	202,992	407,000	.....	65,240	185,928	1,537,372	37,522	2,880,914	1,306,020	435	285	.....	.....	.....	150	297	24
39,212	36,505	133,026	.....	3,210	78,557	830,701	21,899	1,431,397	578,867	852	.....	.....	.....	.....	852	.....	25
83,301	25,008	463,764	6,832	1,500	105,209	1,080,474	12,518	2,642,125	949,133	650	575	.....	.....	.....	75	.....	26
68,467	48,033	393,458	3,813	16,441	21,775	1,063,935	11,398	1,982,153	907,120	178	.....	.....	.....	.....	178	.....	27
250,011	297,958	707,058	7,676	13,268	150,022	1,905,100	55,979	4,200,813	2,239,734	862	.....	.....	.....	.....	862	.....	28
178,807	747,515	660,915	314,837	0,952	150,552	2,488,732	42,049	6,980,318	4,457,937	1,114	.....	.....	.....	.....	1,114	.....	29
1,000,420	2,767,178	4,978,057	.....	639,380	2,408,527	200,335,498	1,031,949	227,608,081	26,238,634	47,710	14,525	13,666	.....	7,040	12,479	15,740	30
169,200	171,385	306,324	3,663	22,805	154,080	6,302,332	69,215	9,292,637	2,801,090	2,108	125	.....	.....	.....	1,983	85	31
721,651	436,477	2,468,045	41,662	67,953	424,752	4,708,766	173,017	10,824,650	5,942,867	3,545	350	.....	47	.....	3,148	8	32
173,761	55,738	725,085	.....	18,020	200,667	1,012,311	77,638	2,411,533	1,321,584	1,037	250	.....	14	.....	773	.....	33
446,267	326,237	1,321,897	41,662	48,529	212,430	3,267,035	70,512	7,058,928	3,715,381	2,091	.....	.....	33	.....	2,058	8	34
101,623	54,502	421,063	.....	804	11,655	429,420	18,867	1,354,189	905,902	417	100	.....	.....	.....	317	.....	35
67,197	55,697	223,357	.....	30,914	34,995	537,460	4,854	1,155,959	613,636	47	.....	.....	.....	.....	47	.....	36

* Same number reported for one or more other months.

TABLE 30.—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-ets 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.

MINNEAPOLIS—Con.																Dollars.		
1	Furniture	29	1,088	21	60	34	28	945	De	1,060	Ja	641	1,189	1,123	65	1	2,537,801	
2	Wood, including rattan and willow furniture.	21	965	12	53	33	23	844	No	119	Ja	62	1,076	1,010	65	1	2,317,227	
3	Metal furniture and store and office fixtures.	8	123	9	7	1	5	101	No	119	Ja	62	113	113			220,574	
4	Hand stamps.	4	47	8	2	1	7	29	De	35	Ja	22	35	19	16		73,122	
5	Hats and caps, other than felt, straw, and wool.	6	70	11	3	5	3	54	Se	56	De	52	55	38	17		191,974	
6	Ink, writing.	3	9		4		1	4	(¹)	4	(²)	4	4	2	2		7,583	
7	Jewelry	13	150	18	3	9	13	107	Jy	113	Fe	98	111	103	7	1	215,547	
8	Looking-glass and picture frames.	9	65	7	8	6	9	35	De	47	My	31	42	39	2	1	215,400	
9	Lumber, planing-mill products, not including planing mills connected with sawmills.	24	1,268	8	67	91	32	1,070	Oc	1,395	Ja	718	1,307	1,289	13		4,520,441	
10	Malt.	3	59		7	4	1	47	Jy	77	De	18	47	47			1,899,887	
11	Marble and stone work.	13	124	11	8	10	3	92					95	95			185,223	
12	Monuments and tombstones.	8	23	9		1	1	12	Au	16	Ja	8	15	15			29,460	
13	All other, except slate.	6	101	2	8	9	2	80	Jy	106	Ja	39	80	80			150,763	
14	Mattresses and spring beds, not elsewhere specified.	5	424	6	31	36	30	321	Au	379	Ja	234	361	311	50		1,891,351	
15	Millinery and lace goods, not elsewhere specified.	13	193	12	16	5	14	146	De	182	Jy	93	164	13	150	1	187,570	
16	Mineral and carbonated waters.	16	92	16	14	13	4	45	Jy	71	De	33	41	41			327,957	
17	Models and patterns, not including paper patterns.	9	56	11			1	44	De	49	Se	41	48	48			36,032	
18	Musical instruments and materials, not elsewhere specified.	3	6	3				3	(¹)	3	(¹)	3	3	3			3,240	
19	Oil, linseed.	3	447		12	39	27	369	Jy	428	My	329	371	365	6		9,379,483	
20	Optical goods.	5	100		10	22	17	51	(¹)	51	(²)	51	51	51			225,391	
21	Paints.	6	155	2	18	50	15	70	Jy	80	No	54	63	47	16		1,515,817	
22	Patent medicines and compounds.	22	428	12	42	107	82	185					137	80	101	3	3	1,220,634
23	Patent and proprietary medicines.	12	274	9	19	83	65	98	Oc	118	Au	85	105	42	61	1	1	807,588
24	Patent and proprietary compounds, not elsewhere specified.	10	154	3	23	24	17	87	Jy	110	Ja	64	82	38	40	2	2	413,096
25	Paving materials.	3	72		5	5		62	Jy	99	Ja	22	90	90			410,149	
26	Perfumery and cosmetics.	13	152	6	6	113	6	21	Se	23	Fe	17	26	13	13		98,575	
27	Photo-engraving.	7	295	4	14	26	20	231	De	235	Ja	226	235	203	32		1,218,646	
28	Printing and publishing, book and job.	130	1,801	106	115	125	122	1,333					1,455	1,068	365	20	2	3,398,530
29	Job printing.	123	1,704	100	108	119	115	1,262	De	1,377	Ja	1,201	1,384	1,008	354	20	2	3,221,093
30	Book publishing without printing, linotype work and typesetting.	7	97	6	7	6	7	71	Je	74	Ja	67	71	60	11		177,437	
31	Printing and publishing, newspapers and periodicals.	70	1,686	45	127	496	259	759					789	690	87	8	4	6,637,744
32	Printing and publishing.	7	660	2	34	181	86	357	No	375	Se	346	359	310	49			3,718,323
33	Printing, publishing, and job printing.	17	797	12	39	250	108	388	No	430	Jy	371	412	377	28	7		2,723,343
34	Publishing without printing.	55	229	31	54	65	65	14	(¹)	14	(¹)	14	18	3	10	1	4	196,078
35	Saddlery and harness.	16	191	16	11	21	6	137	De	159	Ja	91	160	158	1	1		335,478
36	Shirts.	4	81		9	22	2	48	My	54	Jy	37	51	10	40	1		120,920
37	Signs and advertising novelties.	20	360	13	20	9	14	304	No	407	Ja	143	393	143	250			389,389
38	Stoves and hot-air furnaces.	4	36	3	2	5	1	25	Se	39	Ja	15	36	36				62,517
39	Structural ironwork, not made in steel works or rolling mills.	11	2,644	8	57	421	102	2,056	De	2,296	Je	1,656	2,301	2,286	15			12,380,554
40	Tobacco, cigars.	32	253	31	18	9	2	193	No	211	Fe	181	212	111	98	3		259,146
41	Trunks and valises.	8	67	7	8	2	2	48	No	60	Ja	33	59	53	5	1		102,014
42	All other industries*	235	12,318	153	534	827	721	10,083					10,377	6,121	4,224	17	15	58,684,053

*All other industries embrace—		Carriages and sleds, children's.	2	Dental goods.	6	Gas and electric fixtures.	2
Ammunition.	1	Carriages and wagons, including repairs.	8	Drug grinding.	1	Gas, illuminating and heating.	1
Asbestos products, not including steam packing.	1	Cars and general shop construction and repairs by electric-railroad companies.	1	Druggists' preparations.	3	Glass, cutting, staining, and ornamenting.	7
Automobiles.	2	Cheese.	1	Dyeing and finishing textiles, exclusive of that done in textile mills.	2	Gloves and mittens, leather.	3
Babbitt and type metal.	3	Cleaving and polishing preparations.	4	Electroplating.	5	Hardware.	2
Bags, other than paper, not including bags made in textile mills.	2	Coal-tar products.	1	Engraving and diesinking.	2	Ice, manufactured.	1
Baking powders.	1	Coffins, burial cases, and undertakers' goods.	2	Engraving, steel and copper plate, including plate printing.	6	Instruments, professional and scientific.	2
Baskets, and rattan and willow ware.	1	Condensed milk.	1	Envelopes.	2	Iron and steel, steel works and rolling mills.	1
Blacking, stains, and dressings.	1	Cordials and flavoring syrups.	1	Fancy articles, not elsewhere specified.	4	Iron and steel, doors and shutters.	1
Bluing.	2	Corsets.	1	Fire extinguishers, chemical.	1	Iron and steel forgings, not made in steel works or rolling mills.	1
Boxes, cigar.	1	Cutlery and edge tools.	1	Flags and banners.	1	Iron and steel, welding.	1
Boxes, set-up paper boxes and cartons.	6	Dairymen's, poultrymen's, and ap- arists' supplies.	2	Flavoring extracts.	2	Japanning.	1
Brass and bronze products.	3			Furnishing goods, men's, neckwear.	1	Knit goods.	7
Brick, building and fire.	2			Furs, dressed.	1		
Brushes.	2						

*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).

[illegible][illegible]

Labels and tags.....	1	Photographic materials.....	5	Sole-water apparatus.....	1	Toys and games.....	3
Lapidary work.....	1	Pickles, preserves, and sauces.....	5	Sporting and athletic goods.....	1	Upholstering materials, excelsior.....	2
Leather goods, not elsewhere specified.....	4	Poultry, killing and dressing, not done in slaughtering and meat-packing establishments.....	2	Spring, steel, automobile.....	1	Varnishes.....	2
Liquors, malt.....	3	done in slaughtering and meat-packing establishments.....	8	Statuary and art goods.....	4	Vinegar.....	1
Lith-graphing.....	2	Printing materials.....	1	Steam fittings and steam and hot-water heating apparatus.....	5	Wheelbarrows.....	1
Lumber and timber products.....	1	Pulp goods.....	2	Stead barrels, drums, and tanks.....	1	Window and door screens and weatherstrips.....	3
Machine tools.....	3	Pumps, not including power pumps.....	1	Stereotyping and electrotyping.....	2	Window shades and fixtures.....	4
Mirrors, framed and unframed, not elsewhere specified.....	2	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	3	Stoves, gas and oil.....	1	Wirework, including woven-wire fencing, not elsewhere specified.....	2
Mucilage and paste.....	2	Sand-lime brick.....	1	Surgical appliances.....	1	Wooden goods, not elsewhere specified.....	1
Oil, composite.....	1	Sausage, not made in slaughtering and meat-packing establishments.....	4	Suspenders, garters, and elastic woven goods.....	1	Woolen goods.....	1
Oil-margarine and other butter substitutes.....	1	Shipbuilding, wooden, including boat building.....	1	Theatrical scenery.....	1		
Paper and wood pulp.....	1	Show cases.....	3	Tin plate and terneplate.....	1		
Petroleum, refining.....	1	Soap.....	1	Tinware, not elsewhere specified.....	1		
Photographs and graphophones.....	2			Tobacco, smoking.....	1		
Photographic apparatus.....	1			Tools, machinists'.....	1		

³ Same number reported for one or more other months.
⁴ Same number reported throughout the year.

TABLE 30.—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	ST. PAUL—All industries.....	818	29,068	673	1,522	2,534	1,690	22,649	No	24,165	Ja	21,518	23,985	17,593	6,352	31	9	Dollars.
2	Artificial stone products.....	11	75	10	5	2	1	57	Jy	73	De	29	65	65	.....	.....	.....	143,303
3	Automobile bodies and parts.....	11	122	10	14	6	2	90	Oc	107	Fe	73	100	97	3	.....	.....	263,909
4	Automobile repairing.....	66	400	76	24	19	13	268	My	284	Ja	224	278	277	1	.....	.....	410,979
5	Awnings, tents, and sails.....	5	29	7	.....	1	2	19	My	26	Ja	14	27	16	11	.....	.....	57,058
6	Bookbinding and blank-book making	7	83	8	1	1	1	72	Aug	77	Se	70	77	29	48	.....	.....	73,238
7	Boots and shoes.....	6	1,452	4	39	154	64	1,191	No	1,297	Mh	1,118	1,255	749	508	.....	.....	7,089,540
8	Boxes, wooden packing, except cigar boxes.	7	339	5	22	8	2	302	Au	336	Ja	270	302	277	6	19	.....	1,149,793
9	Brass, bronze, and copper products.....	6	181	3	10	6	4	158	De	189	Jy	142	196	184	12	.....	.....	597,729
10	Bread and other bakery products.....	68	1,040	62	58	97	78	745	De	795	Mh	707	782	469	313	.....	.....	2,153,594
11	Brooms.....	7	35	9	.....	1	1	24	Oc	28	Ap	22	28	26	.....	2	.....	43,616
12	Butter.....	11	250	4	24	35	58	129	Je	150	Fe	111	123	102	21	.....	.....	1,461,002
13	Carriages and wagons, including repairs.	8	324	5	15	10	5	280	Oc	321	Je	261	320	316	4	.....	.....	1,183,446
14	Cars and general shop construction and repairs by steam-railroad companies.	12	4,208	.....	83	63	36	4,016	Ja	4,154	Au	3,722	4,028	3,922	106	.....	.....	9,080,355
15	Clothing, men's.....	9	557	6	16	32	19	484	De	664	Mh	360	651	93	558	.....	.....	816,849
16	Confectionery and ice cream.....	19	674	12	20	54	23	565	No	730	Fe	468	675	190	485	.....	.....	1,857,070
17	Copper, tin, and sheet-iron work.....	21	240	21	24	10	11	168	Au	223	Fe	98	202	202	.....	.....	.....	519,647
18	Envelopes.....	3	99	2	5	3	3	80	Oc	114	Ja	32	90	23	67	.....	.....	132,864
19	Flour-mill and gristmill products.....	4	145	.....	10	20	10	105	De	113	My	96	130	130	.....	.....	.....	1,633,767
20	Food preparations, not elsewhere specified.	10	234	6	22	19	14	173	Oc	191	Ja	157	199	111	88	.....	.....	1,624,029
21	Foundry and machine-shop products	33	2,503	28	104	122	71	2,178	De	713	Mh	399	2,252	2,207	44	1	.....	7,584,917
22	Boiler shops and foundries.....	7	620	7	20	34	10	549	Ja	1,840	Fe	1,440	1,544	1,540	3	1	.....	1,875,078
23	All other.....	26	1,883	21	84	88	61	1,629	Ja	745	Fe	551	1,544	1,540	3	1	.....	6,900,839
24	Fur goods.....	12	954	10	34	206	75	629	De	745	Fe	551	678	204	413	1	.....	3,270,713
25	Furniture.....	16	233	14	15	10	9	185	De	111	Fe	87	205	193	8	4	.....	608,596
26	Wood, including rattan and willow.....	7	116	6	6	4	4	96	De	111	Fe	87	103	91	8	4	.....	296,025
27	Store and office fixtures.....	9	117	8	9	6	5	80	No	103	Fe	77	102	102	.....	.....	.....	307,571
28	Gas and electric fixtures.....	3	33	.....	4	4	1	24	(*)	24	(*)	24	24	18	6	.....	.....	72,307
29	Knit goods.....	3	20	4	.....	2	.....	14	Jy	17	Mh	11	16	5	11	.....	.....	87,323
30	Leather goods, not elsewhere specified.	6	555	.....	23	58	19	455	No	551	Ap	394	461	171	293	.....	.....	1,506,577
31	Lumber, planing-mill products, not including planing mills connected with sawmills.	12	479	16	31	45	31	356	Ja	448	Ja	266	372	370	2	.....	.....	1,604,006
32	Marble and stone work.....	13	151	8	18	11	4	110	.....	.....	.....	.....	127	126	1	.....	.....	391,655
33	Monuments and tombstones.....	8	31	6	5	2	2	16	My	19	Ja	13	15	15	.....	.....	.....	104,070
34	All other, except slate.....	5	120	2	13	9	2	94	Oc	122	Fe	68	112	111	1	.....	.....	287,616
35	Mineral and soda waters.....	9	70	6	11	17	7	29	Jy	45	Ja	21	26	24	2	.....	.....	173,559
36	Patent medicines and compounds.....	17	158	10	24	35	28	61	.....	.....	.....	.....	57	29	28	.....	.....	630,012
37	Patent and proprietary medicines	12	146	7	22	35	26	56	Au	67	Ja	46	52	24	23	.....	.....	612,061
38	Patent and proprietary compounds, not elsewhere specified.	5	12	3	2	.....	2	5	Au	6	Ja	5	5	5	.....	.....	.....	17,951
39	Printing and publishing, book and job.	82	2,091	90	145	213	270	1,364	.....	.....	.....	.....	1,423	828	594	1	.....	6,140,088
40	Job printing.....	74	1,193	84	94	76	76	809	No	910	Ja	818	864	575	288	1	.....	2,502,182
41	Book printing and publishing, linotype work and typesetting.	8	892	6	51	137	203	405	De	558	Fe	467	559	253	306	.....	.....	3,646,906
42	Printing and publishing, newspapers and periodicals.	48	1,434	22	89	195	256	872	.....	.....	.....	.....	901	656	245	.....	.....	2,561,015
43	Printing, publishing, and job printing.	16	1,290	8	66	174	188	854	De	884	Ja	829	878	641	237	.....	.....	2,426,561
44	Publishing without printing.....	32	144	14	23	21	68	18	De	23	Fe	17	23	15	8	.....	.....	134,494
45	Sausage, not made in slaughtering and meat-packing establishments.	6	37	7	3	4	2	21	Je	22	Ja	20	21	21	.....	.....	.....	27,256
46	Structural ironwork, not made in steel works or rolling mills.	7	136	2	9	6	4	115	De	148	Je	83	141	139	2	.....	.....	442,687
47	Tobacco, cigars.....	34	429	31	12	21	7	358	Ap	372	Jy	338	364	177	187	.....	.....	639,254
48	All other industries*.....	226	9,298	175	603	1,033	550	6,937	.....	.....	.....	.....	7,389	5,087	2,290	3	9	54,505,731

* All other industries embrace—

Agricultural implements..... 2
 Artificial limbs..... 2
 Automobiles..... 1
 Bags, other than paper, not including bags made in textile mills..... 2
 Billiard tables and accessories..... 1
 Blacking, stains, and dressings..... 1
 Boot and shoe cut stock..... 1
 Boxes, cigar..... 2
 Boxes, set-up paper boxes and cartons..... 4
 Brick..... 1
 Brushes, paint and varnish..... 1
 Buttons..... 1
 Carpets, rag..... 3
 Carriage and wagon materials..... 1

Cars and general shop construction and repairs by electric-railroad companies..... 1
 Chemicals..... 1
 Cleansing preparations..... 1
 Clothing, women's..... 3
 Coffee, roasting and grinding..... 3
 Coffins, burial cases, and undertakers' goods..... 1
 Cooperage..... 1
 Cordage and twine..... 1
 Cordials and flavoring sirups..... 1
 Cutlery and edge tools..... 1
 Dairywomen's, poultrymen's, and apiculturists' supplies..... 1
 Dental goods..... 2

Druggists' preparations..... 2
 Dyeing and finishing textiles, exclusive of that done in textile mills..... 1
 Electrical machinery, apparatus, and supplies..... 2
 Electroplating..... 2
 Engines, steam, gas, and water..... 2
 Engraving and die sinking..... 3
 Engraving, steel and copper plate, including plate printing..... 1
 Engraving, wood..... 1
 Flags and banners..... 1
 Furs, dressed..... 3
 Gas, illuminating and heating..... 2
 Glass, cutting, staining, and ornamenting..... 6

Gold and silver, reducing and refining, not from the ore..... 1
 Hair work..... 1
 Hand stamps..... 5
 Hats and caps, other than felt, straw, and wool..... 3
 Hats, wool-felt..... 1
 House-furnishing goods, not elsewhere specified..... 2
 Ice, manufactured..... 1
 Ink, printing..... 1
 Instruments, medical and surgical..... 1
 Jewelry..... 8
 Lead, bar, pipe, and sheet..... 1
 Liquors, malt..... 3
 Liquors, vinous..... 1

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.				
										Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹	Rent- ²	

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

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.									
4,534,416	5,098,044	24,449,322	672,181	783,192	4,740,660	83,267,081	1,903,379	149,638,290	64,467,830	40,845	18,934	1,733	284	.....	19,594	13,965	1	
9,038	3,225	75,013	.....	504	1,707	68,381	3,806	180,122	107,935	97	.....	.....	27	.....	70	.....	2	
20,645	7,124	80,043	.....	7,064	3,628	123,943	7,067	335,224	204,214	183	.....	.....	.....	.....	183	.....	3	
38,399	27,264	366,885	11,900	53,662	7,057	347,440	19,093	990,300	623,767	207	.....	.....	2	.....	205	.....	4	
.....	3,749	10,285	.....	2,400	230	49,654	705	105,820	55,401	11	.....	.....	.....	.....	11	.....	5	
2,100	1,778	55,242	.....	3,812	1,085	45,059	1,358	125,039	79,622	21	.....	.....	.....	.....	21	.....	6	
189,634	364,684	1,164,383	.....	26,785	168,649	4,843,287	33,759	7,776,083	2,899,037	1,308	.....	.....	.....	.....	1,308	.....	7	
80,414	8,514	279,248	.....	2,250	28,721	813,985	16,885	1,429,361	599,491	1,091	791	.....	.....	.....	300	40	8	
.....
25,480	10,465	168,495	.....	2,700	12,088	297,197	21,646	626,966	308,123	331	.....	.....	.....	.....	331	.....	9	
150,085	194,641	595,723	1,900	73,633	46,455	3,629,744	82,936	5,599,146	1,899,495	815	370	.....	.....	.....	445	247	10	
.....	2,100	29,061	.....	1,344	170	70,808	472	133,656	53,276	21	.....	.....	2	.....	19	.....	11	
78,004	86,799	145,815	295	12,502	35,315	7,816,309	30,654	9,038,459	1,052,496	928	615	.....	.....	.....	313	411	12	
33,417	31,585	312,907	.....	4,595	45,581	682,205	17,968	1,378,738	678,505	605	500	.....	.....	.....	105	565	13	
.....
241,379	110,935	5,247,804	.....	.....	.....	2,291,856	223,910	8,068,846	5,553,080	2,471	2,444	.....	12	.....	15	4,225	14	
.....
44,289	43,498	349,429	2,421	13,577	27,669	1,077,146	6,027	1,821,916	738,743	356	224	.....	.....	.....	132	22	15	
65,534	172,181	381,756	600	39,683	201,135	1,812,035	30,830	3,481,190	1,535,325	537	215	.....	.....	.....	322	55	16	
45,026	12,398	190,449	4,038	7,285	8,487	375,039	6,202	793,219	411,078	121	.....	.....	2	.....	119	.....	17	
10,735	8,575	54,315	.....	8,066	2,505	108,431	1,738	208,116	97,947	55	.....	.....	.....	.....	55	.....	18	
36,725	36,201	120,026	.....	5,200	28,871	6,135,047	39,736	6,589,572	415,089	1,191	125	.....	.....	.....	1,066	.....	19	
67,048	42,007	146,503	36,000	14,806	147,530	3,721,722	32,348	5,073,392	1,319,322	498	114	.....	.....	.....	384	60	20	
.....
325,309	350,267	2,701,645	16	16,452	310,810	3,621,273	311,298	12,079,703	8,247,132	3,399	710	1,333	10	.....	1,346	4,150	21	
86,231	48,950	778,950	16	2,400	192,820	1,290,355	184,316	3,479,543	2,004,672	1,178	225	.....	.....	.....	953	.....	22	
239,078	301,317	1,022,695	.....	14,052	117,990	2,230,918	126,982	8,600,360	6,242,460	2,221	485	1,333	10	.....	293	4,150	23	
190,673	364,446	797,085	4,203	74,716	275,993	4,473,596	15,503	6,581,805	2,092,769	441	.....	.....	.....	.....	441	.....	24	
49,358	37,328	213,921	100	11,140	10,143	330,524	12,219	802,031	459,288	306	100	.....	.....	.....	206	.....	25	
28,790	15,372	96,784	.....	9,700	4,552	147,956	5,416	383,811	230,409	180	100	.....	.....	.....	30	1	26	
.....
20,568	21,955	117,137	100	1,440	5,591	182,538	6,803	418,220	228,879	176	.....	.....	.....	.....	176	.....	27	
5,325	3,801	23,898	4,880	3,544	698	52,977	965	120,958	67,010	20	.....	.....	.....	.....	7	.....	28	
.....	1,000	12,836	.....	500	260	88,299	728	125,752	86,725	7	.....	.....	.....	.....	7	.....	29	
157,290	132,607	458,341	.....	14,554	79,805	1,893,731	6,467	3,070,485	1,170,287	109	.....	.....	.....	.....	109	.....	30	
.....
80,141	284,486	355,976	.....	8,233	35,006	1,413,623	26,598	2,506,654	1,066,433	2,194	1,120	.....	.....	.....	1,074	17	31	
.....
32,457	11,036	143,573	16,000	9,714	5,976	211,258	16,571	550,622	322,793	930	95	.....	3	.....	832	.....	32	
7,810	4,830	21,893	.....	1,596	1,059	48,094	1,551	117,340	67,753	76	.....	.....	.....	.....	73	.....	33	
24,647	6,206	121,680	16,000	8,118	4,917	163,224	15,020	436,282	255,088	854	95	.....	.....	.....	759	.....	34	
18,555	27,326	27,604	.....	4,853	25,996	116,208	3,223	266,216	140,787	61	.....	.....	11	.....	50	.....	35	
81,695	94,357	51,613	7,884	7,367	32,153	253,914	3,854	648,593	600,825	151	6	.....	.....	.....	145	.....	36	
74,495	92,758	43,601	7,884	6,227	31,895	240,437	3,742	808,588	665,419	145	.....	.....	.....	.....	145	.....	37	
7,200	1,599	7,952	.....	1,140	257	13,477	112	38,995	25,406	6	.....	.....	.....	.....	.....	.....	38	
.....
429,854	543,017	1,333,944	291,172	71,298	144,663	1,541,928	49,492	5,824,289	4,232,869	1,389	100	.....	.....	.....	1,289	1	39	
268,028	140,799	860,798	235,414	60,472	55,882	1,327,971	36,005	3,761,636	2,397,660	1,087	100	.....	.....	.....	987	1	40	
181,825	402,218	473,140	55,758	10,826	88,781	213,957	13,487	2,062,653	1,836,209	302	.....	.....	.....	.....	302	.....	41	
.....
337,342	272,014	1,083,311	237,959	73,548	134,067	1,784,582	33,010	6,579,475	4,761,883	677	.....	.....	.....	.....	677	.....	42	
275,368	231,527	1,062,658	55,242	62,348	130,394	1,704,966	32,937	5,978,593	4,240,600	675	.....	.....	.....	.....	675	.....	43	
.....
61,974	40,487	20,653	182,717	11,200	4,273	79,616	73	600,882	521,193	2	.....	.....	.....	.....	2	.....	44	
2,000	3,000	26,551	.....	1,500	676	195,763	5,080	277,889	77,046	77	.....	.....	.....	.....	77	.....	45	
.....
24,177	8,505	140,181	7,639	2,362	3,555	260,044	11,740	481,488	209,704	125	.....	.....	.....	.....	125	.....	46	
.....
27,792	62,379	289,348	421	14,039	144,319	601,760	4,015	1,249,836	644,061	18	.....	.....	.....	.....	18	.....	47	
1,634,446	1,729,752	6,995,433	44,773	189,204	2,771,157	32,009,213	817,476	54,412,364	21,585,675	20,094	11,405	400	215	.....	8,074	4,171	48	

Lithographing.....	1	Paper and wood pulp.....	1	Show cases.....	1	Tinware, not elsewhere specified.....	4
Looking-glass and picture frames.....	1	Paper goods, not elsewhere specified.....	2	Signs and advertising novelties.....	9	Tobacco, smoking.....	2
Lubricating greases.....	1	Paving materials.....	1	Slaughtering and meat packing.....	3	Tools, not elsewhere specified.....	4
Mats and matting, from cocoa fiber, grass, and coir.....	1	Perfumery and cosmetics.....	3	Soap.....	2	Toys and games.....	1
Mattresses and spring beds, not elsewhere specified.....	3	Photographs and graphophones.....	1	Sporting and athletic goods.....	2	Trunks and valises.....	4
Millinery and lace goods, not elsewhere specified.....	7	Photo-engraving.....	4	Stationery goods, not elsewhere specified.....	1	Upholstering materials, not elsewhere specified.....	1
Models and patterns, not including paper patterns.....	6	Photographic materials.....	1	Statuary and art goods.....	3	Varnishes.....	3
Mucilage, paste, and other adhesives, not elsewhere specified.....	2	Pickles and sauces.....	1	Steam packing.....	3	Window shades and fixtures.....	2
Musical instruments, pianos.....	1	Printing materials.....	2	Steel barrels, drums, and tanks.....	1	Wirework, not elsewhere specified.....	2
Oil, linseed.....	2	Refrigerators.....	2	Stereotyping and electrotyping.....	1	Wood, turned and carved.....	1
Optical goods.....	1	Regalia, and society badges and emblems.....	1	Stoves and hot-air furnaces.....	4	Wooden goods, not elsewhere specified.....	1
Paints.....	3	Roofing materials.....	3	Stoves, gas and oil.....	1		
		Saddlery and harness.....	8	Surgical appliances.....	1		
		Sand and emery paper and cloth.....	1	Suspenders, garters, and elastic woven goods.....	2		
		Shipbuilding, wooden, small boats.....	2	Theatrical scenery.....	1		
		Shirts.....	4				

* Same number reported for one or more other months.

† Same number reported throughout the year.

MANUFACTURES—MINNESOTA.

TABLE 30.—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 10,000 TO 50,000 INHABITANTS²—ALL INDUSTRIES COMBINED.

1	FARIBAULT.....	53	1,004	42	60	54	42	806	Au.	948	Fe	717	955	696	244	14	1	Dollars.
2	HIBBING.....	16	75	10	4	2	3	50	Je	53	Ja	45	53	38	15	.....	.....	4,424,890
3	MANKATO.....	56	1,037	55	73	77	61	771	No	862	Ja	692	863	692	170	1	.....	398,872
4	ROCHESTER.....	41	439	49	23	8	.....	359	No	381	Ja	334	379	320	59	.....	.....	6,366,977
5	ST. CLOUD.....	72	2,336	58	99	88	93	1,998	Oc	2,145	De	1,898	1,990	1,836	81	23	.....	2,172,002
6	WINONA.....	73	3,054	54	154	200	112	2,534	De	2,842	Ap	2,345	2,874	2,027	843	1	3	8,596,608
																		17,441,370

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]

<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>											
158,998	118,580	688,298	3,260	21,705	132,656	7,953,981	124,793	10,155,358	2,076,674	2,823	1,525	310	988	514
5,696	4,710	67,600	4,400	6,020	4,845	1,511,975	15,706	320,427	152,746	63	63
170,590	187,356	728,405	431	10,005	118,336	7,812,388	137,657	9,766,306	1,814,261	3,291	1,755	40	2	6	1,488	618
59,969	19,181	336,700	108	12,760	49,612	1,235,536	71,273	2,250,242	943,433	1,368	729	25	114	50	450	256
281,543	292,509	3,238,409	5,844	10,858	81,020	4,261,828	205,300	7,733,764	3,266,540	0,883	1,620	102	600	4,561	100
457,532	475,218	2,101,303	74,181	24,780	478,230	18,800,561	376,545	25,119,522	5,846,416	10,458	3,150	2	7,306	680

³ Excludes Austin and Virginia to avoid disclosure of individual operations.

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON

FOURTEENTH CENSUS OF THE UNITED STATES
MANUFACTURES: 1919

MISSISSIPPI

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.

MISSISSIPPI.

GENERAL STATISTICS.

General character of the state.—Mississippi has a gross area of 46,865 square miles, of which 46,362 represent land surface. The inhabitants of the state in 1900 numbered 1,551,270; in 1910, 1,797,114; and in 1920, 1,790,618. In total population Mississippi ranked twenty-third among the states in 1920, and in density of population twenty-sixth. The number of inhabitants per square mile in 1910 was 38.8, the corresponding figures for 1920 being 38.6.

There were in the state in 1920 nine cities having more than 10,000 inhabitants—Biloxi, Columbus, Greenville, Hattiesburg, Jackson, Laurel, Meridian, Natchez, and Vicksburg. These nine cities, whose combined population in that year was 136,201, formed 7.6 per cent of the total population for Mississippi and reported 24.9 per cent of the value of the state's manufactured products in 1919.

Importance and growth of manufactures (Table 1).—The large increases in wages, cost of materials, and the value of products, as presented in Table 1, are largely 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. However, the increases in the average number of wage earners and horsepower are significant evidences of the growth of 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 county totals for other censuses with those for 1919.

Principal industries, ranked by value of products (Table 3).—The ranking of industries by value of products may not always be satisfactory as indicating their importance from a manufacturing standpoint. The ranking of many industries 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 29.

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).—The proportion of female wage earners in the state is small, but 5.2 per cent in 1919. Biloxi is the only city in the state showing a larger proportion of female wage earners (59.6 per cent) in 1919 than of males; this is due to the extensive employment of females in the canning industry in that city.

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 for the nine cities having 10,000 inhabitants or more. Although there were several industries in the state in which the females predominated, the canning industry is the only one of importance in this class.

Prevailing hours of labor (Table 9).—The figures presented in this table show a shortening of the hours of labor since the census of 1914. In that year 7.2 per cent of the wage earners was included in the group "48 and under" as against 18.5 per cent in 1919, while in the "60" and "over 60" groups there was 75.2 per cent of the total average number of wage earners in 1914, as compared with 67.7 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, 95.3 per cent was in the several classes having less than 101 wage earners, while such establishments employed only 42.2 per cent of the total number of wage earners. On the other hand, the number of establishments having more than 100 wage earners formed only 4.7 per cent, but reported 57.8 per cent of the average number of wage earners in the state.

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 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 with those of another group, 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 illustrates the fact that the number of establishments of itself is no real index of manufacturing activities.

Character of ownership (Table 14).—Corporate ownership in 1914 reported 22.3 per cent of the total number of establishments in the state, 74.7 per cent of the average number of wage earners, and 79.2 per cent of the value of products. The corresponding proportions for 1919 were 20.3 per cent, 72.8 per cent, and 75.5 per cent, respectively. There was an increase of

7,018, or 20.1 per cent, in the average number of wage earners under corporate ownership, while the value of products increased \$86,390,163, or 137.2 per cent, from 1914 to 1919.

Manufactures, by population groups, in cities of 10,000 inhabitants or more (Table 15).—This table shows relatively the importance of the manufactures in the nine cities in the state as to value of products. Combined these cities reported 24.9 per cent of the total for the state in 1919, as compared with 23.4 per cent in 1914. The proportion of wage earners for the nine cities was also greater in 1919, being 20.5 per cent, as against 17.4 per cent in 1914.

Number and horsepower of types of prime movers (Table 16).—There was an increase in both the owned and rented power from 1914 to 1919, and although rented power formed but a small proportion of the total power in the state, the percentage that rented power formed of the total was greater in 1919 than in 1914. During this five-year period the owned power increased 7,503 horsepower, or 4.2 per cent, and rented power 6,877 horsepower, or 101 per cent.

Fuel consumed (Table 17).—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.....	2,455	2,209	2,598	1,520	1,294	11.1	-15.0	70.9	17.5
Persons engaged.....	64,452	52,277	56,761	42,966	(²)	23.3	-7.9	32.1	.....
Proprietors and firm members.....	2,811	2,388	2,974	1,588	(²)	17.8	-19.8	87.3	.....
Salaried employees.....	4,081	3,189	3,403	2,688	1,260	28.0	-6.3	26.6	113.3
Wage earners (average number).....	57,560	46,702	50,384	38,690	26,799	23.2	-7.3	30.2	44.4
Primary horsepower.....	200,814	186,434	208,222	110,338	65,738	7.7	-9.6	86.9	67.8
Capital.....	\$154,117,337	\$81,005,484	\$72,393,485	\$50,256,309	\$22,712,186	90.3	11.9	44.0	121.3
Salaries and wages.....	59,182,535	23,007,760	22,421,367	17,417,380	9,002,544	157.2	2.6	28.7	92.5
Salaries.....	7,926,819	3,831,133	3,653,644	2,598,346	1,082,937	106.9	4.8	40.6	137.7
Wages.....	51,255,716	19,176,627	18,767,723	14,819,034	7,909,607	167.3	2.2	26.6	87.4
Paid for contract work.....	2,684,155	2,075,852	2,591,240	1,150,796	(²)	29.3	-19.9	125.2	.....
Rent and taxes.....	4,598,382	1,320,197	804,930	454,506	(²)	243.3	64.0	.....	.....
Cost of materials.....	96,677,871	41,340,122	36,925,582	25,800,885	16,543,029	133.9	12.0	43.1	56.0
Value of products.....	197,746,987	79,550,095	80,555,410	57,451,445	33,718,517	143.6	-1.2	40.2	70.4
Value added by manufacture ⁴	101,069,116	38,209,973	43,629,828	31,650,560	17,175,488	164.5	-12.4	37.8	84.3

¹ A minus sign (-) denotes decrease.² Figures not available.³ Exclusive of internal revenue.⁴ Value of products less cost of materials.

MANUFACTURES—MISSISSIPPI.

5

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.....	2,455	57,560	\$51,255,716	\$4,598,382	\$96,677,871	\$107,746,087	\$101,069,116	200,814
Adams.....	30	1,300	921,646	35,248	1,605,172	2,875,937	1,270,765	2,607
Alcorn.....	60	598	400,351	25,281	2,238,583	3,106,069	868,380	2,727
Amite.....	14	401	754,307	13,124	251,958	1,407,885	1,155,427	2,654
Attala.....	51	787	527,773	34,155	1,692,084	2,881,089	1,189,005	8,554
Benton.....	11	19	14,585	154	8,365	35,940	27,575	324
Bolivar.....	46	446	405,218	20,794	1,481,947	2,401,570	910,623	1,708
Calhoun.....	38	79	50,808	671	45,562	202,623	157,061	1,212
Carroll.....	8	36	9,720	1,735	162,287	185,664	23,377	428
Chickasaw.....	22	176	134,581	13,265	324,843	655,808	330,965	986
Choctaw.....	26	153	106,429	2,601	232,153	472,243	240,090	970
Chalhorne.....	8	135	102,310	65,022	1,293,723	1,595,404	301,081	534
Clarke.....	42	1,403	1,275,000	225,885	1,714,880	4,001,471	2,286,591	5,356
Clay.....	21	206	162,475	14,365	528,908	897,675	368,767	982
Coahoma.....	36	317	286,737	74,889	3,690,120	4,667,962	968,842	3,038
Copiah.....	35	500	358,591	31,001	1,486,372	2,277,690	791,318	2,180
Covington.....	10	1,119	757,506	67,859	714,117	1,719,318	1,005,201	1,815
De Soto.....	9	5	3,400	628	22,418	42,506	20,148	325
Forrest.....	48	2,020	1,784,784	207,612	3,099,897	6,940,908	3,850,071	7,443
Franklin.....	15	840	811,713	81,213	375,292	1,743,312	1,368,020	2,385
Greene.....	25	970	926,751	65,366	1,136,446	3,368,341	2,231,895	2,392
Grenada.....	13	178	177,896	17,644	900,326	1,369,881	469,555	852
Hancock.....	16	1,449	1,001,531	78,817	630,917	2,300,520	1,666,582	2,939
Harrison.....	81	2,722	2,028,292	151,671	3,164,751	6,591,093	3,420,942	5,677
Hinds.....	82	1,779	1,418,530	227,657	0,827,591	13,789,266	3,961,675	7,020
Holmes.....	23	322	280,483	9,866	554,856	1,005,209	450,353	1,084
Humphreys.....	11	575	620,134	145,034	774,202	2,320,153	1,545,951	1,640
Itawamba.....	52	126	93,120	82,951	209,598	216,647	216,647	1,525
Jackson.....	38	2,833	4,054,310	93,059	3,133,023	8,407,789	5,274,766	8,106
Jasper.....	32	514	375,951	10,604	223,004	1,169,637	946,633	1,037
Jefferson.....	17	271	198,106	21,700	90,424	634,497	544,073	2,521
Jefferson Davis.....	4	5	4,110	140	8,020	19,630	11,010	102
Jones.....	50	3,517	3,286,386	535,940	4,201,138	10,807,074	6,605,936	13,973
Kemper.....	61	667	548,154	48,903	425,147	1,593,852	1,168,705	3,768
Lafayette.....	18	28	24,280	897	21,231	163,816	142,585	489
Lamar.....	14	1,048	1,830,441	243,349	1,128,426	4,752,595	3,624,169	5,573
Lauderdale.....	85	2,670	2,440,329	268,284	6,252,394	10,730,358	4,483,964	7,334
Lawrence.....	11	216	181,912	13,177	113,029	529,369	410,340	298
Leake.....	23	32	21,017	642	24,793	90,930	66,137	746
Lee.....	22	343	236,850	103,456	1,320,555	1,983,700	663,235	1,184
Leflore.....	37	483	400,344	66,283	5,315,370	6,748,555	1,483,185	3,053
Lincoln.....	23	804	651,004	119,197	1,906,499	3,406,938	1,440,430	2,308
Lowndes.....	55	1,331	947,006	50,891	1,849,554	3,595,766	1,746,212	3,936
Madison.....	16	286	256,096	4,828	182,755	691,903	500,148	1,416
Marion.....	34	1,750	1,563,724	155,988	1,581,066	4,594,501	3,013,435	3,013
Marshall.....	13	59	38,257	3,048	318,093	391,231	73,138	394
Monroe.....	96	401	303,669	23,147	927,857	1,973,838	1,045,981	3,870
Montgomery.....	10	225	144,109	82,834	1,087,370	1,575,574	488,204	1,046
Neshoba.....	34	613	603,706	20,216	508,612	1,691,156	1,182,544	2,312
Newton.....	52	695	536,813	41,581	1,174,553	2,538,694	1,364,141	3,106
Noxubee.....	45	463	306,002	11,235	653,252	1,326,241	672,989	2,090
Oktibbeha.....	23	212	143,926	5,223	634,037	965,019	331,882	1,208
Panola.....	15	646	672,249	88,252	502,037	2,145,827	1,643,790	1,997
Pearl River.....	18	1,927	1,926,316	111,894	2,198,401	5,434,437	3,233,036	3,697
Perry.....	17	695	744,575	40,910	289,866	1,588,370	1,295,510	1,011
Pike.....	32	2,427	2,689,936	53,968	2,238,578	5,591,173	3,352,595	3,796
Pontotoc.....	31	81	54,675	3,162	379,772	502,607	122,835	1,013
Prentiss.....	24	173	106,928	1,999	146,788	398,754	251,960	873
Quitman.....	6	55	69,373	2,577	32,290	144,227	111,937	250
Rankin.....	31	590	449,525	284,894	284,894	1,040,308	764,504	2,393
Scott.....	24	924	791,802	23,022	618,120	2,552,500	1,034,380	3,206
Sharkey.....	5	199	150,507	5,376	781,741	902,720	120,979	595
Simpson.....	23	1,296	1,023,928	151,776	1,090,077	3,146,700	2,055,723	4,757
Smith.....	11	62	42,840	1,072	26,472	123,145	96,673	355
Stone.....	8	989	688,474	67,445	725,968	1,630,012	1,204,044	2,930
Sunflower.....	45	470	401,298	20,309	1,330,155	2,456,399	1,126,244	2,142
Tallahatchie.....	27	1,030	857,891	49,917	1,607,287	3,524,128	1,916,841	3,710
Tate.....	9	42	23,748	6,052	289,732	365,995	76,263	530
Tippah.....	35	84	52,384	967	74,707	284,500	209,793	1,012
Tishomingo.....	84	257	158,539	2,430	265,779	699,652	433,773	2,214
Tunica.....	9	113	87,599	3,678	423,201	589,682	166,481	420
Union.....	31	128	94,005	7,166	280,502	615,919	335,417	1,108
Walthall.....	12	156	166,648	35,159	117,055	367,806	250,751	692
Warren.....	46	2,056	1,979,072	113,235	2,820,206	6,808,506	3,548,300	6,003
Washington.....	52	1,208	1,024,903	140,590	5,889,503	9,490,726	3,511,223	6,533
Wayne.....	22	682	429,053	5,228	359,865	1,809,078	949,213	9001
Webster.....	48	130	71,828	1,068	89,127	282,023	162,896	1,711
Wilkinson.....	6	12	5,800	-----	8,246	28,143	10,897	53
Winston.....	74	743	546,084	26,317	853,002	2,424,689	1,571,687	3,917
Yalobusha.....	16	586	722,396	14,149	570,283	1,499,590	929,307	732
Yazoo.....	29	554	429,777	66,066	1,075,329	2,285,231	1,209,902	2,340
All other counties ¹	4	52	27,083	1,497	108,435	174,227	65,792	224

¹ All other counties include George and Issaquena.

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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.....	2,455	57,560	100.0	\$197,747	100.0	\$101,069	100.0	Printing and publishing, newspapers and periodicals.....	156	412	0.7	\$1,348	0.7	\$1,030	1.0
Lumber and timber products.....	1,435	35,512	61.7	87,508	44.3	61,063	60.4	Confectionery and ice cream.....	21	158	0.3	1,211	0.6	505	0.5
Oil and cake, cottonseed.....	49	2,454	4.3	39,202	19.8	5,461	5.4	Wood preserving.....	4	206	0.4	1,184	0.6	493	0.5
Cars and general shop construction and repairs by steam-railroad companies.....	13	4,030	7.0	10,226	5.2	6,167	6.1	Boxes, wooden packing, except cigar boxes.....	4	821	1.4	1,059	0.5	543	0.5
Cotton goods.....	15	2,406	4.2	8,067	4.1	3,093	3.1	Shipbuilding, wooden, including boat building.....	9	248	0.4	1,028	0.5	610	0.6
Lumber, planing-mill products, not including planing mills connected with sawmills.....	65	1,102	1.9	5,933	3.0	2,445	2.4	Carriages and wagons, including repairs.....	14	187	0.3	933	0.5	557	0.6
Turpentine and rosin.....	45	2,495	4.3	5,548	2.8	4,257	4.2	Brick, sewer pipe, and drain tile.....	28	472	0.8	925	0.5	633	0.6
Fertilizers.....	9	370	0.6	3,627	1.8	959	0.9	Canning and preserving, fish.....	11	481	0.8	882	0.4	256	0.3
Mineral and carbonated waters.....	68	440	0.8	3,333	1.7	1,624	1.6	Canning and preserving, oysters.....	7	364	0.6	797	0.4	366	0.4
Butter.....	19	106	0.2	2,248	1.1	353	0.3	Automobile repairing.....	76	177	0.3	686	0.3	510	0.6
Bread and other bakery products.....	82	295	0.5	2,189	1.1	739	0.7	Printing and publishing, book and job.....	37	183	0.3	662	0.3	428	0.4
Flour-mill and gristmill products.....	54	61	0.1	2,092	1.1	195	0.2	Canning and preserving, vegetables.....	10	249	0.4	624	0.3	164	0.2
Foundry and machine-shop products.....	43	460	0.8	1,786	0.9	935	0.9	Coffee, roasting and grinding.....	7	28	0.1	620	0.3	147	0.1
Food preparations, not elsewhere specified.....	7	81	0.1	1,684	0.9	260	0.3	Copper, tin, and sheet-iron work.....	14	84	0.2	462	0.2	309	0.3
Ice, manufactured.....	50	447	0.8	1,515	0.8	946	0.9	Gas, illuminating and heating.....	7	122	0.2	411	0.2	207	0.2
								All other industries ¹	96	3,109	5.4	9,957	5.0	5,814	5.8

¹ Among the industries for which statistics can not be shown separately without the possibility of disclosing the operations of individual establishments are four having products in excess of some for which figures are shown in the table. These industries are as follows: "Clothing, men's"; "furn tire"; "paper and wood pulp"; and "shipbuilding, steel."²

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	64,452	60,866	3,586	94.4	5.6	Clerks and other subordinate salaried employees.....	1919	1,880	1,379	501	73.4	26.6
	1914	52,277	50,010	2,267	95.7	4.3		1914	1,769	1,576	193	88.1	10.9
	1909	56,701	54,057	2,704	95.2	4.8		1909	1,712	1,556	156	90.9	9.1
Proprietors and officials.....	1919	5,012	4,894	118	97.6	2.4	Wage earners (average number).....	1919	57,560	54,593	2,967	94.8	5.2
	1914	3,806	3,755	51	98.7	1.3		1914	46,702	44,079	2,623	95.7	4.3
	1909	4,665	4,603	62	98.7	1.3		1909	50,384	47,898	2,486	95.1	4.9
Proprietors and firm members.....	1919	2,811	2,719	92	96.7	3.3	16 years of age and over.....	1919	57,080	54,254	2,826	95.0	5.0
	1914	2,386	2,340	46	98.1	1.9		1914	46,069	44,165	1,904	95.9	4.1
	1909	2,974	2,918	56	98.1	1.9		1909	40,326	47,287	2,039	95.9	4.1
Salaried officers of corporations.....	1919	554	544	10	98.2	1.8	Under 16 years of age.....	1919	480	339	141	70.6	29.4
	1914	376	373	3	99.2	0.8		1914	633	514	119	81.2	18.8
	1909	305	303	2	99.0	1.0		1909	1,058	611	447	57.8	42.2
Superintendents and managers.....	1919	1,647	1,631	16	99.0	1.0							
	1914	1,044	1,042	2	99.8	0.2							
	1909	1,386	1,383	3	99.8	0.2							

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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	57,560	94.3	4.9	0.8	Ice, manufactured.....	1919	447	99.8	0.2	.....
	1914	46,702	94.6	4.1	1.3		1914	476	96.2	.....	3.8
	1909	50,384	93.9	4.0	2.1	Lumber and timber products.....	1919	35,512	99.3	0.5	0.2
Boxes, wooden packing, except cigar boxes..	1919	821	91.3	8.8	.....		1914	28,490	99.6	(?)	0.4
	1914	213	85.4	10.8	3.8	Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.	1919	1,102	98.6	1.0	0.4
Bread and other bakery products.....	1919	295	87.8	7.8	4.4		1914	937	99.5	.....	0.5
	1914	306	93.4	2.5	4.1	Mineral and carbonated waters.....	1919	440	93.4	5.2	1.4
Brick, sewer pipe, and drain tile.....	1919	472	97.0	.....	3.0		1914	308	94.1	2.3	3.6
	1914	551	94.4	1.1	4.5	Oil and cake, cottonseed.....	1919	2,454	96.0	1.0	3.1
Canning and preserving, fish.....	1919	481	26.8	71.3	1.9		1914	2,330	99.5	0.2	0.3
	1914	791	36.2	59.4	4.4	Printing and publishing, newspapers and periodicals.	1919	412	74.0	17.2	8.7
Canning and preserving, oysters ¹	1919	364	24.2	75.3	0.5		1914	563	73.0	9.4	16.7
Canning and preserving, vegetables.....	1919	249	43.8	55.4	0.8	Shipbuilding, wooden, including boat build- ing.	1919	248	100.0	.....	.....
	1914	82	52.4	43.9	3.7		1914	65	100.0	.....	.....
Cars and general shop construction and re- pairs by steam-railroad companies.	1919	4,030	99.4	0.6	.....	Turpentine and rosin.....	1919	2,495	97.2	1.3	1.5
	1914	3,278	99.4	0.6	.....		1914	3,275	98.1	0.6	1.3
Cotton goods.....	1919	2,406	49.7	45.1	5.2	Wood preserving.....	1919	206	100.0	.....	.....
	1914	1,980	50.2	40.3	9.5		1914	241	100.0	.....	.....
Fertilizers.....	1919	370	99.7	0.3	.....	All other industries.....	1919	4,296	85.8	12.2	2.0
	1914	379	100.0	.....	.....		1914	1,699	74.5	22.0	3.6
Foundry and machine-shop products.....	1919	460	99.1	0.7	0.2						
	1914	423	99.2	0.5	0.3						

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	1919	1914	1909
Biloxi.....	787	.....	.....	317	.....	.....	468	.....	.....	2	.....	.....	\$1,941,629	.....	.....
Columbus.....	549	521	.....	465	455	.....	72	49	.....	12	17	.....	2,150,568	\$1,248,543	.....
Greenville.....	822	671	.....	705	607	.....	65	1	.....	2	3	.....	4,419,662	1,935,153	.....
Hattiesburg.....	1,267	587	648	1,250	590	645	8	4	3	3	23	.....	4,533,382	1,133,927	\$1,250,892
Jackson.....	1,326	943	772	1,231	895	740	55	23	15	40	25	17	11,401,869	3,625,068	2,959,812
Laurel.....	2,223	2,129	.....	2,005	1,868	.....	179	173	.....	31	88	.....	8,182,357	3,372,292	.....
Meridian.....	2,165	1,974	1,524	1,821	1,722	1,360	265	204	120	79	48	38	9,589,986	4,738,763	4,237,476
Natchez.....	1,180	297	428	1,001	244	333	179	16	72	17	23	.....	2,717,187	895,913	1,114,087
Vicksburg.....	1,455	1,009	1,202	1,367	947	1,172	84	54	17	4	8	13	4,336,392	1,672,907	2,220,344

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.....	54,573	48,363	49,148	84.3	100.0	87.1	July.....	55,793	46,143	47,237	86.2	95.4	83.7
February.....	53,177	47,519	49,511	82.1	98.3	87.7	August.....	59,933	47,304	50,341	92.6	97.8	89.2
March.....	53,870	47,810	49,839	83.2	98.9	88.3	September.....	63,160	48,010	53,195	97.0	99.3	94.3
April.....	52,653	47,290	47,851	81.3	97.8	84.8	October.....	64,736	47,774	55,387	100.0	98.8	98.1
May.....	53,185	45,296	45,178	82.2	93.7	80.1	November.....	63,823	45,881	56,436	98.6	94.9	100.0
June.....	52,920	45,097	45,198	81.7	93.2	80.1	December.....	62,897	43,937	55,285	97.2	90.8	98.0

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.

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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.												Percent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
All industries.....	57,560	54,573	53,177	53,870	<i>52,655</i>	53,185	52,920	55,793	59,933	63,180	64,736	63,823	62,897	81.3
Males.....	54,593	51,333	50,042	50,825	<i>49,689</i>	50,568	50,717	53,563	57,056	60,174	61,249	60,389	59,511	81.1
Females.....	2,967	3,240	3,135	3,045	<i>2,966</i>	2,617	2,203	2,230	2,877	2,986	3,487	3,434	3,386	63.2
Boxes, wooden packing, except cigar boxes.....	821	754	706	<i>651</i>	729	840	869	881	871	855	864	896	936	69.6
Bread and other bakery products.....	295	<i>283</i>	287	290	295	292	290	289	292	304	308	305	305	61.9
Brick, sewer pipe, and drain tile.....	472	<i>355</i>	348	369	480	512	540	555	612	573	501	458	381	64.7
Canning and preserving, fish.....	481	534	588	562	535	254	<i>74</i>	82	621	611	671	627	613	11.0
Canning and preserving, oysters.....	364	498	490	<i>514</i>	489	271	9	6	321	313	498	477	482	1.2
Canning and preserving, vegetables.....	249	348	114	72	77	<i>65</i>	96	114	117	266	545	624	550	10.4
Cars and general shop construction and repairs by steam-railroad companies.....	4,030	4,206	4,052	4,130	4,054	3,926	3,789	<i>3,740</i>	3,793	3,996	4,129	4,252	4,287	87.4
Cotton goods.....	2,406	2,540	2,498	2,427	2,370	2,428	2,308	2,332	<i>2,897</i>	2,343	2,405	2,449	2,475	90.4
Fertilizers.....	370	513	542	592	548	332	<i>241</i>	266	276	280	273	269	308	40.7
Foundry and machine-shop products.....	460	426	433	<i>417</i>	439	450	454	464	489	488	473	481	506	82.4
Ice, manufactured.....	447	<i>362</i>	332	332	420	510	539	593	623	578	447	360	328	45.5
Lumber and timber products.....	35,512	32,257	31,185	31,931	<i>31,042</i>	32,167	32,588	35,007	38,276	40,328	40,678	39,843	40,842	76.0
Lumber, planing-mill products, not including planing mills connected with sawmills.....	1,102	<i>870</i>	981	1,000	1,026	1,050	1,085	1,137	1,164	1,207	1,187	1,195	1,213	80.0
Mineral and carbonated waters.....	440	360	<i>355</i>	380	402	439	487	510	510	506	470	444	417	66.6
Oil and cake, cottonseed.....	2,454	3,216	3,055	2,547	2,123	1,678	1,521	1,521	<i>1,496</i>	2,392	3,289	3,288	3,319	46.1
Printing and publishing, newspapers and periodicals.....	412	<i>400</i>	406	401	404	407	413	410	414	412	421	427	429	63.2
Shipbuilding, wooden, including boat building.....	248	596	592	472	279	319	228	128	75	<i>66</i>	76	75	71	10.9
Turpentine and rosin.....	2,495	2,201	2,248	2,480	2,646	2,623	2,572	2,682	2,685	2,662	2,495	2,451	<i>2,180</i>	81.5
Wood preserving.....	206	204	207	206	209	227	222	204	215	188	198	210	<i>182</i>	80.2
All other industries.....	4,296	3,630	3,758	4,091	4,086	4,386	4,595	4,863	4,786	4,793	4,808	4,692	<i>3,064</i>	63.0
<i>Industries showing large proportion of females.</i>														
Boxes, wooden packing, except cigar boxes.....	72	61	74	60	82	61	83	64	73	<i>66</i>	79	72	90	62.2
Canning and preserving, fish.....	345	389	442	417	395	182	<i>50</i>	35	454	417	489	453	437	6.1
Canning and preserving, oysters.....	275	365	368	366	360	<i>202</i>	.....	.....	264	263	385	358	309	52.5
Canning and preserving, vegetables.....	138	167	61	39	<i>36</i>	38	48	43	37	141	340	378	328	9.5
Cotton goods.....	1,152	1,252	1,190	1,155	1,130	1,170	1,099	1,122	<i>1,097</i>	1,117	1,157	1,164	1,171	87.6
Printing and publishing, newspapers and periodicals.....	72	<i>68</i>	70	69	68	72	74	72	73	73	75	75	75	90.7
Total for cities.....	11,774	12,034	11,558	11,491	11,372	11,092	<i>10,568</i>	11,020	11,842	12,294	12,734	12,603	12,685	83.0
Males.....	10,310	10,473	9,993	9,955	9,842	9,750	<i>9,544</i>	10,009	10,343	10,826	11,031	10,910	11,044	88.4
Females.....	1,464	1,561	1,565	1,536	1,530	1,342	1,019	1,011	1,499	1,468	1,703	1,693	1,641	59.4
BILOXI.....	787	906	953	934	915	648	<i>211</i>	225	813	798	1,067	995	979	10.8
Males.....	318	355	345	358	348	203	<i>180</i>	189	301	325	398	385	369	45.2
Females.....	469	551	608	576	567	385	<i>31</i>	36	512	478	669	610	610	4.6
COLUMBUS.....	549	632	618	523	500	479	<i>434</i>	502	521	573	623	612	571	68.7
Males.....	470	532	513	430	430	409	<i>363</i>	430	446	495	545	541	501	66.6
Females.....	79	100	100	93	70	70	<i>71</i>	72	75	78	78	71	70	70.0
GREENVILLE.....	822	813	844	<i>783</i>	779	775	739	758	900	789	910	882	<i>952</i>	75.9
Males.....	787	758	788	<i>673</i>	721	717	688	705	839	732	857	829	887	75.0
Females.....	55	55	56	<i>50</i>	58	58	51	53	61	57	53	53	55	82.0
HATTIESBURG.....	1,267	1,347	1,299	1,318	1,289	1,238	1,237	1,217	<i>1,189</i>	1,298	1,245	1,263	1,264	88.3
Males.....	1,259	1,341	1,293	1,312	1,283	1,232	1,231	1,210	<i>1,179</i>	1,287	1,233	1,253	1,254	87.9
Females.....	8	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>7</i>	10	11	12	10	10	50.0
JACKSON.....	1,326	1,392	1,326	1,294	1,153	1,116	<i>1,094</i>	1,233	1,249	1,534	1,551	1,474	1,496	70.5
Males.....	1,265	1,330	1,269	1,235	1,096	1,052	<i>1,033</i>	1,173	1,189	1,479	1,486	1,411	1,427	69.5
Females.....	61	62	57	59	57	64	<i>61</i>	60	60	55	65	63	69	79.7
LAUREL.....	2,223	2,225	<i>1,880</i>	1,882	1,920	2,016	2,043	2,407	2,445	2,437	2,487	2,444	2,490	75.5
Males.....	2,029	2,019	<i>1,694</i>	1,694	1,733	1,827	1,863	2,217	2,256	2,246	2,294	2,228	2,287	73.8
Females.....	194	206	<i>186</i>	188	187	189	180	190	189	191	193	216	203	86.1
MERIDIAN.....	2,165	2,256	2,245	2,322	2,295	2,188	2,112	2,010	<i>1,995</i>	2,134	2,110	2,149	2,164	85.9
Males.....	1,830	1,899	1,931	2,001	1,964	1,856	1,772	1,663	<i>1,656</i>	1,793	1,777	1,811	1,837	82.8
Females.....	335	357	<i>314</i>	321	331	332	340	347	339	341	333	338	327	88.0
NATCHEZ.....	1,180	1,055	<i>1,048</i>	1,083	1,154	1,178	1,226	1,236	1,226	1,190	1,211	1,240	1,313	79.8
Males.....	1,001	891	<i>876</i>	907	967	1,013	1,035	1,065	1,050	1,028	1,020	1,053	1,108	79.0
Females.....	179	164	173	176	187	165	191	171	176	<i>162</i>	191	187	205	78.0
VICKSBURG.....	1,455	1,408	<i>1,348</i>	1,412	1,367	1,454	1,467	1,432	1,504	1,541	1,530	1,544	1,456	87.1
Males.....	1,371	1,348	<i>1,285</i>	1,345	1,300	1,381	1,389	1,357	1,427	1,441	1,421	1,399	1,364	88.8
Females.....	84	<i>60</i>	65	67	67	73	78	75	77	100	100	145	92	41.4

MANUFACTURES—MISSISSIPPI.

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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	57,500	4,340	2,695	3,613	2,592	3,001	2,363	35,921	3,035
	1914	46,702	(²)	(²)	3,345	2,291	4,369	1,573	32,149	2,975
	1909	50,384	(²)	(²)	2,794	982	2,024	1,555	22,957	19,172
Boxes, wooden packing, except cigar boxes.....	1919	821						120	701	
	1914	213						108	105	
Bread and other bakery products.....	1919	295	3	(²)	81		47	17	109	38
	1914	306	(²)	(²)	4	4	5	38	135	120
Brick, sewer pipe, and drain tile.....	1919	472	14		67	9	47	33	301	1
	1914	551	(²)	(²)	53	12	53		433	
Canning and preserving, fish.....	1919	481			251		100		130	
	1914	701	(²)	(²)	496		83		212	
Canning and preserving, oysters ³	1919	364	18		234		104		8	
Canning and preserving, vegetables.....	1919	249				18	17	91	123	
	1914	82					5	45	32	
Cars and general shop construction and repairs by steam-railroad companies.....	1919	4,030		2,426	1,579				25	
	1914	3,278				948	2,206		34	
Cotton goods.....	1919	2,406					127	220	2,059	
	1914	1,989					65		1,924	
Fertilizers.....	1919	370					12	119	186	53
	1914	379					63		152	164
Foundry and machine-shop products.....	1919	460			51		298	11	100	
	1914	423	(²)	(²)	20	12	173	5	212	1
Ice, manufactured.....	1919	447			28		13	25	102	279
	1914	476	(²)	(²)	25		5	21	106	319
Lumber and timber products.....	1919	35,512	2,327	164	410	2,288	970	1,372	27,483	498
	1914	28,490	(²)	(²)	474	815	662	917	25,201	421
Lumber, planing-mill products, not including planing mills connected with sawmills.....	1919	1,102	105		43	115	204	179	456	
	1914	937	(²)	(²)	1	22	237	88	589	
Mineral and carbonated waters.....	1919	440	20	17	32		98	6	267	
	1914	308	(²)	(²)	12	1	21	17	257	
Oil and cake, cottonseed.....	1919	2,454				67	113		393	1,881
	1914	2,396				26	43	173	334	1,700
Printing and publishing, newspapers and periodicals.....	1919	412	6		241	11	57	18	76	3
	1914	503	(²)	(²)	275	21	145	6	116	
Shipbuilding, wooden, including boat building.....	1919	248	153		27		64		4	
	1914	65					61		4	
Turpentine and rosin.....	1919	2,495	49	14	4	19	259		2,150	
	1914	3,275	(²)	(²)	1,494	405	9	50	1,240	77
Wood preserving.....	1919	206					18		84	104
	1914	241							241	
All other industries.....	1919	4,296	1,645	74	565	65	453	152	1,164	178
	1914	1,990	(²)	(²)	491	25	443	105	822	113
Total for cities.....	1919	11,774	103	798	1,981	201	733	400	6,706	852
	1914	8,131	(²)	(²)	385	166	2,079	276	4,378	847
BILOXI ¹	1919	787	18		349		175		185	60
COLUMBUS.....	1919	549	28		95	35	3	4	314	70
	1914	521	(²)	(²)	1	22	100	6	267	65
GREENVILLE.....	1919	822			12		64	15	552	179
	1914	671	(²)	(²)	7		17	14	466	167
HATTIESBURG.....	1919	1,207			261		103	125	774	4
	1914	587	(²)	(²)	36	3	241	6	171	130
JACKSON.....	1919	1,326		91	123		110	74	523	405
	1914	943	(²)	(²)	90	109	252	129	153	205
LAUREL.....	1919	2,223	9		13	67	88	6	2,040	
	1914	2,129	(²)	(²)	44	6	11		2,052	16
MERIDIAN.....	1919	2,165	48		1,030	85	104	60	813	25
	1914	1,974	(²)	(²)	107	26	703	57	1,027	54
NATCHEZ.....	1919	1,180			9	14	28	88	962	49
	1914	297	(²)	(²)	35		27	51	96	88
VICKSBURG.....	1919	1,455		707	89		58	28	513	60
	1914	1,009	(²)	(²)	65		668	13	141	122

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

MANUFACTURES—MISSISSIPPI.

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.....	2,455	57,560	158	1,272	2,853	597	6,705	208	6,999	105	7,750	74	11,884	24	8,569	14	9,088	3	8,712	
Boxes, wooden packing, except cigar boxes....	4	821	6	53	111	23	184	2	171	1	120	1	120	1	120	1	530	1	530	
Bread and other bakery products.....	82	295	2	9	35	10	105	6	216	1	116	1	116	1	116	1	116	1	116	
Brick, sewer pipe, and drain tile.....	28	473	2	1	4	3	43	4	116	1	59	2	259	1	259	1	259	1	259	
Canning and preserving, fish.....	11	481	2	1	4	3	43	4	116	1	59	2	259	1	259	1	259	1	259	
Canning and preserving, oysters.....	7	304	2	1	4	3	43	4	116	1	59	2	259	1	259	1	259	1	259	
Canning and preserving, vegetables.....	10	249	2	1	4	3	43	4	116	1	59	2	259	1	259	1	259	1	259	
Cars and general shop construction and repairs by steam-railroad companies.....	13	4,080	1	1	1	1	14	3	109	3	258	2	353	1	463	1	707	2	2,126	
Cotton goods.....	15	2,406	1	1	1	1	14	3	109	3	258	2	353	1	463	1	707	2	2,126	
Fertilizers.....	9	370	2	2	5	1	8	2	77	4	280	1	103	1	103	1	103	1	103	
Foundry and machine-shop products.....	43	460	2	18	44	17	220	6	196	1	103	1	103	1	103	1	103	1	103	
Ice, manufactured.....	50	447	2	18	44	17	220	6	196	1	103	1	103	1	103	1	103	1	103	
Lumber and timber products.....	1,435	35,512	15	823	1,777	360	4,021	108	3,619	53	3,944	44	7,264	20	7,036	12	7,651	1	1,638	
Lumber, planing-mill products, not including planing mills connected with sawmills.....	65	1,102	2	19	41	32	404	12	392	2	265	2	265	1	265	1	265	1	265	
Mineral and carbonated waters.....	68	440	2	42	132	22	242	2	66	1	103	1	103	1	103	1	103	1	103	
Oil and cake, cottonseed.....	40	2,454	2	19	41	32	404	12	392	2	265	2	265	1	265	1	265	1	265	
Printing and publishing, newspapers and periodicals.....	156	412	38	100	197	10	158	2	57	1	103	1	103	1	103	1	103	1	103	
Shipbuilding, wooden, including boat building.....	9	248	1	5	15	11	145	9	342	10	859	6	861	1	276	1	276	1	276	
Turpentine and rosin.....	45	2,495	1	7	12	11	145	9	342	10	859	6	861	1	276	1	276	1	276	
Wood preserving.....	4	206	1	18	1	18	1	24	1	61	1	103	1	103	1	103	1	103	1	103
All other industries.....	352	4,296	91	166	392	67	682	18	504	5	314	3	512	1	306	1	306	1	306	
Total for cities.....	316	11,774	25	86	236	115	1,306	48	1,447	19	1,415	14	2,243	3	884	5	3,235	1	1,008	
BILOXI.....	33	787	2	9	24	10	119	8	225	2	160	2	259	1	259	1	259	1	259	
COLUMBUS.....	27	549	2	6	18	8	82	3	101	1	83	2	265	1	265	1	265	1	265	
GREENVILLE.....	32	822	3	10	23	13	143	1	25	4	302	1	329	1	329	1	329	1	329	
HATTIESBURG.....	36	1,267	2	13	31	14	140	4	136	1	91	1	165	1	165	1	165	1	165	
JACKSON.....	55	1,326	6	12	41	20	241	9	268	5	386	3	390	1	390	1	390	1	390	
LAUREL.....	23	2,223	2	6	18	5	39	5	160	3	195	1	248	1	269	2	1,294	1	1,294	
MERIDIAN.....	54	2,165	2	17	48	15	214	12	356	2	117	2	422	1	422	1	422	1	422	
NATCHEZ.....	22	1,180	1	4	10	12	132	1	38	1	81	2	389	1	389	1	389	1	389	
VICKSBURG.....	34	1,455	2	9	23	15	106	5	138	1	105	1	105	1	286	1	707	1	707	

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
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes.....	2,455	2,209	2,598	57,560	46,702	50,384	\$197,746,987	\$79,550,085	\$80,555,410	\$101,069,116	\$38,209,973	\$43,629,828
Less than \$5,000.....	759	1,083	1,150	899	2,600	3,260	1,882,744	2,321,838	2,573,206	1,337,938	1,655,479	1,918,351
\$5,000 to \$20,000.....	749	617	785	3,411	5,156	6,838	7,626,893	6,294,551	8,080,215	5,383,955	4,069,108	5,717,615
\$20,000 to \$100,000.....	593	320	467	9,175	8,779	12,679	25,986,780	13,739,910	10,633,830	15,792,497	7,315,467	12,336,122
\$100,000 to \$500,000.....	257	166	190	17,755	18,167	27,607	58,806,959	39,694,048	50,259,159	30,604,697	24,669,919	23,657,739
\$500,000 to \$1,000,000.....	59	128	190	11,115	18,167	27,607	43,400,086	17,490,748	50,259,159	20,150,250	24,669,919	23,657,739
\$1,000,000 and over.....	38	128	190	15,235	18,167	27,607	60,043,525	17,490,748	50,259,159	27,899,779	24,669,919	23,657,739
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.....	30.9	49.0	44.5	1.5	5.6	6.5	1.0	2.9	3.2	1.3	4.3	4.4
\$5,000 to \$20,000.....	30.5	27.9	30.2	5.9	11.0	13.6	3.9	7.9	10.0	5.3	10.6	13.1
\$20,000 to \$100,000.....	24.2	14.5	18.0	15.9	18.8	25.2	13.1	17.3	24.4	15.6	20.5	28.3
\$100,000 to \$500,000.....	10.5	7.5	7.3	30.8	64.6	54.8	29.7	49.9	62.4	30.2	64.6	54.2
\$500,000 to \$1,000,000.....	2.4	1.0	1.0	19.3	64.6	54.8	21.9	22.0	62.4	19.9	64.6	54.2
\$1,000,000 and over.....	1.5	1.0	1.0	26.5	64.6	54.8	30.4	22.0	62.4	27.0	64.6	54.2

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

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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.		
			1919	1914			1919	1914			1919	1914			1919	1914	
BREAD AND OTHER BAKERY PRODUCTS.....	82	83	100.0	100.0	295	306	100.0	100.0	\$2,189,341	\$919,007	100.0	100.0	\$738,964	\$404,681	100.0	100.0	
Less than \$5,000.....	16	36	19.5	43.4	10	27	3.4	8.8	56,818	96,521	2.6	10.5	24,190	46,289	3.3	11.4	
\$5,000 to \$20,000.....	28	32	34.1	38.0	51	123	17.3	40.2	292,235	356,579	13.3	38.8	103,112	167,547	14.0	41.4	
\$20,000 to \$100,000.....	35	15	42.7	18.1	202	156	68.5	51.0	1,453,200	465,907	66.4	50.7	508,935	190,845	68.9	47.2	
\$100,000 to \$500,000.....	3	3	3.7	.....	32	.....	10.8	.....	387,688	.....	17.7	.....	102,727	.....	13.9	.....
COTTON GOODS.....	15	11	100.0	100.0	2,406	1,989	100.0	100.0	8,066,769	2,789,007	100.0	100.0	3,002,662	977,007	100.0	100.0	
Less than \$100,000.....	3	27.3	175	8.8	210,591	7.6	78,391	8.0
\$100,000 to \$500,000.....	9	18	60.0	72.7	924	1,814	38.4	91.2	2,735,339	2,578,416	33.9	92.4	1,040,497	1,898,616	33.6	92.0	
\$500,000 and over.....	6	6	40.0	.....	1,482	.....	61.6	.....	5,331,430	.....	66.1	.....	2,062,165	.....	66.4	.....
FERTILIZERS.....	9	11	100.0	100.0	370	379	100.0	100.0	\$,026,674	2,059,786	100.0	100.0	958,626	454,801	100.0	100.0	
Less than \$100,000.....	3	5	33.3	45.5	13	26	3.5	6.9	143,374	161,803	4.0	7.9	21,410	51,950	2.2	11.4	
\$100,000 and over.....	6	6	66.7	54.5	357	353	96.5	93.1	3,483,300	1,897,983	96.0	92.1	937,216	402,851	97.8	88.6	
FLOUR-MILL AND GRISTMILL PRODUCTS.....	54	17	100.0	100.0	61	48	100.0	100.0	2,091,603	410,332	100.0	100.0	194,855	66,054	100.0	100.0	
Less than \$5,000.....	33	7	61.1	41.2	2	9	3.3	18.7	75,564	16,298	3.6	4.0	15,133	2,950	7.8	4.5	
\$5,000 to \$20,000.....	13	6	24.1	35.3	5	11	8.2	22.9	112,231	69,534	5.4	16.9	17,673	14,770	9.1	22.4	
\$20,000 to \$100,000.....	5	4	9.3	23.5	13	28	21.3	58.3	265,067	324,500	12.7	79.1	45,146	48,334	23.2	73.2	
\$100,000 and over.....	3	5	5.6	.....	41	.....	67.2	.....	1,638,201	.....	78.3	.....	116,903	.....	60.0	.....
LUMBER AND TIMBER PRODUCTS.....	1,435	1,240	100.0	100.0	35,512	28,490	100.0	100.0	87,508,229	36,506,812	100.0	100.0	61,062,707	22,712,761	100.0	100.0	
Less than \$5,000.....	495	705	34.5	56.9	679	2,016	1.9	7.1	1,193,796	1,396,300	1.4	3.8	928,801	1,043,058	1.5	4.6	
\$5,000 to \$20,000.....	475	308	33.1	24.8	2,504	3,075	7.1	10.8	4,897,365	3,073,856	5.6	8.4	3,798,296	2,146,743	6.2	9.5	
\$20,000 to \$100,000.....	314	146	21.9	11.8	5,789	4,734	16.3	16.6	12,963,571	6,503,677	14.8	17.8	9,350,700	4,108,768	15.3	18.1	
\$100,000 to \$500,000.....	109	72	7.6	5.8	10,322	18,005	29.1	65.5	25,893,070	17,138,357	29.6	46.9	17,267,873	15,419,192	28.3	67.9	
\$500,000 to \$1,000,000.....	27	9	1.9	0.7	7,812	.....	22.0	.....	20,685,222	8,394,622	23.6	23.0	14,610,044	.....	23.9	.....
\$1,000,000 and over.....	15	.....	1.0	.....	8,406	.....	23.7	.....	21,876,205	.....	25.0	.....	15,190,987	.....	24.8	.....
LUMBER, PLANING-MILL PRODUCTS, NOT INCLUDING PLANING MILLS CONNECTED WITH SAWMILLS.....	65	48	100.0	100.0	1,102	937	100.0	100.0	5,933,133	1,828,954	100.0	100.0	2,444,717	842,742	100.0	100.0	
Less than \$5,000.....	10	12	15.4	25.0	18	38	1.6	4.1	20,414	37,219	0.5	2.0	21,227	20,624	0.9	2.4	
\$5,000 to \$20,000.....	9	16	13.8	33.3	42	168	3.8	17.9	104,810	186,326	1.8	10.1	54,042	105,490	2.2	12.5	
\$20,000 to \$100,000.....	25	16	38.5	33.3	375	323	34.0	34.5	1,343,059	671,446	22.7	31.2	553,816	259,109	22.7	30.7	
\$100,000 and over.....	21	4	32.3	8.3	667	408	60.5	43.5	4,454,950	1,034,903	76.1	56.6	1,815,632	457,519	74.3	54.3	
MINERAL AND CARBONATED WATERS.....	68	80	100.0	100.0	440	308	100.0	100.0	3,333,437	1,066,364	100.0	100.0	1,623,929	500,247	100.0	100.0	
Less than \$5,000.....	6	43	8.8	53.8	8	54	1.8	17.5	18,034	100,356	0.5	9.4	7,528	56,901	0.5	11.4	
\$5,000 to \$20,000.....	24	24	35.3	30.0	62	70	14.1	25.6	253,936	262,136	7.6	24.6	111,921	125,016	6.9	25.0	
\$20,000 to \$100,000.....	29	13	42.0	16.2	202	175	45.9	56.8	1,402,149	703,872	42.1	66.0	704,891	318,330	43.4	63.6	
\$100,000 to \$500,000.....	9	.....	13.2	.....	108	.....	38.2	.....	1,669,318	.....	49.8	.....	799,591	.....	49.2	.....
OIL AND CAKE, COTTONSEED.....	40	67	100.0	100.0	2,454	2,336	100.0	100.0	39,202,188	17,599,651	100.0	100.0	5,460,842	3,162,023	100.0	100.0	
Less than \$100,000.....	8	11.9	75	3.2	331,022	1.9	65,375	2.1
\$100,000 to \$500,000.....	16	52	32.7	77.6	485	2,291	19.8	96.8	5,217,878	12,693,488	13.3	71.8	533,002	1,096,648	9.8	97.9	
\$500,000 to \$1,000,000.....	19	7	38.8	10.4	632	.....	38.0	.....	13,532,726	4,634,241	34.5	26.3	1,918,884	.....	35.1	.....
\$1,000,000 and over.....	14	.....	28.6	.....	1,037	.....	42.3	.....	20,451,584	.....	52.2	.....	3,008,059	.....	55.1	.....
TURPENTINE AND ROSIN.....	45	61	100.0	100.0	2,495	3,275	100.0	100.0	5,547,813	1,997,139	100.0	100.0	4,257,412	1,416,960	100.0	100.0	
Less than \$5,000.....	8	13.1	14	0.4	23,521	1.2	14,138	1.0
\$5,000 to \$20,000.....	9	28	20.0	45.9	98	371	3.9	11.3	100,107	318,178	2.0	15.9	72,671	217,120	1.7	15.3	
\$20,000 to \$100,000.....	15	21	33.3	34.4	231	1,200	9.3	36.6	713,573	917,733	12.9	46.0	493,438	672,776	11.6	47.5	
\$100,000 to \$500,000.....	21	4	46.7	6.6	2,160	1,600	86.8	51.6	4,725,133	737,707	85.2	36.9	3,691,303	512,926	86.7	36.2	

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

² Includes the group "\$100,000 to \$500,000."

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

⁴ Includes the group "\$1,000,000 and over."

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

MANUFACTURES—MISSISSIPPI.

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.
BILOXI.....	33	787	100.0	\$1,941,629	100.0	\$807,358	100.0	LAUREL.....	23	2,223	100.0	\$8,182,357	100.0	\$4,835,901	100.0
Less than \$5,000.....	3	1	0.1	5,050	0.3	3,878	0.5	Less than \$20,000.....	6	17	0.8	47,193	0.6	27,608	0.6
\$5,000 to \$20,000.....	5	12	1.5	47,543	2.4	27,980	3.5	\$20,000 to \$100,000.....	8	127	5.7	413,261	5.1	204,583	4.2
\$20,000 to \$100,000.....	19	309	39.3	797,898	41.1	394,975	48.9	\$100,000 to \$500,000.....	4	190	9.0	1,060,692	13.0	558,824	11.6
\$100,000 to \$500,000.....	6	465	59.1	1,091,138	56.2	380,525	47.1	\$500,000 and over.....	5	1,880	84.6	6,661,211	81.4	4,044,889	83.0
COLUMBUS.....	27	549	100.0	2,150,568	100.0	730,710	100.0	MERIDIAN.....	54	2,165	100.0	9,580,980	100.0	3,788,166	100.0
Less than \$5,000.....	7	2	0.4	14,321	0.7	7,081	1.0	Less than \$5,000.....	3	3	0.1	7,950	0.1	4,140	0.1
\$5,000 to \$20,000.....	5	11	2.0	48,977	2.3	22,727	3.1	\$5,000 to \$20,000.....	11	24	1.1	113,300	1.2	69,438	1.8
\$20,000 to \$100,000.....	9	96	17.5	397,113	18.5	142,719	19.5	\$20,000 to \$100,000.....	23	323	14.9	1,245,842	13.0	728,037	19.2
\$100,000 to \$500,000.....	6	440	80.1	1,690,157	78.6	558,183	76.4	\$100,000 to \$500,000.....	12	455	21.0	2,333,399	24.3	995,793	26.3
\$500,000 and over.....	6	440	80.1	1,690,157	78.6	558,183	76.4	\$500,000 and over.....	5	1,360	62.8	5,889,495	61.4	1,991,761	52.6
GREENVILLE.....	32	822	100.0	4,419,662	100.0	1,888,351	100.0	NATCHEZ.....	22	1,180	100.0	2,717,187	100.0	1,143,981	100.0
Less than \$5,000.....	6	3	0.4	13,206	0.3	5,861	0.3	Less than \$20,000.....	5	10	0.8	47,264	1.7	22,580	2.0
\$5,000 to \$20,000.....	5	14	1.7	52,255	1.2	27,085	1.4	\$20,000 to \$100,000.....	9	100	8.5	402,108	14.8	193,390	17.4
\$20,000 to \$100,000.....	15	157	19.1	750,072	17.0	366,481	19.4	\$100,000 to \$500,000.....	8	1,070	90.7	2,267,815	83.5	922,011	80.6
\$100,000 to \$500,000.....	3	170	20.7	834,711	18.9	505,766	26.8	\$500,000 and over.....	8	1,205	82.8	3,381,110	78.0	2,091,648	80.7
\$500,000 and over.....	3	478	58.1	2,769,418	62.7	983,158	52.1	VICKSBURG.....	34	1,455	100.0	4,336,392	100.0	2,593,103	100.0
HATTIESBURG.....	36	1,267	100.0	4,533,382	100.0	2,468,423	100.0	Less than \$5,000.....	4	3	0.2	10,050	0.2	5,208	0.2
Less than \$5,000.....	3	.....	.....	8,000	0.2	4,285	0.2	\$5,000 to \$20,000.....	6	22	1.5	67,951	1.5	29,731	1.1
\$5,000 to \$20,000.....	8	20	1.6	86,539	1.9	50,003	2.0	\$20,000 to \$100,000.....	16	225	15.5	878,181	20.3	466,570	18.0
\$20,000 to \$100,000.....	19	192	15.2	1,008,347	22.2	414,041	16.8	\$100,000 to \$500,000.....	8	1,205	82.8	3,381,110	78.0	2,091,648	80.7
\$100,000 to \$500,000.....	6	1,055	83.3	3,432,496	75.7	2,000,091	81.0								
\$500,000 and over.....	6	1,055	83.3	3,432,496	75.7	2,000,091	81.0								
JACKSON.....	55	1,326	100.0	11,401,889	100.0	3,117,090	100.0								
Less than \$5,000.....	7	3	0.2	16,775	0.1	9,264	0.3								
\$5,000 to \$20,000.....	6	21	1.6	69,811	0.6	48,838	1.6								
\$20,000 to \$100,000.....	17	272	20.5	941,280	8.3	410,889	13.2								
\$100,000 to \$500,000.....	19	497	37.5	2,930,039	25.7	1,344,845	43.1								
\$500,000 and over.....	6	533	40.2	7,445,964	65.3	1,308,254	41.8								

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.						
						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	1,282	498	675	57,560	8,335	41,921	7,304	14.5	72.8	12.7	\$197,746,987	\$25,563,980	\$149,371,210	\$22,811,797	12.9	75.5	11.5				
	1914	1,180	493	536	46,702	7,248	34,903	4,551	15.5	74.7	9.8	70,550,095	9,514,036	62,981,047	7,055,012	12.0	79.2	8.9				
	1909	1,353	555	690	50,384	9,779	33,467	7,138	19.4	66.4	14.2	80,555,410	11,674,333	58,719,954	10,161,123	14.5	72.9	12.6				
Bread and other bakery products.	1919	66	2	14	295	238	.....	157	80.7	.....	19.3	2,189,341	1,792,016	.....	1,397,325	81.9	.....	18.1
	1914	66	2	15	306	208	.....	198	68.0	.....	32.0	919,007	647,090	.....	271,917	70.4	.....	29.6
Cars and general shop construction and repairs by steam-railroad companies.	1919	.....	13	.....	4,030	.....	4,030	.....	100.0	.....	.....	10,225,791	.....	10,225,791	.....	100.0	.....	.....		
	1914	.....	15	.....	3,278	.....	3,278	.....	100.0	.....	.....	3,682,100	.....	3,682,100	.....	100.0	.....	.....		
Cotton goods.....	1919	1	14	.....	2,406	.....	2,406	.....	100.0	.....	.....	8,066,769	.....	8,066,769	.....	100.0	.....	.....		
	1914	.....	11	.....	1,989	.....	1,989	.....	100.0	.....	.....	2,789,007	.....	2,789,007	.....	100.0	.....	.....		
Fertilizers.....	1919	.....	9	.....	370	.....	370	.....	100.0	.....	.....	3,626,674	.....	3,626,674	.....	100.0	.....	.....		
	1914	2	9	.....	379	.....	379	.....	100.0	.....	.....	2,059,786	.....	2,059,786	.....	100.0	.....	.....		
Flour-mill and gristmill products.	1919	38	9	7	61	18	43	.....	29.5	70.5	.....	2,091,663	702,031	1,364,258	25,374	33.6	65.2	1.2		
	1914	6	4	7	48	9	16	23	18.8	33.3	47.9	410,332	60,023	181,130	169,179	14.6	44.1	41.2				
Lumber and timber products.	1919	787	176	472	35,512	6,232	23,793	5,487	17.5	67.0	15.5	87,508,229	15,502,317	58,885,548	13,120,364	17.7	67.3	15.0				
	1914	719	160	301	28,490	5,318	19,842	3,380	18.7	69.6	11.7	36,506,812	5,763,325	26,524,968	4,218,521	15.8	72.7	11.6				
Lumber, planing-mill products, not including planing mills connected with sawmills.	1919	22	21	22	1,102	348	500	254	31.6	45.4	23.0	5,933,133	3,021,566	3,021,566	1,435,994	24.9	50.9	24.2				
	1914	14	17	17	937	65	720	152	6.9	76.8	16.2	1,828,954	198,505	1,235,668	394,781	10.9	67.6	21.6				
Mineral and soda waters...	1919	28	23	17	440	136	223	81	30.9	50.7	18.4	3,333,437	921,323	1,919,457	492,657	27.6	57.6	14.8				
	1914	45	17	18	308	134	137	37	43.5	44.5	12.0	1,066,364	333,333	601,780	131,251	31.3	56.4	12.3				
Oil and cake, cottonseed...	1919	.....	46	3	2,454	.....	2,310	144	.....	94.1	5.9	39,202,188	.....	36,732,414	2,469,774	.....	93.7	6.3
	1914	1	61	5	2,336	.....	2,207	129	.....	94.5	5.5	17,599,651	.....	16,991,585	2,608,066	.....	96.5	3.5
Turpentine and rosin.....	1919	6	25	14	2,495	76	2,047	372	3.0	82.0	14.9	5,547,813	195,307	4,517,664	834,842	3.5	81.4	15.0				
	1914	16	30	15	3,275	233	2,770	272	7.1	84.6	8.3	1,997,139	155,842	1,592,057	289,240	7.8	77.7	14.5				

¹ Includes the group, "Corporations."² Includes the group, "Individuals."

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.								
					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.	Cor- pora- tions.	All oth- ers.	Indi- vid- uals.	Cor- pora- tions.	All oth- ers.				
Total for cities.....	1919 1914	108 94	149 124	59 66	11,774 8,131	812 616	10,266 6,971	996 544	6.9 7.6	87.2 85.7	5.9 6.7	\$49,273,032 18,622,566	\$4,408,685 1,400,018	\$41,561,944 15,926,569	\$3,302,403 1,295,979	8.9 7.5	84.3 85.5	6.7 7.0				
BLOXIS.....	1919	9	13	11	787	114	564	109	14.5	71.7	13.8	1,941,029	285,157	1,450,070	206,402	14.7	74.7	10.6				
COLUMBUS.....	1919 1914	10 11	10 10	7 6	549 521	66 83	438 412	45 26	12.0 15.9	79.8 79.1	8.2 5.0	2,150,568 1,248,543	333,159 159,572	1,509,100 1,036,937	308,309 52,034	15.5 12.8	70.2 83.0	14.3 4.2				
GREENVILLE.....	1919 1914	13 9	11 11	8 5	822 671	112 53	590 516	114 102	13.6 7.9	72.5 76.9	13.9 15.2	4,410,002 1,935,153	507,571 97,014	3,322,003 1,579,039	500,088 250,100	11.5 5.0	75.2 81.0	13.4 13.4				
HATTIESBURG.....	1919 1914	12 14	20 14	4 7	1,267 587	50 47	1,107 483	20 57	3.9 8.0	94.5 82.3	1.6 9.7	4,533,382 1,133,927	278,706 110,400	4,188,427 870,219	66,240 153,308	6.1 9.7	92.4 76.7	1.5 13.5				
JACKSON.....	1919 1914	16 13	30 26	9 10	1,326 943	101 92	1,126 797	99 54	7.6 9.8	84.9 84.5	7.5 5.7	11,401,899 3,625,068	969,145 203,079	9,834,285 3,243,517	598,439 178,472	8.6 5.6	86.3 89.5	5.2 4.9				
LAUREL.....	1919 1914	8 7	15 15	..... 4	2,223 2,129	72 54	2,151 2,067	..... 8	3.2 2.5	96.8 97.1	..... 0.4	8,182,357 3,372,292	182,834 79,539	7,999,523 3,264,033	..... 34,720	2.2 2.2	97.8 96.8	..... 1.0
MERIDIAN.....	1919 1914	18 15	25 24	11 12	2,165 1,974	157 148	1,848 1,716	160 110	7.3 7.5	85.4 86.9	7.4 5.6	9,589,986 4,738,763	889,893 298,549	7,636,806 4,110,618	1,003,287 329,596	9.3 6.3	79.6 80.7	11.1 7.0				
NATCHEZ.....	1919 1914	10 12	7 9	5 3	1,180 297	77 73	988 130	115 94	6.5 24.6	83.7 43.8	9.7 31.6	2,717,187 895,013	566,182 247,571	1,780,333 480,592	370,672 167,750	20.8 27.0	65.5 53.6	13.0 18.7				
VICKSBURG.....	1919 1914	12 13	18 15	4 9	1,455 1,009	63 66	1,358 850	34 93	4.3 6.5	93.3 84.3	2.3 9.2	4,336,392 1,672,907	396,038 210,294	3,841,397 1,341,614	98,057 120,999	9.1 12.6	88.6 80.2	2.3 7.2				

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.....	1910 1914 1909		9 8 5		9 7 5		1			
Population ¹	1920 1915 1910	1,790,618 1,901,882 1,797,114	136,201 128,858 88,885	7.6 6.8 4.9	136,201 101,851 88,885	7.6 5.4 4.9	27,007 1.4		1,654,417 1,773,024 1,708,229	92.4 93.2 95.1
Number of establishments.....	1919 1914 1909	2,455 2,209 2,598	316 274 201	12.9 12.4 7.7	316 225 201	12.9 10.2 7.7	40 2.2		2,139 1,935 2,397	87.1 87.6 92.3
Average number of wage earners.....	1919 1914 1909	57,560 46,702 50,384	11,774 8,131 4,574	20.5 17.4 9.1	11,774 7,188 4,574	20.5 15.4 9.1	943 2.0		45,786 38,571 45,810	79.5 82.6 90.9
Value of products.....	1919 1914 1909	\$197,746,087 79,550,095 80,555,410	\$49,273,032 18,622,566 11,791,611	24.9 23.4 14.6	\$49,273,032 14,997,498 11,791,611	24.9 18.8 14.6	\$3,625,068 4.6		\$148,473,055 60,927,529 68,763,790	75.1 70.0 85.4
Value added by manufacture.....	1919 1914 1909	101,069,116 38,200,973 43,029,828	21,373,143 7,647,337 5,003,122	21.1 20.0 11.5	21,373,143 6,536,269 5,003,122	21.1 17.1 11.5	1,111,068 2.9		79,695,973 30,562,636 38,626,706	78.9 80.0 88.5

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.—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.....	4,162	3,249	3,251	203,814	189,454	206,222	100.0	100.0	100.0
Owned.....	2,701	2,527	2,924	187,128	179,625	203,661	93.2	96.3	98.8
Steam.....	2,387	2,273	2,747	183,090	177,287	202,346	91.6	95.1	98.1
Engines.....	2,331	(²)	(²)	170,894	(²)	(²)	85.1		
Turbines.....	56	(²)	(²)	13,096	(²)	(²)	6.5		
Internal-combustion engines.....	302	237	166	2,957	1,095	1,077	1.5	0.9	0.5
Water.....	12	17	11	181	643	238	0.1	0.3	0.1
Water wheels and turbines.....	11	12	11	170	518	238	0.1	0.3	0.1
Water motors.....	1	5		2	125		(²)	0.1	
Rented.....	1,461	722	327	13,686	6,899	2,561	6.8	3.7	1.2
Electric.....	1,431	722	327	13,644	6,779	2,490	6.8	3.6	1.2
Other.....				42	30	65	(²)	(²)	(²)
Electric.....	2,127	1,016	517	34,829	17,351	7,627	100.0	100.0	100.0
Rented.....	1,481	722	327	13,644	6,779	2,490	39.2	36.1	32.7
Generated by establishments reporting.....	666	294	190	21,185	10,572	5,131	60.8	63.9	67.3

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 17.—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, 2,240 pounds).	Bituminous (tons, 2,000 pounds).				
All industries.....	10,874	445,676	4,881	66,493	4,850	4,395
Per cent of increase.....	1,853 488.8	476,108 -6.2	6,242 -22.1	12,117 488.8	(¹) (¹)	3,886 24.3
Brick, sewer pipe, and drain tile.....	250	25,426		168		
Cars and general shop construction and repairs by steam-railroad companies.....	347	42,499	226	959	115	
Confectionery and ice cream.....	2,805	1,522	12	2,336	5	488
Cotton goods.....		38,609	43			
Gas, illuminating and heating.....		23,466	1,194	3,391		
Ice, manufactured.....	4,164	40,351		5,670	34	
Lumber and timber products.....	760	64,756	1,032	268	1,695	
Mineral and carbonated waters.....	99	5,237	15	13	404	
Oil and cake, cottonseed.....	2,220	100,250			29	
Shipbuilding, steel.....				48,200		
Wood preserving.....		13,704		5,900		
All other industries.....	229	29,817	2,339	588	2,517	3,909
Total for cities.....	3,356	121,588	3,070	4,354	535	4,248
BLOOMINGDALE.....		14,140	112		8	250
COLUMBUS.....		10,722				
GREENVILLE.....	7	13,163	10	3	87	60
HATTIESBURG.....		3,690	302		22	110
JACKSON.....		27,419	340		195	555
LAUREL.....		11,810	201	2	127	
MERIDIAN.....	20	13,599	562	360		2,873
NATCHEZ.....	30	9,071	63	1	31	
VICKSBURG.....	3,290	17,665	1,480	3,983	65	400

¹ Included in figures for fuel oils.

² A minus sign (-) denotes decrease.

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 six of these industries in Mississippi are here presented.

Lumber and timber products (Table 18).—This table presents statistics pertaining to the chief products of the lumber industry for 1919, 1914, and 1909. Measured by the value of products, this is the most important manufacturing industry in the state, contributing 44.3 per cent of the total value of all manufactured products in 1919.

For a number of years Mississippi has been one of the leading lumber-producing states, ranking fourth in the production of this commodity in 1919 and third for both 1914 and 1909.

In 1919 yellow pine contributed 1,980,395 M feet, board measure, or 82.9 per cent of the total lumber cut in the state; red gum 168,226 M feet, or 7 per cent; and oak 132,804 M feet, or 5.6 per cent. Other important woods cut were cottonwood, cypress, hickory, ash, elm, yellow poplar, tupelo, and maple.

TABLE 18.—PRODUCTION OF LUMBER, LATH, AND SHINGLES: 1919, 1914, AND 1909.

PRODUCT.	QUANTITY.		
	1919	1914	1909
Lumber..... M ft., b. m.	2,390,135	1,280,966	2,572,660
Lath..... thousands.	93,204	(²)	90,926
Shingles..... thousands.	34,002	(²)	151,303

¹ Data for custom mills not included.

² Not reported.

Oil and cake, cottonseed (Table 19).—This table shows the quantities of the chief products of the industry for 1919, 1914, and 1909. The statistics for 1919 relate to the crushing season of 1918-19—that is to the handling of the seed from the crop of 1918. They cover the operation of only those establishments which were engaged primarily in the cottonseed industry. The crude products reported do not include those intermediate products, which were used in further manufacture.

Mississippi ranked sixth among the states in cottonseed products manufactured. While there has been an increase in the total value of products, there has been an actual decrease in the quantity of seed handled, the amount in 1919 being less than in 1914 and 1909.

TABLE 19.—OIL AND CAKE, COTTONSEED: 1919, 1914, AND 1909.

MATERIAL AND PRODUCT.	QUANTITY.		
	1919	1914	1909
Cottonseed, crushed..... tons (2,000 lbs.)..	438, 725	506, 190	559, 357
Crude products manufactured:			
Oil..... gallons..	18, 255, 656	21, 312, 278	24, 386, 280
Meal and cake..... tons (2,000 lbs.)..	210, 204	232, 126	214, 738
Hulls..... tons (2,000 lbs.)..	108, 690	138, 669	161, 707
Linters..... pounds..	43, 739, 388	35, 652, 381	24, 237, 530

Cotton goods (Table 20).—This table presents detailed statistics as to materials and products of the cotton-goods industry in Mississippi for 1919, 1914, and 1909. It will be seen from the details for materials used that the mills in the state largely produced their own yarn, raw cotton forming 87.2 per cent of the total cost of all materials in 1919.

TABLE 20.—COTTON GOODS: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$4, 974, 107	\$1, 812, 069	\$2, 042, 150
Cotton, domestic:			
Pounds.....	14, 370, 837	13, 897, 341	16, 371, 192
Cost.....	\$4, 335, 759	\$1, 545, 598	\$1, 707, 222
Starch, cost.....	\$34, 481	\$13, 385	\$12, 769
Chemicals and dyestuffs, cost.....	\$53, 810	\$34, 652	\$31, 042
Fuel and rent of power, cost.....	\$187, 607	\$78, 281	\$101, 557
All other materials, cost.....	\$302, 300	\$140, 104	\$39, 560
PRODUCTS.			
Total value.....	\$8, 036, 769	\$2, 780, 007	\$3, 102, 308
Drills:			
Pounds.....	2, 535, 093	(1)	(1)
Square yards.....	7, 567, 026	6, 676, 640	7, 705, 349
Value.....	\$1, 477, 625	\$448, 493	\$437, 721
Unbleached and bleached sheetings, shirtings, and muslins:			
Pounds.....	3, 165, 311	(1)	(1)
Square yards.....	15, 138, 180	10, 137, 838	23, 140, 744
Value.....	\$1, 830, 605	\$771, 679	\$1, 407, 306
Other woven goods:			
Pounds.....	4, 391, 264	(1)	(1)
Square yards.....	16, 022, 142	20, 089, 423	11, 744, 171
Value.....	\$3, 239, 679	\$1, 219, 702	\$933, 126
Yarns, for sale:			
Pounds.....	2, 055, 323	1, 333, 799	1, 119, 504
Value.....	\$1, 285, 530	\$288, 050	\$220, 920
Waste, bagging, and ties:			
Value.....	\$88, 856	\$35, 923	\$28, 556
All other products, value.....	\$145, 014	\$25, 103	\$74, 709
ACTIVE MACHINERY.			
Spindles (producing, not including doubling and twisting spindles) number..	158, 502	120, 186	153, 504
Looms, number.....	3, 883	3, 537	4, 733

¹ Not reported.

The total value of products increased \$5,277,762, or 189.2 per cent, from 1914 to 1919, notwithstanding a decrease in yardage. Woven goods was the principal product and constituted 81.2 per cent of the total value for the industry in 1919. The total output of woven goods was 45,596,264 square yards in 1909, 42,901,210 square yards in 1914, and 38,727,354 square yards in 1919. The decrease in the production of woven goods for the last five-year period was 9.7 per cent, and for the last ten-year period 15.1 per cent.

Turpentine and rosin (Table 21).—The quantities and values of turpentine and rosin produced by 45 establishments in 1919, 61 in 1914, and 64 in 1909, are shown in this table.

The working unit in the gathering of crude gum is called a crop, which consists of 10,500 boxes or cups. In 1919 there were 822 crops worked in the state. Of those, 275 were from "virgin" trees, or trees worked the first year; 257 from "yearling," or trees worked the second year; and 290 from "pulling," or trees worked the third and subsequent years. Of the foregoing, 69 were worked from back-boxed timber—20 "virgin," 15 "yearling," and 34 "pulling."

In 1919 only the cup system was reported as being used for gathering crude gum in the state. In 1909 and 1914 both the box system and cup system were used. In the former year 831 crops out of a total of 1,053 and in the latter year 17 crops out of a total of 1,138 were gathered by the box system.

TABLE 21.—PRODUCTION AND VALUE OF TURPENTINE AND ROSIN: 1919, 1914, AND 1909.

PRODUCT.	1919	1914	1909
Total value.....	\$5, 547, 813	\$1, 997, 139	\$1, 474, 629
Spirits of turpentine:			
Gallons.....	1, 749, 812	2, 885, 054	1, 588, 786
Value.....	\$2, 011, 896	\$905, 747	\$732, 334
Rosin:			
Barrels (280 pounds).....	207, 114	275, 205	102, 503
Value.....	\$3, 498, 136	\$1, 081, 040	\$739, 799
All other products, value.....	\$37, 811	\$10, 352	\$2, 490

Fertilizers (Table 22).—This table shows the quantities and values of the products of the fertilizer industry for 1919, 1914, and 1909.

TABLE 22.—FERTILIZERS: 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$3, 626, 674	\$2, 059, 786	\$2, 125, 020
Fertilizers:			
Tons.....	1 103, 684	1 129, 469	1 133, 101
Value.....	\$3, 160, 469	\$1, 861, 845	\$1, 725, 256
Complete and ammoniated fertilizers—			
Tons.....	51, 808	65, 766	72, 193
Value.....	\$2, 120, 331	\$1, 349, 190	\$1, 167, 632
Superphosphates, concentrated phosphates, and all others—			
Tons.....	52, 086	63, 703	60, 908
Value.....	\$1, 049, 088	\$512, 655	\$557, 024
All other products, value.....	\$457, 205	\$197, 941	\$390, 773

¹ In addition, there was produced in cottonseed-oil mills and other industries 18,742 tons of fertilizer, valued at \$740,512, in 1919; 29,794 tons, valued at \$521,174, in 1914; and 33,971 tons, valued at \$616,052, in 1909.

Printing and publishing (Table 23).—This table shows the publications in Mississippi, by number and aggregate circulation per issue, classified according to period of issue for the years 1919, 1914, and 1909.

The decrease shown in the total number of publications and of circulation is due to the disappearance of a number of weekly newspapers—a decrease also accentuated at the census of 1914.

The increase in circulation of daily newspapers—23.3 per cent for the five-year period from 1914 to 1919, and of 18.9 per cent for the decade—was accompanied by a small decrease in number of publications for both periods.

Of the dailies, 11 were published in the afternoon, a decrease of 1 from 1914 to 1919, the circulation increasing slightly. The increase in the circulation of morning newspapers, the number of which decreased by 2 during the five-year period, was 10,518, or 66.3 per cent. The circulation of Sunday newspapers increased 4,784 during the same period, or 14.7 per cent. All publications were printed in the English language.

TABLE 23.—PRINTING AND PUBLISHING: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1919	1914	1909	1919	1914	1909
Total.....	169	218	219	227,972	267,319	315,731
Daily.....	14	17	18	56,480	45,792	47,492
Sunday.....	5	7	7	37,355	32,571	36,322
Semiweekly ¹	4	7	5	6,725	6,236	6,000
Weekly.....	139	169	182	112,962	161,865	221,492
Monthly ²	7	18	7	14,450	20,855	4,425

¹ Includes in 1914, 1 triweekly.

² Includes in 1919, 2 semi-monthlies and 1 quarterly; in 1914, 4 semi-monthlies and 1 quarterly; and in 1909, 1 semi-monthly and 1 bimonthly.

Laundries (Table 24).—Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. Table 24, however, summarizes the statistics for such laundries in the state for 1919 and 1914.

TABLE 24.—POWER LAUNDRIES: 1919 AND 1914.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1914-1919.
	1919	1914	
Number of establishments.....	23	27	.....
Persons engaged.....	712	688	3.5
Proprietors and firm members.....	20	32	.....
Salaried employees.....	58	49	.....
Wage earners (average number).....	634	607	4.4
Primary horsepower.....	1,816	680	167.1
Capital.....	\$527,254	\$347,909	51.5
Salaries and wages.....	397,753	267,848	48.5
Salaries.....	77,848	53,270	46.1
Wages.....	319,905	214,578	49.1
Paid for contract work.....	26,918	75	.....
Rent and taxes.....	18,439	12,435	48.3
Cost of materials.....	286,102	122,244	134.0
Amount received for work done.....	946,670	540,209	75.2

¹ Percentages are omitted where base is less than 100.

Dyeing and cleaning (Table 25).—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 25.—DYEING AND CLEANING: 1919.

	Number or amount.
Number of establishments.....	24
Persons engaged.....	105
Proprietors and firm members.....	29
Salaried employees.....	8
Wage earners (average number).....	68
Primary horsepower.....	635
Capital.....	\$50,780
Salaries and wages.....	51,861
Salaries.....	8,534
Wages.....	40,007
Paid for contract work.....	425
Rent and taxes.....	8,315
Cost of materials.....	20,616
Amount received for work done.....	128,143

Custom sawmills and gristmills (Tables 26 and 27).—Statistics for custom sawmills and custom gristmills are not included in the general tables nor in the totals for manufacturing industries. Data for custom mills were not collected in 1914. Tables 26 and 27, however, summarize the statistics for such mills for 1919 and 1909. The value of products for custom sawmills represents the amount charged for the work performed, and that for custom gristmills, the selling value of the grain milled.

TABLE 26.—CUSTOM SAWMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	72	27	.....
Persons engaged.....	154	95	.....
Proprietors and firm members.....	97	35	.....
Wage earners (average number).....	67	60	.....
Primary horsepower.....	2,187	663	229.9
Capital.....	\$88,496	\$26,000	237.7
Wages.....	31,243	10,133	208.3
Rent and taxes.....	991	(²)	.....
Cost of materials.....	13,729	933	1,371.5
Value of products ³	80,191	28,769	178.7

¹ Percentages are omitted where base is less than 100.

² Figures not available.

³ Amount received for work done.

TABLE 27.—CUSTOM GRISTMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	598	596	0.3
Persons engaged.....	790	912	-13.4
Proprietors and firm members.....	731	837	-12.7
Salaried employees.....	9	10	.....
Wage earners (average number).....	50	65	-16.4
Primary horsepower.....	13,253	15,852	-9.4
Capital.....	\$520,726	\$475,776	9.4
Salaries and wages.....	40,758	34,489	18.2
Salaries.....	2,260	804	181.1
Wages.....	38,498	33,685	14.5
Rent and taxes.....	8,904	(²)	.....
Cost of materials ³	1,830,290	1,073,848	70.4
Value of products ³	2,299,950	1,258,318	82.6

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 28 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 for selected industries in the state, and for all industries combined for the cities of Columbus, Greenville, Hattiesburg, Jackson, Laurel, Meridian, Natchez, and Vicksburg for 1919, 1914, and 1909.

1909. Certain kindred industries are combined in some instances for comparison with 1909.

Table 29 presents, for 1919, statistics in detail for the state as a whole and for each industry that can be shown without the disclosure of individual operations, and for all industries combined in the nine cities of 10,000 inhabitants or more.

TABLE 28.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909.

INDUSTRY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Expressed in thousands.			INDUSTRY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Expressed in thousands.		
					Wages.	Cost of materials.	Value of products.						Wages.	Cost of materials.	Value of products.
All Industries.....	1919	2,455	57,560	200,814	\$51,256	\$96,678	\$197,747	Marble and stone work...	1919	12	78	114	\$59	\$195	\$300
	1914	2,209	46,702	186,434	19,177	41,340	70,550		1914	13	58	108	31	77	140
	1909	2,598	50,384	206,222	18,768	36,926	80,555		1909	11	71	80	41	79	176
Bread and other bakery products.	1919	82	295	662	240	1,450	2,189	Mattresses and spring beds, not elsewhere specified.	1919	7	39	120	28	130	208
	1914	83	306	184	145	514	919		1914	7	33	104	13	36	70
	1909	79	285	92	128	516	878		1909	6	40	101	26	67	118
Brick, sewer pipe, and drain tile.	1919	28	472	1,702	305	202	925	Mineral and carbonated waters.	1919	68	440	1,148	269	1,710	3,333
	1914	38	551	2,435	198	188	513		1914	80	308	543	119	506	1,066
Canning and preserving ¹ .	1919	28	1,094	846	375	1,518	2,303		1909	79	191	317	72	234	501
	1914	18	1,052	600	229	877	1,655	Oil and cake, cottonseed..	1919	49	2,454	20,537	1,664	33,741	39,202
	1909	11	847	378	97	508	824		1914	67	2,336	25,272	850	14,438	17,000
Carriages and wagons and materials.	1919	19	276	706	230	457	1,105		1909	87	2,503	24,534	833	12,169	15,966
	1914	23	210	1,074	101	223	470	Printing and publishing..	1919	193	595	698	514	551	2,009
	1909	41	365	1,350	154	274	642		1914	219	663	643	371	314	1,267
Cars and general shop construction and repairs by steam-railroad companies.	1919	13	4,030	4,433	5,649	4,059	10,226		1909	225	736	499	387	300	1,308
	1914	15	3,278	3,350	2,028	1,493	3,682	Shipbuilding, wooden, including boat building.	1919	9	248	635	360	418	1,028
	1909	10	2,572	2,232	1,558	1,422	3,233		1914	11	65	170	31	47	101
Coffee, roasting and grinding.	1919	7	28	49	13	474	620		1909	15	91	301	51	66	161
	1914	7	8	20	4	75	94	Turpentine and resin.....	1919	45	2,495	78	1,574	1,200	5,548
Confectionery and ice cream.	1919	21	158	645	108	706	1,211		1914	61	3,275	108	680	580	1,907
	1914	13	56	51	23	103	177		1909	64	2,573	286	582	349	1,475
Copper, tin, and sheet-iron work.	1919	14	84	34	88	153	462	Wood preserving.....	1919	4	206	1,180	196	691	1,184
	1914	18	82	.....	51	90	191		1914	4	241	1,407	153	1,061	1,470
	1909	15	119	.....	60	91	211		1909	3	263	1,275	112	652	1,315
Cotton goods.....	1919	15	2,406	6,939	1,537	4,974	8,067	All other industries.....	1919	167	3,186	8,248	4,092	5,807	12,121
	1914	11	1,989	5,510	580	1,812	2,789		1914	85	1,093	5,963	488	1,175	2,076
	1909	14	2,645	8,045	695	2,042	3,102		1909	150	2,104	6,065	711	1,602	3,304
Fertilizers.....	1919	9	370	2,316	285	2,068	3,027	CITIES.							
	1914	11	379	2,809	155	1,605	2,060	COLUMBUS.....	1919	27	549	1,776	361	1,420	2,151
	1909	10	440	1,823	141	1,385	2,125		1914	27	521	2,449	224	747	1,249
Flour-mill and gristmill products.	1919	54	61	1,634	49	1,897	2,092	GREENVILLE.....	1919	32	822	3,628	658	2,531	4,420
	1914	17	48	783	14	344	410		1914	25	671	2,088	315	1,177	1,935
	1909	13	18	609	5	132	153	HATTIESBURG.....	1919	36	1,267	4,781	1,038	2,065	4,533
Food preparations, not elsewhere specified.	1919	7	81	473	53	1,424	1,084		1914	35	587	2,964	292	666	1,134
	1914	5	19	100	5	106	201		1909	29	648	2,273	297	625	1,251
Foundry and machine-shop products.	1919	43	460	1,240	590	850	1,786	JACKSON.....	1919	55	1,326	5,763	1,094	8,285	11,402
	1914	43	423	1,095	231	262	690		1914	49	943	4,862	460	2,514	3,625
	1909	50	583	1,372	295	472	1,088		1909	44	772	3,292	366	1,852	2,960
Gas, illuminating and heating.	1919	7	122	228	100	204	411	LAUREL.....	1919	23	2,223	10,258	2,167	3,346	8,182
	1914	8	113	196	56	111	292		1914	26	2,129	7,115	1,066	1,713	3,372
	1909	8	101	148	39	86	250	MERIDIAN.....	1919	54	2,165	5,443	2,089	5,802	9,590
Ice, manufactured.....	1919	50	447	6,208	372	569	1,515		1914	51	1,974	5,538	1,017	2,720	4,739
	1914	58	476	8,439	219	327	1,040		1909	54	1,524	5,361	702	2,474	4,237
	1909	51	341	7,003	189	213	866	NATCHEZ.....	1919	22	1,180	2,277	831	1,573	2,717
Lumber and timber products. ²	1919	1,504	37,435	139,851	32,431	30,450	94,501		1914	24	297	1,158	131	606	896
	1914	1,266	20,640	125,371	12,413	14,856	38,538		1909	27	428	1,481	169	689	1,114
	1909	1,647	33,397	149,715	12,583	14,207	42,793	VICKSBURG.....	1919	34	1,455	4,053	1,600	1,743	4,336
									1914	37	1,009	1,757	534	832	1,673
									1909	47	1,202	2,637	637	1,148	2,220

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

² Includes "boxes, wooden packing," and "lumber, planing-mill products, not including planing mills connected with sawmills."

MANUFACTURES—MISSISSIPPI.

TABLE 29.—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.

																Dollars.
1	All industries.....	2,455	64,452	2,811	2,201	1,379	501	57,500	Oct 64,736	Apr 52,653	(2)	(2)	(2)	(2)	(2)	154,117,337
2	Artificial stone products.....	3	17	1	2	—	—	14	Je 23	Fe 4 2	23	23	—	—	—	124,245
3	Automobile bodies and parts.....	4	75	2	9	7	1	56	De 83	Ja 35	82	78	4	—	—	126,176
4	Automobile repairing.....	70	289	100	3	3	6	177	Oct 196	Apr 157	195	188	1	6	—	305,653
5	Awnings, tents, and sails.....	3	4	3	—	—	—	1	Apr 2	Ja 5 0	2	2	—	—	—	4,200
6	Boxes, wooden packing, except cigar boxes.....	4	872	—	32	8	11	821	De 936	Mh 651	936	846	90	—	—	1,392,903
7	Bread and other bakery products.....	82	459	98	19	18	29	205	Oct 308	Ja 283	309	271	25	13	—	709,029
8	Brick, sewer pipe, and drain tile.....	28	547	37	33	1	4	472	De 612	Ja 335	606	588	—	18	—	1,230,183
9	Brooms, from broom corn.....	7	35	11	1	2	1	20	My 24	So 14	35	16	10	—	—	18,747
10	Butter.....	19	152	13	16	9	8	106	Aug 139	Ja 68	113	103	9	—	—	265,850
11	Canning and preserving, fish.....	11	516	13	13	7	2	481	Oct 671	Je 74	673	176	484	10	3	710,787
12	Canning and preserving, oysters.....	7	388	1	17	4	2	364	Mh 514	Jy 6	502	122	377	1	2	465,710
13	Canning and preserving, vegetables.....	7	276	2	17	4	4	249	No 624	My 65	635	249	381	5	—	417,136
14	Carriage and wagon materials.....	5	101	5	7	—	—	89	Aug 112	Ja 64	101	87	—	—	—	86,823
15	Carriages and wagons, including repairs.....	14	235	15	12	19	2	187	—	—	203	203	—	—	—	614,227
16	Carriages and wagons.....	7	183	8	10	12	1	152	No 175	Fe 130	169	169	—	—	—	431,002
17	Repair work only.....	7	52	7	2	7	1	35	Jy 38	Mh 32	34	34	—	—	—	183,225
18	Cars and general shop construction and repairs by electric-railroad companies.....	5	18	—	2	—	—	16	Apr 17	Ja 15	17	17	—	—	—	38,807
19	Cars and general shop construction and repairs by steam-railroad companies.....	13	4,266	—	92	107	37	4,030	De 4,287	Jy 3,746	4,224	4,199	25	—	—	4,394,222
20	Coffee, roasting and grinding.....	7	59	5	9	16	1	28	My 29	Fe 26	20	15	14	—	—	203,623
21	Confectionery and ice cream.....	21	238	27	25	16	12	158	—	—	173	127	45	1	—	2,300,856
22	Confectionery.....	5	110	7	9	6	3	85	Se 90	Fe 66	93	53	40	—	—	215,085
23	Ice cream.....	16	128	20	16	10	9	73	Je 104	Fe 41	80	74	5	1	—	2,085,171
24	Copper, tin, and sheet-iron work.....	14	112	13	8	4	3	84	Oct 94	Mh 72	94	90	4	—	—	131,634
25	Cotton goods.....	15	2,600	1	62	18	13	2,406	Ja 2,540	Aug 2,297	2,805	1,386	1,273	69	77	6,080,362
26	Fertilizers.....	9	431	—	31	25	5	370	Mh 592	Je 241	346	346	—	—	—	4,738,555
27	Flour-mill and gristmill products.....	51	127	53	7	6	—	61	Oct 65	Apr 58	62	62	—	—	—	608,428
28	Food preparations, not elsewhere specified.....	7	121	8	15	14	3	81	De 112	Apr 66	95	95	—	—	—	515,178
29	Foundry and machine-shop products.....	43	572	44	31	27	10	460	—	—	494	490	3	1	—	1,585,947
30	Boiler shops and foundries.....	6	117	4	4	4	2	103	De 111	Mh 94	111	111	—	—	—	206,202
31	Machine shops.....	25	237	32	11	13	2	179	Aug 201	Mh 150	186	185	1	—	—	692,547
32	Machine shop and foundry combined.....	12	218	8	16	10	6	178	De 196	Ja 167	197	194	2	1	—	696,685
33	Gas, illuminating and heating.....	7	160	—	15	10	13	122	De 133	Mh 106	134	134	—	—	—	1,190,879
34	Ice, manufactured.....	50	557	29	57	17	7	447	Aug 623	Ja 302	479	478	—	—	—	2,080,356
35	Lumber and timber products.....	1,435	39,131	1,854	937	641	187	35,512	De 40,842	Apr 31,042	45,533	45,204	226	94	9	87,841,015
36	Lumber, planing-mill products, not including planing mills connected with sawmills.....	65	1,341	72	92	46	20	1,102	De 1,213	Ja 970	1,245	1,238	2	5	—	2,746,400
37	Marble and stone work, monuments and tombstones.....	12	106	18	4	1	5	78	Aug 87	Ja 64	85	85	—	—	—	148,402
38	Mattresses and spring beds, not elsewhere specified.....	7	55	7	7	1	1	39	No 44	Mh 36	44	35	9	—	—	95,585
39	Mineral and carbonated waters.....	68	637	80	69	35	13	440	Jy 510	Fe 355	441	411	24	6	—	2,744,257
40	Oil and cake, cottonseed.....	49	2,800	2	200	115	20	2,454	De 3,319	Aug 1,496	3,252	3,142	10	100	—	12,317,339
41	Patent medicines and compounds.....	8	16	7	2	—	—	6	Fe 7	Aug 5	6	1	5	—	—	12,682
42	Pottery, earthen and stone ware.....	4	15	3	1	—	—	11	(9) 11	(9) 11	11	11	—	—	—	27,250
43	Printing and publishing, book and job.....	37	255	35	16	10	11	183	—	—	194	144	46	4	—	459,142
44	Job printing.....	34	251	31	16	10	11	183	No 195	Fe 175	194	144	46	4	—	455,842
45	Book publishing without printing.....	3	4	4	—	—	—	—	—	—	—	—	—	—	—	2,300
46	Printing and publishing, newspapers and periodicals.....	156	683	173	50	26	22	412	—	—	431	319	75	36	1	1,110,634
47	Printing and publishing.....	13	210	22	20	14	15	139	Oct 141	Mh 137	130	97	18	24	—	293,682
48	Printing, publishing, and job printing.....	136	467	148	27	12	7	273	De 289	Ja 261	292	222	57	12	1	786,777
49	Publishing without printing.....	7	6	3	3	—	—	—	—	—	—	—	—	—	—	825
50	Saddlery and harness.....	5	34	6	1	—	—	27	Ja 53	No 16	16	4	10	1	1	33,002
51	Shipbuilding, wooden, including boat building.....	9	308	6	20	29	5	248	Ja 596	Se 65	276	276	—	—	—	393,765
52	Turpentine and rosin.....	45	2,656	39	96	26	—	2,495	Aug 2,685	De 2,189	2,608	2,540	30	38	—	3,471,334
53	Upholstering materials, excelsior.....	3	39	6	2	—	—	31	My 37	Ja 22	37	33	—	—	—	37,968
54	Wood preserving.....	4	221	—	10	4	1	206	My 227	De 182	182	182	—	—	—	911,025
55	All other industries*.....	30	3,028	22	159	103	23	2,721	—	—	—	—	—	—	—	10,742,638

*All other industries embrace—

Agricultural implements.....	2	Clothing, men's.....	1	Flavoring extracts.....	1
Belting, leather.....	1	Coffins, burial cases, and undertakers' goods.....	2	Furniture.....	1
Cars, steam-railroad, not including operations of railroad companies.....	1	Cordage and twine.....	1	Knit goods.....	1
		Druggists' preparations.....	1	Millinery, trimmed hats and hat frames.....	1

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).

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

MANUFACTURES—MISSISSIPPI.

19

COMBINED AND SPECIFIED INDUSTRIES: 1919.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					Electric horsepower generated in establishments reporting.
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.			Rented. 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.	Dollars.							
5,242,807	2,684,012	51,255,716	2,084,155	221,169	4,377,213	83,682,626	2,993,245	107,746,987	101,069,116	200,814	170,891	13,096	2,657	181	13,686	21,185	1
5,720	678	13,465	600	199	1,642	34,269	822	65,097	30,006	5	140	5	71	224	8	4	2
15,512	6,527	48,987	3,300	2,062	70,083	1,886	177,677	105,728	211	472	248	6	15	301	10	11	3
2,100	6,472	215,637	3,273	23,360	7,062	163,014	13,111	680,164	510,039	472	501	12	12	2	2	12	4
45,677	19,575	624,388	1,200	3,724	509,287	6,782	1,050,191	513,122	1,340	1,340	602	3	22	15	10	13	5
33,211	36,451	218,577	3,800	20,751	7,018	1,400,805	49,572	2,180,341	738,961	1,702	1,680	15	12	301	10	13	6
55,745	14,418	364,947	160	10,055	110,570	175,222	925,222	633,430	1,702	1,702	1,680	15	12	301	10	13	7
900	2,822	16,880	515	152	35,298	604	75,163	39,361	27	27	501	187	1	12	2	12	8
27,826	16,012	90,825	5,521	4,158	1,805,970	28,615	2,248,099	353,484	501	418	408	187	1	12	2	12	9
26,900	10,688	160,561	2,513	1,370	5,105	606,791	19,617	882,132	255,724	418	408	187	1	12	2	12	10
31,142	6,983	111,178	46,358	900	10,079	409,547	21,381	796,920	365,992	207	207	203	203	203	203	203	11
30,512	8,098	93,806	270	1,480	451,937	8,461	621,312	163,914	210	172	172	172	172	172	172	172	12
12,300	63,273	9,007	50	1,181	81,314	110	172,160	90,745	172	534	205	79	160	160	160	160	13
46,411	32,771	172,564	4,508	1,388	63,677	365,961	9,080	933,042	557,398	425	205	31	48	99	61	16	14
28,411	21,321	140,117	1,010	58,413	336,716	6,923	757,782	414,143	425	205	31	48	99	61	16	16	15
18,000	11,450	32,447	4,508	5,261	29,248	2,757	175,260	143,255	100	10	10	31	48	99	61	16	16
2,700	18,042	18,042	4,508	486	13,802	1,231	40,556	25,523	48	48	10	31	48	99	61	16	17
259,809	224,958	5,648,985	15,333	3,853,513	205,343	10,225,791	6,166,905	4,433	1,557	4,433	1,557	2,876	2,876	2,876	2,876	2,876	18
17,095	21,857	12,850	1,965	4,051	470,760	2,821	620,137	146,556	49	49	443	25	177	49	20	20	19
62,463	20,293	108,333	2,403	7,260	23,969	670,704	31,896	1,211,067	505,467	615	443	25	177	49	20	20	20
25,370	13,432	43,546	2,370	5,228	206,775	7,001	454,491	179,752	36	36	23	13	164	31	24	24	21
37,093	15,411	64,787	2,403	4,890	18,741	403,929	20,932	756,576	325,715	609	420	25	164	31	24	24	22
11,470	5,453	87,828	4,050	1,725	151,720	1,611	462,238	309,007	34	34	6,030	6	903	617	25	25	23
163,505	43,166	1,537,147	400	4,780	4,780,340	187,667	8,066,769	3,092,662	6,030	6,030	6,030	6	903	617	25	25	24
86,890	36,568	284,818	150	4,800	159,357	2,612,391	55,654	3,026,674	958,626	2,316	588	455	1,728	720	26	26	25
14,045	7,068	48,678	150	3,391	14,847	1,879,611	17,167	2,001,663	191,555	1,634	450	455	1,728	720	26	26	26
32,184	24,450	58,357	2,225	9,531	1,417,567	5,081	1,083,572	260,024	473	473	30	65	378	378	28	28	27
99,986	38,803	589,743	150	4,830	29,309	801,689	48,447	1,785,590	935,433	1,240	405	148	687	88	29	29	28
11,900	6,001	132,566	300	6,542	133,433	12,446	361,706	218,827	245	245	40	205	5	30	30	30	29
35,320	16,490	199,851	150	1,920	6,136	323,701	17,106	606,844	326,034	593	315	98	180	83	31	31	30
52,766	16,402	257,326	2,610	10,601	314,552	18,895	754,019	300,572	402	402	50	50	302	302	32	32	31
22,535	16,293	99,945	100	3,420	16,174	37,254	166,717	411,344	207,373	228	167	150	61	120	31	31	32
89,631	25,609	371,546	2,039	61,042	219,950	348,935	1,515,223	946,338	6,298	6,298	5,759	150	380	120	31	31	33
2,507,943	1,133,671	30,995,202	2,486,895	46,092	2,457,096	26,060,008	385,514	87,508,229	132,508	132,508	122,591	8,275	1,090	373	14,860	35	35
231,433	78,758	811,333	20,192	6,677	93,280	3,473,730	14,677	5,933,133	2,444,717	6,003	5,205	200	518	48	36	36	36
6,778	8,408	50,297	1,821	2,822	1,775	190,324	4,063	380,642	194,355	114	10	104	104	37	37	37	37
10,750	845	27,801	240	2,083	2,350	127,013	1,748	207,039	78,278	120	120	120	120	38	38	38	38
159,380	62,226	268,736	905	15,703	102,144	1,653,940	55,559	3,333,437	1,623,929	1,148	502	42	604	50	30	30	39
502,996	212,964	1,663,938	15,241	5,082	448,343	32,012,771	828,575	39,202,188	5,460,842	20,537	18,750	550	1,176	1,467	40	40	40
4,200	600	2,552	660	305	11,728	29,499	17,685	29,499	17,685	40	40	5	182	43	43	43	41
1,200	3,850	14,103	11,409	6,311	7,908	1,780	1,780	1,780	1,780	187	187	5	182	43	43	43	42
36,159	18,064	172,587	10,499	11,409	6,300	226,137	7,597	654,894	421,160	187	187	5	182	43	43	43	42
36,159	18,064	172,587	3,604	2	35	35	35	6,825	6,790	187	187	5	182	43	43	43	45
101,836	51,938	341,665	10,733	22,670	18,239	292,207	25,084	1,347,777	1,030,426	511	162	349	1	46	46	46	46
55,857	28,855	108,411	5,882	7,126	89,302	7,106	478,225	384,817	136	136	5	131	1	48	48	48	47
47,379	23,083	233,254	1,010	16,488	11,113	205,538	17,078	852,227	628,711	375	157	218	1	48	48	48	48
1,600	0	8,617	300	425	15,722	547	17,325	16,898	16,898	20	20	2	18	2	50	50	49
2,460	0	8,617	1,280	425	15,722	547	17,325	16,898	16,898	20	20	2	18	2	50	50	50
66,733	50,294	359,597	731	896	393,356	24,806	1,028,361	610,199	635	635	437	11	187	1	51	51	51
131,001	31,979	1,574,063	51,003	776	148,968	1,276,579	13,822	5,547,813	4,257,412	78	20	58	330	100	178	54	52
3,600	18,335	18,335	776	232	21,142	3,715	66,383	41,526	330	330	330	330	330	100	178	54	53
24,429	5,931	195,525	600	5,467	104,083	3,364,031	148,746	8,659,991	5,147,214	6,588	1,865	4,010	261	452	2,759	55	54
245,500	393,225	3,641,327	600	5,467	104,083	3,364,031	148,746	8,659,991	5,147,214	6,588	1,865	4,010	261	452	2,759	55	55

Models and patterns, not including paper patterns.
Paper and wood pulp.
Pickles and sauces.
Saws.

1 Scales and balances.
1 Shipbuilding, steel.
1 Slaughtering.
1 Sugar, cane.

1 Tools, not elsewhere specified.
1 Vinegar and cider.
1 Wood distillation.
1 Wood, turned and carved.

¹ Same number reported for one or more months.

² None reported for one or more months.

³ Same number reported throughout the year.

MANUFACTURES—MISSISSIPPI.

TABLE 29.—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 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																
1	BILOXI.....	33	879	34	39	14	5	787	Oc 1,067	Je 211	1,079	408	668	1	2	Dollars.
2	COLUMBUS.....	27	652	25	40	27	11	549	Ja 632	Je 434	571	496	64	5	6	1,268,233
3	GREENVILLE.....	32	941	36	39	31	13	822	De 952	Mh 723	954	896	55	3	.....	1,312,319
4	HATTIESBURG.....	36	1,353	21	29	31	10	1,267	Ja 1,347	Au 1,189	1,241	1,223	11	2	.....	3,904,601
5	JACKSON.....	55	1,575	34	94	82	39	1,326	Oc 1,551	Je 1,094	1,493	1,393	56	38	6	3,100,518
																6,245,549
6	LAUREL.....	23	2,432	8	103	76	22	2,223	De 2,490	Fe 1,880	2,848	2,434	354	30	30	9,802,246
7	MERIDIAN.....	54	2,458	45	130	81	37	2,165	Mh 2,322	Au 1,995	2,192	1,854	259	10	69	6,687,067
8	NATCHEZ.....	22	1,291	20	48	26	17	1,180	De 1,313	Fe 1,048	1,317	1,113	204	.....	.....	2,133,787
9	VICKSBURG.....	34	1,610	25	70	42	18	1,455	No 1,544	Fe 1,345	1,549	1,425	120	4	.....	3,033,937

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

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

MANUFACTURES—MISSISSIPPI.

21

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.					Rent- ed. ²
											Steam engines (not turbines).	Steam-turbines.	Internal-combustion engines.	Water power. ¹		

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

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.									
77,877	19,738	382,401	49,111	5,142	22,927	1,039,104	95,167	1,941,629	807,358	986	811	-----	12	-----	163	12	1	1
81,034	43,990	300,797	1,584	7,186	35,172	1,372,849	47,009	2,150,568	730,710	1,776	1,430	-----	60	-----	286	-----	2	2
129,450	52,568	657,645	122,261	11,662	87,638	2,439,491	91,817	4,419,662	1,888,351	3,628	2,780	-----	25	2	821	62	3	3
73,686	53,731	1,038,018	83,737	8,615	136,515	1,948,652	116,407	4,533,382	2,468,423	4,781	2,775	-----	15	-----	1,991	600	4	4
240,959	170,627	1,093,716	6,009	68,842	102,279	8,094,632	190,147	11,401,869	3,117,090	5,763	4,917	-----	15	-----	831	579	5	5
257,895	149,638	2,166,819	60,850	7,397	470,285	3,251,692	94,766	8,182,357	4,835,901	10,258	9,213	375	45	-----	625	1,884	6	6
348,039	138,966	2,089,362	9,597	19,369	230,607	5,610,776	191,044	9,589,986	3,788,166	5,443	2,030	200	-----	-----	8,213	40	7	7
92,149	49,659	831,093	-----	6,590	27,290	1,510,525	62,681	2,717,187	1,143,981	2,277	2,058	-----	25	-----	194	923	8	8
183,983	83,149	1,600,280	4,808	7,689	84,288	1,595,684	147,545	4,336,392	2,593,163	4,063	3,037	-----	25	-----	991	822	9	9

¹ Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).



DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON

FOURTEENTH CENSUS OF THE UNITED STATES
MANUFACTURES: 1919

MISSOURI

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 oil, 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.

MISSOURI.

GENERAL STATISTICS.

General character of the state.—Missouri has a gross area of 69,420 square miles, of which 68,727 represent land surface. The inhabitants of the state in 1900 numbered 3,106,665; in 1910, 3,293,335; and in 1920, 3,404,055. In total population Missouri ranked ninth among the states in 1920. The number of inhabitants per square mile in 1910 was 47.9, the corresponding figure for 1920 being 49.5.

In 1920 there were 13 cities in the state—Cape Girardeau, Carthage, Columbia, Hannibal, Independence, Jefferson City, Joplin, Kansas City, Moberly, St. Joseph, St. Louis, Sedalia, and Springfield—having more than 10,000 inhabitants. The combined population of these 13 cities in that year was 1,354,925, which formed 39.8 per cent of the total population for Missouri. In 1919 these cities reported 75.6 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 value of products from 1914 to 1919, 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 large increase in "Rent and taxes."

Statistics for the state, by counties (Table 2).—Figures are not available for comparison of the totals for the 114 counties in 1919 with those for prior censuses. St. Louis, an independent city, is included in this table in order to show the complete statistics for the state. This city alone reported 55.3 per cent of the average number of wage earners in the state, and 54.7 per cent of the value of products.

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 31.

Average number of wage earners for selected industries (Table 5).—The industries covered by this table are those which employed 1,500 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 to 1919 all cities for which comparative figures are given show increases in value of products, due largely to the increased value of commodities at the later period.

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 for selected industries, similar data are given for males and females for all industries combined, and for each of the 13 cities shown in the table. 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, 88.4 per cent were in the 13 cities, while of the male wage earners, only 72.9 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 Missouri. In that year only 18.8 per cent of the wage earners were included in the group "48 and under," as against 46.6 per cent in 1919. In 1914 the "60" and "Over 60" groups constituted 23.9 per cent of the total wage earners, as compared with 9 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 34.6 per cent of the total number of

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.

wage earners. On the other hand, the establishments employing an average of more than 100 wage earners represented only 4.5 per cent of the total number of manufacturing establishments in the state, but reported 65.4 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. Although corporations owned but 32.6 per cent of the number of establishments in the state in 1919, they reported 89.4 per cent of the average number of wage earners and 92.9 per cent of the total value of products. During the five-year period 1914 to 1919 the average number of wage earners in cor-

porations increased 41,186, or 30.9 per cent, and the value of products, \$906,046,660, or 157.6 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 13 cities in 1919 represented 58.3 per cent of the total in the state. They reported in that year 76.7 per cent of the average number of wage earners and 75.6 per cent of the value of products. These proportions do not differ materially from those of 1914.

Principal industries in Kansas City, St. Joseph, and St. Louis, with per cent of total for state (Table 16).—This table presents the principal industries in each of the three cities in the state having 50,000 inhabitants or more in 1920, the figures being given for those which can be shown without 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 85,918 horsepower, or 22 per cent. This increase, however, is due to the gain of 95,840 horsepower, or 111 per cent, in rented power, since owned power decreased 9,922 horsepower, or 3.3 per cent, during the five-year period. Of the total horsepower in 1914, 77.9 per cent was owned power and 22.1 per cent rented. The corresponding proportions for 1919 were 61.8 per cent and 38.2 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. In 1919 six industries combined—brick and tile, terra-cotta, and fire-clay products; steam-railroad repair shops; cement; flour and grist mills; manufactured gas; and slaughtering and meat packing—consumed 54.1 per cent of the bituminous coal.

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.....	8,592	8,386	8,375	6,464	6,853	2.5	0.1	29.6	-5.7
Persons engaged.....	244,939	188,266	185,705	156,585	(?)	30.1	1.4	18.6	.....
Proprietors and firm members.....	7,670	7,698	8,226	6,299	(?)	-0.3	-6.4	30.6	.....
Salaried employees.....	42,226	28,386	24,486	17,119	12,474	48.8	15.9	43.0	37.2
Wage earners (average number).....	195,037	152,182	152,993	139,167	107,704	28.2	-0.5	14.9	23.6
Primary horsepower.....	477,393	391,385	340,467	247,861	189,117	22.0	15.0	37.4	31.1
Capital.....	\$938,760,773	\$522,548,083	\$444,343,135	\$379,308,827	\$223,781,088	79.7	17.6	17.1	69.5
Salaries and wages.....	275,560,003	126,494,933	109,836,698	85,646,364	60,008,556	117.8	15.2	28.2	42.7
Salaries.....	79,044,650	37,297,456	28,993,922	19,002,238	13,204,822	111.9	28.6	52.6	42.9
Wages.....	196,515,353	89,197,477	80,842,776	66,644,126	46,713,734	120.3	10.3	21.3	42.7
Paid for contract work.....	4,338,793	2,602,416	2,667,451	2,649,428	(?)	66.7	-2.4	0.7	.....
Rent and taxes.....	62,450,247	18,023,569	14,617,099	\$1,681,955	(?)	246.5	23.3	.....	.....
Cost of materials.....	1,056,457,164	388,714,869	354,411,151	252,258,417	184,189,030	171.8	9.7	40.0	37.0
Value of products.....	1,694,208,338	637,952,128	574,111,070	439,548,957	316,304,095	149.9	11.1	30.6	39.0
Value added by manufacture.....	537,751,174	249,237,269	219,699,919	187,290,540	132,115,065	115.8	13.4	17.3	41.8

¹A minus sign (-) denotes decrease.

²Figures not available.

³Exclusive of internal revenue.

⁴Value of products less cost of materials.

MANUFACTURES—MISSOURI.

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

5

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.....	8,592	195,037	\$196,515,353	\$82,450,247	\$1,059,457,164	\$1,504,208,338	\$537,751,174	477,303
Adair.....	43	482	346,237	41,364	2,536,047	3,343,447	807,400	750
Andrew.....	13	70	35,134	3,539	76,055	139,808	63,843	942
Atchison.....	11	34	23,836	16,581	109,792	278,215	108,423	278
Audrain.....	40	853	719,471	92,555	2,273,273	3,965,406	1,722,133	1,731
Barry.....	69	516	515,187	31,569	927,096	1,711,623	784,527	2,127
Barton.....	24	147	144,279	5,033	265,941	449,998	184,057	923
Bates.....	33	87	61,436	6,835	202,455	364,816	162,861	511
Benton.....	13	17	11,372	1,240	70,916	118,259	41,343	132
Bollinger.....	40	140	90,890	1,460	294,886	514,402	219,516	1,025
Boone.....	47	439	294,916	52,006	1,077,313	2,464,786	787,473	1,347
Buchanan.....	233	11,479	12,414,347	1,793,724	170,495,178	204,500,601	28,095,783	20,672
Butler.....	34	1,104	895,060	120,393	2,132,862	4,024,049	1,891,187	3,606
Caldwell.....	29	48	43,745	4,212	130,073	225,011	94,938	218
Callaway.....	24	252	218,302	16,881	783,222	1,218,801	435,669	744
Camden.....	7	9	3,280	255	55,768	69,096	13,328	97
Cape Girardeau.....	90	1,992	1,612,348	279,619	8,346,034	12,409,073	4,063,039	8,739
Carroll.....	35	67	84,010	5,961	387,061	544,793	167,132	479
Carter.....	15	410	487,657	11,398	1,117,713	1,649,198	531,485	2,941
Cass.....	33	120	119,025	6,323	418,612	649,677	231,065	1,220
Cedar.....	22	23	16,419	1,687	101,604	223,537	61,873	396
Chariton.....	46	75	60,617	13,197	272,703	439,238	166,475	768
Christian.....	38	85	30,885	4,105	596,060	725,575	128,909	765
Clark.....	14	60	48,774	4,200	439,341	567,793	164,452	202
Clay.....	53	1,080	1,107,204	137,496	8,014,364	10,085,508	2,671,204	3,626
Clinton.....	20	101	74,122	6,286	303,107	435,054	131,857	284
Cole.....	55	1,728	1,239,476	123,838	7,484,104	10,373,241	2,889,137	2,466
Cooper.....	41	230	153,569	45,885	831,853	1,234,572	402,719	1,095
Crawford.....	14	10	11,840	1,078	213,283	257,626	44,843	205
Dade.....	20	19	16,798	2,200	156,002	218,004	62,002	431
Dallas.....	11	16	13,780	595	113,273	143,898	30,025	246
Davies.....	16	51	38,373	4,579	323,585	422,839	99,254	167
De Kalb.....	15	9	6,023	1,020	53,141	80,540	33,399	254
Dent.....	21	105	259,152	11,087	945,980	1,298,380	352,400	889
Douglas.....	35	75	32,081	2,593	367,215	531,390	164,175	743
Dunklin.....	38	490	398,758	44,428	840,549	1,547,741	707,192	1,891
Franklin.....	59	1,172	812,302	188,474	6,328,765	8,119,558	1,799,793	2,908
Gasconade.....	23	267	161,082	14,021	2,465,650	2,758,413	352,703	804
Gentry.....	25	80	101,463	5,540	105,710	280,827	175,111	251
Greene.....	145	4,780	4,780,000	370,205	10,842,274	25,608,705	8,769,431	10,469
Grundy.....	23	358	439,299	6,036	1,164,693	1,667,072	502,379	562
Harrison.....	18	29	10,452	3,944	88,280	151,567	63,287	246
Henry.....	59	480	436,415	20,493	1,614,727	2,468,473	853,746	2,214
Hickory.....	6	7	4,060	223	150,002	188,242	29,240	154
Holt.....	17	30	25,600	3,409	202,302	806,681	604,319	73
Howard.....	20	81	71,119	12,977	893,593	1,136,285	242,782	484
Howell.....	41	102	65,366	10,406	1,415,242	1,657,469	242,218	741
Iron.....	58	241	190,244	4,892	189,064	585,650	305,686	1,816
Jackson.....	1,052	23,856	26,130,155	7,747,693	148,337,318	221,936,283	73,598,955	57,027
Jasper.....	254	3,450	3,171,071	708,491	20,917,267	30,969,559	10,082,252	12,071
Jefferson.....	44	3,244	3,723,531	564,290	7,902,953	13,807,347	5,904,394	17,474
Johnson.....	35	145	101,829	34,100	2,976,907	3,402,781	425,874	907
Knox.....	0	40	31,442	2,101	100,363	174,880	74,627	72
Laclede.....	28	75	44,583	2,749	351,331	481,613	130,282	541
Lafayette.....	50	155	130,880	38,380	1,960,656	2,305,532	404,876	1,272
Lawrence.....	53	210	152,730	52,010	3,808,623	4,371,941	563,318	1,730
Lewis.....	27	201	156,250	9,285	196,459	442,384	245,925	423
Lincoln.....	24	70	70,457	4,725	217,599	357,371	139,772	772
Linn.....	58	518	364,985	60,037	1,930,155	2,931,727	1,001,571	578
Livingston.....	30	278	198,245	17,722	1,495,878	2,013,535	614,657	1,169
McDonald.....	30	72	62,250	3,386	384,612	536,507	161,895	653
Macon.....	51	91	72,230	8,231	432,453	613,381	180,928	535
Madison.....	34	374	362,340	9,471	1,167,536	1,147,940	119,506	3,229
Marion.....	9	6	2,594	252	65,944	76,553	10,609	155
Mercer.....	85	3,847	4,306,149	351,942	12,077,067	21,394,577	9,318,610	17,038
Mercer.....	8	10	7,084	1,096	22,332	48,542	26,210	39
Miller.....	21	253	196,234	13,433	715,715	1,075,903	350,888	567
Mississippi.....	17	78	78,804	23,634	883,637	1,220,259	336,622	568
Moniteau.....	31	142	145,974	9,051	848,867	1,108,495	259,628	529
Monroe.....	21	39	30,365	2,631	76,241	160,843	85,602	284
Montgomery.....	30	173	140,023	15,583	798,746	1,171,071	372,925	1,440
Morgan.....	20	109	103,269	2,231	398,784	478,803	80,019	806
New Madrid.....	47	1,029	663,407	110,071	975,661	2,486,233	1,510,572	3,499
Newton.....	63	219	170,856	25,210	1,865,637	2,319,648	454,011	1,592
Nodaway.....	43	148	108,324	25,227	337,922	616,897	278,975	618
Oregon.....	18	15	10,111	1,196	92,838	131,151	38,313	320
Osage.....	28	68	32,631	4,832	416,299	569,681	153,382	725
Osage.....	11	6	2,084	310	37,392	67,928	30,536	203
Pemissot.....	28	723	527,472	54,447	1,099,729	2,245,994	1,146,265	2,589
Perry.....	47	97	64,966	6,411	638,304	893,241	254,937	1,017
Pettis.....	74	2,608	3,257,888	103,703	5,739,130	9,848,209	4,109,109	5,202

1 Loss.

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

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.					
Phelps.....	24	30	\$21,924	\$3,832	\$224,213	\$283,145	\$58,932	425
Pike.....	43	533	517,709	58,839	2,121,311	3,760,696	1,039,385	2,001
Platte.....	17	52	44,990	3,059	906,718	1,075,321	108,603	648
Polk.....	24	40	33,157	3,705	504,691	609,657	104,906	538
Pulaski.....	18	35	15,410	1,680	130,758	176,340	45,582	197
Putnam.....	19	27	19,949	3,094	94,674	162,716	68,042	135
Ralls.....	6	6	3,914	922	9,426	26,314	16,885	15
Randolph.....	36	1,460	1,636,040	85,806	3,790,111	6,342,315	2,552,201	2,276
Ray.....	30	77	64,118	8,889	358,766	487,799	131,693	378
Reynolds.....	77	466	390,261	17,994	332,775	1,375,073	1,042,898	2,461
Ripley.....	24	105	80,402	5,081	188,774	431,543	242,769	630
St. Charles.....	40	1,400	1,259,738	714,202	7,439,396	10,542,663	3,103,267	3,376
St. Clair.....	30	29	28,015	1,947	107,184	187,636	80,452	398
St. Francois.....	41	222	189,073	14,117	940,243	1,344,666	404,423	1,691
St. Louis.....	153	6,882	7,330,837	1,025,477	10,590,002	26,688,812	16,098,810	25,181
St. Louis city ¹	3,205	107,919	108,557,326	46,680,451	540,826,347	871,700,438	330,874,091	105,697
Ste. Genevieve.....	35	259	237,199	28,469	1,684,015	2,326,622	642,607	1,612
Saline.....	43	650	745,200	48,667	5,165,669	6,177,342	1,011,673	1,620
Schuyler.....	20	10	6,508	1,073	57,099	82,710	25,611	209
Scotland.....	11	61	47,934	1,360	61,128	129,083	67,955	129
Scott.....	31	539	380,631	45,560	4,109,528	5,140,012	1,030,484	1,069
Shannon.....	26	279	219,571	9,595	181,527	504,657	323,130	1,068
Shelby.....	17	27	25,838	2,426	103,432	180,545	77,113	273
Stoddard.....	58	505	385,111	13,204	2,008,657	2,859,633	850,976	2,554
Stone.....	42	285	96,388	5,940	311,057	596,846	285,789	961
Sullivan.....	20	13	11,671	1,716	58,880	90,880	41,000	138
Taney.....	16	26	23,733	1,152	59,678	120,494	60,816	391
Texas.....	50	57	41,504	2,145	416,474	573,548	157,074	971
Vernon.....	43	361	454,230	11,015	489,306	1,140,850	651,544	833
Warren.....	14	27	28,297	1,204	48,385	107,339	58,954	199
Washington.....	20	90	77,761	13,045	793,201	1,345,016	552,715	573
Wayne.....	40	62	55,028	3,394	296,993	426,173	129,180	714
Webster.....	65	211	71,443	4,331	550,399	720,179	169,810	787
Worth.....	12	12	7,930	1,554	37,357	71,872	34,515	64
Wright.....	28	127	44,684	13,263	1,298,819	1,499,276	200,457	561

¹ An independent city, included to complete the statistics for the state.

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.....	8,592	195,037	100.0	\$1,594,208	100.0	\$537,751	100.0	Soap.....	7	652	0.3	\$8,556	0.5	\$2,888	0.5
Slaughtering and meat packing.....	49	8,290	4.3	246,610	15.5	18,601	3.5	Brass and bronze products.....	21	608	0.3	8,208	0.5	2,350	0.4
Flour-mill and gristmill products.....	690	3,015	1.5	113,207	7.1	15,113	2.8	Copper, tin, and sheet-iron work.....	180	1,208	0.6	8,146	0.5	3,594	0.7
Boots and shoes, not including rubber boots and shoes.....	54	17,458	9.0	109,193	6.9	32,268	6.0	Wirework, including wire rope and cable, not elsewhere specified.....	24	1,010	0.5	7,790	0.5	2,972	0.6
Automobiles.....	8	1,865	1.0	62,625	3.9	12,500	2.3	Millinery and lace goods, not elsewhere specified.....	42	1,809	0.9	7,434	0.5	3,288	0.6
Foundry and machine-shop products.....	301	9,530	4.9	49,471	3.1	29,480	5.5	Boxes, wooden packing, except cigar boxes.....	29	1,827	0.9	7,312	0.5	3,136	0.6
Cars, steam-railroad, not including operations of railroad companies.....	8	4,307	2.2	46,854	2.9	15,065	2.8	Explosives.....	5	566	0.3	7,172	0.4	3,687	0.7
Tobacco, chewing and smoking, and snuff.....	11	2,752	1.4	44,922	2.8	19,421	3.6	Glass.....	4	2,034	1.1	6,927	0.4	4,367	0.8
Bread and other bakery products.....	975	6,156	3.2	43,839	2.7	17,483	3.2	Ice, manufactured.....	129	1,174	0.6	6,505	0.4	4,397	0.8
Bags, other than paper, not including bags made in textile mills.....	10	1,752	0.9	38,021	2.4	5,301	1.0	Tinware, not elsewhere specified.....	10	1,516	0.8	6,124	0.4	2,426	0.5
Clothing, men's.....	112	6,823	3.5	35,830	2.2	13,663	2.5	Awning, tents, and sails.....	23	771	0.4	5,824	0.4	2,038	0.4
Cars and general shop construction and repairs by steam-railroad companies.....	45	13,471	6.9	33,021	2.1	20,294	3.8	Structural ironwork, not made in steel works or rolling mills.....	35	1,063	0.5	5,544	0.3	2,597	0.5
Coffee, roasting and grinding.....	40	814	0.4	30,070	1.9	7,012	1.3	Stamped ware, not elsewhere specified.....	7	662	0.3	5,427	0.3	2,454	0.5
Printing and publishing, newspapers and periodicals.....	774	4,183	2.2	30,012	1.9	18,152	3.4	Automobile repairing.....	417	1,283	0.7	5,212	0.3	3,135	0.6
Boot and shoe cut stock.....	7	1,593	0.8	28,696	1.8	2,221	0.4	Cooperage.....	30	677	0.3	5,161	0.4	1,908	0.4
Printing and publishing, book and job.....	460	5,866	3.0	25,880	1.6	16,642	3.1	Druggists' preparations.....	36	646	0.3	4,832	0.3	2,242	0.4
Petroleum, refining.....	4	930	0.5	24,611	1.5	3,495	0.6	Pickles, preserves, and sauces.....	11	346	0.2	4,818	0.3	798	0.1
Liquors, malt.....	20	2,930	1.5	24,366	1.5	20,642	3.8	Boot and shoe findings.....	12	484	0.2	4,576	0.3	1,170	0.2
Confectionery and ice cream.....	220	3,669	1.9	23,498	1.5	10,570	2.0	Carriages and wagons, including repairs.....	113	885	0.5	4,446	0.3	1,982	0.4
Food preparations, not elsewhere specified.....	87	1,454	0.7	23,463	1.5	5,256	1.0	Oleomargarine and other butter substitutes.....	4	197	0.1	4,415	0.3	728	0.1
Butter.....	66	686	0.4	22,148	1.4	2,112	0.4	Trunks and valises.....	20	877	0.4	4,279	0.3	1,882	0.3
Electrical machinery, apparatus, and supplies.....	35	6,367	3.3	22,008	1.4	13,845	2.6	Oil, not elsewhere specified.....	5	99	0.1	4,175	0.3	1,230	0.2
Clothing, women's.....	116	3,308	1.7	18,434	1.2	6,940	1.3	Engines, steam, gas, and water.....	10	782	0.4	4,166	0.3	2,665	0.5
Furniture.....	86	3,373	1.7	16,155	1.0	7,831	1.5	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	7	621	0.3	3,865	0.2	1,387	0.3
Stoves and hot-air furnaces.....	19	2,462	1.3	15,340	1.0	9,274	1.7	Marble and stone work.....	154	840	0.4	3,803	0.2	2,080	0.4
Patent medicines and compounds.....	142	1,040	0.5	14,591	0.9	9,400	1.7	Leather, tanned, curried, and finished.....	7	265	0.1	3,770	0.2	824	0.2
Paints.....	30	898	0.5	14,531	0.9	4,813	0.9	Mineral and soda waters.....	178	476	0.2	3,598	0.2	2,056	0.4
Lumber and timber products.....	557	5,283	2.7	14,020	0.9	9,101	1.7	Poultry, killing and dressing, not done in slaughtering and meat-packing establishments.....	6	142	0.1	3,308	0.2	359	0.1
Chemicals.....	22	1,253	0.6	13,538	0.8	5,821	1.1	Coffins, burial cases, and undertakers' goods.....	16	608	0.3	3,253	0.2	1,469	0.3
Iron and steel, steel works and rolling mills.....	5	2,647	1.4	12,537	0.8	6,876	1.3	Bookbinding and blank-book making.....	39	977	0.5	3,195	0.2	1,863	0.3
Lumber, planing-mill products, not including planing mills connected with sawmills.....	111	2,895	1.5	12,318	0.8	5,523	1.0	Furnishing goods, men's.....	12	374	0.2	2,893	0.2	1,162	0.2
Cement.....	5	1,788	0.9	11,738	0.7	6,168	1.1	Tobacco, cigars.....	279	932	0.5	2,830	0.2	1,541	0.3
Shirts.....	19	2,715	1.4	11,705	0.7	4,440	0.8	Cars and general shop construction and repairs by electric-railroad companies.....	8	1,162	0.6	2,719	0.2	1,485	0.3
Brick and tile, terra-cotta, and fire-clay products.....	65	4,469	2.3	11,456	0.7	7,538	1.4	Steam fittings and steam and hot-water heating apparatus.....	6	622	0.3	2,597	0.2	1,380	0.3
Gas, illuminating and heating.....	26	1,318	0.7	11,113	0.7	8,117	1.5	Hats, straw.....	10	384	0.2	2,464	0.2	1,245	0.2
Saddlery and harness.....	88	1,215	0.6	9,450	0.6	3,112	0.6	Mattresses and spring beds, not elsewhere specified.....	28	348	0.2	2,467	0.2	1,066	0.2
Automobile bodies and parts.....	78	1,376	0.7	9,315	0.6	4,496	0.8	Lime.....	16	736	0.4	2,090	0.1	1,208	0.2
Boxes, paper and other, not elsewhere specified.....	41	2,369	1.2	8,857	0.6	3,901	0.7	Varnishes.....	7	93	0.1	2,027	0.1	673	0.1
								All other industries.....	1,259	22,962	11.8	128,791	8.1	57,553	10.7

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 10 having products in excess of some for which figures are shown in the table. These industries are as follows: "Babbitt and type metal"; "cars, electric-railroad, not including operations of railroad companies"; "chewing gum"; "coal-tar products"; "cordials and flavoring sirups"; "cotton goods"; "iron and steel, blast furnaces"; "jute goods"; "smelting, lead"; and "stationery goods, not elsewhere specified."

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	244,939	186,828	58,111	76.3	23.7	Clerks and other subordinate salaried employees.....	1919	30,695	20,722	9,973	67.5	32.5
	1914	188,266	150,451	37,815	79.9	20.1		1914	21,275	16,483	4,792	77.5	22.5
	1909	185,705	150,750	34,955	81.2	18.8		1909	17,802	14,061	3,831	78.6	21.4
Proprietors and officials.....	1919	19,207	18,471	736	96.2	3.8	Wage earners (average number).....	1919	195,037	147,635	47,402	75.7	24.3
	1914	14,809	14,310	499	96.8	3.2		1914	152,182	119,628	32,554	78.0	21.4
	1909	14,820	14,423	397	97.3	2.7		1909	152,993	122,266	30,727	79.9	20.1
Proprietors and firm members.....	1919	7,676	7,428	248	96.8	3.2	16 years of age and over.....	1919	192,886	146,317	46,569	75.9	24.1
	1914	7,698	7,426	272	96.5	3.5		1914	150,390	118,650	31,740	78.9	21.1
	1909	8,226	7,989	237	97.1	2.9		1909	149,175	119,980	29,195	80.4	19.6
Salaried officers of corporations.....	1919	4,282	4,083	199	95.4	4.6	Under 16 years of age.....	1919	2,151	1,318	833	61.3	38.7
	1914	3,328	3,209	119	96.4	3.6		1914	1,702	978	814	54.6	45.4
	1909	3,010	2,924	86	97.1	2.9		1909	3,818	2,286	1,532	59.9	40.1
Superintendents and managers.....	1919	7,249	6,960	289	96.0	4.0							
	1914	3,783	3,705	78	97.9	2.1							
	1909	3,584	3,510	74	97.9	2.1							

MANUFACTURES—MISSOURI.

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 (average num- ber).	PER CENT OF TOTAL.			INDUSTRY.	Cen- sus year.	Wage earners (average 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	195,037	75.0	23.9	1.1	Foundry and machine-shop products ³	1919	9,705	98.5	1.1	0.4
	1914	152,182	79.0	19.9	1.1		1914	5,602	99.6	0.1	0.3
	1909	152,993	78.4	19.1	2.5	Furniture.....	1919	3,373	91.4	7.9	0.7
Automobiles.....	1919	1,865	97.2	2.8	.....		1914	3,209	97.1	1.9	0.9
	1914	327	98.8	1.2	.....	Glass.....	1919	2,034	92.2	7.8	.....
Bags, other than paper, not including bags made in textile mills. ¹	1919	1,752	30.9	67.1	2.0		1914	2,248	98.3	1.4	0.3
Boot and shoe cut stock ¹	1919	1,593	69.8	29.3	0.9	Iron and steel, steel works and rolling mills.	1919	2,647	95.9	3.3	0.8
Boots and shoes, not including rubber boots and shoes.	1919	17,458	56.5	42.3	1.2		1914	1,237	99.9	.....	0.1
	1914	13,169	61.2	37.4	1.4	Liquors, malt.....	1919	2,930	98.0	2.0	.....
Boxes, paper and other, not elsewhere specified.	1919	2,309	38.5	58.9	2.6		1914	5,947	95.0	4.9	0.1
	1914	1,092	29.0	63.0	8.0	Lumber and timber products.....	1919	5,283	99.0	0.7	0.3
Boxes, wooden packing, except cigar boxes.	1919	1,827	85.7	12.5	1.8		1914	6,007	98.4	0.5	1.2
	1914	1,051	91.4	1.6	6.9	Lumber, planing-mill products, not includ- ing planing mills connected with saw- mills.	1919	2,895	94.8	3.4	1.8
Bread and other bakery products.....	1919	6,156	61.3	37.3	1.4		1914	2,039	98.3	0.7	1.0
	1914	5,269	65.5	33.2	1.3	Millinery and lace goods, not elsewhere specified.	1919	1,809	12.6	85.6	1.8
Brick and tile, terra-cotta, and fire-clay products.	1919	4,469	99.6	0.3	0.1		1914	908	10.5	88.1	1.4
	1914	5,188	99.3	0.2	0.5	Printing and publishing, book and job.....	1919	5,866	67.0	30.7	2.3
Cars and general shop construction and repairs by steam-railroad companies.	1919	13,471	99.4	0.1	0.5		1914	5,123	72.9	25.0	2.0
	1914	9,721	99.9	0.1	.....	Printing and publishing, newspapers and periodicals.	1919	4,183	77.5	17.2	5.3
Cars, steam-railroad, not including opera- tions of railroad companies. ¹	1919	4,307	99.4	0.6	.....		1914	4,279	80.8	18.0	1.2
Cement ¹	1919	1,788	96.5	3.4	0.1	Shirts.....	1919	2,715	6.2	91.5	2.4
Clothing, men's.....	1919	6,823	19.2	80.2	0.7		1914	2,547	8.9	89.4	1.7
	1914	5,593	28.8	70.1	1.1	Slaughtering and meat packing.....	1919	8,290	92.2	7.7	0.1
Clothing, women's.....	1919	3,308	18.3	80.8	0.9		1914	5,152	96.0	3.9	0.1
	1914	2,355	20.6	77.1	2.3	Stoves and hot-air furnaces.....	1919	2,462	99.1	0.6	0.2
Confectionery and ice cream ²	1919	3,669	48.0	51.3	0.7		1914	1,714	99.8	0.2	0.1
	1914	2,854	44.4	54.6	1.1	Tinware, not elsewhere specified.....	1919	1,516	66.6	32.2	1.3
Electrical machinery, apparatus, and sup- plies.	1919	6,367	69.9	29.0	1.1		1914	843	74.8	22.2	3.0
	1914	2,560	76.2	22.6	1.2	Tobacco, chewing and smoking, and snuff.	1919	2,752	48.5	49.5	2.0
Flour-mill and gristmill products.....	1919	3,015	96.1	3.8	0.1		1914	2,871	60.6	36.6	2.7
	1914	2,096	99.1	0.8	0.1	All other industries.....	1919	56,340	78.0	20.5	1.5
							1914	51,181	83.3	15.5	1.2

¹ Not shown separately in 1914.² Includes "chewing gum" in 1914.³ Includes "iron and steel, tempering and welding" and "machine tools."

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
Cape Girardeau.....	1,427	1,259	.....	1,018	1,040	.....	393	212	.....	16	7	.....	\$3,586,593	\$3,888,376	.....
Carthage.....	515	.....	.....	358	.....	.....	136	.....	.....	21	.....	.....	6,627,782	.....	.....
Columbia.....	379	479	.....	250	352	.....	128	126	.....	1	1	.....	2,232,207	1,289,702	.....
Hannibal.....	2,800	2,366	2,445	2,245	1,877	1,808	529	486	542	26	3	95	14,026,833	6,214,645	\$6,195,129
Independence.....	283	.....	.....	254	.....	.....	22	.....	.....	7	.....	.....	5,344,137	.....	.....
Jefferson City.....	1,713	1,401	651	1,070	738	450	609	606	171	34	57	30	10,188,406	8,086,920	5,445,518
Joplin.....	1,810	1,156	830	1,306	964	659	500	185	168	4	7	3	14,219,935	5,950,150	4,135,925
Kansas City.....	22,137	16,252	14,643	15,798	12,276	10,841	6,117	3,900	3,562	222	76	240	192,815,052	60,953,411	54,704,510
Moberly.....	570	463	999	348	307	860	187	147	118	35	9	21	4,496,894	2,136,330	1,933,971
St. Joseph.....	5,943	4,914	5,390	3,817	3,108	3,268	2,103	1,798	2,035	23	8	87	50,697,198	17,067,642	17,625,682
St. Louis.....	107,919	85,058	87,371	76,998	63,697	65,802	29,557	20,159	19,105	1,364	1,202	2,464	871,700,438	360,479,868	328,495,313
Sedalia.....	1,163	903	935	946	777	768	206	120	163	11	6	4	5,561,865	2,921,688	2,333,072
Springfield.....	2,910	2,009	2,131	2,270	1,886	2,020	630	117	98	10	6	13	18,812,549	6,192,954	5,382,098

MANUFACTURES—MISSOURI.

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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.....	184,513	151,203	<i>141,268</i>	88.0	96.4	86.4	July.....	194,709	156,203	150,969	92.8	99.6	92.3
February.....	182,796	151,799	145,022	87.2	96.7	88.7	August.....	202,609	155,366	157,351	96.0	99.0	96.2
March.....	<i>182,239</i>	155,240	148,776	86.9	98.9	91.0	September.....	206,394	154,431	163,514	98.4	98.4	100.0
April.....	182,885	156,968	147,979	87.2	100.0	90.5	October.....	209,704	152,048	161,110	100.0	96.9	98.5
May.....	187,384	155,556	148,053	89.4	99.1	90.5	November.....	207,586	141,558	161,540	99.0	90.2	98.8
June.....	190,266	156,296	150,028	90.7	99.6	91.8	December.....	209,369	<i>139,366</i>	160,294	99.8	88.8	98.0

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.....	105,037	184,513	182,796	<i>182,239</i>	182,885	187,384	190,266	194,709	202,609	206,394	209,704	207,586	209,369	86.9
Males.....	147,035	139,556	<i>137,933</i>	138,043	138,790	142,567	144,090	148,933	152,087	155,850	158,121	159,238	157,600	87.2
Females.....	47,402	44,957	44,863	44,196	<i>44,089</i>	44,817	45,276	45,776	49,622	50,538	51,583	51,348	51,759	85.2
Automobiles.....	1,865	<i>1,663</i>	1,690	1,749	1,787	1,837	1,920	1,921	1,913	1,910	1,977	1,995	2,012	82.7
Bags, other than paper, not including bags made in textile mills.....	1,752	1,611	1,590	<i>1,510</i>	1,601	1,724	1,782	1,809	1,849	1,840	1,904	1,935	1,899	78.0
Boot and shoe cut stock.....	1,593	<i>1,308</i>	1,336	1,520	1,573	<i>1,608</i>	1,640	1,565	1,541	1,645	1,808	1,850	1,727	70.4
Boots and shoes, not including rubber boots and shoes.....	17,458	16,315	<i>16,200</i>	16,452	16,964	17,259	17,721	17,859	17,945	17,829	18,055	18,340	18,467	88.2
Boxes, paper and other, not elsewhere specified.....	2,369	<i>2,169</i>	2,195	2,232	2,216	2,309	2,340	2,417	2,419	2,413	2,503	2,619	2,596	82.8
Boxes, wooden packing, except cigar boxes.....	1,827	<i>1,871</i>	1,744	1,821	1,803	1,903	<i>1,717</i>	1,827	1,890	1,724	1,784	1,903	1,837	87.1
Bread and other bakery products.....	6,156	<i>6,700</i>	5,705	5,824	6,039	5,952	5,804	5,941	6,147	6,320	6,740	6,741	6,839	83.3
Brick and tile, terra-cotta, and fire-clay products.....	4,460	<i>3,458</i>	3,534	3,623	4,172	4,064	4,764	4,865	4,962	5,026	5,292	4,781	4,503	65.2
Cars and general shop construction and repairs by steam-railroad companies.....	13,471	13,488	13,389	13,421	<i>12,942</i>	13,015	13,016	13,115	13,270	13,550	13,917	<i>14,294</i>	14,235	90.5
Cars, steam-railroad, not including operations of railroad companies.....	4,307	4,572	4,648	<i>4,770</i>	4,063	4,635	4,123	4,046	4,601	4,404	4,450	<i>2,790</i>	3,952	58.5
Cement.....	1,788	1,744	1,709	1,650	1,753	1,783	1,791	1,855	1,892	1,837	1,918	1,886	<i>1,688</i>	85.4
Clothing, men's.....	6,823	6,529	6,205	5,974	<i>5,815</i>	6,084	6,429	6,780	7,017	7,378	7,682	7,874	8,019	72.5
Clothing, women's.....	3,308	<i>2,880</i>	3,103	3,310	3,310	3,243	3,251	3,401	3,545	3,529	3,447	3,310	3,307	81.2
Confectionery and ice cream.....	3,669	<i>5,598</i>	3,428	3,432	3,402	3,414	3,412	3,471	3,711	3,966	4,138	4,215	4,071	70.9
Electrical machinery, apparatus, and supplies.....	6,307	5,807	<i>5,357</i>	5,464	5,545	5,759	6,184	6,493	6,779	6,720	7,182	7,360	7,694	69.6
Flour-mill and gristmill products.....	3,015	2,909	2,783	2,775	2,765	2,752	<i>2,782</i>	2,845	3,334	3,588	3,292	3,210	3,210	76.0
Foundry and machine-shop products.....	9,530	8,650	<i>8,317</i>	8,332	8,413	8,423	8,720	9,858	10,012	10,663	10,866	11,213	10,893	74.2
Furniture.....	3,373	<i>5,120</i>	3,142	3,228	3,239	3,197	3,352	3,400	3,531	3,507	3,508	3,532	3,600	86.7
Glass.....	2,034	2,025	2,020	<i>2,289</i>	2,243	2,162	2,148	1,692	<i>1,693</i>	1,850	1,972	2,191	2,134	72.3
Iron and steel, steel works and rolling mills.....	2,647	3,250	3,253	3,213	2,531	2,459	2,447	2,227	2,605	2,581	2,536	<i>2,176</i>	2,486	66.9
Liquors, malt.....	2,030	2,832	2,730	2,604	3,040	3,161	3,283	3,320	3,481	2,971	2,713	<i>2,532</i>	2,393	67.0
Lumber and timber products.....	5,283	<i>4,119</i>	4,157	4,322	4,398	4,537	4,676	5,219	5,590	6,248	6,009	6,069	6,882	60.0
Lumber, planing-mill products, not including planing mills connected with sawmills.....	2,895	<i>2,512</i>	2,517	2,623	2,758	2,866	2,997	3,054	3,045	3,093	3,105	3,115	3,055	80.6
Millinery and lace goods, not elsewhere specified.....	1,809	1,717	<i>1,986</i>	1,924	1,853	1,724	<i>1,679</i>	1,710	1,933	1,809	1,742	1,777	1,894	79.5
Printing and publishing, book and job.....	5,896	<i>5,610</i>	5,743	5,759	5,761	5,786	5,830	5,771	5,848	5,821	5,975	6,187	6,401	86.1
Printing and publishing, newspapers and periodicals.....	4,183	3,803	3,956	4,053	4,155	4,164	4,224	4,191	4,107	4,248	4,348	4,375	<i>4,417</i>	87.6
Shirts.....	2,715	2,071	2,586	2,531	<i>2,606</i>	2,543	2,653	2,720	2,759	2,771	2,847	2,894	3,099	80.9
Slaughtering and meat packing.....	8,290	9,805	9,012	8,415	7,802	7,909	8,170	8,063	8,205	7,981	<i>7,654</i>	7,875	8,589	78.1
Stoves and hot-air furnaces.....	2,462	<i>2,035</i>	2,149	2,176	2,250	2,340	2,406	2,448	2,573	2,696	2,778	2,852	2,841	71.4
Tinware, not elsewhere specified.....	1,516	1,602	1,511	1,518	1,438	1,485	<i>1,394</i>	1,419	1,505	1,505	1,461	1,634	1,760	79.2
Tobacco, chewing and smoking, and snuff.....	2,752	<i>3,292</i>	3,119	<i>2,391</i>	2,512	2,574	2,534	2,414	2,607	2,782	2,968	2,941	2,890	72.6
All other industries.....	50,515	52,004	51,703	<i>51,024</i>	52,206	54,113	55,177	56,333	60,260	62,128	62,473	60,720	60,039	81.7
Industries showing large proportion of females.														
Boot and shoe cut stock.....	470	406	<i>370</i>	448	474	483	478	499	475	492	528	551	466	67.2
Boots and shoes, not including rubber boots and shoes.....	7,481	7,002	<i>6,952</i>	6,994	7,224	7,375	7,591	7,675	7,755	7,687	7,668	7,904	7,945	87.5
Boxes, paper and other, not elsewhere specified.....	1,447	<i>1,803</i>	1,363	1,390	1,374	1,430	1,438	1,454	1,447	1,458	1,507	1,610	1,590	80.9
Bread and other bakery products.....	2,354	<i>2,127</i>	2,105	2,204	2,274	2,202	2,154	2,260	2,345	2,411	2,741	2,678	2,657	77.6
Clothing, men's.....	5,569	5,305	5,039	4,734	<i>4,632</i>	4,854	5,171	5,401	5,600	5,911	6,291	6,522	6,648	69.7
Clothing, women's.....	2,700	<i>2,342</i>	2,578	2,704	2,730	2,666	2,654	2,773	2,871	2,890	2,797	2,704	2,712	81.6
Confectionery and ice cream.....	1,902	1,794	1,820	1,818	1,741	1,705	1,664	1,680	1,820	1,954	2,205	2,365	2,270	70.2
Electrical machinery, apparatus, and supplies.....	1,887	1,783	1,674	1,725	<i>1,670</i>	1,705	1,871	1,933	2,030	2,023	2,023	2,008	2,139	78.1
Printing and publishing, book and job.....	1,823	<i>1,739</i>	1,853	1,831	1,800	1,800	1,825	1,770	1,741	1,744	1,819	1,942	2,015	86.2
Printing and publishing, newspapers and periodicals.....	739	732	727	732	735	739	737	736	735	744	747	785	749	94.8
Shirts.....	2,547	2,505	2,425	2,366	<i>2,347</i>	2,389	2,487	2,544	2,580	2,595	2,673	2,720	2,933	80.6
Tobacco, chewing and smoking, and snuff.....	1,408	1,699	1,612	1,258	1,318	1,301	1,279	<i>1,190</i>	1,325	1,413	1,514	1,504	1,483	70.0

MANUFACTURES—MISSOURI.

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

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

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.	
Total for cities.....	149,569	141,176	140,583	140,584	141,404	144,555	147,190	149,584	153,888	156,457	159,098	159,277	161,032	87.3
Males.....	107,689	100,920	100,214	100,682	101,483	104,238	106,609	108,828	111,782	113,606	114,997	113,815	115,094	87.1
Females.....	41,880	40,256	40,369	39,902	39,921	40,317	40,581	40,756	42,106	42,851	44,101	45,462	45,938	86.9
CAPE GIRARDEAU.....	1,427	1,225	1,245	1,279	1,322	1,345	1,459	1,477	1,581	1,571	1,571	1,496	1,553	77.5
Males.....	1,033	840	875	909	949	963	1,072	1,081	1,180	1,169	1,154	1,080	1,115	71.9
Females.....	394	376	370	370	373	382	387	396	401	402	417	416	438	84.5
CARTHAGE.....	515	494	512	511	503	499	525	503	514	514	548	517	540	90.1
Males.....	379	355	372	372	370	369	390	379	387	382	403	372	397	88.1
Females.....	136	139	140	139	133	130	135	124	127	132	145	145	143	85.5
COLUMBIA.....	379	377	366	345	345	357	369	382	390	393	387	416	421	81.9
Males.....	251	257	243	228	234	234	255	252	252	260	256	265	273	83.5
Females.....	128	120	123	117	111	123	114	127	138	133	131	151	148	73.5
HANNIBAL.....	2,800	2,811	2,764	2,757	2,786	2,781	2,811	2,795	2,773	2,763	2,844	2,892	2,884	94.2
Males.....	2,260	2,258	2,210	2,199	2,183	2,224	2,254	2,258	2,259	2,262	2,330	2,345	2,338	93.1
Females.....	540	553	554	558	542	557	557	537	514	501	514	547	546	89.8
INDEPENDENCE.....	253	267	267	266	266	278	288	311	333	295	281	275	269	79.9
Males.....	250	244	244	243	243	255	263	287	307	272	256	250	244	79.2
Females.....	24	23	23	23	23	23	25	24	26	23	25	25	25	88.5
JEFFERSON CITY.....	1,713	1,618	1,664	1,618	1,665	1,712	1,754	1,755	1,782	1,764	1,764	1,824	1,804	83.2
Males.....	1,066	960	1,014	1,021	1,051	1,084	1,127	1,128	1,140	1,138	1,155	1,172	1,162	81.9
Females.....	617	558	650	597	614	628	627	627	642	626	641	652	642	84.4
JOPLIN.....	1,810	1,610	1,682	1,609	1,640	1,644	1,729	1,843	1,960	2,018	2,003	2,018	2,084	76.6
Males.....	1,309	1,172	1,087	1,114	1,172	1,189	1,263	1,370	1,460	1,498	1,471	1,469	1,433	73.2
Females.....	501	438	485	495	468	455	466	473	500	520	532	549	631	69.4
KANSAS CITY.....	22,137	20,317	20,855	20,595	20,979	21,322	21,844	22,111	22,861	23,201	23,923	24,154	24,082	83.9
Males.....	15,958	14,458	14,815	14,721	15,101	15,525	16,052	16,129	16,666	16,903	17,214	17,240	17,172	83.0
Females.....	6,179	5,859	5,940	5,874	5,878	5,797	5,792	5,982	6,195	6,298	6,709	6,914	6,910	83.8
MOBERLY.....	570	488	438	499	534	553	607	650	644	636	611	595	585	67.4
Males.....	379	340	306	346	356	369	423	423	416	419	409	387	382	72.3
Females.....	191	148	132	153	178	188	208	227	228	217	202	208	203	57.9
St. JOSEPH.....	5,943	5,379	5,441	5,481	5,592	5,652	5,705	5,807	6,344	6,615	6,572	6,409	6,319	81.3
Males.....	3,835	3,405	3,587	3,442	3,601	3,702	3,740	3,817	4,149	4,333	4,345	4,120	3,979	78.0
Females.....	2,108	1,974	2,054	2,039	1,991	1,950	1,965	1,990	2,195	2,282	2,227	2,289	2,340	83.3
St. LOUIS.....	107,919	103,116	102,551	101,948	102,020	104,413	105,998	107,764	110,440	112,310	114,206	114,223	116,033	87.9
Males.....	77,697	73,689	73,142	73,021	73,086	75,057	76,503	78,410	80,241	81,631	82,693	81,719	83,172	87.8
Females.....	30,222	29,427	29,409	28,927	28,934	29,356	29,495	29,354	30,205	30,679	31,513	32,504	32,861	88.0
SEDALIA.....	1,163	1,053	1,041	1,035	1,060	1,075	1,149	1,190	1,232	1,262	1,277	1,285	1,287	79.9
Males.....	957	891	891	897	920	936	972	978	1,002	998	995	999	1,005	88.7
Females.....	206	162	150	138	140	139	177	212	230	264	282	286	282	46.6
SPRINGFIELD.....	2,910	2,521	2,557	2,641	2,753	2,924	2,952	2,996	3,028	3,115	3,079	3,163	3,191	79.0
Males.....	2,276	2,042	2,118	2,169	2,271	2,335	2,319	2,313	2,323	2,341	2,316	2,397	2,422	84.3
Females.....	634	479	439	472	536	589	633	683	705	774	763	766	769	56.7

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	195,037	18,974	7,999	64,117	39,600	31,903	15,257	13,184	4,303
	1914	152,182	(1)	(2)	28,576	19,252	47,528	20,480	29,786	6,580
	1909	152,993	(1)	(2)	28,276	10,671	36,711	28,934	46,446	6,955
Automobiles.....	1919	1,865	852		572	159	282			
	1914	327				144	183			
Bags, other than paper, not including bags made in textile mills ¹	1919	1,752			12	1,728	12			
Boot and shoe cut stock ²	1919	1,593			1,465	96	32			
Boots and shoes, not including rubber boots and shoes.....	1919	17,458	3,274	34	6,443	4,216	3,195	296		
	1914	13,169	(1)	(2)	110	819	5,783	6,063	394	
Boxes, paper and other, not elsewhere specified.....	1919	2,369	12	29	700	1,120	56	417	35	
	1914	1,092	(2)	(2)	150	145	677	114	6	
Boxes, wooden packing, except cigar boxes.....	1919	1,827	22	1	18	793	419	468	106	
	1914	1,051	(2)	(2)	120	462	44	250	175	
Bread and other bakery products.....	1919	6,156	69	822	1,707	2,170	901	225	190	72
	1914	5,269	(2)	(2)	485	496	3,392	147	589	160
Brick and tile, terra-cotta, and fire-clay products.....	1919	4,469	65		259	582	644	1,009	1,910	
	1914	5,188	(2)	(2)	11	172	706	1,091	3,148	60
Cars and general shop construction and repairs by steam-railroad companies.....	1919	13,471	8	149	11,160	6	15	2,116	17	
Cars, steam-railroad, not including operations of railroad companies ³	1914	9,721	(2)	(2)	2,658	169	4,807		70	2,017
	1919	4,307			1,540	111		2,656		
Cement ³	1919	1,788							1,141	647
Clothing, men's.....	1919	6,823	3,270	1,060	740	647	1,106			
	1914	5,593	(2)	(2)	1,712	3,499	803	76	3	

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 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.
Clothing, women's.....	1919 1914	3,308 2,355	979 (²)	452 (²)	883 454	910 1,069	84 826	.....	.....	.....
Confectionery and ice cream ^a	1919 1914	3,689 2,854	64 (²)	245 (²)	198 68	840 796	1,638 785	484 427	60 538	140 240
Electrical machinery, apparatus, and supplies.....	1919 1914	6,367 2,560	5 (²)	658 (²)	992 320	1,806 424	2,002 1,751	.....	4 4	.....
Flour-mill and gristmill products.....	1919 1914	3,015 2,096	65 (²)	..... (²)	773 116	13 5	174 104	181 11	1,125 1,049	684 811
Foundry and machine-shop products ⁴	1919 1914	9,705 5,002	378 (²)	67 (²)	3,207 446	1,205 466	3,965 3,736	811 384	70 570	2
Furniture.....	1919 1914	3,373 3,209	28 (²)	..... (²)	683 750	575 485	1,817 902	224 262	46 720	.....
Glass.....	1919 1914	2,034 2,248	..... (²)	..... (²)	325 11	1,525 448	184 35	.....	1,754	.....
Iron and steel, steel works and rolling mills.....	1919 1914	2,047 1,237	..... (²)	..... (²)	1,319 339	655	673 259	.....	639	.....
Liquors, malt.....	1919 1914	2,030 5,947	2,555 (²)	52 (²)	187 5,226	.....	71 37	19 502	46 66	..... 116
Lumber and timber products.....	1919 1914	5,283 6,007	369 (²)	119 (²)	286 238	133 193	276 349	814 226	3,286 4,900	..... 101
Lumber, planing-mill products, not including planing mills connected with sawmills.....	1919 1914	2,895 2,030	94 (²)	4 (²)	647 229	702 431	743 802	525 159	180 418	.....
Millinery and lace goods, not elsewhere specified.....	1919 1914	1,809 908	251 (²)	306 (²)	159 47	742 234	351 627	.....	.....	.....
Printing and publishing, book and job.....	1919 1914	5,866 5,123	870 (²)	200 (²)	4,367 4,327	276 443	127 319	.....	17 24	.....
Printing and publishing, newspapers and periodicals.....	1919 1914	4,183 4,270	307 (²)	278 (²)	2,749 2,063	355 437	396 839	24 145	67 182	7 13
Shirts.....	1919 1914	2,715 2,547	335 (²)	1,384 (²)	136 478	656 1,420	204 649	.....	.....	.....
Slaughtering and meat packing.....	1919 1914	8,290 5,152	142 (²)	..... (²)	8,060 625	28 84	18 785	10 1,827	32 1,720	..... 102
Stoves and hot-air furnaces.....	1919 1914	2,402 1,714	94 (²)	..... (²)	1,290 58	358 506	720 960	.....	10	.....
Tinware, not elsewhere specified.....	1919 1914	1,516 843	.....	.....	306	1,000 205	71 315	130 313	10	.....
Tobacco, chewing and smoking, and snuff.....	1919 1914	2,752 2,871	..... (²)	4 (²)	2 56	2,696 53	50 2,762	.....	.....	.....
All other industries.....	1919 1914	50,340 51,181	4,857 (²)	1,335 (²)	12,932 6,870	13,488 5,617	10,777 14,701	4,848 8,382	4,852 12,671	2,751 2,940
Total for cities.....	1919 1914	149,560 116,260	17,993 (²)	7,304 (²)	49,225 24,238	33,519 17,392	23,476 40,339	11,375 12,784	4,632 18,126	2,045 3,381
CAPE GIRARDEAU.....	1919 1914	1,427 1,250	1 (²)	..... (²)	122 48	42 4	846 194	26 645	379 327	11 41
CARTHAGE.....	1919	515	.....	9	83	212	46	45	49	71
COLUMBIA.....	1919 1914	379 479	..... (²)	..... (²)	98 106	4	217 316	..... 28	54 14	6 15
HANNIBAL.....	1919 1914	2,800 2,366	25 (²)	10 (²)	1,172 124	1,211 4	247 811	..... 1,040	105 333	30 54
INDEPENDENCE.....	1919	283	4	.....	190	17	11	46	1	14
JEFFERSON CITY.....	1919 1914	1,713 1,401	15 (²)	..... (²)	314 203	285 264	1,021 5	15 794	60 106	3 29
JOPLIN.....	1919 1914	1,810 1,166	1 (²)	..... (²)	333 231	99 21	722 285	493 432	128 131	34 50
KANSAS CITY.....	1919 1914	22,137 10,252	1,825 (²)	1,531 (²)	7,745 4,197	5,474 2,212	2,431 4,694	2,091 1,643	971 2,098	69 1,408
MOBERLY.....	1919 1914	570 463	..... (²)	..... (²)	58 49	445 4	30 349	7	12 40	18 24
St. JOSEPH.....	1919 1914	5,943 4,914	385 (²)	380 (²)	2,151 1,609	1,580 879	373 1,371	632 394	258 519	175 142
St. LOUIS.....	1919 1914	107,919 85,058	15,035 (²)	5,358 (²)	34,583 17,337	23,923 13,890	16,780 30,559	7,906 7,735	2,243 14,039	1,481 1,492
SEDALIA.....	1919 1914	1,163 903	9 (²)	2 (²)	847 174	123	58 546	3 9	91 157	30 17
SPRINGFIELD.....	1919 1914	2,910 2,009	93 (²)	5 (²)	1,519 160	104 108	694 1,212	111 64	281 362	103 103

¹ Includes 48 and under for 1914 and 1909.
² Corresponding figures not available.

^a Includes "chewing gum" in 1914.

⁴ Includes "iron and steel, tempering and welding," and "machine tools."

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.	Establishments.	Wage earners.
All industries.....	8,592	105,037	1,396	4,454	9,385	1,426	15,901	623	20,390	307	21,856	224	35,394	100	34,044	44	30,549	18	27,518		
Automobiles.....	8	1,865	.....	1	5	1	7	1	38	.....	.....	2	364	1	282	2	1,169	.....	.....
Bags, other than paper, not including bags made in textile mills.....	10	1,752	.....	1	5	3	33	.....	.....	.....	.....	3	624	2	535	1	555	.....	.....
Boot and shoe cut stock.....	7	1,593	.....	1	3	.....	33	2	68	2	154	.....	.....	.....	2	1,368	.....	.....	
Boots and shoes, not including rubber boots and shoes.....	54	17,458	.....	2	4	4	61	5	175	1	97	14	2,532	19	6,946	6	4,044	3	3,599		
Boxes, paper and other, not elsewhere specified.....	41	2,369	.....	4	8	8	96	13	474	9	643	6	886	1	262	.....	.....	.....	.....
Boxes, wooden packing, except cigar boxes..	29	1,827	.....	6	22	5	88	9	329	4	335	4	747	1	306	.....	.....	.....	.....
Bread and other bakery products.....	975	6,156	209	673	1,250	64	607	16	520	6	466	2	336	2	552	2	1,132	1	1,293		
Brick and tile, terra-cotta, and fire-clay products.....	65	4,469	.....	14	38	14	153	15	527	9	624	10	1,664	1	312	2	1,151	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	45	13,471	.....	4	13	5	53	6	235	3	229	10	1,517	8	2,297	5	4,295	4	4,832		
Cars, steam-railroad, not including operations of railroad companies.....	8	4,307	.....	.....	.....	1	9	.....	.....	1	98	2	320	1	435	2	1,224	1	2,221		
Cement.....	5	1,788	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	553	1	810	1	925	.....	.....
Clothing, men's.....	112	6,823	.....	23	72	32	365	19	635	23	1,662	9	1,508	4	1,424	2	1,157	.....	.....
Clothing, women's.....	116	3,308	1	25	69	41	524	29	926	14	1,014	6	775	.....	.....	.....	.....	.....	.....
Confectionery and ice cream.....	220	3,669	41	126	262	25	227	11	317	4	270	11	1,808	1	260	1	525	.....	.....
Electrical machinery, apparatus, and supplies.....	35	6,367	.....	4	12	12	125	5	167	4	286	5	695	2	638	2	1,570	1	2,674		
Flour-mill and gristmill products.....	690	3,015	236	361	588	63	649	20	609	5	361	4	493	1	315	.....	.....	.....	.....
Foundry and machine-shop products.....	301	9,530	27	120	329	80	954	34	1,119	16	1,079	15	2,354	7	2,311	2	1,384	.....	.....
Furniture.....	86	3,373	5	19	46	19	245	20	721	16	1,025	5	589	2	747	.....	.....	.....	.....
Glass.....	4	2,034	.....	.....	.....	.....	.....	.....	.....	1	77	2	432	.....	.....	.....	.....	1	1,525		
Iron and steel, steel works and rolling mills..	5	2,647	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	132	1	375	3	2,140	.....	.....
Liquors, malt.....	20	2,930	.....	.....	.....	10	112	.....	.....	6	416	1	119	2	884	.....	.....	1	1,399		
Lumber and timber products.....	557	5,283	29	405	687	78	828	24	786	11	777	6	886	4	1,319	.....	.....	.....	.....
Lumber, planing-mill products, not including planing mills connected with sawmills.....	111	2,895	4	48	104	33	392	18	613	3	192	2	372	3	1,222	.....	.....	.....	.....
Millinery and lace goods, not elsewhere specified.....	42	1,809	2	10	33	8	100	9	316	9	654	3	449	1	257	.....	.....	.....	.....
Printing and publishing, book and job.....	460	5,866	74	234	571	92	1,016	36	1,209	15	999	6	948	3	1,123	.....	.....	.....	.....
Printing and publishing, newspapers and periodicals.....	774	4,183	243	445	945	56	595	15	467	7	484	6	836	1	335	1	521	.....	.....
Shirts.....	19	2,715	1	7	19	.....	.....	1	39	2	186	5	866	2	761	1	894	.....	.....
Slaughtering and meat packing.....	49	8,290	6	19	33	7	72	7	258	3	222	1	114	1	467	2	1,807	3	5,317		
Stoves and hot-air furnaces.....	19	2,462	.....	.....	7	64	1	29	3	235	6	1,030	1	384	1	720	.....	.....	.....
Tinware, not elsewhere specified.....	10	1,516	.....	1	5	1	20	1	27	2	116	4	832	.....	.....	.....	.....	.....	.....
Tobacco, chewing and smoking, and snuff.....	11	2,752	2	3	8	1	6	3	119	.....	.....	1	199	.....	.....	.....	.....	1	2,420		
All other industries.....	3,704	50,515	516	1,898	4,254	756	8,500	303	9,667	128	9,205	69	10,414	27	8,985	5	3,452	2	2,093		
Total for cities.....	5,012	149,569	678	2,192	5,333	1,058	12,099	508	16,783	258	18,385	192	29,950	78	26,954	38	25,890	10	14,175		
CAPE GIRARDEAU.....	50	1,427	6	27	81	8	80	3	104	4	279	1	119	.....	.....	1	764	.....	.....
CARTHAGE.....	49	515	.....	32	69	13	144	3	129	.....	.....	1	173	.....	.....	.....	.....	.....	.....
COLUMBIA.....	25	379	4	14	34	5	53	.....	.....	1	78	1	214	.....	.....	.....	.....	.....	.....
HANNIBAL.....	67	2,890	7	35	85	16	199	4	153	.....	.....	2	260	1	296	2	1,807	.....	.....
INDEPENDENCE.....	21	283	1	11	25	5	63	2	44	2	151	.....	.....	.....	.....	.....	.....	.....	.....
JEFFERSON CITY.....	42	1,713	5	20	37	9	120	1	48	1	79	3	485	3	944	.....	.....	.....	.....
JOPLIN.....	139	1,810	15	84	185	23	255	12	375	1	99	3	455	1	441	.....	.....	.....	.....
KANSAS CITY.....	997	22,137	129	422	1,304	251	2,873	109	3,539	46	3,303	28	4,428	6	2,248	5	3,150	1	1,292		
MOBERLY.....	25	570	1	14	31	7	83	2	50	.....	.....	.....	.....	1	406	.....	.....	.....	.....
ST. JOSEPH.....	219	5,943	23	95	233	48	474	23	743	12	884	12	1,811	6	1,798	.....	.....	.....	.....
ST. LOUIS.....	3,205	107,919	465	1,349	3,047	636	7,354	341	11,388	131	12,819	137	21,670	59	20,372	28	18,486	9	12,838		
SEDALIA.....	66	1,163	10	36	66	15	147	1	25	2	121	1	117	1	687		
SPRINGFIELD.....	107	2,910	12	53	136	22	254	7	185	8	572	3	318	1	440	1	996		

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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.....	8,592	8,386	8,375	195,037	152,182	152,093	\$1,594,208,338	\$637,952,128	\$574,111,070	\$537,751,174	\$249,237,269	\$219,099,919
Less than \$5,000.....	2,433	3,611	3,649	1,783	3,911	5,107	6,200,126	8,426,604	8,272,292	3,749,063	5,352,461	5,293,930
\$5,000 to \$20,000.....	2,791	2,512	2,505	7,811	10,152	10,999	20,517,745	25,006,975	25,001,039	15,756,004	14,351,718	14,249,595
\$20,000 to \$100,000.....	1,904	1,449	1,444	18,713	23,127	23,048	87,947,680	65,177,199	65,057,234	42,978,314	33,028,026	32,157,357
\$100,000 to \$500,000.....	942	602	683	38,395	61,506	64,791	210,689,301	134,663,617	204,184,575	94,731,089	87,704,685	84,656,927
\$500,000 to \$1,000,000.....	238	108		27,059			166,777,675	74,810,437		68,276,088		
\$1,000,000 and over.....	284	104	94	101,776	53,486	48,148	1,093,075,805	329,867,296	271,595,930	312,260,616	108,890,379	83,342,049
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.....	28.3	43.1	43.6	0.9	2.6	3.3	0.4	1.3	1.4	0.7	2.1	2.4
\$5,000 to \$20,000.....	32.5	30.0	29.9	3.7	6.7	7.2	1.9	3.9	4.4	2.9	5.8	6.5
\$20,000 to \$100,000.....	22.2	17.3	17.2	9.6	15.2	15.7	5.5	10.2	11.3	8.0	13.3	14.6
\$100,000 to \$500,000.....	11.0	7.2		19.7	40.4	42.3	13.2	21.1	17.6	12.7	35.2	38.5
\$500,000 to \$1,000,000.....	2.8	1.3		13.9			10.5	11.7	35.6	12.7		
\$1,000,000 and over.....	3.3	1.2	1.1	52.2	35.1	31.5	68.6	51.7	47.8	58.1	43.7	37.9

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.
BOOTS AND SHOES, NOT INCLUDING RUBBER BOOTS AND SHOES.....	54	49	100.0	100.0	17,458	13,160	100.0	100.0	\$100,193,423	\$40,311,210	100.0	100.0
Less than \$100,000.....	10	8	18.5	16.3	203	123	1.2	0.9	574,240	202,795	0.5	0.5
\$100,000 to \$500,000.....	15	11		30.6					4,803,862		11.9	
\$500,000 to \$1,000,000.....	19	11	16.7	22.4	1,432	5,309	8.2	40.3	5,797,296	8,954,898	5.3	22.2
\$1,000,000 and over.....	35	15	64.8	30.6	15,823	7,737	90.6	58.8	102,521,887	26,349,655	94.2	65.4
BREAD AND OTHER BAKERY PRODUCTS.....	975	1,043	100.0	100.0	6,156	5,269	100.0	100.0	43,839,428	19,940,499	100.0	100.0
Less than \$5,000.....	170	503	18.4	48.2	50	321	0.8	6.1	534,320	1,548,923	1.2	7.8
\$5,000 to \$20,000.....	577	400	59.2	44.7	781	1,010	12.7	19.2	6,277,446	3,817,534	14.3	19.1
\$20,000 to \$100,000.....	181	54	18.6	5.2	923	660	15.0	12.5	6,530,667	2,304,435	14.9	11.9
\$100,000 to \$500,000.....	24	13	2.5	1.2	597	1,091	9.7	20.7	5,528,434	2,464,866	12.6	12.4
\$500,000 to \$1,000,000.....	6	3	0.6	0.3	415		6.7		3,920,424	1,987,183	8.9	10.0
\$1,000,000 and over.....	8	4	0.8	0.4	3,390	2,187	55.1	41.5	21,048,147	7,757,558	48.0	38.9
BUTTER.....	66	54	100.0	100.0	686	361	100.0	100.0	22,147,691	5,167,343	100.0	100.0
Less than \$5,000.....	3	0	4.5	11.1	2	2	0.3	0.6	10,198	15,125	(*)	0.3
\$5,000 to \$20,000.....	12	17	18.2	31.5	6	10	0.9	5.3	144,479	197,900	0.7	3.8
\$20,000 to \$100,000.....	25	21	37.9	38.0	63	83	9.2	23.0	1,186,780	834,186	5.4	16.1
\$100,000 to \$500,000.....	13	10	19.7	18.5	122	4,257	17.8	71.2	2,520,949	4,120,042	12.7	79.7
\$500,000 to \$1,000,000.....	5		7.6		97		14.1		3,643,184		16.4	
\$1,000,000 and over.....	8		12.1		396		57.7		14,342,101		64.8	
CARS AND GENERAL SHOP CONSTRUCTION AND REPAIRS BY STEAM-RAILROAD COMPANIES.....	45	39	100.0	100.0	13,471	9,721	100.0	100.0	33,020,800	12,847,379	100.0	100.0
\$5,000 to \$20,000.....	7	6	15.0	15.4	36	40	0.3	0.5	97,698	549,401	0.3	0.4
\$20,000 to \$100,000.....	6	12	13.3	30.8	179	501	1.3	5.2	363,425	615,997	1.1	4.8
\$100,000 to \$500,000.....	13	11	28.9	28.2	1,394	4,458	10.3	45.9	3,281,899	2,823,458	9.9	22.0
\$500,000 to \$1,000,000.....	10	5	22.2	12.8	2,734		20.3		6,965,425	3,516,078	21.1	27.4
\$1,000,000 and over.....	9	5	20.0	12.8	9,128	4,710	67.8	48.5	22,309,353	5,842,445	67.6	45.5
CLOTHING, MEN'S.....	112	71	100.0	100.0	6,823	5,593	100.0	100.0	35,838,747	13,484,374	100.0	100.0
Less than \$5,000.....	9	9	8.0	12.7	25	22	0.4	0.4	25,335	22,036	0.1	0.2
\$5,000 to \$20,000.....	25	14	22.3	19.7	210	211	3.1	3.8	250,527	147,782	0.7	1.1
\$20,000 to \$100,000.....	23	21	20.5	29.6	390	364	5.7	6.5	1,155,406	1,060,870	3.2	7.9
\$100,000 to \$500,000.....	37	24	33.0	33.8	1,970	2,780	28.9	49.7	10,017,321	5,984,357	28.0	44.4
\$500,000 to \$1,000,000.....	8		7.2		923		13.5		4,005,568		13.7	
\$1,000,000 and over.....	10	8	8.9	4.2	3,305	2,216	48.4	39.6	19,483,930	6,269,320	54.4	46.5
CLOTHING, WOMEN'S.....	116	74	100.0	100.0	3,308	2,355	100.0	100.0	18,433,548	5,517,015	100.0	100.0
Less than \$5,000.....	10		8.6		14		0.4		23,549		0.1	
\$5,000 to \$20,000.....	12	17	10.3	23.0	38	103	1.1	4.4	134,806	166,342	0.7	3.0
\$20,000 to \$100,000.....	40	42	34.5	56.8	482	952	14.0	40.4	2,398,986	2,108,618	12.3	38.2
\$100,000 to \$500,000.....	46	15	39.7	20.3	1,961	1,300	59.3	55.2	10,661,129	3,242,055	59.5	58.8
\$500,000 to \$1,000,000.....	8		6.9		813		24.6		5,045,084		27.4	

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

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

* Less than one-tenth of 1 per cent.

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

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

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	
COFFEE, ROASTING AND GRINDING.....	40	37	100.0	100.0	814	656	100.0	100.0	\$30,070,206	\$14,299,135	100.0	100.0	\$7,011,581	\$3,350,217	100.0	100.0	
\$5,000 to \$20,000.....	6	14	15.0	10.8	9	16	1.1	0.9	79,760	125,871	0.3	0.2	24,406	12,616	0.3	0.4	
\$20,000 to \$100,000.....	7	9	17.5	24.3	21	50	2.6	7.6	360,935	475,281	1.2	3.3	73,884	170,849	1.1	5.1	
\$100,000 to \$500,000.....	9	15	22.5	40.5	99	290	12.2	44.2	2,530,281	3,919,850	8.4	27.4	416,709	1,376,985	5.9	41.1	
\$500,000 to \$1,000,000.....	8	3	20.0	8.1	177	.....	21.7	.....	5,886,918	1,795,555	19.6	12.6	1,673,603	.....	23.9	.....
\$1,000,000 and over.....	10	6	25.0	16.2	508	310	62.4	47.3	21,212,312	8,082,578	70.5	56.5	4,822,979	1,789,767	68.8	53.4	
CONFECTIONERY AND ICE CREAM ³	220	154	100.0	100.0	3,669	2,854	100.0	100.0	23,497,553	9,251,427	100.0	100.0	10,569,535	3,995,704	100.0	100.0	
Less than \$5,000.....	59	57	26.8	37.0	25	43	0.7	1.5	144,012	146,176	0.6	1.6	63,289	80,210	0.6	2.0	
\$5,000 to \$20,000.....	83	55	37.7	35.7	165	168	4.5	5.9	886,496	603,530	3.8	6.5	306,398	316,551	3.8	7.9	
\$20,000 to \$100,000.....	46	21	20.9	13.6	307	216	8.4	7.6	2,059,802	975,007	8.8	10.5	806,882	434,871	7.6	10.9	
\$100,000 to \$500,000.....	19	15	8.6	9.7	665	2,427	18.1	85.0	4,118,091	3,824,014	17.5	41.3	1,651,406	2,164,072	15.6	78.2	
\$500,000 to \$1,000,000.....	6	6	2.7	3.9	755	.....	20.6	.....	5,124,500	3,702,700	21.8	40.0	2,414,360	.....	22.8	.....
\$1,000,000 and over.....	7	.....	3.2	.....	1,752	.....	47.8	.....	11,163,752	.....	47.5	.....	5,237,200	.....	49.5	.....
ELECTRICAL MACHINERY, APPARATUS, AND SUP- PLIES.....	35	19	100.0	100.0	6,367	2,560	100.0	100.0	22,007,658	6,643,210	100.0	100.0	13,845,405	4,227,457	100.0	100.0	
Less than \$5,000.....	5	26.3	10	0.4	15,366	0.2	7,791	0.2
\$5,000 to \$20,000.....	4	5	11.4	26.3	14	26	0.2	1.0	49,359	56,184	0.2	0.8	21,551	38,187	0.2	0.9	
\$20,000 to \$100,000.....	10	3	28.6	15.8	93	72	1.5	2.8	389,221	161,652	1.8	2.4	252,590	99,480	1.8	1.6	
\$100,000 to \$500,000.....	12	3	34.3	15.8	743	2,452	11.7	95.8	2,893,845	986,060	11.8	14.8	1,334,480	4,111,999	9.6	97.3	
\$500,000 to \$1,000,000.....	4	3	11.4	15.8	587	.....	9.2	.....	3,047,950	5,423,948	13.8	81.7	1,571,529	.....	11.4	.....
\$1,000,000 and over.....	5	.....	14.3	.....	4,930	.....	77.4	.....	15,927,283	.....	72.4	.....	10,665,255	.....	77.0	.....
FLOUR-MILL AND GRIST- MILL PRODUCTS.....	690	641	100.0	100.0	3,015	2,096	100.0	100.0	113,297,359	38,686,300	100.0	100.0	15,112,635	5,423,920	100.0	100.0	
Less than \$5,000.....	159	145	23.0	22.6	17	94	0.6	4.5	405,532	384,498	0.4	1.0	77,169	80,643	0.5	1.5	
\$5,000 to \$20,000.....	205	244	29.7	38.1	119	275	3.9	13.1	2,321,425	2,771,811	2.0	7.2	427,052	538,725	2.8	9.9	
\$20,000 to \$100,000.....	215	182	31.2	28.4	418	534	13.9	25.5	9,654,289	7,411,813	8.5	19.2	1,880,272	1,205,274	9.1	22.2	
\$100,000 to \$500,000.....	67	52	9.7	8.1	479	2,874	15.9	41.7	15,920,418	11,326,649	14.1	29.3	2,493,546	2,493,546	12.5	46.0	
\$500,000 to \$1,000,000.....	16	13	2.3	2.0	293	.....	9.7	.....	11,096,608	8,709,681	9.8	22.5	2,018,584	.....	13.4	.....
\$1,000,000 and over.....	28	5	4.1	0.8	1,689	319	56.0	15.2	73,899,087	8,081,857	65.2	20.9	9,322,481	1,105,732	61.7	20.4	
FOOD PREPARATIONS, NOT ELSEWHERE SPECI- FIED.....	87	54	100.0	100.0	1,454	629	100.0	100.0	23,463,398	7,793,604	100.0	100.0	5,256,132	1,646,404	100.0	100.0	
Less than \$5,000.....	22	16	25.3	29.6	9	20	0.6	3.2	34,584	42,525	0.1	0.5	20,960	23,507	0.4	1.4	
\$5,000 to \$20,000.....	17	15	19.5	27.8	46	81	3.2	12.9	171,109	201,871	0.7	2.6	63,946	114,424	1.2	6.9	
\$20,000 to \$100,000.....	18	10	20.7	18.5	147	110	10.1	17.5	966,035	554,708	4.1	7.1	354,770	164,314	6.7	10.0	
\$100,000 to \$500,000.....	19	13	21.8	24.1	423	418	29.1	66.5	4,911,416	4,694,500	20.9	89.7	1,402,548	1,944,159	26.7	81.6	
\$500,000 to \$1,000,000.....	7	.....	8.0	.....	573	.....	39.4	.....	5,179,920	.....	22.1	.....	1,718,368	.....	32.7	.....
\$1,000,000 and over.....	4	.....	4.6	.....	256	.....	17.6	.....	12,200,384	.....	52.0	.....	1,695,540	.....	32.3	.....
FOUNDRY AND MACHINE- SHOP PRODUCTS ⁶	321	261	100.0	100.0	9,705	5,602	100.0	100.0	50,142,868	14,564,313	100.0	100.0	29,892,143	7,773,012	100.0	100.0	
Less than \$5,000.....	51	68	15.9	26.1	25	68	0.2	1.3	144,230	153,661	0.3	1.1	101,803	115,360	0.3	1.5	
\$5,000 to \$20,000.....	95	86	29.6	33.0	280	456	2.9	8.1	1,124,024	1,001,997	2.2	6.9	730,769	692,863	2.4	8.9	
\$20,000 to \$100,000.....	98	77	30.5	29.5	1,118	1,272	11.5	22.7	4,783,683	3,308,373	9.5	22.7	2,811,210	1,950,220	9.4	25.1	
\$100,000 to \$500,000.....	54	25	16.8	9.6	2,459	3,806	25.3	67.9	11,679,547	6,339,475	23.3	43.5	6,646,118	5,014,563	22.2	64.5	
\$500,000 to \$1,000,000.....	10	5	3.1	1.9	1,560	.....	16.1	.....	7,042,775	3,760,807	14.0	25.8	3,872,957	.....	13.0	.....
\$1,000,000 and over.....	13	.....	4.0	.....	4,263	.....	43.9	.....	25,368,609	.....	50.6	.....	15,729,286	.....	52.6	.....
FURNITURE.....	86	91	100.0	100.0	3,373	3,209	100.0	100.0	16,154,865	7,174,010	100.0	100.0	7,831,475	3,819,183	100.0	100.0	
Less than \$5,000.....	13	15	15.1	16.5	11	16	0.3	0.5	26,325	33,443	0.2	0.5	14,271	20,397	0.2	0.5	
\$5,000 to \$20,000.....	11	18	12.8	19.8	36	97	1.1	3.0	117,986	191,399	0.7	2.7	70,959	116,197	0.9	3.0	
\$20,000 to \$100,000.....	20	36	23.3	39.6	292	982	8.7	30.6	1,078,723	1,891,255	6.7	26.4	542,492	1,047,625	6.9	27.4	
\$100,000 to \$500,000.....	36	22	41.9	24.2	1,891	2,114	56.1	65.9	7,768,048	5,057,013	48.1	70.5	4,204,136	2,634,964	53.7	69.0	
\$500,000 to \$1,000,000.....	3	.....	3.5	.....	257	.....	7.6	.....	1,905,276	.....	11.8	.....	837,043	.....	10.7	.....
\$1,000,000 and over.....	3	.....	3.5	.....	886	.....	26.3	.....	5,258,507	.....	32.6	.....	2,162,574	.....	27.6	.....
LIQUORS, MALT.....	20	32	100.0	100.0	2,930	5,947	100.0	100.0	24,365,548	31,801,404	100.0	100.0	20,641,517	24,428,671	100.0	100.0	
Less than \$20,000.....	5	15.6	13	0.2	42,472	0.1	29,085	0.1
\$20,000 to \$100,000.....	77	11	35.0	34.4	772	162	2.5	2.7	7,375,427	697,173	1.5	2.2	724,462	474,073	1.2	1.9	
\$100,000 to \$500,000.....	5	5	25.0	15.6	159	2,777	5.4	13.1	1,156,377	1,129,048	4.7	3.6	776,786	3,164,500	3.8	13.0	
\$500,000 to \$1,000,000.....	3	6	15.0	18.8	209	.....	7.1	.....	2,035,710	3,547,991	8.4	11.2	1,627,389	.....	7.9	.....
\$1,000,000 and over.....	5	5	25.0	15.6	2,490	4,995	85.0	84.0	20,798,034	26,384,720	85.4	83.0	17,989,880	20,761,013	87.2	85.0	
PRINTING AND PUBLISH- ING, BOOK AND JOB.....	460	435	100.0	100.0	5,866	5,123	100.0	100.0	25,880,461	12,434,192	100.0	100.0	16,641,977	8,575,864	100.0	100.0	
Less than \$5,000.....	113	174	24.6	40.0	61	176	1.0	3.4	281,396	401,650	1.1	3.2	183,180	293,156	1.1	3.4	
\$5,000 to \$20,000.....	171	158	37.2	36.3	506	771	8.6	15.0	1,888,564	1,587,698	7.3	12.8	1,218,051	1,150,895	7.3	13.4	
\$20,000 to \$100,000.....	118	75	25.7	17.2	1,158	1,315	19.7	25.7	5,463,591	3,327,887	21.1	26.8	3,490,641	2,274,257	21.0	26.5	
\$100,000 to \$500,000.....	51	25	11.1	5.7	2,428	2,861	41.4	55.8	9,839,819	4,418,744	38.0	35.5	6,251,937	4,857,556	37.0	56.6	
\$500,000 to \$1,000,000.....	4	3	0.9	0.7	590	.....	10.1	.....	2,487,984	2,698,213	9.6	21.7	1,517,575	.....	9.1	.....
\$1,000,000 and over.....	3	.....	0.6	.....	1,123	.....	19.1	.....	5,919,107	.....	22.9	.....	3,974,593	.....	23.9	.....

¹ Includes the group "Less than \$5,000."² Includes the group "\$500,000 to \$1,000,000."³ Includes "chewing gum" in 1914.⁴ Includes the groups "\$500,000 to \$1,000,000" and "\$1,000,000 and over."⁵ Includes the group "\$1,000,000 and over."⁶ Includes "iron and steel, tempering and welding" and "machine tools."⁷ Includes the group "\$5,000 to \$20,000."

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.			
			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
PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS.....	774	851	100.0	100.0	4,183	4,279	100.0	100.0	\$30,011,808	\$18,034,624	100.0	100.0	\$18,152,235	\$13,058,831	100.0	100.0
Less than \$5,000.....	413	572	53.4	67.2	362	845	8.7	19.7	1,079,805	1,360,935	3.6	7.5	820,963	1,123,928	4.6	8.6
\$5,000 to \$20,000.....	256	204	33.1	24.0	607	723	16.7	16.9	2,340,731	1,822,362	7.8	10.1	1,802,159	1,544,534	9.9	11.8
\$20,000 to \$100,000.....	69	51	8.9	6.0	580	400	13.9	9.3	2,767,614	1,965,998	9.2	10.9	2,112,174	1,656,462	11.6	12.7
\$100,000 to \$500,000.....	26	17	3.4	2.0	764	1,221	18.3	28.5	4,916,409	3,515,447	16.4	19.5	3,624,091	3,809,478	20.0	29.2
\$500,000 to \$1,000,000.....	4	3	0.5	0.4	359	.....	8.6	.....	2,372,905	1,950,317	7.9	10.8	1,645,995	.....	9.1	.....
\$1,000,000 and over.....	6	4	0.8	0.5	1,421	1,090	34.0	25.5	16,534,344	7,419,565	55.1	41.1	8,136,853	4,924,429	44.8	37.7
SLAUGHTERING AND MEAT PACKING.....	49	31	100.0	100.0	8,290	5,152	100.0	100.0	246,610,195	91,608,121	100.0	100.0	18,600,819	7,272,686	100.0	100.0
\$5,000 to \$20,000.....	5	.....	10.2	.....	2	.....	(2)	.....	59,833	.....	(2)	.....	17,457	.....	0.1	.....
\$20,000 to \$100,000.....	16	11	32.7	35.5	33	53	0.4	1.0	845,713	430,461	0.3	0.5	144,690	98,331	0.8	1.3
\$100,000 to \$500,000.....	12	11	24.5	35.5	97	182	1.2	3.5	2,492,691	3,096,930	1.0	3.4	261,692	338,708	1.4	4.7
\$500,000 to \$1,000,000.....	3	.....	6.1	.....	104	.....	1.3	.....	2,266,827	.....	0.9	.....	315,810	.....	1.7	.....
\$1,000,000 and over.....	13	9	26.5	20.0	8,054	4,917	97.2	95.4	240,945,081	88,071,730	97.7	96.1	17,861,164	6,840,647	96.0	94.1
STOVES AND HOT-AIR FURNACES.....	19	15	100.0	100.0	2,462	1,714	100.0	100.0	15,339,544	6,644,251	100.0	100.0	9,274,252	4,305,848	100.0	100.0
\$20,000 to \$100,000.....	5	3	26.3	20.0	45	70	1.8	4.1	222,180	104,302	1.4	2.5	116,178	87,892	1.3	2.0
\$100,000 to \$500,000.....	6	9	31.6	60.0	283	1,044	11.5	95.9	1,569,761	1,890,063	10.2	28.4	717,795	4,217,950	7.7	98.0
\$500,000 to \$1,000,000.....	3	6	15.8	20.0	469	.....	19.0	.....	1,951,999	4,589,880	12.7	69.1	1,488,467	.....	16.0	.....
\$1,000,000 and over.....	5	.....	26.3	.....	1,665	.....	67.6	.....	11,595,598	.....	75.6	.....	6,951,812	.....	75.0	.....

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

2 Less than one-tenth of 1 per cent.

3 Includes the groups "Less than \$5,000" and "\$5,000 to \$20,000."

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 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.
CAPE GIRARDEAU.	50	1,427	100.0	\$8,586,593	100.0	\$2,897,990	100.0	KANSAS CITY.....	997	22,137	100.0	\$192,815,052	100.0	\$68,505,148	100.0
Less than \$5,000.....	13	13	0.9	34,759	0.4	19,462	0.7	Less than \$5,000.....	154	83	0.4	438,354	0.2	268,407	0.4
\$5,000 to \$20,000.....	17	62	4.3	107,454	2.3	99,548	3.4	\$5,000 to \$20,000.....	311	752	3.4	3,462,041	1.8	2,062,229	3.0
\$20,000 to \$100,000.....	11	121	8.5	503,102	6.6	261,335	9.0	\$20,000 to \$100,000.....	304	3,206	14.5	14,768,273	7.7	8,313,934	12.1
\$100,000 and over.....	9	1,231	86.3	7,791,218	90.7	2,517,615	86.9	\$100,000 to \$500,000.....	159	5,527	25.0	34,830,913	18.1	15,840,641	23.1
CARTHAGE.....	49	515	100.0	6,627,782	100.0	1,280,586	100.0	\$500,000 to \$1,000,000.....	36	4,279	19.3	27,027,396	14.0	11,503,023	16.8
Less than \$5,000.....	10	11	2.1	30,111	0.5	13,170	1.0	\$1,000,000 and over.....	33	8,290	37.4	112,290,075	58.2	30,516,914	44.5
\$5,000 to \$20,000.....	14	39	7.6	137,110	2.1	72,871	5.7	MOBERLY.....	25	570	100.0	4,496,894	100.0	1,244,180	100.0
\$20,000 to \$100,000.....	19	165	30.1	779,353	11.8	350,773	27.4	Less than \$5,000.....	3	3	0.5	13,206	0.3	6,266	0.5
\$100,000 to \$500,000.....	3	100	19.4	833,382	12.6	243,400	19.0	\$5,000 to \$20,000.....	7	13	2.3	64,295	1.4	28,968	2.3
\$1,000,000 and over.....	3	210	40.8	4,847,826	73.1	600,372	46.9	\$20,000 to \$100,000.....	12	107	18.8	721,952	16.1	282,290	22.7
COLUMBIA.....	25	379	100.0	2,232,207	100.0	681,922	100.0	\$100,000 and over.....	3	447	78.4	3,697,441	82.2	926,636	74.5
Less than \$5,000.....	7	4	1.1	19,089	0.9	10,214	1.5	St. JOSEPH.....	219	5,943	100.0	50,697,198	100.0	17,345,706	100.0
\$5,000 to \$20,000.....	7	13	3.4	70,130	3.1	44,144	6.5	Less than \$5,000.....	28	11	0.2	78,456	0.2	44,710	0.3
\$20,000 to \$100,000.....	6	42	11.1	269,400	12.1	169,075	24.9	\$5,000 to \$20,000.....	70	150	2.5	756,011	1.5	407,896	2.3
\$100,000 and over.....	5	320	84.4	1,873,591	83.9	457,589	67.1	\$20,000 to \$100,000.....	69	738	12.4	3,412,786	6.7	1,727,109	10.0
HANNIBAL.....	67	2,800	100.0	14,026,833	100.0	5,512,023	100.0	\$100,000 to \$500,000.....	27	1,276	21.5	6,580,002	13.0	3,028,139	17.5
Less than \$5,000.....	10	7	0.2	28,620	0.2	15,427	0.3	\$500,000 to \$1,000,000.....	15	1,795	30.2	9,980,104	19.7	4,651,254	26.8
\$5,000 to \$20,000.....	25	60	2.1	235,518	1.7	132,068	2.4	\$1,000,000 and over.....	10	1,973	33.2	20,889,839	59.0	7,486,508	43.2
\$20,000 to \$100,000.....	18	193	6.9	934,431	6.7	368,556	6.7	St. LOUIS.....	3,205	107,919	100.0	871,700,438	100.0	330,874,091	100.0
\$100,000 to \$500,000.....	7	150	5.4	981,098	7.0	620,563	11.3	Less than \$5,000.....	590	300	0.3	1,516,942	0.2	981,857	0.3
\$500,000 to \$1,000,000.....	4	286	10.2	3,007,797	21.4	871,385	15.9	\$5,000 to \$20,000.....	986	3,137	2.9	14,812,586	1.7	7,958,173	2.4
\$1,000,000 and over.....	3	2,104	75.1	8,839,360	63.0	3,501,024	63.5	\$20,000 to \$100,000.....	805	8,813	8.2	40,786,197	4.7	21,507,346	6.5
INDEPENDENCE.....	21	283	100.0	5,344,137	100.0	1,005,813	100.0	\$100,000 to \$500,000.....	534	23,568	21.8	122,565,306	14.1	59,126,685	17.9
JEFFERSON CITY.....	42	1,713	100.0	10,188,406	100.0	2,823,701	100.0	\$500,000 to \$1,000,000.....	126	13,729	12.7	88,240,712	10.1	37,407,512	11.3
Less than \$5,000.....	11	7	0.4	34,543	0.3	19,189	0.7	\$1,000,000 and over.....	104	58,372	54.1	603,778,695	69.2	203,892,618	61.6
\$5,000 to \$20,000.....	16	56	3.3	100,516	1.6	95,078	3.4	SEDALIA.....	66	1,163	100.0	5,561,865	100.0	2,073,907	100.0
\$20,000 to \$100,000.....	3	35	2.0	121,437	1.2	72,149	2.6	Less than \$5,000.....	24	15	1.3	55,851	1.0	30,223	1.7
\$100,000 to \$500,000.....	7	572	33.4	1,853,716	18.2	996,208	35.3	\$5,000 to \$20,000.....	19	58	5.0	219,708	3.9	119,665	5.8
\$500,000 and over.....	5	1,043	60.9	8,018,194	78.7	1,640,177	58.1	\$20,000 to \$100,000.....	17	131	11.3	788,387	14.2	379,200	18.3
JOPLIN.....	139	1,810	100.0	14,219,935	100.0	4,605,860	100.0	\$100,000 and over.....	6	959	82.5	4,497,919	80.9	1,538,819	74.2
Less than \$5,000.....	42	29	1.6	125,323	0.9	70,485	1.7	SPRINGFIELD.....	107	2,910	100.0	18,812,549	100.0	6,215,865	100.0
\$5,000 to \$20,000.....	41	103	5.7	453,826	3.2	261,875	5.7	Less than \$5,000.....	22	15	0.5	56,189	0.3	35,249	0.6
\$20,000 to \$100,000.....	35	260	14.4	1,708,592	12.0	737,830	16.0	\$5,000 to \$20,000.....	38	115	4.0	421,007	2.3	258,826	4.2
\$100,000 to \$500,000.....	15	491	27.1	3,185,487	22.4	1,409,741	30.6	\$20,000 to \$100,000.....	23	211	7.3	1,078,090	5.7	464,431	7.5
\$500,000 and over.....	6	927	51.2	8,746,707	61.5	2,119,923	46.0	\$100,000 to \$500,000.....	12	382	13.1	1,878,686	10.0	861,798	13.9
								\$500,000 to \$1,000,000.....	5	441	15.2	2,870,512	15.3	1,319,582	21.2
								\$1,000,000 and over.....	7	1,746	60.0	12,505,155	66.5	3,275,976	52.7

1 Figures can not be shown by groups without disclosing individual operations.

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.								
		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.	Cor- pora- tions.	All oth- ers.				
All industries.....	1919	4,210	2,802	1,580	195,037	13,093	174,296	7,648	6.7	89.4	3.9	\$1,594,208,338	\$69,526,094	\$1,480,883,324	\$43,798,920	4.4	92.9	2.7				
	1914	4,346	2,501	1,539	152,182	12,832	133,110	6,240	8.4	87.5	4.1	637,952,128	40,542,260	574,836,664	22,573,204	6.4	90.1	3.5				
	1909	4,335	2,447	1,593	152,993	13,755	139,514	8,724	9.0	85.3	5.7	574,111,070	38,121,568	508,761,173	27,228,329	6.6	88.6	4.7				
Boxes, paper and other, not elsewhere specified.	1919	5	33	3	2,369	62	2,282	25	2.6	96.3	1.1	8,857,121	249,894	8,536,517	70,710	2.8	96.4	0.8				
	1914	4	27	1	1,092	182	1,010		7.5	92.5		1,636,088	112,445	1,523,643		6.9	93.1					
Bread and other bakery products.	1919	788	63	124	6,156	1,311	4,535	310	21.3	73.7	5.0	43,839,428	10,080,022	31,203,810	2,555,596	23.0	71.2	5.8				
	1914	874	39	130	5,269	1,414	3,506	349	26.8	66.5	6.6	19,940,499	5,771,880	12,766,532	1,402,087	28.9	64.0	7.0				
Brick and tile, terra-cotta, and fire-clay products.	1919	15	45	5	4,469	508	3,919	42	11.4	87.7	0.9	11,455,779	1,408,645	9,978,961	68,173	12.3	87.1	0.6				
	1914	30	48	12	5,188	609	4,508	71	11.7	86.9	4.1	6,509,161	758,437	5,664,220	89,504	12.3	87.0	1.3				
Butter.....	1919	20	33	13	686	45	613	28	6.6	89.4	4.1	22,147,691	1,419,127	20,188,615	539,940	6.4	91.2	2.4				
	1914	16	24	14	361	30	303	28	8.3	83.9	7.8	5,167,343	248,665	4,617,591	301,087	4.8	89.4	5.8				
Clothing, men's.....	1919	29	66	17	6,823	445	6,100	278	6.5	89.4	4.1	35,838,747	1,180,868	33,199,355	1,458,524	3.3	92.6	4.1				
	1914	14	45	12	5,593	181	5,188	224	3.2	92.8	4.0	13,484,374	294,541	12,651,658	538,175	2.2	93.8	4.0				
Clothing, women's.....	1919	35	56	25	3,308	626	2,246	436	18.9	67.9	13.2	18,433,548	2,734,714	13,003,297	2,695,537	14.8	70.5	14.6				
	1914	23	37	14	2,355	326	1,674	355	13.8	71.1	15.1	5,517,015	832,892	3,943,425	740,698	15.1	71.5	13.4				
Coffee, roasting and grind- ing.	1919	4	31	5	814	6	793	15	0.7	97.4	1.8	30,070,206	95,261	29,619,804	355,141	0.3	98.5	1.2				
	1914	6	27	4	656	39	604	13	5.9	92.1	2.0	14,299,135	280,471	13,791,346	218,318	2.0	96.4	1.5				
Confectionery and ice cream ²	1919	103	50	67	3,669	550	2,975	144	15.0	81.1	3.9	23,497,553	3,000,292	19,422,459	1,074,802	12.8	82.7	4.6				
	1914	69	42	43	2,854	225	2,468	161	7.9	86.5	5.0	9,251,427	808,932	7,763,411	689,084	8.7	83.8	7.4				
Electrical machinery, ap- paratus, and supplies.	1919	3	31	1	6,367	165	6,302		1.0	99.0		22,007,658	1,244,467	21,763,191		1.1	98.9					
	1914	7	12		2,560	321	2,239		12.5	87.5		6,643,210	359,782	6,283,428		5.4	94.6					
Flour-mill and gristmill products.	1919	315	179	196	3,015	259	2,539	217	8.6	84.2	7.2	113,297,359	6,390,869	100,538,509	6,807,981	5.6	88.7	5.6				
	1914	284	152	205	2,096	393	1,345	358	18.7	64.2	17.1	38,686,309	4,328,928	27,838,468	6,518,913	11.2	72.0	16.8				
Food preparations, not elsewhere specified.	1919	30	43	14	1,444	83	1,278	93	5.7	87.9	6.4	23,463,398	1,024,863	21,666,287	742,248	4.4	92.5	3.2				
	1914	21	24	9	629	73	448	108	11.6	71.2	17.2	7,793,004	106,138	7,103,064	524,402	2.1	91.1	6.7				
Foundry and machine- shop products. ³	1919	112	167	42	9,705	523	9,006	176	5.4	92.8	1.8	50,142,868	2,176,015	47,235,430	731,423	4.3	94.2	1.5				
	1914	82	139	40	5,602	289	5,142	171	5.2	91.8	3.1	14,564,313	780,830	13,881,213	402,261	5.4	91.9	2.8				
Furniture.....	1919	23	54	9	3,373	113	3,199	61	3.4	94.8	1.8	16,154,865	439,807	15,414,449	300,609	2.7	95.4	1.9				
	1914	28	55	8	3,209	227	2,935	47	7.1	91.5	1.5	7,174,010	476,607	6,596,029	101,374	6.6	91.9	1.4				
Lumber and timber prod- ucts.	1919	315	60	182	5,283	861	3,448	974	16.3	65.3	18.4	14,025,865	2,330,794	9,277,200	2,417,871	16.6	66.1	17.2				
	1914	519	66	211	6,007	1,480	3,635	892	24.6	60.5	14.8	10,076,588	2,146,645	6,402,596	1,467,345	21.3	64.1	14.6				
Lumber, planing-mill products, not including planing mills connected with sawmills.	1919	35	60	16	2,895	144	2,667	84	5.0	92.1	2.9	12,317,666	489,062	11,397,241	430,463	4.0	92.5	3.5				
	1914	40	68	14	2,039	166	1,788	85	8.1	87.7	4.2	5,468,709	432,020	4,813,962	207,727	7.9	88.3	3.8				
Patent medicines and com- pounds.	1919	57	75	10	1,040	109	918	13	10.5	88.3	1.2	14,590,676	996,312	13,446,399	147,965	6.8	92.2	1.0				
	1914	61	92	15	787	102	677	8	13.0	86.0	1.0	6,828,865	785,282	5,992,996	50,587	11.5	87.8	0.7				
Printing and publishing, book and job.	1919	240	149	71	5,866	671	4,847	348	11.4	82.6	5.9	25,880,461	2,969,085	21,431,721	1,489,655	11.4	82.8	5.8				
	1914	241	124	70	5,123	643	4,166	314	12.6	81.3	6.1	12,434,192	1,333,101	10,290,477	810,614	10.7	81.8	6.5				
Printing and publishing, newspapers and period- icals.	1919	462	160	152	4,183	1,341	2,505	337	32.1	59.9	8.1	30,011,808	8,376,113	19,598,796	2,036,899	27.9	65.3	6.8				
	1914	540	155	156	4,279	1,412	2,531	336	33.0	59.1	7.9	18,034,624	4,907,972	12,333,629	793,023	27.2	63.4	4.4				
Shirts.....	1919	3	16		2,715	7	2,708		0.3	99.7		11,704,712	22,240	11,682,472		0.2	99.8					
	1914	5	14		2,547	19	2,528		0.7	99.3		3,815,735	34,581	3,781,154		0.9	99.1					
Slaughtering and meat packing.	1919	21	25	3	8,290	149	8,241		0.6	99.4		246,610,195	11,719,239	244,890,956		0.7	99.3					
	1914	6	22	3	5,152	148	5,104		0.9	99.1		91,608,121	1,773,033	90,835,088		0.8	99.2					
Total for cities.....	1919	2,169	2,157	686	149,569	8,726	136,109	4,734	5.8	91.0	3.2	1,205,309,889	49,135,015	1,127,451,640	28,723,234	4.1	93.5	2.4				
	1914	2,136	1,862	595	116,260	8,083	104,580	3,612	7.0	89.9	3.1	475,161,684	28,057,872	434,073,864	13,020,948	5.9	91.4	2.7				
CAPE GIRARDEAU.....	1919	19	18	13	1,427	110	1,279	38	7.7	89.6	2.7	8,586,593	599,077	7,762,869	224,647	7.0	90.4	2.6				
	1914	16	20	6	1,259	47	1,179	33	3.7	93.6	2.6	3,888,376	159,058	3,638,312	91,006	4.1	93.6	2.3				
CARTHAGE.....	1919	18	17	14	515	85	389	41	16.5	75.5	8.0	6,627,782	298,757	6,038,376	290,649	4.5	91.1	4.4				
COLUMBIA.....	1919	10	10	5	379	28	333	18	7.4	87.9	4.7	2,232,207	189,144	1,985,450	57,613	8.5	88.9	2.6				
	1914	10	8	4	479	20	413	37	6.1	86.2	7.7	1,269,702	1,269,702	1,156,023	43,623	5.5	91.0	3.4				

¹ Includes the group "All others."² Includes "chewing gum" in 1914.³ Includes "iron and steel, tempering and welding" and "machine tools."

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

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISH- MENTS 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.		Individ- uals.	Corpora- tions.	All others.	Indi- vid- uals.	Corpora- tions.	All oth- ers.				
HANNIBAL.....	1919	32	24	11	2,800	78	2,651	71	2.8	94.7	2.5	\$14,026,833	\$478,971	\$13,113,176	\$434,686	3.4	93.5	3.1				
	1914	23	27	16	2,366	62	2,232	72	2.6	94.3	3.0	6,214,645	172,360	5,434,799	607,486	2.8	87.5	9.8				
INDEPENDENCE.....	1919	8	10	3	283	19	254	10	6.7	89.8	3.5	5,344,137	179,873	5,074,560	89,704	3.4	94.9	1.7				
JEFFERSON CITY.....	1919	15	21	6	1,713	28	1,677	8	1.6	97.9	0.5	10,188,406	117,825	10,035,448	35,133	1.2	98.5	0.3				
	1914	14	21	15	1,401	64	1,300	37	4.6	92.8	2.6	8,086,920	127,552	7,790,076	169,292	1.6	96.3	2.1				
JOPLIN.....	1919	59	45	35	1,810	117	1,530	163	6.5	84.5	9.0	14,219,935	753,755	12,663,221	802,959	5.3	89.1	5.6				
	1914	49	30	21	1,156	148	889	119	12.8	76.9	10.3	5,950,150	375,546	5,056,708	517,896	6.3	85.0	8.7				
KANSAS CITY.....	1919	433	403	161	22,137	2,194	18,400	1,543	9.9	83.1	7.0	192,815,052	14,607,082	167,444,420	10,763,550	7.6	86.8	5.6				
	1914	508	369	175	16,252	2,489	12,776	987	15.3	78.6	6.1	90,953,411	9,767,165	46,421,112	4,765,134	16.0	76.2	7.8				
MOBERLY.....	1919	9	12	4	570	18	542	10	3.2	95.1	1.8	4,496,894	181,095	4,258,937	56,862	4.0	94.7	1.3				
	1914	15	11	3	463	37	414	12	8.0	89.4	2.6	2,136,330	133,724	1,970,239	32,367	6.3	92.2	1.5				
ST. JOSEPH.....	1919	93	100	26	5,043	259	5,572	112	4.4	93.8	1.9	50,697,198	1,669,412	48,257,979	769,807	3.3	95.2	1.5				
	1914	131	100	36	4,914	334	4,369	211	6.8	88.9	4.3	17,067,642	1,107,631	16,229,836	640,175	7.0	89.2	3.8				
ST. LOUIS.....	1919	1,369	1,429	377	107,919	5,594	99,743	2,582	5.2	92.4	2.4	871,700,438	29,175,171	827,975,054	14,550,213	3.3	95.0	1.7				
	1914	1,288	1,215	284	85,058	4,618	78,465	1,975	5.4	92.2	2.3	360,479,868	15,221,438	330,678,539	5,579,891	4.2	94.2	1.5				
SEDALIA.....	1919	29	25	12	1,163	55	1,075	33	4.7	92.4	2.8	5,561,865	233,902	5,144,155	183,808	4.2	92.5	3.3				
	1914	39	19	11	903	100	757	40	11.7	83.8	4.4	2,921,686	355,035	2,434,867	131,784	12.2	83.3	4.5				
SPRINGFIELD.....	1919	45	43	19	2,910	141	2,661	105	4.8	91.5	3.6	18,812,549	650,951	17,697,995	463,603	3.5	94.1	2.5				
	1914	43	42	24	2,000	154	1,766	89	7.7	87.9	4.4	6,192,954	478,307	5,263,353	451,294	7.7	85.0	7.3				

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. ¹		10,000 to 25,000 ¹		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.	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		13		8		3		2			
	1914		12		7		3		2			
	1909		10		5		3		2			
Population ²	1920	3,404,055	1,354,925	39.8	110,146	3.2	147,472	4.3	1,097,307	32.2	2,049,130	60.2
	1915	3,372,886	1,270,659	37.7	99,836	3.0	154,245	4.6	1,016,578	30.1	2,102,227	62.3
	1910	3,293,335	1,160,840	34.9	70,763	2.1	144,677	4.4	935,410	28.4	2,142,495	65.1
Number of establishments.....	1919	8,592	5,012	58.3	345	4.0	465	5.4	4,202	48.9	3,580	41.7
	1914	8,386	4,613	55.0	298	3.6	476	5.7	3,839	45.8	3,773	45.0
	1909	8,375	4,247	50.7	232	2.8	446	5.3	3,569	42.6	4,128	49.3
Average number of wage earners.....	1919	195,037	149,569	76.7	8,850	4.5	10,693	5.5	130,056	66.7	45,468	23.3
	1914	152,182	116,366	76.5	7,007	4.6	8,079	5.3	101,310	66.6	35,786	23.5
	1909	152,993	115,565	75.5	5,200	3.4	8,351	5.5	102,014	66.7	37,428	24.5
Value of products.....	1919	\$1,594,208,338	\$1,205,309,889	75.6	\$57,064,717	3.6	\$83,729,682	5.3	\$1,064,515,490	66.8	\$388,898,449	24.4
	1914	637,952,123	475,867,911	74.6	25,223,886	4.0	20,210,746	4.0	421,433,279	66.1	162,081,217	25.4
	1909	574,111,070	427,078,288	74.4	16,734,760	2.9	27,143,705	4.7	383,199,823	66.7	147,032,782	25.6
Value added by manufacture.....	1919	537,751,174	445,066,792	82.8	17,520,122	3.3	28,167,431	5.2	399,379,239	74.4	92,684,382	17.3
	1914	249,237,260	206,229,724	82.7	9,860,088	4.0	10,717,276	4.3	185,646,360	74.5	43,007,545	17.3
	1909	219,699,919	181,522,835	82.6	5,945,511	2.7	10,684,506	4.9	164,892,818	74.9	38,177,084	17.4

¹ Includes Webb City in 1914 and 1909; population less than 10,000 in 1919.² 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.

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 ¹ over 1914.			Amount, 1919.	Per cent of total for the state.	Increase ¹ over 1914.	
			Amount.	Per cent.				Amount.	Per cent.
KANSAS CITY.					ST. LOUIS.				
Bread and other bakery products.....	\$15,762,836	36.0	\$8,669,469	122.2	Slaughtering and meat packing.....	\$96,044,220	38.9	\$59,538,068	163.1
Printing and publishing, newspapers and periodicals.....	10,592,983	35.3	5,674,961	115.4	Boots and shoes, not including rubber boots and shoes.....	59,857,853	54.8	40,957,084	216.7
Butter.....	7,879,726	35.6	(²)	(²)	Tobacco manufactures.....	45,947,990	96.2	(²)	(²)
Flour-mill and gristmill products.....	7,611,780	6.7	4,082,888	115.7	Foundry and machine-shop products ³	31,493,878	63.4	8,886,184	39.3
Printing and publishing, book and job.....	6,715,257	25.9	3,635,243	118.0	Boot and shoe cut stock.....	28,096,415	100.0	(²)	(²)
Coffee, roasting and grinding.....	6,393,029	21.3	4,746,262	288.1	Bags, other than paper, not including bags made in textile mills.....	27,970,073	73.6	(²)	(²)
Clothing, men's.....	6,048,192	16.8	(²)	(²)	Coffee, roasting and grinding.....	21,956,572	73.0	9,984,671	83.4
Food preparations, not elsewhere specified.	5,839,526	24.9	4,073,524	230.7	Clothing, men's.....	21,135,292	59.0	14,306,258	209.5
Cars and general shop construction and repairs by steam-railroad companies.....	3,840,304	11.6	2,336,465	155.4	Bread and other bakery products.....	21,047,050	48.0	11,594,104	122.6
Copper, tin, and sheet-iron work.....	3,226,533	30.6	2,010,076	165.2	Liquors, malt.....	20,591,404	84.5	-6,238,070	-23.3
Lumber, planing-mill products, not includ- ing planing mills connected with saw- mills.....	2,653,164	21.5	992,678	59.8	Clothing, women's.....	17,415,571	94.5	12,062,303	225.3
Confectionery and ice cream.....	2,197,935	0.4	735,075	50.6	Printing and publishing, book and job.....	16,868,498	65.2	8,919,212	112.2
Automobiles.....	(²)	(²)	(²)	(²)	Food preparations, not elsewhere specified.	15,239,112	64.9	10,109,255	197.1
Awning, tents, and sails.....	(²)	(²)	(²)	(²)	Electrical machinery, apparatus, and sup- plies.....	14,847,552	67.5	11,572,305	353.3
Chewing gum.....	(²)	(²)	(²)	(²)	Furniture.....	13,958,300	86.4	8,336,410	143.3
Cordials and flavoring sirups.....	(²)	(²)	(²)	(²)	Printing and publishing, newspapers and periodicals.....	13,832,301	46.1	5,178,708	59.8
Liquors, malt.....	(²)	(²)	(²)	(²)	Stoves and hot-air furnaces.....	13,569,872	88.5	(²)	(²)
Millinery and lace goods, not elsewhere specified.....	(²)	(²)	(²)	(²)	Confectionery and ice cream.....	13,432,819	57.2	8,764,485	157.7
Paints.....	(²)	(²)	(²)	(²)	Flour-mill and gristmill products.....	12,928,163	11.4	9,964,110	336.2
Petroleum, refining.....	(²)	(²)	(²)	(²)	Patent medicines and compounds.....	12,575,220	86.2	6,490,723	106.7
					Chemicals.....	11,978,475	88.5	(²)	(²)
					Paints.....	10,864,510	74.8	6,148,730	130.4
					Shirts.....	8,686,657	74.2	5,242,928	152.2
					Automobile bodies and parts.....	8,326,287	89.4	8,067,569	3,118.2
					Brass and bronze products.....	8,051,089	98.8	(²)	(²)
					Boxes, paper and other, not elsewhere specified.....	8,010,943	90.4	6,755,192	537.9
					Wirework, including wire rope and cable, not elsewhere specified.....	7,438,233	95.5	4,173,501	127.8
					Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	7,434,254	60.4	5,321,440	251.9
					Brick and tile, terra-cotta, and fire-clay products.....	5,950,295	51.9	1,895,850	46.8
					Cars and general shop construction and repairs by steam-railroad companies.....	5,356,978	16.2	3,121,861	139.7
					Millinery and lace goods, not elsewhere specified.....	5,069,774	68.2	3,444,197	211.9
					Boxes, wooden packing, except cigar boxes. Cars, steam-railroad, not including opera- tions of railroad companies.....	5,002,785	68.4	2,966,603	145.7
					Gas, illuminating and heating.....	(²)	(²)	(²)	(²)
					Iron and steel, steel works and rolling mills. Jute goods.....	(²)	(²)	(²)	(²)
					Soap.....	(²)	(²)	(²)	(²)
					Stamped ware, not elsewhere specified.....	(²)	(²)	(²)	(²)

¹ A minus sign (—) denotes decrease.² Figures can not be shown without disclosing individual operations.³ Includes "iron and steel, tempering and welding."

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.....	27,701	16,197	11,545	477,303	391,385	340,467	100.0	100.0	100.0
Owned.....	4,199	4,824	5,140	295,092	305,014	295,391	61.8	77.9	86.8
Steam ¹	2,873	3,428	3,802	209,657	233,490	280,494	56.5	72.4	82.4
Engines.....	2,762	(²)	(²)	244,096	(²)	(²)	51.1	(²)	(²)
Turbines.....	111	(²)	(²)	25,561	(²)	(²)	5.4	(²)	(²)
Internal-combustion engines.....	1,228	1,273	1,200	22,049	15,321	11,159	4.6	4.7	3.3
Water.....	98	123	138	3,386	3,203	3,738	0.7	0.8	1.1
Water wheels and turbines.....	80	118	121	3,169	3,172	3,532	0.7	0.8	1.0
Water motors.....	9	5	17	217	31	206	(³)	(³)	0.1
Rented.....	23,502	11,373	6,405	182,211	86,371	45,076	38.2	22.1	13.2
Electric.....	23,502	11,373	6,405	181,556	84,362	44,056	38.0	21.6	12.9
Other.....	(²)	(²)	(²)	655	2,009	1,020	0.1	0.5	0.3
Electric.....	33,081	18,951	11,534	287,572	181,981	106,941	100.0	100.0	100.0
Rented.....	23,502	11,373	6,405	181,556	84,362	44,056	63.1	46.4	41.2
Generated by establishments reporting.....	9,579	7,578	5,129	106,016	97,619	62,885	36.9	53.6	58.8

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, 2,240 pounds).	Bituminous (tons, 2,000 pounds).				
All industries.....	1919.. 14,652	4,117,582	194,758	1,839,968	31,322	1,658,684
Per cent of increase ¹	1914.. 15,100	3,577,688	222,717	1,340,828	(¹)	1,073,686
	-3.0	15.1	-12.6	38.9	(¹)	54.5
Boots and shoes, not including rubber boots and shoes.....	343	41,133	1,172	10	138	9,572
Brass and bronze products.....		37,597	1,923	24,336	60	4,027
Bread and other bakery products.....	1,776	52,041	11,130	35,605	825	91,317
Brick and tile, terra-cotta, and fire-clay products.....	885	395,175	616	119,624	121	3,055
Cars and general shop construction and repairs by steam-railroad companies.....	1,221	207,032	4,897	17,941	9,011	55
Cement.....		448,863		9,066		
Chemicals.....	50	37,564	3,446	3,764		4,480
Confectionery and ice cream.....	105	30,409	640	1,155	448	26,046
Electrical machinery, apparatus, and supplies.....		13,252	428	6,229	208	107,402
Explosives.....		33,368	119	233		21,890
Flour-mill and gristmill products.....	302	206,350	36	28,436	4,041	5,133
Food preparations, not elsewhere specified.....	18	13,177	21	183	57	37,872
Foundry and machine-shop products.....	118	57,829	39,277	21,792	986	58,807
Furniture.....	487	17,170	1,365	496	390	5,389
Gas, illuminating and heating.....		702,610	24,807	194,082		
Ice, manufactured.....		295,493		141,348	114	2,083
Iron and steel, steel works and rolling mills.....		76,980	2,651	138,324		528
Lime.....		46,191			59	
Liquors, malt.....	4	173,914	2,326	37,511	1,304	3,480
Lumber and timber products.....		13,398		2,086	796	
Lumber, planing-mill products, not including planing mills connected with saw-mills.....	7	14,499	60	42	91	2,687
Minerals and earths, ground or otherwise treated.....		17,438	97	5,050	1,532	
Paints.....		36,593	805	12,568	20	254
Printing and publishing, book and job.....	332	8,408	40	90	49	25,471
Printing and publishing, newspapers and periodicals.....	160	11,258	840	17,230	1,542	50,385
Slaughtering and meat packing.....		266,986	530	170,100	2	24,512
Soap.....		20,619	413			96
Stoves and hot-air furnaces.....	28	13,653	4,713		2	15,535
All other industries.....	8,816	865,588	92,406	852,067	9,526	1,158,038
Total for cities.....	10,783	2,377,400	149,996	805,411	17,425	1,595,231
CAPE GIRARDEAU.....	33	14,000	50	2	80	1,499
CARTHAGE.....	12	4,719	150	1	10	9,477
COLUMBIA.....		5,527	411			197
HANNIBAL.....		46,132	4,587	100	9	1,745
INDEPENDENCE.....	32	7,777	617	15,000		849
JEFFERSON CITY.....	3	10,093		4,064	102	2,082
JOPLIN.....	5	16,088	13,903	16,315	147	67,366
KANSAS CITY.....	1,294	158,687	10,672	350,388	3,264	140,784
MOBERLY.....	13	9,859	150		86	391
ST. JOSEPH.....	216	65,360	12,599	88,731	573	21,755
ST. LOUIS.....	9,119	1,980,631	100,552	321,387	4,253	1,331,113
SEDALIA.....		19,140	79	860	64	1,144
SPRINGFIELD.....	56	38,807	6,247	8,563	8,837	16,829

¹ Included in figures for fuel oils.² A minus sign (-) denotes decrease.

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 six of these industries in Missouri are here presented.

Slaughtering and meat packing (Table 19).—This table presents, for the census years 1919, 1914, and 1909, the kind, number, and cost of animals slaughtered; "All other materials," which include dressed meat purchased for curing, cottonseed oil for making lard compounds and substitutes, curing materials, seasoning, refrigeration, materials for making ice, containers, fuel, rent of power, mill supplies, and freight; and the quantity and value of the most important products that can be shown without disclosing individual operations. The value of minor and auxiliary products are grouped under "All other products," which include beef, pickled and other cured, canned pork, canned sausage, meat puddings, headcheese and scrap-ple, lard compounds and substitutes, oleo oil, oleo stearin, hoofs, horns, and horntips, strips and waste, hog and cattle hair, wool, stock feed, and ice. The value of goat meat was included with that of "Edible offal and other fresh meat."

The actual growth of the industry is indicated by a comparison of the number of animals killed in 1919 and 1914. The number of these slaughtered in 1919, exclusive of goats and kids, was 5,090,407 and in 1914, 3,975,313, an increase of 1,115,094, or 28.1 per cent. This increase was in all classes except sheep and lambs, which decreased 34,595. There was a large increase in the cost of each class of animals slaughtered, and the cost per unit for hogs, and sheep and lambs, more than doubled.

The production of mutton and lamb during this period declined 3,199,698 pounds and that of fresh pork 8,375,813 pounds, but the increase in cured pork was 103,940,812 pounds. There was a decline of 2,262,565 pounds in tallow and oleo stock and 340,637 pounds in casings.

The number of sheep and lamb skins was 34,621 less in 1919 than in 1914.

TABLE 19.—SLAUGHTERING AND MEAT PACKING: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$228,009,376	\$84,335,435	\$72,004,428
Animals slaughtered, cost.....	\$213,273,847	\$77,107,756	\$64,725,904
Beefes—			
Number.....	674,287	359,910	530,356
Cost.....	\$61,904,149	\$24,718,132	\$24,332,919
Calves—			
Number.....	167,753	45,213	81,551
Cost.....	\$3,827,762	\$637,528	\$821,829
Sheep and lambs—			
Number.....	742,156	776,751	546,649
Cost.....	\$8,337,496	\$4,192,609	\$2,659,215
Hogs—			
Number.....	3,506,211	2,793,439	2,471,658
Cost.....	\$139,204,440	\$47,559,427	\$36,911,941
All other materials, cost.....	\$14,735,529	\$7,227,679	\$7,278,524

TABLE 19.—SLAUGHTERING AND MEAT PACKING: 1919, 1914, AND 1909—Continued.

	1919	1914	1909
PRODUCTS.			
Total value.....	\$246,610,195	\$91,608,121	\$79,325,733
Fresh meat, value.....	\$94,931,313	\$44,510,603	\$37,968,029
Beef—			
Pounds.....	282,295,654	183,947,055	273,808,501
Value.....	\$44,197,967	\$20,469,895	\$20,038,884
Veal—			
Pounds.....	16,819,209	4,402,875	8,831,469
Value.....	\$2,980,652	\$549,457	\$767,841
Mutton and lamb—			
Pounds.....	27,183,158	30,382,856	21,896,982
Value.....	\$6,090,276	\$3,409,093	\$2,209,396
Pork—			
Pounds.....	156,569,049	164,944,862	138,974,435
Value.....	\$39,001,859	\$18,746,424	\$13,492,089
Edible offal and other fresh meat—			
Pounds.....	25,912,179	20,108,325	10,667,668
Value.....	\$2,660,559	\$1,335,734	\$1,450,599
Pork, pickled and other cured:			
Pounds.....	313,862,906	209,922,094	222,224,021
Value.....	\$90,646,301	\$28,393,231	\$24,769,411
Sausage:			
Pounds.....	35,010,730	16,183,674	18,022,911
Value.....	\$6,630,306	\$1,984,968	\$1,876,818
Lard:			
Pounds.....	92,064,888	72,410,700	48,835,133
Value.....	\$27,744,195	\$7,573,570	\$5,595,067
Tallow and oleo stock:			
Pounds.....	6,569,624	8,832,189	10,412,367
Value.....	\$1,246,421	\$617,446	\$799,584
Grease and soap stock:			
Pounds.....	8,407,056	2,403,605	(1)
Value.....	\$1,182,782	\$136,273	(1)
Casings:			
Pounds.....	4,220,621	4,561,258	(1)
Value.....	\$736,384	\$473,885	(1)
Fertilizers and fertilizer materials:			
Tons.....	23,023	15,973	19,482
Value.....	\$1,121,011	\$473,606	\$564,335
Hides and pelts:			
Cattle—			
Number.....	674,287	359,910	
Pounds.....	36,022,198	21,920,168	
Value.....	\$11,487,699	\$3,449,506	567,275
Calf—			
Number.....	126,009	38,971	32,406,066
Pounds.....	1,595,333	526,789	\$4,427,484
Value.....	\$830,008	\$94,932	
Sheep and lamb—			
Number.....	742,144	776,765	281,627
Value.....	\$2,168,383	\$870,028	\$330,199
All other products, value.....	\$7,875,792	\$3,080,083	\$3,503,936

¹ Not reported separately.

This state ranked fifth in value of products in the slaughtering and meat-packing industry in the United States for the last three census periods—1919, 1914, and 1909.

Boots and shoes (Tables 20 and 21).—Table 20 gives the number of pairs and value of the various kinds of footwear made in Missouri in 1919, 1914, and 1909.

The number of pairs of boots and shoes reported in 1919 increased by 5,012,812, or 24.5 per cent, as compared with 1914, and by 799,892, or only 3.2 per cent, as compared with 1909. The value of the output for the former period shows an increase of \$62,058,444, or 154.9 per cent. Missouri's proportion of the aggregate number of pairs of boots, shoes, and slippers reported for the United States was 8 per cent in 1919 as against 7.1 in 1914 and 9.1 in 1909. Men's shoes were the only kind in 1919 to show a decrease in output over 1914. All other kinds show an increase, and of these, women's shoes made the greatest gain, amounting to 3,497,453 pairs, or 51.7 per cent. In 1914 and 1909 men's boots and shoes led in production, but in 1919 more women's

shoes were reported than any other kind. Slippers were principally infants', and "All other products" for 1919 includes the value of a large quantity of cut stock which can not be shown separately without disclosing individual operations.

TABLE 20.—BOOTS AND SHOES, BY CLASSES: 1919, 1914, AND 1909.

CLASS.	NUMBER OF PAIRS AND VALUE.		
	1919	1914	1909
Aggregate number of pairs.....	26,362,397	20,868,352	25,931,107
Aggregate value.....	\$109,193,423	\$40,311,210	\$42,534,198
Boots and shoes:			
Total number of pairs.....	25,457,052	20,444,240	24,657,160
Total value.....	\$102,132,828	\$40,074,384	
Men's—			
Number of pairs.....	8,399,403	8,840,878	9,303,028
Value.....	\$38,571,154	\$21,030,331	
Boys' and youths'—			
Number of pairs.....	2,294,733	748,018	2,087,258
Value.....	\$7,496,179	\$1,278,816	
Women's—			
Number of pairs.....	10,256,064	6,758,611	8,642,965
Value.....	\$43,848,582	\$11,961,984	
Misses' and children's—			
Number of pairs.....	4,506,852	4,096,733	4,623,900
Value.....	\$12,210,913	\$5,797,253	
Slippers (all kinds):			
Number of pairs.....	905,345	424,112	1,273,947
Value.....	\$698,323	\$177,781	
All other products, value.....	\$6,362,272	\$50,045	

¹ Total value only reported in 1909.

Table 21 gives the kinds and number of pairs of boots and shoes produced in the state in 1919 and 1914, classified according to method of manufacture.

Welted shoes exceeded other kinds in number of pairs manufactured in 1919. This is a reversal of the showing made at the previous census when the McKay was the leading type. Men's, boys', and youths' boots and shoes were principally welted, while women's, misses', and children's were McKay. There was an increase in the turned and wood or metal fastened type for the period covered by the table. Stitchdown, a type not reported separately at previous censuses, shows a total of 1,155,291 pairs for 1919.

TABLE 21.—BOOTS AND SHOES—NUMBER OF PAIRS, BY METHOD OF MANUFACTURE: 1919 AND 1914.

CLASS.	Census year.	NUMBER OF PAIRS, BY METHOD OF MANUFACTURE.				
		Total.	Welted.	McKay.	Turned and wood or metal fastened.	Stitch-down.
Boots and shoes.....	1919	25,457,052	10,350,770	9,045,541	4,305,450	1,155,291
	1914	20,444,240	7,364,001	9,318,739	3,761,500	(1)
Men's.....	1919	8,399,403	6,175,367	2,133,395		90,641
	1914	8,840,878	5,188,588	1,337,283	2,315,007	(1)
Boys' and youths'.....	1919	2,294,733	1,335,289		959,444	
	1914	748,018	188,803	227,081	332,134	(1)
Women's.....	1919	10,256,064	1,739,626	7,256,108	817,091	443,230
	1914	6,758,611	1,986,610	4,224,983	547,018	(1)
Misses' and children's.....	1919	4,506,852	1,100,488	2,389,433	395,520	621,411
	1914	4,096,733		3,529,392	567,341	(1)
Slippers (all kinds).....	1919	905,345		45,819	768,250	91,276
	1914	424,112		424,112		(1)

¹ Not reported separately.

² Includes "McKay."

³ Includes "McKay" and "Stitchdown."

⁴ Includes "Welted"

⁵ Includes "Turned."

Flour-mill and gristmill products (Table 22).—This table shows the chief products of the industry in Missouri at the censuses of 1919, 1914, and 1909. Of the total value of products for the industry in the state, wheat flour formed 66.4 per cent in 1919 and 66.3 per cent in 1914. Bran and middlings and feed and offal combined formed 23.3 per cent and 25.8 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 193.7 per cent and the quantity increased 32 per cent during the five-year period.

TABLE 22.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILLS): 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$113,297,359	\$38,686,309	\$44,508,106
Wheat flour:			
Barrels.....	7,132,417	5,402,391	5,672,269
Value.....	\$76,273,509	\$25,633,116	\$30,054,028
Corn meal and corn flour:			
Barrels.....	322,994	763,678	1,020,738
Value.....	\$6,235,585	\$2,641,988	\$3,129,694
Hominy and grits:			
Pounds.....	8,073,600	24,883,523	26,726,254
Value.....	\$236,176	\$373,432	\$413,234
Bran and middlings:			
Tons (2,000 lbs.).....	275,382	219,068	
Value.....	\$12,901,420	\$5,071,600	425,467
Feed and offal:			
Tons.....	242,320	188,507	
Value.....	\$13,405,953	\$4,898,895	\$9,711,059
All other cereal products, value.....	\$5,118,228		
All other products, value.....	\$36,479	\$67,278	\$1,200,091

Printing and publishing (Table 23).—This table shows the number and aggregate circulation per issue of all newspapers and periodicals in Missouri for the census years 1919, 1914, and 1909.

A decrease is shown during the five years 1914 to 1919, both in total number of publications and in their aggregate circulation per issue, due to the discontinuance of certain weekly and semimonthly publications, some of which were printed in the German language.

Notwithstanding the decrease in aggregate circulation for all publications, the circulation of daily newspapers increased 176,387, or 12.3 per cent, and of Sunday newspapers, 74,214, or 6.6 per cent. Of the dailies, 21 were published in the morning, with a circulation of 672,797, an increase of 50,038, or 8 per cent, over the figures for 1914; and 60 with a circulation of 935,809 were published in the afternoon, showing an increase of 126,349, or 15.6 per cent.

In 1919, 40 foreign-language publications with an aggregate circulation of 428,678 per issue were reported in the state, as compared with 54 in 1914 with a circulation of 491,675. This is a decrease of 25.9 per cent in number of publications and of 12.8 per cent in circulation. Of these foreign-language publications, 2 dailies, 3 Sundays, 6 weeklies, 3 semimonthlies, 9 monthlies, and 1 bimonthly were printed in German; 3 weeklies in Italian; 1 semiweekly, 1 weekly, 1 semi-monthly, and 1 monthly in Bohemian; and 1 weekly each in Hungarian, Spanish, Polish, and Yiddish. There were 1 weekly and 3 monthly publications in

English and German, and 1 weekly in English and Italian.

TABLE 23.—PRINTING AND PUBLISHING: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1919	1914	1909	1919	1914	1909
Total.....	895	1,004	1,003	8,504,660	9,098,333	7,577,639
Daily.....	81	89	91	1,608,606	1,432,219	1,624,621
Sunday.....	18	23	21	1,205,673	1,131,459	978,377
Semiweekly ¹	17	12	13	404,235	108,326	353,481
Weekly.....	611	721	731	2,258,690	3,542,326	1,871,585
Semi-monthly.....	26	20	13	477,621	704,401	193,248
Monthly.....	113	110	117	2,258,270	1,755,852	2,265,275
Quarterly.....	20	23	12	303,090	414,245	203,504
All other classes ²	9	6	5	48,475	9,505	87,548

¹ Includes in 1919, 3 triweeklies, and in 1914 and 1909 each, 1 triweekly.

² Includes in 1919, 8, in 1914, 5, and in 1909, 2 bimonthly publications.

Butter (Table 24).—This table presents the quantity and value of butter manufactured in 1919, 1914, and 1909. The products of those establishments engaged primarily in the manufacture of cheese and condensed milk have been excluded from the table in order to avoid the possibility of disclosing the operations of individual establishments. The total quantity of butter increased 19,747,046 pounds, or 121.6 per cent, during the five-year period 1914 to 1919, while the value increased \$15,683,563, or 352.1 per cent. In addition, in 1919, butter valued at \$2,342,870 was manufactured in establishments engaged primarily in the manufacture of products other than those covered by the industry designation.

TABLE 24.—BUTTER: 1919, 1914, AND 1909.

	1919	1914	1909
Products, total value.....	\$22,147,091	\$5,107,343	\$2,953,818
Butter:			
Pounds.....	35,988,733	16,241,687	10,261,876
Value.....	\$20,138,209	\$4,454,046	\$2,802,230
Packed solid—			
Pounds.....	18,950,331	7,254,182	4,452,602
Value.....	\$10,241,087	\$1,961,929	\$1,213,508
Prints or rolls—			
Pounds.....	17,038,402	8,987,505	5,809,274
Value.....	\$9,897,122	\$2,403,617	\$1,648,722
All other products, value.....	\$2,009,482	\$712,697	\$96,588

Electrical machinery, apparatus, and supplies (Table 25).—This table shows details as to products for the manufacture of electrical machinery, apparatus, and supplies in Missouri during the year 1919.

TABLE 25.—ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES: 1919.

PRODUCT.	Value.
Total.....	\$22,007,658
Motors.....	8,600,563
Transformers and feeder potential regulators.....	1,640,785
Fuses, cut-outs, and fuse plugs.....	594,997
Household and industrial apparatus and devices.....	123,641
Sockets, receptacles, bases, and attachment plugs.....	85,087
All other electrical machinery, apparatus, and supplies.....	10,432,603
All other products.....	307,439
Amount received for custom work and repairing.....	222,533

Laundries (Table 26).—Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. Table 26, however, summarizes the statistics for such laundries in the state of Missouri for 1919 and 1914.

TABLE 26.—POWER LAUNDRIES: 1919 AND 1914.

	NUMBER OR AMOUNT.		Per cent of increase, 1914-1919.
	1919	1914	
Number of establishments.....	165	177	-6.8
Persons engaged.....	6,839	6,757	1.2
Proprietors and firm members.....	112	144	-22.2
Salaried employees.....	730	714	2.2
Wage earners (average number).....	5,997	5,899	1.7
Primary horsepower.....	8,243	7,941	3.8
Capital.....	\$7,321,472	\$4,332,735	69.0
Salaries and wages.....	4,844,141	3,334,921	45.3
Salaries.....	934,688	725,766	28.8
Wages.....	3,909,453	2,609,155	49.8
Paid for contract work.....	17,624	9,821	79.5
Rent and taxes.....	251,712	176,825	42.4
Cost of materials.....	2,544,213	1,349,790	88.5
Amount received for work done.....	9,438,493	6,310,206	49.4

¹ A minus sign (—) denotes decrease.

Dyeing and cleaning (Table 27).—Statistics for dyeing and cleaning establishments that were operated by mechanical power in 1919 are presented in this table.

Statistics for such establishments have not been 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 27.—DYEING AND CLEANING: 1919.

	Number or amount.
Number of establishments.....	125
Persons engaged.....	1,414
Proprietors and firm members.....	124
Salaried employees.....	228
Wage earners (average number).....	1,062
Primary horsepower.....	1,292
Capital.....	\$1,281,553
Salaries and wages.....	1,258,553
Salaries.....	359,455
Wages.....	899,098
Paid for contract work.....	8,955
Rent and taxes.....	118,701
Cost of materials.....	650,768
Amount received for work done.....	2,827,687

Custom sawmills and custom gristmills (Tables 28 and 29).—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 in 1914.

Tables 28 and 29, however, summarize the statistics for such mills for 1919 and 1909. The value of products for custom sawmills represents the amount received for the work performed, and that for custom gristmills the value of the grain milled.

TABLE 28.—CUSTOM SAWMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	285	419	-32.0
Persons engaged.....	517	1,135	-54.4
Proprietors and firm members.....	388	595	-34.8
Salaried employees.....	129	536	-75.9
Wage earners (average number).....	5,648	7,060	-20.0
Primary horsepower.....	\$343,578	\$497,026	-30.9
Capital.....	88,938	117,407	-24.2
Salaries and wages.....		634	
Salaries.....	88,938	116,773	-23.8
Wages.....	3,206	2,521	27.2
Rent and taxes.....	28,659	13,568	111.2
Cost of materials.....	278,210	414,135	-32.8
Amount received for work done.....			

¹ A minus sign (-) denotes decrease.

TABLE 29.—CUSTOM GRISTMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	251	412	-39.1
Persons engaged.....	332	730	-54.5
Proprietors and firm members.....	296	547	-45.9
Salaried employees.....	1	7	
Wage earners (average number).....	35	176	-80.1
Primary horsepower.....	4,126	7,268	-43.2
Capital.....	\$549,902	\$880,960	-36.1
Salaries and wages.....	25,848	33,162	-22.1
Salaries.....	636	1,435	-55.7
Wages.....	25,212	31,727	-20.5
Rent and taxes.....	5,182	4,750	9.0
Cost of materials ²	1,071,773	1,155,245	-7.2
Value of products ²	1,318,391	1,461,474	-9.8

¹ A minus sign (-) denotes decrease; percentage omitted where base is less than 100.² Includes estimate of all grain ground.

GENERAL TABLES.

Table 30 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 Kansas City, St. Joseph, and St. Louis, 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 31 presents, for 1919, for the state as a whole and for Kansas City, St. Joseph, and St. Louis, 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 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 earners (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 earners (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
Expressed in thousands of dollars.								Expressed in thousands of dollars.							
THE STATE--ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
All industries.....	1919	8,592	195,037	477,303	196,515	1,056,457	1,594,208	Cooperage.....	1919	30	677	1,565	831	3,252	5,161
	1914	8,386	152,182	391,385	89,197	388,715	637,952		1914	39	852	1,702	431	1,162	1,888
	1909	8,375	152,993	340,467	80,843	354,411	574,111		1909	43	1,088	2,319	558	1,902	3,079
Agricultural implements...	1919	14	254	656	253	800	1,457	Copper, tin, and sheet-iron products. ³	1919	197	3,386	3,332	3,388	11,223	19,697
	1914	18	240	742	142	270	570		1914	195	2,506	2,394	1,569	4,769	8,390
	1909	25	438	1,080	219	504	981		1909	207	2,637	1,556	1,482	4,598	7,827
Automobiles, including bodies and parts.	1919	86	3,240	3,508	3,721	54,943	71,939	Electrical machinery, apparatus, and supplies.	1919	35	6,367	6,128	5,684	8,162	22,008
	1914	25	501	626	389	1,207	2,183		1914	19	2,560	1,918	1,536	2,410	6,643
	1909	17	368	184	252	1,025	1,677		1909	20	1,060	1,180	627	1,104	3,261
Awnings, tents, and sails..	1919	23	771	273	591	3,786	5,824	Envelopes.....	1919	7	467	612	355	812	1,952
	1914	21	428	203	206	991	1,552		1914	7	346	407	169	443	908
	1909	18	429	217	193	1,207	1,784	Flavoring extracts.....	1919	12	150	187	80	1,114	1,526
Belting, leather.....	1919	8	56	133	57	768	1,041		1914	12	100	125	54	571	1,009
	1914	5	44	156	34	364	503		1909	12	80	70	31	272	648
Blackening and cleansing and polishing preparations.	1919	40	121	314	153	589	1,183	Flour-mill and gristmill products.	1919	690	3,015	47,546	3,154	98,185	113,297
	1914	37	81	319	40	321	660		1914	641	2,096	39,003	1,122	33,262	38,686
	1909	32	110	162	55	303	600		1909	680	2,198	43,175	1,040	38,826	44,508
Boots and shoes, including cut stock and findings.	1919	73	19,535	12,946	15,777	106,807	142,466	Food preparations, not elsewhere specified.	1919	87	1,454	3,894	1,027	18,207	23,463
	1914	54	14,740	9,527	6,933	37,131	52,522		1914	54	629	1,997	305	6,147	7,791
	1909	59	17,396	11,113	8,164	34,540	48,751		1909	37	471	1,551	214	4,254	5,384
Boxes, paper and other, not elsewhere specified.	1919	41	2,369	1,550	1,503	4,953	8,857	Foundry and machine-shop products. ⁴	1919	812	14,317	28,105	17,617	30,095	71,564
	1914	32	1,092	727	455	747	1,636		1914	356	8,449	18,402	5,877	10,522	22,271
	1909	27	1,113	657	372	669	1,376		1909	329	7,443	13,568	4,860	9,156	19,975
Brass and bronze products.	1919	21	608	887	670	5,859	8,208	Fur goods.....	1919	12	166	57	189	564	1,233
	1914	18	383	523	264	2,438	3,047		1914	7	106	57	47	93	231
	1909	18	297	418	196	1,654	2,221		1909	8	78	9	45	148	314
Bread and other bakery products.	1919	975	6,156	6,730	6,093	26,356	43,839	Furnishing goods, men's...	1919	12	374	60	278	1,791	2,893
	1914	1,043	5,269	5,000	2,875	10,157	19,940		1914	16	873	122	250	900	1,574
	1909	954	4,743	3,023	2,487	10,829	18,524	Furniture and refrigerators.	1919	93	3,580	7,605	3,745	9,039	17,682
Brick and tile, terra-cotta, and fire-clay products.	1919	65	4,469	15,132	4,486	3,918	11,456		1914	100	3,346	6,546	2,043	3,533	7,608
	1914	90	5,183	14,747	2,771	1,995	6,509		1909	99	3,427	6,203	1,919	3,327	7,330
Brooms.....	1919	63	295	205	239	603	1,021	Gas and electric fixtures...	1919	6	251	240	326	927	1,632
	1914	49	223	184	112	323	666		1914	9	156	294	107	178	487
	1909	50	184	126	89	411	708		1909	3	79	60	43	121	188
Butter.....	1919	66	686	2,751	641	20,036	22,148	Gas, illuminating and heating.	1919	26	1,318	8,772	1,539	2,996	11,118
	1914	54	301	1,556	202	4,367	5,167		1914	35	1,342	16,351	844	2,143	7,197
	1909	56	159	788	100	2,499	2,959		1909	20	941	3,635	636	1,223	4,638
Canning and preserving ¹ ...	1919	158	1,256	2,805	511	4,931	6,377	Glass.....	1919	4	2,034	14,188	2,412	2,560	6,927
	1914	153	850	1,012	142	740	1,082		1914	7	2,248	12,445	1,588	1,575	3,882
	1909	222	952	974	186	1,005	1,574		1909	4	1,755	8,820	758	947	1,993
Carriages and wagons and materials.	1919	122	1,155	2,516	1,130	3,027	5,413	Hats and caps, other than felt, straw, and wool.	1919	22	348	55	299	1,111	1,893
	1914	223	2,560	4,528	1,636	3,832	6,851		1914	13	212	26	133	356	581
	1909	243	3,302	5,858	1,781	4,860	8,469		1909	14	182	30	106	218	440
Cars and general shop construction and repairs by electric - railroad companies.	1919	8	1,162	540	1,407	1,234	2,719	Hats, fur-felt.....	1919	5	323	68	211	1,021	1,479
	1914	8	1,168	812	807	834	1,710		1914	6	114	24	73	202	321
	1909	7	905	3,005	620	501	1,204		1909	4	32	4	15	22	77
Cars and general shop construction and repairs by steam - railroad companies.	1919	45	13,471	14,904	18,530	12,727	33,021	Hats, straw.....	1919	10	384	49	285	1,219	2,464
	1914	39	9,721	9,031	6,839	5,372	12,847		1914	5	159	42	81	348	731
	1909	35	8,121	9,042	6,097	4,128	9,812	House-furnishing goods, not elsewhere specified.	1919	14	102	413	85	958	1,353
Chemicals.....	1919	22	1,253	4,149	1,162	7,717	13,538		1914	9	44	325	28	130	223
	1914	22	842	1,764	498	4,164	6,936		1909	5	34	107	17	102	158
	1909	9	619	886	333	2,224	3,640	Ice, manufactured.....	1919	129	1,174	29,116	1,426	2,108	6,505
Clothing, men's, including shirts.	1919	131	9,538	3,954	6,670	29,441	47,543		1914	117	1,059	26,787	748	1,041	3,107
	1914	90	8,110	2,560	3,213	10,036	17,300		1909	92	761	22,904	472	667	2,084
	1909	84	7,994	1,559	2,994	9,071	15,407	Iron and steel, steel works and rolling mills.	1919	5	2,647	7,426	3,045	5,661	12,537
Clothing, women's.....	1919	116	3,308	534	2,883	11,493	18,434		1914	3	1,237	7,082	954	1,887	3,363
	1914	74	2,355	602	1,093	3,034	5,517		1909	4	2,227	6,255	1,320	2,859	5,013
	1909	68	2,750	487	1,137	3,180	5,439	Jewelry.....	1919	29	446	170	550	641	1,927
Coffee, roasting and grinding.	1919	40	814	2,834	576	23,059	30,070		1914	28	461	225	366	400	1,088
	1914	37	656	2,760	355	10,949	14,299		1909	19	376	160	272	323	873
	1909	40	730	2,879	312	9,192	12,062	Leather goods ⁵	1919	116	2,185	2,031	2,187	9,078	14,303
Coffins, burial cases, and undertakers' goods.	1919	16	608	1,196	618	1,784	3,253		1914	133	1,419	1,892	1,899	3,179	5,859
	1914	8	436	792	267	586	1,038		1909	106	1,814	1,269	1,037	3,794	6,508
	1909	11	540	663	296	776	1,565	Leather, tanned, curried, and finished.	1919	7	265	948	296	2,945	3,770
Confectionery and ice cream. ²	1919	220	3,669	5,773	2,837	12,928	23,498		1914	10	227	700	156	2,042	2,573
	1914	154	2,854	3,981	1,183	5,256	9,251		1909	9	220	519	146	1,599	2,035

¹ Includes "pickles, preserves, and sauces."² Includes "chewing gum" in 1914.³ Includes "stamped ware, not elsewhere specified" and "tinware, not elsewhere specified."⁴ Includes "automobile repairing"; "bells"; "gas machines"; "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"; and "structural ironwork, not made in steel works or rolling mills" in all years; "pumps, steam and other power" in 1919; "engines, steam, gas, and water" in 1919 and 1914; and "hardware, saddlery" in 1914 and 1909.⁵ Includes "saddlery and harness" and "trunks and valises."

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

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 ma- terials.	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 ma- terials.	Value of prod- ucts.
					Expressed in thousands of dollars.								Expressed in thousands of dollars.		
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
Lime.....	1919	16	736	1,930	650	793	2,090	Poultry, killing and dress- ing, not done in slaugh- tering and meat-packing establishments. Printing and publishing ¹ .	1919	6	142	312	158	2,948	3,308
	1914	19	531	1,593	277	409	890		1914	10	172	206	96	2,144	2,387
	1909	31	692	1,314	317	461	1,031								
Liquors, malt.....	1919	20	2,930	26,454	3,570	3,724	24,366	Rubber tires, tubes, and rubber goods, not else- where specified. Show cases.....	1919	1,310	11,465	14,135	11,955	23,177	61,250
	1914	32	5,947	31,164	4,852	7,373	31,801		1914	1,353	10,571	14,330	7,391	9,571	33,173
	1909	31	5,646	30,436	3,908	7,508	27,447		1909	1,322	10,790	10,472	6,610	8,627	29,651
Lumber and timber prod- ucts. ¹	1919	706	10,089	39,757	8,480	16,018	34,039	Signs and advertising nov- elties.	1919	7	621	2,168	541	2,479	3,865
	1914	956	9,196	44,098	4,749	8,413	18,397		1914	6	235	657	128	453	726
	1909	1,098	13,522	49,506	5,897	10,614	23,261								
Marble and stone work....	1919	154	840	5,185	1,018	1,723	3,803	Slaughtering and meat packing. ⁴	1919	8	284	743	308	553	1,177
	1914	175	905	4,018	647	1,281	2,716		1914	8	230	351	146	259	574
	1909	169	1,342	4,306	989	1,447	3,441		1909	8	209	100	137	170	433
Mattresses and spring beds, not elsewhere specified.	1919	28	348	769	377	1,401	2,407	Soap.....	1919	21	294	119	243	480	1,044
	1914	33	296	406	162	460	882		1914	21	158	27	141	149	703
	1909	33	345	310	187	457	950		1909	14	148	20	126	162	583
Millinery and lace goods, not elsewhere specified.	1919	42	1,809	189	1,133	4,147	7,434	Stoves and hot-air furnaces.	1919	62	8,361	20,213	10,453	228,656	247,477
	1914	33	908	241	367	1,064	2,163		1914	40	5,200	15,600	3,462	84,684	92,000
	1909	35	934	94	277	885	1,647		1909	45	4,674	11,735	2,073	72,198	79,581
Mineral and soda waters...	1919	178	476	1,098	399	1,542	3,598	Surgical appliances and artificial limbs.	1919	7	652	1,617	564	5,668	8,556
	1914	195	556	845	298	656	1,623		1914	9	521	1,358	279	2,811	4,920
	1909	176	463	749	221	420	1,292		1909	10	554	954	272	3,055	4,719
Minerals and earths, ground or otherwise treated.	1919	17	402	2,371	375	647	1,338	Tobacco manufactures.....	1919	19	2,462	2,994	2,977	6,065	15,340
	1914	9	179	1,235	96	162	366		1914	15	1,714	3,039	1,204	2,338	6,644
	1909	6	131	992	68	108	324								
Oil, not elsewhere specified.	1919	5	99	309	108	2,945	4,175	Tools, not elsewhere speci- fied.	1919	27	200	189	220	484	1,603
	1914	4	21	50	15	177	281		1914	17	69	43	53	32	212
									1909	15	37	16	24	22	143
Optical goods.....	1919	8	210	153	193	654	1,404	Vinegar and cider.....	1919	290	3,684	2,560	2,790	26,789	47,752
	1914	4	122	34	62	431	736		1914	431	3,997	1,859	1,990	14,061	33,381
	1909	5	54	29	30	76	171		1909	477	4,453	2,034	2,235	10,546	30,951
Paint and varnish.....	1919	37	991	4,388	1,287	11,073	16,550	Washing machines and clothes wringers.	1919	23	403	858	513	602	1,522
	1914	34	599	2,775	393	3,750	5,792		1914	19	191	522	115	188	400
	1909	32	685	2,706	366	4,698	6,828								
Patent medicines and com- pounds and druggists' preparations. ²	1919	201	1,786	2,058	1,280	8,376	21,325	Wirework, including wire rope and cable, not else- where specified.	1919	13	64	1,001	71	552	1,023
	1914	212	1,090	867	532	2,926	9,010		1914	16	52	293	27	228	382
	1909	185	980	908	415	2,536	7,039								
Paving materials.....	1919	49	703	5,401	673	300	1,379	All other industries.....	1919	8	156	372	156	628	1,053
	1914	25	652	2,605	320	147	671		1914	8	122	326	66	178	350
Photo-engraving.....	1919	20	246	170	423	152	1,133		1919	24	1,010	1,743	729	4,818	7,790
	1914	17	224	90	233	61	520		1914	21	741	1,609	374	1,332	3,484
	1909	18	187	80	165	82	450		1909	14	710	902	379	1,734	3,396
Photographic materials....	1919	6	254	516	221	753	1,357		1919	560	22,439	90,286	24,534	146,501	213,744
	1914	5	191	350	125	450	1,007		1914	577	17,815	59,844	10,652	59,795	83,059
									1909	945	28,077	66,447	14,929	58,336	94,642
Pipes, tobacco.....	1919	7	387	334	239	377	943								
	1914	7	301	332	109	229	436								
	1909	7	307	243	107	169	393								

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

KANSAS CITY.....	1919	997	22,137	44,287	23,742	124,310	192,815	KANSAS CITY—Con.	1919	25	340	834	316	1,224	2,198
All industries.	1914	1,052	16,252	35,706	10,504	31,981	60,953	Confectionery and ice cream. ⁵	1914	25	274	758	138	652	1,460
	1909	902	14,643	29,208	8,526	30,118	54,705	Copper, tin, and sheet- iron products. ⁶	1919	29	627	344	754	2,185	3,828
Bread and other bakery products.	1919	131	2,572	2,694	2,466	8,874	15,763		1914	55	513	363	407	801	1,611
	1914	141	1,908	1,973	969	3,442	7,093		1909	59	553	407	349	828	1,575
	1909	107	1,375	847	726	2,640	5,617	Druggists' preparations....	1919	6	57	32	26	522	747
Brick and tile, terra-cotta, and fire-clay products.	1919	4	213	865	239	255	680		1914	5	37	7	24	98	224
	1914	8	343	1,377	206	192	538	Flour-mill and gristmill products.	1919	8	226	4,440	281	6,841	7,612
	1909	5	353	480	161	121	389		1914	6	119	1,837	79	3,215	3,529
Cars and general shop con- struction and repairs by steam-railroad com- panies.	1919	5	1,632	1,343	2,125	1,443	3,840		1909	8	209	3,210	93	4,102	4,507
	1914	4	1,104	844	580	580	1,504	Food preparations, not elsewhere specified.	1919	21	293	1,393	280	4,075	5,840
	1909	4	662	415	508	315	883		1914	18	183	622	95	1,194	1,766
Chemicals.....	1919	5	44	252	51	151	457	Foundry and machine- shop products. ⁷	1919	102	1,940	3,805	2,581	4,491	9,365
	1914	4	30	165	16	74	172		1914	80	1,349	2,588	965	1,503	3,627
Coffee, roasting and grind- ing.	1919	9	221	463	179	4,836	6,394		1909	58	645	1,223	461	775	1,826
	1914	10	100	680	50	1,225	1,648								
	1909	10	107	350	51	1,393	1,879								

¹ Includes "boxes, wooden packing, except cigar boxes" and "lumber, planing-mill products, not including planing mills connected with sawmills" in all years; and "window and door screens and weather strips" in 1919 and 1914.

² Includes "perfumery and cosmetics."

³ Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithography."

⁴ Includes "sausage, not made in slaughtering and meat-packing establishments."

⁵ Includes "chewing gum" in 1914.

⁶ Includes "stamped ware, not elsewhere specified" and "tinware, not elsewhere specified."

⁷ Includes "automobile repairing"; "engines, steam, gas, and water"; "gas machines"; "hardware"; "iron and steel, welding"; "plumbers' supplies, not elsewhere specified"; "steam fittings and steam and hot-water heating apparatus"; "steel barrels, drums, and tanks"; and "structural ironwork, not made in steel works or rolling mills."

MANUFACTURES—MISSOURI.

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

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.		Value of products.	INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.		Value of products.
					Expressed in thousands of dollars.								Expressed in thousands of dollars.		
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
KANSAS CITY—Con.								ST. LOUIS							
Furniture.....	1919	12	187	370	220	437	877	All industries.	1919	3,205	107,919	195,097	108,557	540,825	871,700
	1914	23	254	503	176	329	721		1914	2,787	85,058	169,982	51,150	203,806	360,480
	1909								1909	2,607	87,371	148,095	48,535	188,189	328,495
House-furnishing goods, not elsewhere specified.	1919	8	82	303	70	849	1,162	Awnings, tents, and sails...	1919	12	217	125	205	2,497	3,315
	1914	6	29	205	18	81	141		1914	10	219	90	83	508	755
	1909								1909	11	214	81	85	554	818
Lumber and timber products. ¹	1919	20	875	2,176	936	2,545	4,624	Blacking and cleansing and polishing preparations.	1919	29	74	154	123	441	832
	1914	26	693	2,117	474	1,485	2,359		1914	23	59	275	31	268	517
	1909	26	802	1,866	519	2,141	3,398		1909	23	97	150	53	291	571
Marble and stone work.....	1919	7	115	544	171	223	461	Boots and shoes, not including rubber boots and shoes. ²	1919	27	9,779	4,737	8,496	39,554	59,858
	1914	13	139	533	119	171	410		1914	27	8,729	5,602	4,453	22,630	31,049
	1909	12	201	379	150	255	566		1909	28	11,081	6,860	5,684	18,151	27,779
Mattresses and spring beds, not elsewhere specified.	1919	9	131	440	175	573	989	Boxes, paper and other, not elsewhere specified.	1919	33	2,016	1,314	1,302	4,551	8,011
	1914	9	71	86	36	124	251		1914	23	786	542	349	569	1,256
	1909	7	74	136	44	133	237		1909	19	790	493	286	464	960
Mineral and soda waters...	1919	9	90	119	82	254	551	Brass and bronze products.	1919	16	582	840	634	5,779	8,051
	1914	11	45	59	35	48	167		1914	11	349	445	237	2,399	2,937
	1909	9	38	101	22	37	98		1909	11	269	385	180	1,632	2,165
Patent medicines and compounds.	1919	28	73	90	75	603	1,667	Bread and other bakery products.	1919	458	2,673	2,661	2,810	12,791	21,048
	1914	36	48	73	30	141	536		1914	470	2,483	2,153	1,422	9,880	9,454
	1909								1909	448	2,264	1,390	1,223	4,765	8,624
Printing and publishing, book and job.	1919	133	1,576	1,695	1,695	2,795	6,715	Brick and tile, terra-cotta, and fire-clay products. ³	1919	14	2,177	5,982	2,371	1,909	5,950
	1914	122	1,207	1,158	896	979	3,080		1914	19	3,212	6,789	1,776	1,117	4,060
	1909								1909	20	3,822	6,862	1,948	1,252	4,881
Printing and publishing, newspapers and periodicals.	1919	58	1,044	1,900	1,188	5,124	10,593	Carriages and wagons, including repairs.	1919	45	613	953	678	1,908	3,217
	1914	48	773	3,404	625	1,650	4,918		1914	78	1,482	1,251	1,032	2,741	4,484
	1909								1909						
Surgical appliances and artificial limbs.	1919	7	92	60	117	71	470	Cars and general shop construction and repairs by steam-railroad companies.	1919	11	2,398	1,175	3,604	1,421	5,357
	1914	8	47	27	37	18	140		1914	8	1,668	1,390	1,294	835	2,235
	1909	7	14	10	9	12	79		1909	5	1,677	1,485	879	765	1,742
All other industries.....	1919	361	9,707	20,119	9,715	76,039	107,982	Chemicals.....	1919	13	1,082	3,588	1,041	6,995	11,978
	1914	394	6,986	15,671	4,265	13,979	25,058		1914	15	784	1,389	459	3,960	6,471
	1909	590	9,610	19,784	5,427	17,360	33,651	Clothing, men's, including shirts.	1919	83	6,041	2,201	4,649	17,612	29,822
ST. JOSEPH	1919	219	5,943	13,591	5,578	33,351	50,697		1914	54	5,091	1,770	2,184	5,861	10,273
All industries.	1914	267	4,914	9,109	2,675	10,607	17,068		1909	50	4,751	879	1,966	5,382	9,687
	1909	261	5,390	7,737	2,710	11,054	17,626	Clothing, women's.....	1919	102	3,105	481	2,762	10,871	17,416
Boots and shoes.....	1919	3	364	358	343	1,467	2,021		1914	66	2,271	581	1,002	2,947	5,353
	1914	3	264	266	161	610	912		1909	58	2,439	438	1,021	2,902	4,886
	1909	5	410	213	201	724	1,025	Coffee, roasting and grinding.	1919	21	500	2,022	341	16,805	21,957
Bread and other bakery products.	1919	30	106	152	115	604	913		1914	20	499	1,808	279	9,103	11,972
	1914	34	108	121	75	257	415		1909	23	570	1,886	208	7,217	9,514
	1909	43	548	321	261	1,367	2,174	Coffins, burial cases, and undertakers' goods.	1919	8	525	1,018	511	1,472	2,763
Confectionery and ice cream. ⁴	1919	8	912	908	621	2,740	5,551		1914	5	413	755	552	533	969
	1914	7	715	809	299	1,276	2,184		1909	6	490	608	268	665	1,371
Cooperage, hogsheads and barrels.	1919	4	23	57	27	82	114	Confectionery and ice cream.	1919	89	2,096	2,690	1,638	7,435	13,433
	1914	3	22	50	11	32	60		1914	63	1,040	2,105	648	2,827	4,668
	1909	3	28	24	17	46	71	Copper, tin, and sheet-iron products. ⁵	1919	120	1,460	1,223	1,340	3,752	7,134
Copper, tin, and sheet-iron work.	1919	5	43	3	63	125	227		1914	95	1,818	1,749	1,043	3,444	5,946
	1914	12	53	5	39	60	125		1909	100	1,833	978	978	2,978	5,060
	1909	12	54	-----	45	76	146	Electrical machinery, apparatus, and supplies.	1919	30	3,477	3,100	2,849	6,263	14,848
Flour-mill and gristmill products.	1919	7	515	4,353	586	15,680	19,107		1914	12	1,420	1,400	828	1,229	3,275
	1914	9	130	1,324	76	2,485	2,714		1909	16	699	650	380	636	2,081
	1909	7	94	1,277	44	1,838	1,994	Electroplating.....	1919	12	84	164	102	80	252
Foundry and machine-shop products. ⁶	1919	25	302	554	368	477	1,225		1914	8	65	443	45	26	108
	1914	16	186	289	107	109	326		1909	12	66	115	46	21	103
	1909	15	233	396	128	164	430	Flour-mill and gristmill products.	1919	8	266	2,105	310	11,512	12,928
Patent medicines and compounds and druggists' preparations.	1919	7	20	14	19	107	210		1914	5	98	1,593	64	2,605	2,964
	1914	8	18	9	7	38	80	Food preparations, not elsewhere specified.	1919	42	981	2,280	635	12,415	15,239
	1909	7	8	6	3	9	24		1914	23	390	1,083	176	4,268	5,130
Printing and publishing...	1919	33	380	313	315	468	1,655		1909	21	382	946	170	3,499	4,455
	1914	34	416	352	258	250	1,156	Foundry and machine-shop products. ⁷	1919	322	8,479	16,815	10,273	16,821	42,266
	1909	30	368	278	226	273	1,025		1914	169	5,251	11,257	3,639	6,602	13,785
Saddlery and harness ⁸	1919	7	121	60	146	788	1,136		1909	160	5,298	8,692	3,518	6,682	14,591
	1914	13	177	131	120	569	779	Furnishing goods, men's...	1919	9	315	40	241	1,594	2,541
	1909	10	238	110	152	585	819		1914	9	424	35	135	588	902
All other industries.....	1919	90	3,157	6,819	2,975	10,813	18,538		1909	7	219	9	82	378	655
	1914	128	2,825	6,753	1,522	4,921	8,317								
	1909	129	3,409	5,112	1,633	5,972	9,913								

¹ 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."

² Excludes "ice cream" in 1914, to avoid disclosure of individual operations.

³ Includes "automobile repairing"; "iron and steel, welding"; "structural ironwork, not made in steel works or rolling mills" in all years; and "gas machines and gas and water meters" in 1914 and 1909.

⁴ Includes "trunks and valises" in 1914 and 1909.

⁵ Includes "cut stock and findings" in 1914.

⁶ Includes "pottery" in 1914 and 1909.

⁷ Includes "tinware, not elsewhere specified" in all years and "stamped ware, not elsewhere specified" in 1914 and 1909.

⁸ Includes "automobile repairing"; "bells"; "engines, steam, gas, and water"; "hardware"; "iron and steel, tempering and welding"; "machine tools"; "plumbers' supplies, not elsewhere specified"; "steam fittings and steam and hot-water heating apparatus"; and "structural ironwork, not made in steel works or rolling mills," in all years; "gas machines and gas and water meters" and "hardware, saddlery," in 1914 and 1909; and "pumps, steam and other power," in 1919.

MANUFACTURES—MISSOURI.

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

INDUSTRY AND CITY.	Con- sus year.	Num- ber of estab- lish- ments	Wage earners (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Con- sus year.	Num- ber of estab- lish- ments	Wage earners (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.															
ST. LOUIS—Contd.								ST. LOUIS—Contd.							
Furniture.....	1919	59	2,896	5,913	2,949	7,302	13,958	Models and patterns, not including paper patterns.	1919	20	143	123	198	82	455
	1914	56	2,646	4,856	1,568	2,535	5,622		1914	16	77	75	51	36	157
	1909	61	2,823	5,046	1,581	2,654	5,953		1909	15	106	72	78	46	211
Gas and electric fixtures and lamps and reflectors.	1919	5	327	334	369	981	1,818	Patent medicines and com- pounds and druggists' preparations. ³	1919	125	1,565	1,782	1,098	6,730	17,089
	1914	6	217	360	132	194	577		1914	125	900	674	421	2,480	7,769
	1909	7	202	185	126	285	547		1909	99	862	800	364	2,281	6,846
Hats and caps, other than felt, straw, and wool.	1919	17	284	43	254	887	1,484	Photo-engraving.....	1919	13	154	109	227	110	652
	1914	7	139	16	90	254	387		1914	12	158	60	145	41	363
	1909	9	124	31	78	159	307		1909	11	114	46	93	59	298
Ice, manufactured.....	1919	8	277	10,103	399	659	2,588	Pickles, preserves, and sauces.	1919	7	338	359	253	4,005	4,794
	1914	7	319	8,700	272	418	1,129		1914	5	55	30	29	315	432
	1909	9	201	8,105	151	291	731		1909	9	191	161	75	628	962
Jewelry.....	1919	19	275	102	327	529	1,161	Printing and publishing ⁴ ..	1919	393	5,874	7,229	6,632	11,090	33,135
	1914	13	248	111	195	236	655		1914	373	5,440	6,740	4,054	5,184	18,026
	1909	8	224	117	153	228	533		1909	347	5,708	5,441	3,824	5,118	17,164
Leather goods ¹	1919	34	1,318	1,058	1,379	4,994	8,387	Show cases.....	1919	5	232	563	244	458	960
	1914	39	817	524	536	1,531	3,177		1914	5	175	219	101	200	427
	1909	32	960	603	515	1,620	3,108		1909	5	121	239	80	115	285
Liquors, malt.....	1919	7	2,574	21,187	3,049	3,076	20,591	Slaughtering and meat packing. ⁶	1919	45	2,880	8,253	3,689	87,809	96,308
	1914	12	4,941	25,210	4,107	5,640	26,829		1914	23	2,066	5,938	1,366	33,788	36,634
	1909	10	4,823	24,590	3,339	6,474	23,147		1909	24	1,469	5,515	900	24,055	26,601
Lumber and timber prod- ucts. ²	1919	70	3,309	11,161	3,020	6,956	12,739	Stoves and hot-air fur- naces. ⁵	1919	13	2,011	2,372	2,382	5,482	13,570
	1914	75	2,305	10,456	1,341	2,610	5,149		1914	11	1,916	3,029	1,336	2,710	7,479
	1909	71	2,812	8,608	1,669	3,881	7,367		1909	13	1,073	1,826	1,199	2,458	5,623
Marble and stone work....	1919	35	244	1,081	357	552	1,260	Surgical appliances.....	1919	13	75	26	69	373	983
	1914	37	329	1,155	280	626	1,180		1914	3	12	3	5	4	17
	1909	39	557	1,073	468	723	1,580		1909	4	18	4	12	7	44
Mattresses and spring beds, not elsewhere specified.	1919	11	132	220	130	562	921	Wirework, including wire rope and cable, not else- where specified.	1919	10	950	1,648	674	4,004	7,438
	1914	15	140	234	89	238	409		1914	10	712	1,521	351	1,180	3,265
	1909	14	179	120	106	204	462		1909	9	683	853	365	1,697	3,323
Millinery and lace goods, not elsewhere specified.	1919	30	1,260	173	855	2,623	5,070	All other industries.....	1919	723	81,678	65,772	32,911	205,122	315,357
	1914	20	618	223	267	792	1,620		1914	660	21,385	55,032	12,773	62,498	109,879
	1909	18	514	64	183	549	1,045		1909	797	25,832	51,467	14,036	76,250	121,554
Mineral and carbonated waters.	1919	39	174	328	168	753	1,857								
	1914	38	262	306	155	298	739								
	1909	38	214	134	106	161	561								
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.															
CAPE GIRARDEAU.....	1919	50	1,427	4,732	1,187	5,689	8,587	MOBERLY.....	1919	25	570	1,250	431	3,253	4,497
	1914	42	1,259	1,989	607	2,356	3,888		1914	29	463	791	220	1,523	2,136
	1909	42	1,259	1,989	607	2,356	3,888		1909	31	999	1,276	538	1,092	1,984
COLUMBIA.....	1919	25	370	988	257	1,550	2,232	SEDALLA.....	1919	66	1,163	3,099	1,329	3,488	5,562
	1914	22	479	1,068	206	502	1,270		1914	69	903	1,778	488	1,951	2,922
	1909	22	479	1,068	206	502	1,270		1909	75	935	1,662	461	1,216	2,333
HANNIBAL.....	1919	67	2,800	3,646	2,894	8,515	14,027	SPRINGFIELD.....	1919	107	2,910	6,423	2,960	12,597	18,813
	1914	66	2,366	3,530	1,829	3,795	6,215		1914	109	2,009	4,646	1,243	3,766	6,193
	1909	66	2,445	3,412	1,284	4,316	6,195		1909	108	2,131	3,685	1,280	3,043	5,382
JEFFERSON CITY.....	1919	42	1,713	2,149	1,232	7,365	10,188								
	1914	50	1,401	1,826	603	4,743	8,087								
	1909	35	651	1,166	271	3,652	5,446								
JOPLIN.....	1919	130	1,810	4,719	1,581	9,614	14,220								
	1914	100	1,156	3,774	618	4,120	5,950								
	1909	77	830	3,102	494	2,358	4,130								

¹ Includes "saddlery and harness" and "trunks and valises."² 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."³ Includes "perfumery and cosmetics."⁴ Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithography."⁵ Includes "sausage, not made in slaughtering and meat-packing establishments."⁶ Includes "gas and oil stoves" in 1914 and 1909.

TABLE 31.—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.	Propri- etors 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.

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

	All industries.....	3, 502	244, 039	7, 676	11, 531	20, 722	9, 973	195, 037	Oc 209, 704	Mh 182, 239	(3)	(3)	(3)	(3)	(3)	Dollars. 938, 760, 773
1	Agricultural implements.....	14	315	8	18	22	13	254	Je 346	De 199	257	256	.....	1	.....	1, 893, 814
2	Artificial limbs.....	10	142	6	13	3	22	98	Oc 103	My 92	99	97	2	1	.....	305, 221
3	Artificial stone products.....	61	254	72	10	9	2	161	Se 211	Fe 77	225	222	1	2	.....	474, 028
4	Automobile bodies and parts.....	78	1, 771	65	108	178	45	1, 875	De 1, 576	Ja 1, 137	1, 618	1, 583	27	2	.....	3, 151, 817
5	Automobiles.....	8	2, 383	113	333	72	1, 865	De 2, 012	Ja 1, 663	1, 984	1, 922	62	6	.....	9, 594, 433	
6	Automobile repairing.....	417	2, 014	523	95	54	59	1, 283	Se 1, 344	Ja 1, 173	1, 350	1, 338	8	4	.....	3, 202, 785
7	Awnings, tents, and sails.....	23	983	12	61	88	51	771	Jy 892	Fe 520	894	254	620	3	8	3, 203, 914
8	Bags, other than paper, not including bags made in textile mills.	10	2, 100	5	47	175	121	1, 752	No 1, 935	Mh 1, 510	1, 882	588	1, 256	4	34	16, 511, 917
9	Belted, leather.....	8	123	2	16	33	16	56	Oc 67	Fe 45	61	61	.....	1	.....	762, 247
10	Blacking, stains, and dressings.....	14	74	15	6	8	7	38	De 48	Ja 17	48	22	24	1	1	135, 233
11	Bookbinding and blank-book making.....	39	1, 243	38	58	90	80	977	De 1, 238	My 753	1, 286	532	722	17	15	2, 389, 189
12	Boot and shoe cut stock.....	7	1, 898	3	84	48	170	1, 593	No 1, 850	Ja 1, 303	1, 727	1, 248	463	13	3	12, 582, 161
13	Boot and shoe findings.....	12	641	10	30	84	33	484	De 620	Fe 398	620	425	162	24	9	3, 069, 643
14	Boots and shoes, not including rubber boots and shoes.....	54	20, 611	2	472	1, 851	828	17, 458	De 18, 467	Fe 16, 290	18, 504	10, 427	7, 854	119	104	53, 836, 904
15	Boxes, paper and other, not elsewhere specified.....	41	2, 712	11	132	118	82	2, 369	.....	.....	2, 552	988	1, 497	11	56	4, 204, 708
16	Shipping containers.....	13	1, 023	4	48	57	41	873	De 968	Ap 790	962	567	376	7	12	2, 109, 835
17	Set-up paper boxes.....	20	1, 266	7	56	24	25	1, 154	No 1, 285	Ja 1, 017	1, 215	274	898	3	40	1, 132, 100
18	All other.....	8	423	.....	28	37	16	342	De 375	Ap 336	375	147	223	1	4	1, 022, 713
19	Boxes, wooden packing, except cigar boxes.....	29	2, 011	14	102	43	25	1, 827	Ja 1, 971	Je 1, 717	1, 834	1, 593	209	30	2	4, 568, 865
20	Brass and bronze products.....	21	722	21	40	46	7	608	De 696	My 555	688	668	13	6	1	2, 305, 835
21	Bread and other bakery products.....	975	8, 432	1, 057	209	662	348	6, 156	De 6, 839	Ja 5, 700	6, 888	4, 200	2, 588	35	65	17, 894, 479
22	Brick and tile, terra-cotta, and fire-clay products.....	65	5, 017	29	186	248	85	4, 469	.....	.....	4, 947	4, 934	9	4	.....	19, 777, 479
23	Building brick.....	34	1, 328	19	44	24	9	1, 232	Oc 1, 639	Ja 607	1, 323	1, 322	.....	1	.....	5, 732, 505
24	Fire brick.....	14	1, 726	1	77	93	26	1, 529	Oc 1, 607	Jy 1, 452	1, 620	1, 617	.....	3	.....	5, 971, 303
25	Sewer pipe and drain tile.....	8	858	7	22	42	16	771	No 858	Ja 582	824	824	.....	.....	.....	2, 566, 634
26	Terra-cotta products.....	5	327	1	17	14	3	292	No 374	Fe 170	373	364	9	.....	.....	722, 347
27	All other.....	4	778	1	26	75	31	645	Oc 850	Mh 521	807	807	.....	.....	.....	4, 784, 000
28	Brooms.....	63	422	65	22	28	12	295	De 336	My 264	363	326	36	1	.....	384, 786
29	Brushes.....	10	56	8	8	3	2	35	Ap 45	No 23	26	24	1	1	.....	86, 281
30	Butter.....	66	974	57	103	24	104	686	Jy 862	Ja 506	666	495	169	1	1	3, 392, 526
31	Buttons.....	9	265	5	14	8	3	235	Ja 317	My 179	309	274	34	1	.....	309, 307
32	Canning and preserving, fruits and vegetables.....	147	1, 178	196	58	9	5	910	Se 3, 765	Ja 10	3, 751	1, 111	2, 409	79	152	1, 004, 979
33	Carpets, rag.....	8	46	10	2	.....	1	33	Je 39	Ja 23	35	29	6	.....	.....	36, 640
34	Carriage and wagon materials.....	9	305	4	18	9	4	270	Fe 279	Jy 256	283	280	3	.....	.....	766, 965
35	Carriages and wagons, including repairs.....	113	1, 117	137	44	30	12	885	.....	.....	913	906	5	2	.....	3, 431, 037
36	Carriages and wagons.....	66	937	74	44	38	12	769	No 822	Fe 725	787	780	5	2	.....	3, 216, 959
37	Repair work only.....	47	180	63	.....	1	.....	116	No 126	Fe 109	126	126	.....	.....	.....	214, 078
38	Cars and general shop construction and repairs by electric-railroad companies.....	8	1, 208	.....	16	14	.....	1, 162	Oc 1, 228	Ap 1, 117	1, 211	1, 206	5	.....	.....	2, 181, 551
39	Cars and general shop construction and repairs by steam-railroad companies.....	45	14, 321	.....	460	309	81	13, 471	No 14, 294	Ap 12, 942	14, 209	14, 133	65	11	.....	17, 585, 442
40	Cars, steam-railroad, not including operations of railroad companies.....	8	4, 869	.....	210	263	89	4, 307	Mh 4, 770	No 2, 790	4, 597	4, 570	27	.....	.....	23, 686, 768
41	Cement.....	5	2, 270	.....	59	243	180	1, 788	Oc 1, 918	De 1, 638	1, 638	1, 585	50	1	2	12, 779, 018
42	Charcoal, not including production in the lumber and wood distillation industries.....	7	31	7	5	.....	1	18	Fe 26	Je 6	20	20	.....	.....	.....	66, 497
43	Chemicals.....	22	1, 826	5	112	255	201	1, 253	Je 1, 280	Mh 1, 218	1, 245	998	239	6	2	9, 309, 265
44	Cleansing and polishing preparations.....	26	156	9	25	25	14	83	.....	.....	83	56	25	1	1	401, 403
45	Cleansing preparations.....	15	76	4	15	10	9	38	Mh 57	De 29	37	25	11	1	.....	183, 028
46	Metal polish.....	3	3	1	1	.....	.....	1	(e) 1	(e) 1	1	1	.....	.....	.....	6, 082
47	All other polishing preparations.....	8	77	4	.....	.....	.....	44	Se 49	Ja 34	45	30	14	.....	.....	212, 293
48	Clothing, men's.....	112	7, 928	64	242	564	235	6, 823	.....	.....	8, 057	1, 433	6, 570	7	47	19, 179, 237
49	Regular factory products.....	78	7, 476	25	234	564	233	6, 420	.....	.....	7, 408	1, 268	6, 086	7	47	19, 051, 290
50	Men's, youths', and boys'.....	36	3, 467	20	151	384	127	2, 785	De 3, 142	Ap 2, 342	3, 164	830	2, 308	3	23	10, 621, 501
51	All other.....	40	4, 009	5	83	180	106	3, 635	De 4, 253	Ap 3, 150	4, 244	438	3, 778	4	24	8, 429, 789
52	Contract work.....	36	452	39	8	.....	2	403	.....	.....	649	165	484	.....	.....	127, 947
53	Men's and youths'.....	24	250	29	1	.....	1	219	De 234	Oc 188	234	91	143	.....	.....	30, 438
54	Boys'.....	5	88	.....	.....	.....	.....	80	Se 93	De 66	95	50	45	.....	.....	15, 831
55	All other.....	7	114	2	.....	.....	.....	104	De 320	Ja 6	320	24	206	.....	.....	78, 678
56	Clothing, women's.....	116	4, 048	88	206	313	183	3, 308	.....	.....	3, 509	632	2, 846	3	28	6, 778, 757
57	Suits, skirts, and cloaks.....	51	1, 738	40	107	146	66	1, 379	Se 1, 553	Ja 1, 145	1, 474	445	1, 029	.....	.....	3, 435, 301
58	Shirt waists and dresses, except house dresses.....	27	835	18	46	80	23	668	Ja 737	Ja 559	682	71	604	1	6	1, 212, 558
59	Undergarments and petticoats.....	10	649	7	18	35	24	565	De 593	Ja 539	595	47	532	1	15	1, 079, 266
60	Wrappers and house dresses.....	13	545	10	24	36	16	459	De 513	Fe 416	513	47	461	1	4	717, 268
61	All other.....	15	281	13	11	16	4	237	Ap 249	Je 186	245	22	220	.....	.....	634, 304
62	Coffee, roasting and grinding.....	40	1, 598	16	115	509	144	514	De 855	Fe 779	850	476	359	3	12	10, 629, 980
63	Coffins, burial cases, and undertakers' goods.....	16	774	3	53	88	22	608	Fe 668	My 569	594	464	120	1	.....	2, 451, 145
64	Confectionery and ice cream.....	220	4, 655	260	187	401	138	3, 669	.....	.....	4, 119	1, 850	2, 238	7	24	12, 265, 529
65	Confectionery.....	126	3, 735	156	115	347	101	3, 016	No 3, 662	Jy 857	3, 525	1, 302	2, 194	5	24	8, 688, 559
66	Ice cream.....	94	920	104	72	54	37	653	Jy 857	Ja 514	594	548	44	2	.....	3, 290, 940

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—MISSOURI.

29

COMBINED AND SPECIFIED INDUSTRIES: 1919.

[illegible]

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

[illegible]

⁴ Same number repeated.

* same number reported for one or more other months.

⁵ Same number reported throughout the year.

TABLE 31.—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	Cooperage.....	30	775	23	46	18	11	677	Oc	755	My	632	754	715	12	27	.....	Dollars.
2	Copper, tin, and sheet-iron work.....	180	1,636	183	101	96	48	1,208	Oc	1,408	Ja	962	1,354	1,337	5	12	.....	2,095,727
3	Dental goods.....	8	64	7	8	6	6	37	(*)	37	(*)	37	37	32	5	.....	4,107,692	
4	Druggists' preparations.....	36	977	24	102	133	72	616	Oc	666	Jy	618	661	370	287	3	1	88,841
5	Electrical machinery, apparatus, and supplies.....	35	7,891	3	331	693	497	6,367	De	7,694	Fe	5,357	7,507	5,335	2,091	33	48	3,253,439
6	Electroplating.....	15	125	15	11	2	1	96	De	117	Ja	75	116	111	2	3	.....	21,322,709
7	Engines, steam, gas, and water.....	10	1,042	2	107	85	60	782	No	913	Mh	671	937	937	.....	.....	.....	123,032
8	Engraving and die sinking.....	5	9	6	.....	2	.....	1	(*)	1	(*)	1	1	1	.....	.....	.....	4,419,235
9	Engraving, steel and copper plate, including plate printing.....	15	206	12	18	2	9	165	De	211	Ja	146	208	92	110	2	4	6,375
10	Engraving, wood.....	7	22	10	.....	.....	.....	12	(*)	12	(*)	12	12	11	.....	1	.....	183,538
11	Envelopes.....	7	568	39	21	41	467	De	501	Fe	440	500	204	283	2	11	12,474
12	Explosives.....	5	998	.....	94	228	110	566	Ja	645	My	497	553	553	.....	.....	.....	1,295,284
13	Fancy articles, not elsewhere specified.....	6	29	5	3	3	1	17	Oc	20	Ja	12	20	3	17	.....	.....	10,569,597
14	Flavoring extracts.....	12	267	2	31	50	25	150	Jy	183	Mh	119	165	64	101	.....	.....	28,978
15	Flour-mill and gristmill products.....	690	4,693	754	420	336	168	3,015	Se	3,583	Fe	2,722	3,190	3,079	109	2	.....	807,852
16	Food preparations, not elsewhere specified.....	87	2,191	67	132	330	208	1,454	1,788	875	898	9	6	46,750,101
17	Breadstuffs, cereals and breakfast foods.....	5	36	2	7	7	2	18	De	37	Jy	9	37	18	17	2	.....	6,910,010
18	Macaroni, vermicelli, and noodles.....	8	320	3	25	21	10	261	De	294	Au	242	289	225	56	6	2	94,876
19	Sweetening sirups, other than cane.....	15	141	22	7	8	5	99	Fe	141	Jy	72	118	83	35	.....	.....	1,297,847
20	All other for human consumption.....	46	967	33	52	85	38	759	My	1,120	Se	381	1,028	259	764	1	4	614,290
21	For animals and fowls.....	13	727	7	41	209	153	317	Ja	337	Se	303	316	290	26	.....	.....	2,304,072
22	Foundry and machine-shop products.....	301	11,848	194	658	1,061	405	9,530	10,922	10,738	146	26	12	2,598,025
23	Boiler shops.....	17	686	7	42	40	21	576	Ja	649	My	530	608	608	.....	.....	.....	39,919,703
24	Foundries.....	28	2,045	5	98	65	19	1,858	De	2,145	Mh	1,673	2,174	2,153	9	12	.....	2,081,156
25	Machine shops.....	241	8,074	177	463	831	327	6,276	No	7,647	Ja	5,235	7,240	7,088	131	9	12	5,098,000
26	Machine shop and foundry combined.....	15	1,043	5	55	125	38	820	Ja	1,005	My	579	900	889	6	5	.....	27,183,820
27	Fur goods.....	12	222	8	13	7	28	166	Oc	208	Mh	114	194	62	130	1	1	5,555,827
28	Furnishing goods, men's.....	12	503	6	25	70	28	374	No	475	My	310	464	50	397	6	11	662,742
29	Furniture.....	86	4,064	42	244	289	116	3,373	3,607	3,304	280	18	5	1,313,274
30	Wood, other than rattan and willow.....	47	1,913	18	115	79	37	1,604	De	1,776	Ja	1,555	1,777	1,623	146	8	.....	10,116,269
31	Metal.....	7	905	2	47	71	38	747	No	843	Fe	640	822	789	31	2	.....	4,042,393
32	Store and office fixtures.....	32	1,246	22	82	139	41	962	De	1,002	Ja	882	1,008	892	103	8	5	2,879,875
33	Gas and electric fixtures.....	6	354	3	34	37	20	251	De	298	Mh	210	298	263	31	4	.....	3,194,031
34	Gas, illuminating and heating.....	26	1,866	1	106	185	256	1,318	Ja	1,419	Fe	1,265	1,307	1,302	5	.....	.....	929,511
35	Glass.....	4	2,136	.....	50	24	28	2,034	Mh	2,299	Au	1,663	2,574	2,306	268	.....	.....	51,042,192
36	Glass, cutting, staining, and ornamenting.....	17	167	13	17	6	5	126	No	138	Jy	102	136	126	9	1	.....	7,884,372
37	Gloves and mittens, cloth, not including gloves made in textile mills.....	4	373	15	7	4	6	341	De	423	Ap	256	349	40	290	2	17	250,598
38	Grease and tallow, not including lubricating greases.....	7	90	7	5	2	1	75	Ja	87	Oc	66	69	69	.....	.....	.....	596,359
39	Hair work.....	3	16	4	.....	1	.....	11	(*)	11	(*)	11	11	1	9	1	.....	244,145
40	Hand stamps.....	8	89	4	12	9	5	59	(*)	59	(*)	59	60	54	1	5	.....	31,616
41	Hardware.....	9	379	4	26	7	3	339	No	404	Fe	241	403	391	12	.....	.....	112,572
42	Hats and caps, other than felt, straw, and wool.....	22	525	25	42	67	43	348	No	417	Fe	304	416	140	272	1	3	1,055,161
43	Hats, fur-felt.....	5	395	3	20	40	9	323	No	382	My	280	366	113	248	4	1	878,990
44	Hats, straw.....	10	650	5	27	213	27	384	De	432	Jy	328	432	157	273	.....	.....	746,678
45	House-furnishing goods, not elsewhere specified.....	14	153	12	13	19	7	102	De	117	My	87	126	88	29	5	4	1,017,385
46	Ice, manufactured.....	129	1,554	85	174	70	51	1,174	Au	1,642	Ja	762	1,351	1,326	24	1	.....	825,123
47	Instruments, professional and scientific.....	7	511	2	52	51	15	391	De	397	Mh	386	397	339	56	2	.....	13,914,589
48	Iron and steel, steel works and rolling mills.....	5	2,022	130	94	51	2,047	Fe	3,253	No	2,176	2,484	2,374	91	17	2	1,225,666
49	Iron and steel, tempering and welding.....	15	94	12	13	11	4	54	Ap	57	Jy	52	52	51	.....	1	.....	15,113,018
50	Jewelry.....	29	586	27	34	34	45	446	De	476	Mh	430	478	401	63	12	2	126,147
51	Labels and tags.....	7	188	5	13	22	12	136	De	147	Mh	123	147	62	71	4	10	832,608
52	Leather goods, not elsewhere specified.....	8	126	4	13	11	5	93	No	104	My	80	101	51	47	2	1	300,087
53	Leather, tanned, curried, and finished.....	7	331	2	17	41	6	265	De	303	Ja	235	303	300	3	.....	.....	209,995
54	Lime.....	16	809	6	35	20	12	736	Oc	853	Ja	610	760	759	1	.....	.....	4,408,610
55	Liquors, malt.....	20	3,584	2	133	478	41	2,930	Au	3,481	No	2,332	3,199	3,132	67	.....	.....	3,073,677
56	Lithographing.....	15	384	9	28	65	20	262	De	278	Ja	241	257	198	50	6	3	44,807,010
57	Looking-glass and picture frames.....	8	33	7	6	.....	4	16	Mh	17	De	15	16	15	1	.....	.....	940,976
58	Lumber and timber products.....	557	6,363	725	191	133	31	5,283	De	6,862	Ja	4,119	7,715	7,638	51	24	2	96,450
59	Lumber, planing-mill products, not including planing mills connected with sawmills.....	111	3,435	73	188	206	73	2,895	No	3,115	Ja	2,512	3,114	2,972	86	51	5	9,737,292

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—MISSOURI.

31

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.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
199,972	47,113	831,200	2,242	12,898	191,110	3,228,005	23,648	5,160,537	1,908,284	1,565	1,200	22	343	45				
388,663	167,162	1,475,000	3,000	78,180	103,410	4,510,001	41,292	8,145,676	3,593,783	1,137	50	176	911					
28,934	14,118	46,725		5,205	1,719	276,075	1,254	430,058	172,720	37			87					
226,134	319,092	332,861	212	21,572	99,176	2,565,586	24,000	4,831,651	2,242,065	1,060	901	8	149	345				
1,101,110	1,258,784	5,683,802	4,471	105,832	1,022,828	7,964,570	197,683	22,007,658	13,845,405	0,128	350	1,000	4,778	2,410				
27,683	2,796	122,615		8,880	918	77,351	8,641	290,328	210,336	197			197					
338,265	130,536	947,143	35,029	6,309	311,059	1,457,737	43,165	4,160,336	2,065,434	1,934	150	1,524	260	2,225				
	524	1,128		91,356	164	824	85	17,703	10,794	5			5					
42,751	9,841	141,576	2,100	11,180	1,480	118,398	2,029	405,082	284,655	70			70					
		15,684	260	2,000	70	3,424	271	44,050	40,355	8								
137,736	134,568	355,385	25,049	35,798	43,367	799,639	12,783	1,952,440	1,140,018	612	245		367	150				
444,070	599,135	648,409		281,132	3,307,674	177,810	177,810	7,172,424	3,687,040	1,969	936	733	300	1,156				
3,350	4,120	10,927	710	1,970	186	33,493	219	65,340	31,637	6			6					
75,808	218,986	79,567		12,838	59,811	1,108,903	4,904	1,825,014	711,717	187			187					
1,149,833	647,838	3,153,880	8,615	31,305	692,342	97,131,800	1,052,924	113,207,350	15,112,635	47,516	25,046	250	6,321	2,023	12,706	535		
539,089	484,131	1,027,403	5,745	94,854	470,007	18,063,251	144,015	23,463,308	5,256,132	3,894	1,829	58	2,007	350				
5,681	4,576	13,806		1,179	419	64,763	1,058	148,051	82,230	114			114					
71,190	45,319	199,296		28,541	10,100	1,542,970	27,483	2,100,041	529,588	771	375	25	371	240				
73,905	28,908	70,059	25		43,011	1,409,013	8,215	2,186,956	769,728	110	57	30	23	32				
204,564	111,660	434,388		41,623	173,237	2,095,592	58,448	4,994,392	1,940,352	767	244	3	520	78				
183,659	293,608	309,854	5,720	23,511	243,240	12,050,913	48,811	14,033,958	1,934,234	2,132	1,153		979					
2,347,460	2,064,752	11,789,405	23,780	241,805	2,162,877	19,017,023	965,059	49,470,974	29,488,892	17,951	4,385	1,650	588	4,003				
166,993	106,752	644,629	500	24,113	380,087	1,330,298	37,728	3,206,609	1,838,673	1,386	190		1,106					
413,162	102,756	2,515,590	11,655	26,278	494,404	3,344,641	421,271	8,367,216	4,601,304	2,947	652	34	2,261	271				
1,623,571	1,660,852	7,648,394	11,025	178,538	1,202,051	12,802,500	377,306	33,926,603	20,746,767	9,650	3,213	391	6,046	3,732				
143,734	194,392	980,832		12,876	85,675	1,539,584	128,664	3,970,396	2,302,148	3,968	330	1,650	1,825					
84,149	40,609	189,224	200	30,035	21,760	560,393	3,917	1,252,858	688,548	57			57					
121,845	470,150	277,844	500	20,167	18,953	1,786,394	4,332	2,892,803	1,102,077	60			48					
720,833	553,385	3,471,156	22,537	119,091	228,433	8,193,157	130,233	16,154,805	7,831,475	7,000	4,225	175	137	2,463	1,012			
312,798	171,961	1,637,505	1,122	60,756	102,366	3,120,135	48,804	6,718,038	3,649,099	3,449	2,885	175	7	382	795			
168,288	128,102	762,119		7,343	88,013	2,418,056	42,238	4,662,512	2,202,218	1,205	289	15	961	12				
239,747	137,322	1,071,442	21,415	41,992	38,054	2,654,966	39,191	4,774,315	2,080,158	2,286	1,051	115	1,120	205				
125,374	115,506	325,585	110	21,378	49,349	897,418	20,890	1,681,681	754,364	240			225					
208,075	382,698	1,539,087	415	3,082	617,828	553,571	2,442,547	11,113,372	8,117,254	8,772	4,210	3,253	992	2,999				
222,105	58,785	2,411,517	163	463,420	1,650,295	1,650,295	0,110,113	6,927,042	4,366,634	14,188	7,925	1,350	4,508	405	11,420			
25,655	24,107	126,178	480	11,902	3,486	116,804	6,730	409,129	285,595	182			182					
25,105	11,578	170,823		14,797	24,581	770,995	8,024	1,207,799	428,780	115			115					
13,180	1,538	73,520	1,645	30	4,046	251,236	33,615	448,515	163,664	227	143		84					
	520	8,524		3,060	104	60,561	118	79,181	18,502	1			1					
20,001	18,227	65,227		8,496	2,961	74,371	1,638	224,615	148,606	42			42					
243,355	11,722	315,981		3,807	59,442	670,919	13,080	1,392,894	708,880	439	260		179					
106,931	64,904	299,225		26,466	8,466	1,102,634	7,884	1,893,461	782,943	55			55					
37,298	28,247	211,220		13,743	24,286	1,010,271	4,376	1,478,951	458,304	68			68					
119,646	176,323	284,575	852	32,747	26,871	1,207,433	11,840	2,404,018	1,244,745	49			49					
61,210	41,061	84,703		10,388	5,884	946,909	11,515	1,352,684	394,260	413			413					
351,627	92,033	1,426,044	7,010	36,840	242,273	684,972	1,423,021	6,504,840	4,396,847	29,116	24,486	785	529	3,316	1,504			
134,306	334,320	374,267		9,126	52,541	450,761	9,948	1,565,500	1,098,801	385			30	355				
390,627	161,785	3,044,666	50,000		1,908,744	5,101,207	550,415	12,537,007	6,876,445	7,426	3,850	750	2,826	6,730				
21,590	17,807	65,002		6,507	1,138	75,067	2,892	236,895	158,936	59			59					
100,631	71,708	549,716	6,831	40,652	25,142	634,960	6,107	1,927,209	1,286,202	170			170					
28,039	55,154	113,250		7,846	10,095	143,754	3,415	435,435	288,266	94			94					
39,085	14,720	81,934		0,152	3,374	337,603	5,288	574,996	232,105	419			419					
08,440	38,897	296,198		2,005	144,888	2,890,087	55,880	3,709,580	823,613	948	420		528					
63,309	62,231	649,765	13,441	1,225	51,656	405,472	387,144	2,090,120	1,207,510	1,936	1,515	105	316	235				
583,648	935,719	3,560,611	500	13,644	5,472,209	3,054,834	669,197	24,365,548	20,641,517	26,454	23,924	550	1,940	40	13,028			
168,948	134,135	333,002	5,028	21,925	14,184	584,372	10,945	1,472,240	877,823	329			329					
13,212	6,801	14,001	6,500	9,834	797	48,378	199	118,799	70,219	26	20		6					
527,378	240,340	4,027,149	655,681	20,807	289,142	4,854,433	70,700	14,026,595	9,109,732	23,502	22,373	380	427	141	181	20		
477,902	323,072	2,841,490	25,661	105,592	172,523	6,675,618	119,366	12,317,096	5,522,682	10,081	5,753	75	250	4,003	570			

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

TABLE 31.—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	Machine tools.....	5	155	18	13	3	121	De	149	Je	104	149	149	.....	Dollars.
2	Marble and stone work.....	154	1,172	153	99	51	29	840	Oc	266	Ja	203	956	939	461,177
3	Monuments and tombstones.....	121	446	138	32	24	12	240	No	698	Ja	541	261	261	2,892,309
4	Other marble and stone work, except slate.	33	726	15	67	27	17	600	No	698	Ja	541	695	678	1,202,936
5	Mattresses and spring beds, not elsewhere specified.	28	459	18	37	39	17	348	Au	386	Ja	300	368	308	1,088,373
6	Millinery and lace goods, not elsewhere specified.	42	2,184	22	128	120	105	1,809	.....	.....	.....	.....	2,534	838	1,028,321
7	Embroideries.....	7	103	4	8	1	3	87	Je	95	Ja	74	94	26	2,440,763
8	Trimmed hats and hat frames.....	24	1,774	10	104	111	86	1,463	Fe	1,681	Je	1,215	2,134	776	121,257
9	Dress and cloak trimmings, braids, and fringes.	11	307	8	16	8	16	259	No	310	Ja	171	306	36	2,017,326
10	Mineral and soda waters.....	178	857	195	67	86	33	476	Jy	697	Ja	346	516	461	302,170
11	Minerals and earths, ground or otherwise treated.	17	451	8	28	9	4	402	No	494	Jy	326	430	425	2,054,077
12	Mirrors, framed and unframed, not elsewhere specified.	8	72	8	5	2	3	54	Oc	65	Jy	41	60	58	1,664,508
13	Models and patterns, not including paper patterns.	26	224	31	7	11	4	171	No	184	Ja	155	182	182	89,649
14	Mucilage, paste, and other adhesives, not elsewhere specified.	6	46	3	9	2	5	27	Jy	31	Oc	25	25	23	219,155
15	Musical instruments and materials, not elsewhere specified.	5	13	3	3	.....	.....	7	(*)	7	(*)	7	7	7	179,993
16	Oil, not elsewhere specified.	5	163	1	19	27	17	99	Oc	134	Au	69	126	126	33,298
17	Oleomargarine and other butter substitutes.	4	296	11	67	21	197	No	No	229	Je	173	209	142	2,634,302
18	Optical goods.....	8	299	3	27	30	29	210	Fe	201	Jy	162	171	110	1,421,266
19	Paints.....	30	1,464	6	108	326	126	898	Se	1,006	Ja	737	927	845	2,717,654
20	Patent medicines and compounds.	142	2,098	79	207	513	259	1,040	.....	.....	.....	.....	1,114	432	9,278,089
21	Patent and proprietary medicines.	101	1,777	50	163	420	217	927	Oc	999	Jy	844	984	339	7,919,699
22	Patent and proprietary compounds, not elsewhere specified.	41	321	29	44	93	42	113	De	131	Ja	100	130	93	7,004,305
23	Paving materials.....	49	812	29	50	26	4	703	Se	895	Ja	445	806	806	915,394
24	Perfumery and cosmetics.....	23	284	16	18	31	119	100	No	107	Au	89	102	25	1,355,708
25	Petroleum, refining.....	4	1,070	48	81	11	930	Jy	1,254	Au	252	1,061	1,061	25	1,079,869
26	Photo-engraving.....	20	350	8	39	37	20	246	No	268	Ja	215	209	244	18,399,315
27	Photographic apparatus.....	5	47	2	7	6	3	29	Jy	35	Fe	34	269	244	516,820
28	Photographic materials.....	6	328	5	22	34	13	254	Fe	272	Se	236	258	192	140,062
29	Pickles, preserves, and sauces.	11	459	4	18	59	32	345	Ja	424	Fe	292	366	154	1,074,787
30	Pipes, tobacco.....	7	417	4	15	7	4	387	Ja	418	Ap	307	382	275	2,465,944
31	Plumbers' supplies, not elsewhere specified.	5	289	18	21	6	244	De	276	Ap	215	276	382	275	499,990
32	Poultry, killing and dressing, not done in slaughtering and meat-packing establishments.	6	185	2	9	20	12	142	No	105	Mh	85	189	136	455,605
33	Printing and publishing, book and job.	460	7,910	301	508	741	404	5,866	.....	.....	.....	.....	6,406	4,254	534,107
34	Job printing.....	417	7,241	367	446	619	309	5,600	De	6,033	Ja	5,163	6,017	3,988	.....
35	Book publishing and printing.....	8	257	2	15	17	20	203	No	235	Mh	188	222	134	18,930,040
36	Book publishing without printing.	19	246	7	34	103	66	36	Jy	9	No	2	27	9	600,703
37	Linotype work and typesetting.....	16	166	15	13	2	9	127	No	142	Ja	112	140	123	301,262
38	Printing and publishing, music.....	7	71	2	6	18	33	12	De	17	Se	2	17	8	285,832
39	Printing and publishing, newspapers and periodicals.	774	8,095	714	538	1,566	1,094	4,183	.....	.....	.....	.....	4,381	3,397	483,244
40	Printing and publishing.....	56	4,141	31	233	1,122	615	2,140	De	2,266	Ja	1,938	2,237	2,065	15,273,683
41	Printing, publishing, and job printing.	571	3,384	609	193	259	315	2,008	De	2,117	Ja	1,897	2,110	1,310	7,960,632
42	Publishing without printing.....	147	570	74	112	185	164	35	Mh	38	Ja	33	34	22	6,452,382
43	Printing materials.....	4	25	1	4	1	4	15	(*)	15	(*)	15	16	16	861,269
44	Refrigerators.....	7	283	1	19	39	17	207	No	235	Ja	164	228	225	118,545
45	Regalia, and society badges and emblems.	6	91	4	5	6	12	64	Jy	76	Ap	57	61	27	982,983
46	Rubber tires, tubes, and rubber goods, not elsewhere specified.	7	715	1	35	31	27	621	Fe	670	My	539	629	391	121,399
47	Saddlery and harness.....	88	1,663	85	106	202	55	1,215	De	1,345	Mh	1,103	1,944	1,231	2,580,742
48	Sausage, not made in slaughtering and meat-packing establishments.	13	100	13	7	4	5	71	De	74	Jy	66	74	64	5,064,798
49	Shirts.....	19	3,050	3	52	187	93	2,715	De	3,099	Ap	2,506	3,102	165	319,466
50	Show cases.....	8	345	9	28	15	11	284	Je	324	Ja	238	3,102	285	5,145,773
51	Signs and advertising novelties.....	21	398	15	28	54	7	294	No	377	Fe	223	285	225	719,628
52	Slaughtering and meat packing.....	49	10,281	28	386	1,249	328	8,290	Ja	9,805	Oc	7,654	8,126	7,500	537,556
53	Soap.....	7	943	1	29	139	122	652	Jy	804	Mh	448	687	379	98,068,695
54	Stamped ware, not elsewhere specified.	7	892	4	20	145	61	662	Oc	831	Ja	401	777	586	3,952,212
55	Statuary and art goods.....	9	82	13	4	.....	2	63	De	82	Fe	50	82	76	3,471,571
56	Steam fittings and steam and hot-water heating apparatus.	6	682	17	34	9	622	No	920	Ap	400	895	895	6	85,397
57	Stereotyping and electrotyping.....	5	180	1	12	18	4	125	De	130	Je	119	130	129	2,213,478
58	Stoves and hot-air furnaces.....	19	2,905	118	269	56	2	2,462	No	2,852	Ja	2,035	2,819	2,798	177,696
59	Structural ironwork, not made in steel works or rolling mills.	35	1,349	14	115	130	27	1,063	De	1,239	Mh	899	1,230	1,225	11,887,859
															4,728,036

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—MISSOURI.

33

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.	Dollars.							
61,708	16,453	148,677	140	7,704	4,044	184,075	6,609	434,999	244,315	211							211	1
185,699	92,055	1,017,639	30,936	30,731	23,180	1,605,641	117,074	3,802,003	2,050,188	5,185	1,045	110	268				3,762	2
62,655	44,357	306,723	22,391	14,228	8,379	777,525	21,718	1,615,822	816,579	760			216				544	3
133,044	47,698	710,916	8,545	16,503	14,801	828,116	95,356	2,187,081	1,203,609	4,425	1,045	110	52				3,218	4
80,583	72,068	376,765	100	28,833	25,264	1,379,811	21,153	2,406,894	1,005,930	769	250		15				504	5
402,350	238,238	1,132,970	2,395	86,046	67,610	4,127,325	19,247	7,434,271	3,287,699	189	20						169	6
12,414	1,300	64,901		5,775	2,518	72,559	2,079	106,081	121,443	21							21	7
403,950	212,131	909,392	75	64,951	61,478	3,676,571	13,900	6,544,377	2,853,906	135	20						115	8
46,890	24,807	158,587	2,320	15,320	3,614	378,195	3,208	693,813	312,350	33							33	9
117,223	152,309	399,449	2,210	37,620	131,641	1,605,090	30,771	3,597,005	2,055,735	1,093	299		219			1	570	10
59,772	14,064	374,930	210	10,137	13,422	542,092	105,097	1,337,593	690,409	2,371	1,081	200	335				755	11
12,681	3,047	60,486		6,095	456	184,382	3,849	328,619	140,388	130							130	12
32,302	8,695	235,391	1,627	12,197	2,434	92,565	6,947	543,935	444,423	197			14				183	13
28,420	8,303	37,142		10,290	4,031	340,971	2,064	530,667	180,732	106	4						102	14
4,200		5,621		758	150	10,720	184	27,372	16,468	3							3	15
59,409	61,092	107,782		2,040	160,407	2,925,900	10,106	4,175,151	1,230,145	309	230		57				22	16
57,936	135,018	150,644	10,247	159,637	159,637	3,652,554	34,703	4,414,888	727,631	903	840						63	17
84,753	58,029	192,826		18,885	42,913	647,759	6,140	1,404,244	750,345	153							153	18
407,894	618,312	1,182,022	200	55,796	190,431	9,500,015	218,087	14,531,437	4,813,335	3,905	2,210						1,695	19
793,182	1,147,376	886,379	10,565	104,501	1,574,892	5,145,822	44,996	14,590,676	9,399,858	895	207		55				373	20
678,808	931,779	774,218	10,565	85,112	1,545,431	4,500,060	35,250	13,154,905	8,559,586	738	205		55				418	21
119,374	215,597	112,161		19,440	20,461	585,762	9,737	1,435,771	840,272	157	2						155	22
61,666	33,061	673,404	19,354	17,754	10,070	192,595	107,486	1,379,062	1,078,981	5,401	2,876		206				2,319	23
52,174	160,983	60,954	1,314	10,088	27,872	589,734	6,067	1,902,228	1,306,427	103							103	24
151,806	115,986	1,388,063		2,898	123,978	10,620,118	1,494,934	24,610,532	3,495,480	2,545	1,140	1,300	15				1,273	25
141,970	91,639	423,135	5,478	27,690	4,400	142,674	9,265	1,133,049	981,210	170							170	26
17,475	7,334	31,170		6,859	96,432	95,432	1,351	103,707	96,924	27							27	27
69,037	73,213	221,115		3,145	32,770	731,212	22,027	1,356,827	603,588	516	513						3	28
69,120	116,221	250,296		8,546	39,152	4,001,712	18,411	4,817,855	797,732	450	91						359	29
51,206	15,470	239,036	50	1,500	42,094	366,013	11,388	943,340	505,939	384	225						159	30
71,275	35,468	287,198		8,240	37,605	382,780	32,291	983,113	568,042	463	250		35				178	31
22,390	32,541	157,520		4,537	11,400	2,934,264	14,630	3,307,749	359,446	312	210						102	32
1,737,349	1,439,104	6,235,986	604,285	434,756	531,313	9,020,807	217,587	25,880,461	16,641,977	6,194	570		24				5,300	33
1,551,457	1,220,042	5,857,085	305,365	400,132	521,494	8,735,215	199,883	23,927,521	14,962,463	5,903	820		24				5,059	34
50,948	38,057	176,755	40,544	15,460	4,315	182,025	10,083	667,600	475,552	245	50						195	35
96,922	173,484	19,000	347,276	12,171	3,838	82,567	234	926,172	843,371	9							9	36
32,022	7,611	183,146	1,100	6,993	1,066	21,090	7,387	359,008	330,591	37							37	37
40,092	97,502	11,230	6,641	3,992	1,391	81,765	787	285,303	252,751	10							10	38
1,492,194	3,120,680	4,410,609	1,128,253	370,786	520,676	11,594,122	265,451	30,011,808	18,152,235	7,014	1,868		731	6			4,409	39
831,846	2,091,243	2,602,007	156,915	175,110	433,054	9,065,727	159,548	19,817,077	10,592,402	4,277	1,825		51				2,401	40
413,447	553,702	1,781,649	175,450	153,573	79,481	2,208,495	105,426	7,445,532	5,131,611	2,736	43		680	6			2,007	41
246,901	484,075	26,953	795,888	40,103	14,141	319,900	477	2,748,599	2,428,222	1							1	42
26,037	5,984	21,741		4,240	18,364	39,168	2,469	198,384	156,757	38	2						36	43
64,525	105,951	273,683		7,432	20,134	705,241	10,085	1,527,256	811,330	605							605	44
16,668	17,302	43,209	800	4,170	994	88,207	1,347	202,562	113,008	36							36	45
88,018	63,448	541,079	6,000	14,321	10,905	2,423,297	55,466	3,865,296	1,386,533	2,168							1,918	46
316,884	279,681	1,250,103		74,624	183,239	6,260,481	77,633	9,449,706	3,111,592	1,082	292		17				773	47
17,775	9,988	75,132		18,178	15,441	633,420	13,677	836,714	219,617	247	81						166	48
276,445	520,399	1,839,753	8,447	45,586	250,674	7,226,120	38,692	11,704,712	4,439,900	1,229	740	125	15				349	49
57,180	42,588	307,949		12,690	8,381	537,251	15,377	1,177,071	624,443	743							743	50
77,431	62,922	242,830	12,293	14,086	18,828	472,485	7,026	1,044,371	564,800	119			2				117	51
1,066,071	2,267,040	10,377,515	45,583	24,785	251,955	226,464,734	1,544,642	240,610,195	18,600,819	19,966	15,109	2,096	92				2,669	52
123,725	246,651	564,498		38,970	301,229	5,588,494	70,279	8,555,927	2,888,154	1,617	1,393						224	53
122,029	316,718	673,677		91,407	295,486	2,929,290	43,857	5,427,284	2,454,128	1,277	1,024		14				230	54
10,778	1,716	72,816		7,071	590	39,623	1,581	172,226	131,022	72							72	55
47,038	81,875	854,494		6,092	13,991	1,108,572	108,872	2,597,264	1,379,820	1,122							1,122	56
33,847	22,610	174,997		9,800	11,727	123,651	11,946	539,688	404,091	351							351	57
541,015	744,048	2,976,649	26,223	18,894	587,814	5,545,178	120,114	15,349,544	9,274,252	2,994	1,770						1,224	58
350,693	229,440	1,287,500	41,796	23,538	333,780	2,808,871	78,460	5,544,496	2,597,175	3,306	749		12				2,545	59

¹ Same number reported throughout the year.

² Same number reported for one or more other months.

MANUFACTURES—MISSOURI.

TABLE 31.—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	Surgical appliances.....	17	195	10	19	11	53	102	Je	111	Ja ^a	86	110	54	55	1	.....	532,837
2	Tinware, not elsewhere specified.....	10	1,664	.....	58	55	35	1,516	De	1,760	Je	1,394	1,766	1,217	527	15	7	5,245,362
3	Tobacco, chewing and smoking, and snuff.....	11	3,320	4	85	471	8	2,752	Ja	3,292	Mh	2,391	2,846	1,376	1,412	9	49	12,213,931
4	Tobacco, cigars.....	279	1,278	287	35	19	5	932	De	1,178	Mh	718	1,159	568	574	13	4	883,902
5	Tools, not elsewhere specified.....	23	500	25	29	16	27	403	De	504	Je	336	433	414	12	7	.....	1,537,543
6	Toys and games.....	12	177	10	9	1	9	148	Oc	228	Ap	84	182	73	109	.....	.....	191,550
7	Trunks and valises.....	20	1,026	15	38	71	25	877	Oc	989	Ja	775	932	792	134	5	1	2,092,393
8	Umbrellas and canes.....	4	41	3	4	7	1	26	De	34	Ja	18	34	10	23	1	.....	129,104
9	Varnishes.....	7	141	1	16	26	5	93	Je	108	Mh	71	106	79	26	.....	1	807,625
10	Vinegar and cider.....	13	100	8	17	6	5	64	.....	.....	.....	.....	66	63	3	.....	.....	889,838
11	Vinegar.....	7	78	4	13	3	4	54	Oc	92	Ap	35	53	50	3	.....	.....	769,791
12	Cider.....	6	22	4	4	3	1	10	Oc ^a	13	Ja ^a	9	13	13	.....	.....	.....	120,047
13	Washing machines and clothes wringers.....	8	188	8	4	12	8	156	No	211	Ja	104	180	169	10	1	.....	634,975
14	Window and door screens and weather strips.....	9	117	5	12	15	1	84	Je ^a	110	Ja	55	85	85	.....	.....	.....	326,712
15	Wirework, including wire rope and cable, not elsewhere specified.....	24	1,212	15	34	119	34	1,010	Mh	1,069	Oc	823	1,039	939	99	1	.....	5,808,781
16	Wood, turned and carved.....	23	272	25	17	7	4	219	De	244	Je	203	244	237	7	.....	.....	310,721
17	All other industries*.....	223	12,734	115	576	930	413	10,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	65,948,882

*All other industries embrace—
Aeroplanes, seaplanes, and airships, and parts..... 2
Aluminum manufactures..... 4
Artificial flowers..... 3
Artists' materials..... 2
Asbestos products, not including steam packing..... 1
Babbitt metal and solder..... 3
Baking powders..... 1
Baskets, and rattan and willow ware..... 1
Bells..... 2
Belting, woven, other than rubber..... 1
Billiard tables and accessories..... 2
Bluing..... 3
Boots and shoes, rubber..... 1

Boxes, cigar..... 2
Butter, reworking..... 1
Cars, electric-railroad, not including operations of railroad companies..... 1
Cash registers and calculating machines..... 7
Cheese..... 2
Chewing gum..... 3
China decorating, not including that done in potteries..... 2
Cloth, sponging and refinishing..... 1
Clothing, men's, buttonholes..... 2
Coal-tar products..... 5
Condensed milk..... 3
Cordage and twine..... 2
Cordials and flavoring sirups..... 5

Corsets..... 1
Cotton goods..... 1
Cutlery and edge tools..... 5
Dairymen's and apiarists' supplies..... 4
Dyeing and finishing textiles, exclusive of that done in textile mills..... 2
Emery and other abrasive wheels..... 1
Enameling..... 3
Engravers' materials..... 2
Feathers and plumes..... 2
Felt goods..... 1
Fertilizers..... 3
Fire extinguishers, chemical..... 2
Fireworks..... 1
Fuel, briquetted..... 1

Furs, dressed..... 1
Gas machines..... 1
Glucose and starch..... 1
Glue, not elsewhere specified..... 4
Gold and silver, reducing and refining, not from the ore..... 1
Hat and cap materials..... 3
Ink, printing..... 2
Ink, writing..... 2
Iron and steel, blast furnaces..... 3
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills..... 1
Iron and steel, doors and shutters..... 3
Iron and steel forgings, not made in steel works or rolling mills..... 3

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

1	KANSAS CITY—All industries.....	997	29,230	777	1,546	3,095	1,675	22,137	No	24,154	Fe	20,255	23,897	16,885	6,892	81	39	83,009,137
2	Agricultural implements.....	6	173	2	12	17	9	193	Je	185	Mh	96	114	114	.....	.....	.....	1,232,000
3	Automobile bodies and parts.....	15	242	14	13	9	8	198	Ap	212	Ja	176	209	203	6	.....	.....	404,278
4	Automobile repairing.....	34	288	40	10	7	10	221	Oc	230	Ap	211	227	226	1	.....	.....	359,303
5	Bookbinding and blank-book making.....	8	654	4	28	75	67	480	De	708	My	201	708	292	414	2	.....	1,676,254
6	Bread and other bakery products.....	131	3,277	141	49	378	137	2,572	De	3,016	Jy	2,351	3,046	1,612	1,434	.....	.....	6,863,455
7	Brick and tile, terra-cotta, and fire-clay products.....	4	240	1	9	12	5	213	My	241	Ja	146	230	230	.....	.....	.....	609,865
8	Brooms.....	9	55	9	2	2	1	41	De	63	Ap	31	63	62	1	.....	.....	47,691
9	Butter.....	4	387	.....	30	177	27	153	Je	204	De	120	120	77	43	.....	.....	1,089,489
10	Cars and general shop construction and repairs by steam-railroad companies.....	5	1,757	.....	70	42	13	1,632	De	1,751	Jy	1,530	1,722	1,694	28	.....	.....	1,753,855
11	Chemicals.....	5	118	.....	14	43	17	44	Se	53	Fe	35	50	45	3	2	.....	577,504
12	Cleansing and polishing preparations.....	3	22	.....	4	8	1	9	Se	11	Ja	6	9	1	8	.....	.....	32,937
13	Clothing, men's.....	13	1,179	1	39	22	27	1,090	De	1,180	Ap	997	1,174	187	987	.....	.....	2,407,288
14	Coffee, roasting and grinding.....	9	369	6	17	101	24	221	Au	240	My	207	226	102	120	3	1	1,479,667
15	Coffins, burial cases, and undertakers' goods.....	5	102	.....	13	7	3	79	Fe	100	Je	64	77	58	19	.....	.....	204,944
16	Confectionery and ice cream.....	25	443	27	13	47	16	340	.....	.....	.....	.....	391	250	138	1	2	1,300,768
17	Confectionery.....	19	232	22	8	30	12	160	No	276	Au	99	239	99	137	1	2	563,789
18	Ice cream.....	6	211	5	5	17	4	180	Jy	250	Fe	140	152	151	1	.....	.....	736,997
19	Copper, tin, and sheet-iron work.....	23	615	30	25	48	16	496	Au	613	Fe	369	553	551	2	.....	.....	1,197,822
20	Druggists' preparations.....	6	82	.....	15	5	5	57	Oc	63	Fe	50	58	31	27	.....	.....	276,591
21	Engraving, steel and copper plate, including plate printing.....	7	108	4	9	.....	7	88	De	119	Ja	69	119	50	68	1	.....	101,761
22	Flour-mill and gristmill products.....	8	287	3	20	32	6	226	Ja	296	Au	150	230	190	40	.....	.....	2,298,082
23	Food preparations, not elsewhere specified.....	21	432	13	41	63	22	293	Ap	327	Se	270	327	245	82	.....	.....	1,795,141
24	Foundry and machine-shop products.....	45	626	39	44	49	37	457	No	574	Mh	330	548	532	12	1	3	1,952,151
25	Furnishing goods, men's.....	3	83	.....	7	11	6	59	No	68	Ap	50	64	4	60	.....	.....	171,455
26	Furniture.....	12	231	11	15	13	5	187	Je	198	No	167	192	188	4	.....	.....	631,019
27	House-furnishing goods, not elsewhere specified.....	8	120	6	10	17	5	82	De	92	Ap	69	100	71	20	5	4	752,133
28	Lithographing.....	4	107	1	8	18	4	76	No	85	Ja	68	81	64	17	.....	.....	246,239

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—MISSOURI.

35

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

[illegible]

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

[illegible]

Japaning.....	2	Peanuts, grading, roasting, cleaning,	3	Shipbuilding, wooden, including boat	3	Suspenders, garters, and elastic woven	2
Jewelry and instrument cases.....	3	and shelling.....	3	building.....	3	goods.....	2
Jute goods.....	1	Pencils, lead.....	1	Smelting and refining, lead.....	3	Theatrical scenery.....	2
Lamps and reflectors.....	1	Pens, fountain and stylographic.....	1	Smelting and refining, metals, not	1	Tin foil, not elsewhere specified.....	1
Lapidary work.....	1	Photographs and graphophones.....	2	elsewhere specified.....	1	Type founding.....	1
Lard, not made in slaughtering and	1	Pocketbooks.....	1	Soda-water apparatus.....	1	Upholstering materials, excelsior.....	1
meat-packing establishments.....	1	Pottery, earthen and stone ware.....	2	Sporting and athletic goods.....	3	Vault lights and ventilators.....	1
Lasts.....	2	Pumps, not including power pumps.....	3	Springs, steel, car and carriage, not	3	Wall plaster and composition flooring	1
Lead, bar, pipe, and sheet.....	1	Pumps, steam and other power.....	3	made in steel works or rolling	3	Waste, cotton.....	1
Liquors, vinous.....	1	Roofing materials.....	4	mills.....	3	Whips.....	1
Lubricating greases.....	2	Safes.....	2	Stationery goods, not elsewhere speci-	1	Window shades and fixtures.....	3
Musical instruments, organs.....	2	Saws.....	1	fied.....	4	Wire.....	1
Needles, pins, and hooks and eyes.....	1	Scales and balances.....	5	Steam packing.....	1	Wood distillation.....	1
Nets and seines.....	1	Screws, machine.....	2	Steel barrels, drums, and tanks.....	2	Wood preserving.....	2
Oil and cake, cottonseed.....	1	Sewing machines.....	2	Stencils and brands.....	1	Wooden goods, not elsewhere speci-	4
Paper goods, not elsewhere speci-	1	Shipbuilding, steel, new vessels.....	1	Stoves, gas and oil.....	4	fied.....	4
fied.....	3					Woolen goods.....	2

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

5,088,640	5,822,647	23,741,756	883,378	1,154,445	6,390,341	122,150,470	2,150,434	192,815,052	68,505,148	44,287	19,775	302	1,344	.....	22,866	7,784	1
29,728	28,490	152,042	1,000	4,780	11,286	472,521	10,288	902,396	410,587	196	50	.....	41	.....	105	.....	2
43,562	28,701	225,898	544	20,760	10,240	262,349	10,114	733,364	400,901	243	.....	.....	24	.....	219	.....	3
17,628	18,671	313,251	1,773	45,301	3,988	320,845	12,199	537,148	288	188	.....	.....	77	.....	111	.....	3
93,315	205,139	427,556	879	17,772	30,015	810,127	8,101	1,082,150	1,055,832	286	.....	.....	.....	.....	286	.....	5
141,883	733,972	2,465,756	.....	53,573	1,149,462	8,052,465	221,132	15,702,836	6,889,230	2,094	1,545	122	47	.....	980	1,936	5
23,084	26,277	238,627	.....	3,832	6,106	127,228	127,716	690,114	425,170	865	075	.....	.....	.....	190	103	6
2,150	2,601	57,266	.....	3,606	980	145,900	1,562	227,300	79,748	41	.....	.....	.....	.....	41	.....	8
91,548	127,248	146,044	.....	21,880	40,068	7,332,628	31,001	7,879,726	515,797	742	105	.....	.....	.....	637	.....	9
162,344	72,507	2,124,654	.....	.....	8,121	1,327,094	110,371	3,440,304	2,396,689	1,343	757	55	.....	.....	531	1,107	10
46,482	91,593	50,788	.....	8,282	17,501	104,041	47,115	456,586	305,430	252	100	.....	.....	.....	152	15	11
14,800	17,568	5,273	.....	1,564	3,517	44,343	3,555	108,481	63,683	7	.....	.....	.....	.....	7	.....	12
165,497	113,563	779,528	133,111	41,054	29,376	3,853,136	23,536	6,048,192	2,166,520	905	380	.....	.....	.....	575	.....	13
49,322	217,243	178,974	.....	11,060	71,871	4,816,744	19,854	6,393,929	1,553,331	463	.....	.....	.....	.....	463	.....	14
27,420	15,879	102,788	.....	15,090	5,310	304,383	2,326	478,277	171,568	145	.....	.....	.....	.....	145	.....	15
51,540	93,771	315,792	.....	37,716	44,559	1,179,283	44,434	2,197,935	974,218	834	160	.....	.....	.....	674	103	16
18,740	58,165	109,862	.....	22,441	2,939	498,220	14,352	808,874	296,302	198	160	.....	.....	.....	38	103	17
32,800	35,606	205,930	.....	15,275	41,620	681,003	30,082	1,389,061	677,916	636	.....	.....	.....	.....	636	.....	18
71,064	54,747	635,813	.....	16,175	13,550	1,825,191	12,732	3,226,533	1,388,610	260	.....	.....	18	.....	242	.....	19
42,451	38,934	25,552	.....	3,264	16,932	518,319	3,096	746,832	224,517	32	10	.....	.....	.....	22	.....	20
19,782	6,769	75,197	.....	6,304	717	61,956	1,178	216,387	153,253	40	.....	.....	.....	.....	40	.....	21
75,460	64,157	280,667	.....	3,550	25,271	6,784,777	56,182	7,611,780	770,821	4,440	2,225	.....	.....	.....	2,215	.....	22
188,198	130,762	279,543	.....	24,622	213,200	4,023,267	51,250	5,839,526	1,765,009	1,393	589	.....	.....	.....	825	32	23
106,034	97,450	500,177	5,330	39,439	19,971	776,926	40,321	1,948,324	1,131,077	928	240	.....	.....	153	535	.....	24
25,813	22,897	36,713	.....	5,405	2,714	194,943	1,572	352,034	155,519	20	.....	.....	12	.....	8	.....	25
40,506	24,739	220,205	21,415	18,513	7,095	428,064	8,105	876,888	440,119	376	210	.....	60	.....	106	.....	26
47,090	37,211	69,855	.....	8,592	5,055	839,071	9,088	1,161,828	343,069	303	.....	.....	.....	.....	303	.....	27
30,199	27,503	86,150	.....	3,750	8,470	164,465	3,210	387,302	219,621	108	.....	.....	.....	.....	108	.....	28

³ Same number reported for one or more other months.

TABLE 31.—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.

KANSAS CITY—Continued.																	Dollars.
1	Lumber, planing-mill products, not including planing mills connected with sawmills.	13	614	7	22	60	21	504	Se	536	Ja	423	530	496	.....	34	2,732,083
2	Marble and stone work.	7	132	2	7	4	4	115	No	128	Ja	90	123	118	4	1	383,774
3	Mattresses and spring beds, not elsewhere specified.	9	169	7	14	10	7	131	Au	148	Fe	118	132	110	22	.....	338,154
4	Mineral and soda waters.	9	127	11	10	12	4	90	Jy	109	No	68	85	64	21	.....	302,310
5	Models and patterns, not including paper patterns.	6	38	9	.....	.....	1	28	Au ³	31	Ja	20	29	29	.....	.....	51,671
6	Patent medicines and compounds.	28	344	19	36	180	36	73	.....	.....	.....	.....	76	53	22	1	711,815
7	Patent and proprietary medicines.	17	275	10	21	161	30	53	Oc	58	Ap ³	50	53	35	17	1	579,149
8	Patent and proprietary compounds, not elsewhere specified.	11	60	9	15	19	6	20	De	29	My	16	23	18	5	.....	132,666
9	Paving materials.	7	175	3	12	6	1	153	Oc	199	Ja	100	165	165	.....	.....	168,033
10	Photo-engraving.	4	108	2	9	13	8	76	Ap	85	Ja	67	80	77	.....	3	153,020
11	Printing and publishing, book and job.	133	2,022	122	122	120	82	1,576	No	1,672	Ja	1,452	1,629	1,126	485	17	3,805,017
12	Printing and publishing, newspapers and periodicals.	58	2,348	35	131	604	534	1,044	.....	.....	.....	.....	1,068	931	137	.....	3,439,335
13	Printing and publishing.	9	1,764	2	61	485	356	860	Je	926	Ja	750	873	802	71	.....	2,450,180
14	Printing, publishing, and job printing.	15	352	11	31	30	113	167	De	179	My	160	179	116	63	.....	723,497
15	Publishing without printing.	34	232	22	39	89	65	17	Mh	20	Oc ³	15	16	13	3	.....	265,678
16	Sausage, not made in slaughtering and meat-packing establishments.	6	72	5	5	1	4	57	De ³	59	Mh	54	59	51	8	.....	284,754
17	Signs and advertising novelties.	9	57	9	4	1	4	39	Oc ³	47	Ap	32	38	30	7	1	86,372
18	Structural ironwork, not made in steel works or rolling mills.	6	131	6	9	16	4	96	Jy	137	Ja	52	106	106	.....	.....	298,287
19	Tobacco, cigars.	16	108	13	4	2	1	88	De	97	Fe	75	94	53	41	.....	67,625
20	Toys and games.	4	22	4	1	.....	1	16	Au	28	Fe ³	7	19	10	9	.....	28,869
21	Trunks and valises.	7	108	9	4	6	4	85	Oc	103	Ja	72	90	77	13	.....	149,532
22	Washing machines and clothes wringers.	4	53	5	1	3	2	42	De	60	Ja ³	30	6	6	.....	.....	165,827
23	Wirework, not elsewhere specified.	9	69	5	5	2	3	54	De	58	Mh	50	57	38	19	.....	114,739
24	All other industries*.	249	10,536	152	633	852	476	8,423	.....	.....	.....	.....	8,873	6,266	2,570	9	40,270,428

*All other industries embrace—

4	Artificial limbs.	1	Butter, reworking.	1	Dental goods.	2	Gloves and mittens, cloth, not including gloves made in textile mills.	1
3	Artificial stone products.	1	Carpets, rag.	1	Electrical machinery, apparatus, and supplies.	3	Glucose and starch.	1
1	Artists' materials.	1	Carriage and wagon materials.	1	Electroplating.	3	Glue, not elsewhere specified.	2
1	Automobiles.	1	Carriages and wagons, repair work only.	2	Enameling.	1	Gold and silver, reducing and refining, not from the ore.	1
3	Awnings, tents, and sails.	3	Cars and general shop construction and repairs by electric-railroad companies.	1	Engines, steam, gas, and water.	6	Hand stamps.	4
1	Babbitt metal and solder.	1	Cars, steam-railroad, not including operations of railroad companies.	1	Engraving, wood.	1	Hardware.	1
3	Bags, other than paper, not including bags made in textile mills.	3	Cash registers and calculating machines.	1	Envelopes.	3	Hats and caps, other than felt, straw, and wool.	2
1	Belting, leather.	1	China decorating, not including that done in potteries.	2	Fancy articles, not elsewhere specified.	1	Hats, fur-felt.	1
1	Belting, woven, other than rubber.	1	Clothing, women's.	13	Flavoring extracts.	1	Hats, straw.	5
3	Blacking, stains, and dressings.	3	Coal-tar products.	1	Fuel, manufactured.	5	Ice, manufactured.	2
2	Boots and shoes.	2	Cordials and flavoring sirups.	2	Fur goods.	2	Ink, printing.	1
3	Boxes, paper and other, not elsewhere specified.	3	Cutlery and edge tools.	2	Gas and electric fixtures.	1	Ink, writing.	1
3	Boxes, wooden packing, except cigar boxes.	3	.....	.....	Gas machines.	1	Iron and steel, steel works and rolling mills.	1
3	Brass and bronze products.	3	.....	.....	Glass.	1	Iron and steel, doors and shutters.	1
2	Brushes.	2	.....	.....	Glass, cutting, staining, and ornamenting.	1	.....	.....

ST. JOSEPH—All industries.																	Dollars.
1	Automobile bodies and parts.	4	22	4	.....	.....	18	Mh ³	19	Fe ³	16	20	19	1	.....	.....	53,658
3	Automobile repairing.	11	61	17	1	1	40	Se	46	Mh	35	43	42	1	.....	.....	81,026
4	Boots and shoes.	3	406	.....	19	14	9	364	De	425	Mh	331	423	278	139	4	1,433,861
5	Bread and other bakery products.	30	165	28	8	16	8	106	De	112	Mh	98	116	94	22	.....	521,002
6	Clothing, men's.	4	402	.....	6	49	1	346	Au	422	Jy	328	404	32	372	.....	746,021
7	Confectionery and ice cream.	8	1,112	5	23	139	33	912	No	1,030	My	809	1,006	414	592	.....	3,120,342
8	Cooperage, hogsheds and barrels.	4	32	4	3	1	1	23	Oc	47	Je	6	43	43	.....	.....	78,228
9	Copper, tin, and sheet-iron work.	5	53	4	3	1	2	43	Oc	54	Ja	29	35	35	.....	.....	119,932
10	Flour-mill and gristmill products.	7	619	7	24	39	34	515	Se	869	Jy	389	500	455	45	.....	6,725,990
11	Foundry and machine-shop products.	10	244	4	21	8	8	203	De ³	227	Mh	173	227	225	2	.....	434,377
12	Lumber, planing-mill products, not including planing mills connected with sawmills.	4	119	1	11	18	8	81	No	100	Fe	64	97	95	2	.....	427,875
13	Printing and publishing, book and job.	20	273	20	13	22	5	213	De	229	Au	202	233	131	100	2	500,757

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—MISSOURI.

37

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.				Rent- ²	Electric horsepower generated in establishments reporting.
											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. 74,249	Dollars. 152,295	Dollars. 531,958	Dollars. 832	Dollars. 38,432	Dollars. 40,910	Dollars. 1,522,495	Dollars. 18,085	Dollars. 2,653,164	Dollars. 1,112,584	1,334	920	75	97	.....	242	95	1
19,171	7,294	171,430	17,522	4,210	2,533	207,961	14,666	460,994	238,367	544	.....	.....	74	.....	470	.....	2
18,400	22,316	175,357	100	15,255	11,462	564,067	9,148	989,134	415,919	440	250	.....	.....	.....	190	.....	3
22,790	22,677	81,759	1,560	4,182	23,708	245,379	8,218	550,808	297,211	119	.....	.....	20	.....	99	.....	4
.....	600	37,679	1,200	2,422	797	16,142	1,518	89,045	71,385	74	.....	.....	14	.....	60	.....	5
107,829	366,096	75,058	.....	14,164	134,970	597,328	5,461	1,666,712	1,063,923	90	2	.....	53	.....	35	.....	6
74,839	318,046	47,683	.....	8,850	121,052	459,720	4,480	1,282,134	817,934	88	.....	.....	53	.....	35	.....	7
32,990	48,050	27,375	.....	5,314	13,918	137,608	981	384,578	245,989	2	2	.....	.....	.....	.....	.....	8
27,620	9,080	174,500	10,000	8,223	782	39,051	16,655	320,794	265,088	710	140	.....	.....	.....	570	.....	9
41,636	27,504	170,898	5,478	8,581	1,644	22,715	2,936	418,437	392,786	35	.....	.....	.....	.....	35	.....	10
432,957	265,466	1,605,113	124,347	141,803	72,223	2,728,906	66,551	6,715,257	3,919,800	1,695	.....	20	.....	.....	1,675	.....	11
445,098	1,069,245	1,187,585	486,362	108,043	43,270	5,049,469	74,752	10,592,983	5,468,762	1,900	1,275	.....	31	.....	594	894	12
287,803	783,050	996,938	104,092	84,660	33,086	4,630,212	67,104	8,501,482	3,804,076	1,728	1,275	.....	31	.....	422	894	13
89,615	84,589	174,253	127,508	10,253	6,821	289,021	7,494	918,508	621,993	172	.....	.....	.....	.....	172	.....	14
87,880	201,606	16,394	254,762	13,130	3,372	130,236	64	1,172,993	1,042,693	.....	.....	.....	.....	.....	.....	.....	15
9,375	4,788	56,838	.....	16,105	14,773	432,603	11,417	603,429	159,409	158	.....	.....	.....	.....	158	.....	16
10,400	3,572	43,416	914	4,966	1,901	48,095	536	141,816	93,185	13	.....	.....	.....	.....	13	.....	17
16,023	23,462	136,521	.....	4,040	2,538	430,416	5,380	679,492	243,696	182	.....	.....	12	.....	170	.....	18
5,557	5,304	65,636	.....	3,377	30,680	175,341	441	333,189	157,407	2	.....	.....	.....	.....	2	.....	19
1,850	306	10,090	300	1,990	204	13,196	797	54,412	40,419	15	.....	.....	5	.....	10	.....	20
12,900	7,106	77,298	.....	11,250	4,640	101,578	3,367	318,866	153,861	62	.....	.....	.....	.....	62	.....	21
5,277	8,796	44,597	810	1,434	177	310,340	726	444,434	133,368	27	.....	.....	27	.....	.....	.....	22
25,520	6,414	44,483	.....	7,120	1,944	173,420	2,602	295,484	119,462	78	.....	.....	27	.....	51	.....	23
2,165,196	1,526,936	9,098,622	69,901	342,232	4,256,521	63,919,912	1,042,744	94,498,546	29,535,890	19,705	10,213	50	532	.....	8,910	3,439	24

Iron and steel, welding.....	3	Peanuts, grading, roasting, cleaning, and shelling.....	1	Roofing materials.....	2	Steel barrels, drums, and tanks.....	2
Jewelry.....	8	Pens, fountain and stylographic.....	1	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	1	Stereotyping and electrotyping.....	2
Lard.....	1	Perfumery and cosmetics.....	4	Saddlery and harness.....	4	Stoves and hot-air furnaces.....	3
Liquors, malt.....	2	Petroleum, refining.....	1	Safes and vaults.....	2	Surgical appliances.....	3
Looking-glass and picture frames.....	1	Photographs and graphophones.....	1	Shirts.....	1	Suspenders, garters, and elastic	1
Lubricating greases.....	2	Photographic apparatus.....	1	Show cases.....	3	woven goods.....	1
Lumber and timber products.....	1	Photographic materials.....	2	Soap.....	1	Theatrical scenery.....	1
Millinery and lace goods, not elsewhere specified.....	10	Pickles, preserves, and sauces.....	1	Sporting and athletic goods.....	1	Tinware, not elsewhere specified.....	4
Mirrors, framed and unframed, not elsewhere specified.....	1	Plumbers' supplies, not elsewhere specified.....	3	Springs, steel, car and carriage, not made in steel works or rolling mills.	1	Tools, not elsewhere specified.....	3
Mucilage, paste, and other adhesives, not elsewhere specified.....	2	Poultry, killing and dressing, not done in slaughtering and meat-packing establishments.....	1	Stamped ware, not elsewhere specified.....	1	Umbrellas and canes.....	1
Musical instruments and materials, not elsewhere specified.....	2	Printing and publishing, music.....	2	Stationery goods, not elsewhere specified.....	1	Upholstering materials, not elsewhere specified.....	1
Oil, not elsewhere specified.....	3	Printing materials.....	2	Statuary and art goods.....	2	Varnishes.....	1
Optical goods.....	3	Refrigerators.....	2	Steam fittings and steam and hot-water heating apparatus.....	1	Vinegar and cider.....	3
Paints.....	10	Regalia, and society badges and emblems.....	2	Steam packing.....	1	Window and door screens and weather strips.....	3
Paper goods, not elsewhere specified.....	1	.....	.....	.....	.....	Wire.....	1
.....	.....	.....	.....	.....	.....	Wood preserving.....	1
.....	.....	.....	.....	.....	.....	Wood, turned and carved.....	1

1,180,121	1,106,514	5,577,876	54,793	173,700	1,454,548	32,445,427	906,065	50,697,198	17,345,706	13,591	4,768	395	234	.....	8,194	677	1
13,200	1,200	29,761	.....	1,096	247	37,064	1,035	78,713	40,614	35	.....	.....	.....	.....	35	.....	2
51,181	28,091	65,334	280	8,343	736	37,704	2,578	164,939	124,657	41	.....	.....	.....	.....	41	.....	3
8,682	40,377	342,837	.....	12,648	12,342	1,457,075	9,753	2,020,617	553,789	358	100	.....	.....	.....	258	.....	4
18,522	17,786	114,552	50	7,052	15,068	582,739	21,432	912,318	308,347	152	5	.....	.....	.....	147	.....	5
99,793	388,684	195,604	.....	3,920	68,590	939,378	6,553	1,565,490	619,529	109	.....	.....	.....	.....	109	.....	6
3,491	711	621,020	.....	16,300	556,954	2,095,307	44,894	5,550,754	2,810,553	908	603	.....	.....	.....	305	212	7
14,565	2,416	26,563	2,242	1,582	402	81,825	574	118,976	31,577	57	.....	.....	22	.....	35	.....	8
128,389	111,375	62,764	.....	2,229	1,133	128,829	910	226,788	102,049	3	.....	.....	.....	.....	3	.....	9
53,085	21,285	585,762	.....	1,080	93,439	15,503,014	176,828	19,108,839	3,426,997	4,353	125	.....	.....	.....	4,228	.....	10
24,400	21,112	238,318	635	20,412	23,611	231,981	21,294	709,550	456,291	382	.....	.....	42	.....	340	.....	11
.....	.....	95,113	6,000	8,502	7,843	185,752	3,831	432,493	242,910	280	.....	.....	50	.....	230	.....	12
49,685	40,660	197,445	.....	12,065	14,497	257,864	7,151	761,536	496,521	113	.....	.....	.....	.....	113	.....	13

² Same number reported for one or more other months.

TABLE 31.—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.

ST. JOSEPH—Continued.															Dollars.
1	Printing and publishing, newspapers and periodicals.	13	297	7	29	54	40	167		189	153	28	7	1	429,352
2	Printing, publishing, and job printing.	6	289	3	27	54	39	166	De 180 Ja 154	188	152	28	7	1	426,027
3	Publishing without printing	7	8	4	2		1	1	(s) 1 (s) 1	1	1				3,325
4	Saddlery and harness	7	152	4	14	10	3	121	No 134 Ja 105	130	123	6	1		505,203
5	Tobacco, cigars	6	31	4	3			22	De 23 Mh 21	5	2	3			41,025
6	All other industries*	83	3,327	41	213	199	105	2,760		3,039	1,987	1,044	5	3	9,826,549

*All other industries embrace—		Brick, building	2	Cars and general shop construction		Fertilizers	
Awnings, tents, and sails	2	Brooms, from broom corn	2	and repairs by steam-railroad com-		Food preparations, not elsewhere	
Bookbinding and blank-book mak-		Butter	3	panies	2	specified	
		Carpets, rag	1	Cars, steam-railroad, not including		Fur goods	
Boxes, paper, shipping containers	1	Carriages and wagons, including repairs	2	operations of railroad companies	1		
and set-up paper boxes	2	Cars and general shop construction		Coffee, roasting and grinding	4	Furniture, wood, other than rattan	
Boxes, wooden packing, except cigar		and repairs by electric-railroad		Coffins, burial cases, and under-		and willow, and store and office	
boxes	2	companies	1	takers' goods	1	fixtures	
				Druggists' preparations	4	Gas, illuminating and heating	

1	ST. LOUIS—All industries.	3,205	135,425	2,204	6,394	13,017	5,891	107,919	De 116,033	Mh 101,948	118,002	84,086	32,452	703	731	575,937,752
2	Artificial limbs.	5	36	3	4	6	7	16	(s) 16 (s) 16	16	15	1				37,297
3	Automobile bodies and parts.	45	1,432	29	91	168	24	1,120	De 1,338 Fe 894	1,339	1,312	19	2	6		2,592,558
4	Automobile repairing.	117	684	118	49	34	28	455	Se 484 Ja 400	477	474	2	1			1,165,470
5	Awnings, tents, and sails.	12	290	3	31	29	10	217	Oc 273 Ja 164	258	66	190	1	1		1,620,883
6	Bags, other than paper, not including bags made in textile mills.	7	1,599	4	37	147	103	1,308	No 1,438 Mh 1,172	1,381	426	917	4	34		12,666,653
7	Blacking, stains, and dressings.	10	53	13	3	5	4	28	Au 39 Ja 6	36	13	21	1	1		113,065
8	Bookbinding and blank-book making.	27	574	31	30	14	13	486	Oc 516 Fe 454	563	235	298	15	15		672,159
9	Boot and shoe cut stock.	7	1,898	3	84	48	170	1,593	No 1,850 Ja 1,303	1,727	1,248	463	13	3		12,582,161
10	Boots and shoes, not including rubber boots and shoes.	27	11,062	2	249	1,107	525	9,779	De 10,323 Ja 9,060	10,372	5,836	4,390	80	66		31,105,951
11	Boxes, paper and other, not elsewhere specified.	33	2,318	8	112	109	78	2,016	No 2,252 Ja 1,831	2,189	887	1,243	9	50		3,817,386
12	Boxes, wooden packing, except cigar boxes.	21	1,405	8	65	31	19	1,282	Ja 1,410 Se 1,150	1,280	1,112	141	27			3,662,108
13	Brass and bronze products.	16	681	11	37	45	6	582	De 668 My 529	665	645	13	6	1		2,348,473
14	Bread and other bakery products.	458	3,028	461	117	234	143	2,673	No 2,843 Ja 2,505	2,848	1,816	946	22	64		7,885,056
15	Brick and tile, terra-cotta, and fire-clay products.	14	2,411		67	123	44	2,177	Oc 2,765 Mh 1,380	2,376	2,367	9				11,613,797
16	Brooms.	15	154	12	7	7	5	123	De 137 Ja 114	140	138	1	1			80,277
17	Carriages and wagons, including repairs.	45	713	48	17	25	10	613		642	637	5				2,632,445
18	Carriages and wagons.	21	603	15	17	24	10	537	No 579 Fe 497	564	559	5				1,938,090
19	Repair work only.	24	110	33		1		76	De 78 Ap 73	78	78					94,355
20	Cars and general shop construction and repairs by steam-railroad companies.	11	2,569		86	73	12	2,398	No 2,608 Ap 2,248	2,503	2,547	16				2,087,745
21	Chemicals.	13	1,523	5	85	188	163	1,032	No 1,100 Mh 1,052	1,078	858	214	4	2		7,427,746
22	Cleaning and polishing preparations.	19	96	8	16	16	10	46		43	27	15		1		135,145
23	Cleaning preparations.	12	68	4	13	10	7	34	Mh 54 De 26	30	21	9				94,267
24	Metal polish and all other polishing preparations.	7	28	4	3	6	3	12	Oc 16 Ja 7	13	6	6		1		40,878
25	Clothing, men's.	72	4,922	62	164	440	177	4,079		4,621	1,097	3,473	5	46		13,822,493
26	Regular factory products.	43	4,582	24	163	439	176	3,780		4,298	904	3,283	5	46		13,759,619
27	Men's, youths', and boys'.	29	3,159	19	132	370	122	2,516	De 2,869 Ap 2,065	2,884	744	2,114	3	23		10,259,713
28	All other.	14	1,423	6	31	69	54	1,264	No 1,420 My 1,126	1,414	220	1,160	2	23		3,499,906
29	Contract work.	29	340	38	1	1	1	299		323	133	190				62,874
30	Men's and youths'.	24	251	29	1	1	1	219	Se 237 Oc 192	234	91	143				30,438
31	All other.	5	89	9				80	Se 102 De 64	89	42	47				32,436
32	Clothing, women's.	102	3,784	72	200	281	126	3,105		3,251	603	2,617	3	28		6,201,422
33	Suits, skirts, and cloaks.	47	1,642	35	105	135	65	1,302	Au 1,475 Ja 1,070	1,397	432	965				3,186,492
34	Shirt waists and dresses, except house dresses.	24	817	13	46	76	21	661	Se 732 Ja 567	655	70	578	1	6		1,155,060
35	Undergarments and petticoats.	10	649	7	18	35	24	565	De 593 Ja 539	595	47	532	1	15		1,079,266
36	Wrappers and house dresses.	9	430	7	20	21	12	370	No 393 Mh 346	389	37	347	1	4		498,291
37	All other.	12	246	10	11	14	4	207	Ap 221 Je 168	215	17	195		3		282,353
38	Coffee, roasting and grinding.	21	1,083	7	84	379	113	500	De 524 Fe 477	512	318	186		8		8,437,384
39	Coffins, burial cases, and undertakers' goods.	8	663	1	38	80	19	525	Fe 561 My 500	511	400	110	1			2,227,612
40	Confectionery and ice cream.	89	2,540	100	112	172	60	2,096		2,301	971	1,311	2	17		6,645,800
41	Confectionery.	68	2,156	82	74	149	46	1,805	No 2,090 Jy 1,597	2,044	724	1,301	2	17		4,797,639
42	Ice cream.	21	384	18	38	23	14	291	Jy 352 Fe 248	267	247	10				1,848,161
43	Cooperage.	13	614	4	38	16	8	548	No 573 Jy 527	578	541	10	27			1,539,804
44	Copper, tin, and sheet-iron work.	115	782	108	61	29	21	563	Oc 668 Ja 471	650	636	2	12			2,451,444
45	Dental goods.	6	48	4	7	4	4	29	(s) 29 (s) 29	29	26	3				69,066
46	Druggists' preparations.	12	782	5	62	123	60	532	Fe 549 Jy 499	533	287	244	1	1		2,623,892
47	Electrical machinery, apparatus, and supplies.	30	4,432	2	202	472	279	3,477	De 4,023 Ja 3,254	3,839	2,503	1,207	25	44		10,732,392
48	Electroplating.	12	108	11	11	2		84	De 102 Ja 65	101	96	2	3			105,496
49	Engraving and die sinking.	5	9	6		2		1	(s) 1 (s) 1	1	1	1				6,375

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—MISSOURI.

39

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-ed.^{2}

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

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.								
78,886	90,358	117,270	25,257	5,652	60,640	193,628	9,629	893,733	690,476	200	-----	-----	-----	-----	-----	200	-----
76,536	89,878	115,710	1,062	5,030	60,615	192,610	9,629	868,335	666,096	200	-----	-----	-----	-----	-----	200	-----
2,320	480	1,560	23,595	622	25	1,018	-----	25,398	24,380	-----	-----	-----	-----	-----	-----	-----	-----
29,137	19,024	146,005	-----	2,840	9,872	784,530	3,914	1,136,015	347,671	60	-----	-----	-----	-----	-----	60	-----
4,550	-----	21,172	-----	1,518	9,940	35,091	337	88,026	52,598	2	-----	-----	-----	-----	-----	2	-----
604,585	823,435	2,718,356	20,320	68,461	574,234	9,298,646	505,352	10,935,235	7,041,237	6,538	3,935	395	120	-----	-----	2,088	465

Class, cutting, staining, and ornamenting.....	1	Marble and stone work.....	1	Musical instruments and materials, not elsewhere specified.....	1	Stationary goods, not elsewhere specified.....	1
Hand stamps.....	1	Mattresses and spring beds, not elsewhere specified.....	2	Patent medicines and compounds.....	1	Structural ironwork, not made in steel works or rolling mills.....	3
Hats and caps, other than felt, straw, and wool.....	3	Millinery, trimmed hats and hat frames.....	2	Paving materials.....	1	Trunks and valises.....	2
Ice, manufactured.....	2	Mineral and soda waters.....	3	Photo-engraving.....	1	Vinegar and cider.....	2
Iron and steel, welding.....	1	Mirrors, framed and unframed, not elsewhere specified.....	1	Pickles and sauces.....	1	Washing machines and clothes wringers.....	1
Jewelry.....	2			Shirts.....	3	Wirework, not elsewhere specified.....	1
Liquors, malt.....	2			Signs.....	1	Wood, turned and carved.....	1
				Slaughtering and meat packing.....	1		

22,838,459	27,154,211	108,557,326	2,490,668	3,674,398	43,006,053	529,748,948	11,077,309	871,700,438	330,874,091	105,697	105,329	6,885	4,387	100	78,996	57,419	1
7,830	14,070	23,513		3,006	401	20,312	979	108,178	86,887	18					18		2
237,409	161,244	1,123,953	6,926	61,068	178,367	4,380,253	38,493	8,326,287	3,907,541	1,664	488		16		1,160		3
90,660	46,881	557,010	42,335	77,023	9,393	565,024	27,193	1,788,894	1,195,777	429			21		408		4
107,491	46,271	205,090		20,817	52,236	2,480,805	7,122	3,315,234	818,247	125					125		5
289,217	334,637	936,368		41,078	680,742	24,313,626	31,905	27,970,073	3,624,542	854	470				384	375	6
7,650	7,939	21,007		2,236	955	120,172	1,419	281,096	159,505	84	60				24		7
57,683	27,405	387,378	2,362	23,678	6,623	360,917	12,794	1,160,813	787,102	227					227		8
195,067	193,196	1,565,344		11,940	109,676	26,181,653	294,230	28,696,415	2,220,632	1,300	310				999	162	9
777,357	2,820,272	8,496,113	1,040	24,800	1,562,630	38,441,592	1,112,056	50,857,853	20,304,205	4,737	2,465				2,272	1,633	10
445,492	265,892	1,301,986	737	84,146	205,411	4,346,847	208,957	8,010,943	3,460,139	1,314	145		20		1,149	66	11
228,395	79,431	1,077,154		44,473	278,888	2,800,226	48,952	5,002,785	2,153,607	4,514	2,255		5		2,254	7	12
174,395	119,663	634,220	4,488	6,355	218,626	5,675,771	103,044	8,051,089	2,272,274	840					840		13
326,125	562,116	2,809,989	538	213,836	303,940	12,457,050	334,199	21,047,650	8,256,392	2,661	753				1,908	397	14
263,046	239,432	2,370,821		8,061	153,440	1,278,453	630,178	5,950,295	4,041,664	5,982	4,702		60		1,220	1,435	15
7,063	7,880	79,683		3,443	1,437	160,878	1,643	270,021	107,500	43					43		16
123,008	45,480	678,173	9,232	28,402	65,121	1,886,525	21,472	3,217,189	1,308,892	953	275				678		17
125,668	45,224	548,132	7,973	20,263	63,617	1,806,037	15,596	2,941,631	1,119,998	824	275				549		18
222,694	99,989	3,604,058		180,041	8,139	1,504	5,876	275,558	188,894	129					129		19
				13,338	1,343,717	77,240		5,856,978	3,936,021	1,175	394				781	25	20
297,483	405,595	1,040,832		36,900	1,036,301	6,781,936	213,035	11,978,475	4,983,504	3,588	1,652				1,936	1,000	21
40,782	37,887	102,193	816	10,020	4,730	315,941	3,613	550,827	231,273	70					70		22
34,562	23,160	27,870	36	6,918	4,170	265,612	3,263	426,714	167,839	65					65		23
6,280	14,721	74,323	780	3,702	566	50,329	350	124,113	73,434	5					5		24
785,136	1,062,174	3,222,114	254,750	161,907	997,771	12,241,217	72,630	21,135,292	8,821,445	1,401	516				885	292	25
781,236	1,060,974	2,915,692	246,739	160,982	997,543	12,216,408	67,784	20,713,017	8,425,525	1,344	516				828	292	26
654,944	887,492	1,957,052	245,268	104,821	669,933	8,029,021	37,572	14,101,025	6,124,432	816	350				466	100	27
126,292	173,482	988,040	1,471	45,861	327,910	4,187,387	30,212	6,621,992	2,304,393	528	166				362	192	28
3,900	1,200	276,422	8,011	11,225	228	24,809	4,846	422,275	392,620	57					57		29
3,900	1,200	201,474	8,011	8,221	159	8,764	2,691	299,854	288,369	38					38		30
		74,948	3,004	69	10,045	2,155		122,421	104,221	19					19		31
775,683	542,464	2,762,480	20,594	142,021	155,204	10,827,347	43,242	17,415,571	6,544,982	481					481		32
418,956	233,591	1,441,788	71,534	59,547	5,371,260	19,280		8,569,405	3,173,859	184					184		33
146,357	162,786	627,267	8,166	29,129	13,212	3,023,978	8,725	3,423,949	1,395,246	79					79		34
70,522	81,048	386,934	11,207	22,181	44,694	1,963,665	6,419	2,950,610	989,525	103					103		35
90,588	41,138	267,621	1,221	10,040	23,767	1,016,531	3,785	1,648,008	628,692	68					68		36
49,220	23,901	138,870		8,837	13,994	452,913	5,027	810,599	352,659	57					57		37
384,186	785,160	340,969	356	87,374	304,623	16,732,220	72,317	21,956,572	5,152,035	2,022	50				1,972		38
130,545	214,003	511,324		22,338	96,938	1,467,029	15,470	2,762,574	1,290,075	1,018	710				308	118	39
343,502	484,286	1,637,619	313	158,985	990,756	7,292,116	143,364	13,432,819	5,997,339	2,690	1,330				1,360	949	40
237,359	432,578	1,242,293		134,245	939,228	6,539,760	83,344	10,424,005	4,797,901	1,722					862	703	41
106,113	51,768	395,326	313	24,740	21,528	1,752,356	57,020	3,008,814	1,199,438	968	470				408	246	42
187,231	43,251	783,908		10,714	185,393	2,453,272	16,906	4,096,704	1,626,526	1,160	935				225	45	43
200,618	63,079	667,814	3,010	46,812	69,624	1,849,271	23,949	3,602,110	1,728,890	570	50				520		44
28,999	9,258	40,379		3,860	1,511	178,437	713	324,653	145,503	10					10		45
157,693	272,597	255,419		14,068	78,252	1,689,538	16,649	3,526,348	1,820,161	930	870				60	345	46
768,301	733,902	2,848,524	4,471	98,679	867,671	6,111,683	151,660	14,847,552	8,584,209	3,100					3,100		47
25,355	2,016	102,269			711	73,188	6,825	251,533	171,520	164					164		48
	524	1,128		91,356	164	824	85	17,703	16,794	5					5		49

* Same number reported throughout the year.

* Same number reported for one or more other months.

TABLE 31.—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.																		
ST. LOUIS—Continued.																		
1	Engraving, steel and copper plate, including plate printing.	8	94	8	5	2	2	77	De	92	Ap ^a	72	89	42	42	1	4	Dollars. 86,777
2	Envelopes.	4	346	1	15	13	18	300	De	338	Fe	273	333	129	191	2	11	873,263
3	Flour-mill and gristmill products.	8	375	1	38	47	23	266	Au	288	Mh ^a	253	267	267	267	4	4	6,164,630
4	Food preparations, not elsewhere specified.	42	1,494	22	69	244	178	981	My	1,272	Au	613	1,245	504	728	9	4	4,498,892
5	Foundry and machine-shop products	146	7,528	67	434	694	236	6,097	Ja	587	My	479	7,115	6,909	113	24	9	24,783,065
6	Boiler shops.	9	611	2	35	36	19	519	Ja	587	My	479	549	549	549	549	549	1,938,240
7	Foundries.	14	1,595	1	68	50	14	1,462	De	1,746	Mh	1,248	1,746	1,734	1,734	12	12	4,038,862
8	Machine shops.	118	4,818	61	308	540	190	3,719	No	4,873	Ja	2,836	4,464	4,334	113	8	9	15,856,260
9	Machine shop and foundry combined.	5	504	3	23	68	13	397	Ja	530	My	246	356	352	352	4	4	2,949,703
10	Fur goods.	6	76	4	6	3	12	51	No	69	Ap	37	66	23	41	1	1	383,112
11	Furnishing goods, men's.	9	420	6	18	59	22	315	No	407	Fe	255	400	40	337	6	11	1,141,769
12	Furniture.	59	3,469	18	204	253	98	2,896	De	1,488	Fe	1,306	4,110	3,832	255	18	5	8,603,432
13	Wood furniture, other than ratan and willow.	36	1,588	9	94	65	27	1,393	De	1,488	Fe	1,306	1,487	1,353	126	8	8	3,247,716
14	Metal furniture, and store and office fixtures.	23	1,881	9	110	188	71	1,503	De	1,623	Ja	1,372	2,023	2,479	129	10	5	5,355,716
15	Grease and tallow, not including lubricating greases.	4	73	3	3	1	1	65	Ja	78	Oc ^a	56	59	59	59	59	59	163,637
16	Hats and caps, other than felt, straw, and wool.	17	427	18	31	54	40	284	No	343	Fe	253	339	114	221	1	3	681,288
17	House-furnishing goods, not elsewhere specified.	6	34	6	3	2	3	20	Oc ^a	24	Ja ^a	16	26	17	9	9	9	72,995
18	Ice, manufactured.	8	330	1	33	16	3	277	Au	329	De	229	279	279	279	279	279	5,652,780
19	Iron and steel, tempering and welding.	9	75	7	8	11	4	45	Oc	48	De ^a	43	43	42	42	42	42	101,662
20	Jewelry.	19	357	22	19	19	22	275	De	288	Jy	267	292	238	40	12	2	542,010
21	Leather goods, not elsewhere specified.	8	126	4	13	11	5	93	No	103	My	83	101	51	47	2	1	299,995
22	Liquors, malt.	7	3,136	82	444	36	2,574	Au	3,000	No	2,092	2,827	2,769	2,769	58	12	25	41,525,120
23	Lithographing.	11	278	8	20	47	16	187	De	195	Ja	176	176	134	33	6	3	694,737
24	Lumber, planing-mill products, not including planing mills connected with sawmills.	43	2,217	19	111	93	34	1,960	Jy	2,083	Fe	1,741	2,086	2,005	61	16	4	5,881,831
25	Marble and stone work.	35	350	24	53	20	9	244	De ^a	312	Jy	167	109	108	1	1	1	1,069,608
26	Mattresses and spring beds, not elsewhere specified.	11	179	3	17	21	6	132	Oc	141	Ja	118	139	116	23	23	23	439,426
27	Millinery and lace goods, not elsewhere specified.	30	1,520	15	80	77	79	1,269	Mh	1,366	Je	1,076	1,387	208	1,188	8	33	1,874,319
28	Mineral and carbonated waters.	39	314	34	31	57	18	174	Au	234	Ja	136	161	154	7	7	7	698,888
29	Minerals and earths, ground or otherwise treated.	5	172	3	8	4	1	156	No	218	Ap	121	151	147	4	4	4	841,954
30	Models and patterns, not including paper patterns.	20	186	22	7	11	3	143	No	154	Ja	135	153	153	153	153	153	167,494
31	Oleomargarine and other butter substitutes.	4	296	11	67	21	197	No	229	Je	173	209	209	142	67	67	67	1,421,256
32	Paints.	18	796	3	56	147	66	524	Oc	584	Ja	443	557	504	53	12	25	4,326,484
33	Patent medicines and compounds.	95	1,675	49	164	316	211	935	No	926	Jy	781	998	353	608	12	25	6,387,278
34	Patent and proprietary medicines.	71	1,472	31	138	250	183	864	No	926	Jy	781	916	299	579	12	25	6,387,278
35	Patent and proprietary compounds, not elsewhere specified.	24	203	18	26	60	28	71	De	82	Je	63	83	54	29	29	29	499,959
36	Paving materials.	9	213	1	23	12	177	Au ^a	249	Ja	87	189	189	159	24	24	24	358,197
37	Perfumery and cosmetics.	18	275	12	17	30	118	98	No	103	Au	87	100	76	76	76	76	1,065,194
38	Photo-engraving.	13	219	4	28	23	10	154	No	172	Ja	132	174	153	3	16	2	333,409
39	Pickles, preserves, and sauces.	7	444	2	15	58	31	338	Je	412	Fe	290	350	144	204	204	204	2,441,439
40	Printing and publishing, book and job.	235	4,988	175	328	569	274	3,642	De	3,957	Ja	3,329	4,058	2,703	1,243	93	19	9,433,066
41	Job printing.	212	4,689	161	294	474	215	3,545	De	3,957	Ja	3,329	3,963	2,635	1,222	91	15	9,166,203
42	Book publishing, with and without printing.	16	231	7	31	93	56	44	Ap ^a	60	No ^a	11	35	14	17	17	17	160,810
43	Linotype work and typesetting.	7	68	7	3	2	3	53	De	58	Je	49	60	54	4	2	2	106,033
44	Printing and publishing, newspapers and periodicals.	112	2,910	46	225	775	382	1,482	De	1,062	Ja	875	1,013	960	39	7	7	7,051,581
45	Printing and publishing.	13	1,744	1	112	494	180	957	De	1,062	Ja	875	1,013	960	39	7	7	4,398,907
46	Printing, publishing, and job printing.	23	865	9	47	186	114	509	No	547	Ja	463	822	409	98	11	4	2,080,213
47	Publishing without printing.	76	301	36	66	95	88	16	(*)	16	(*)	16	16	7	8	1	1	572,461
48	Saddlery and harness.	18	655	12	35	96	30	482	De	541	Ap	413	546	464	79	3	3	1,878,139
49	Sausage, not made in slaughtering and meat-packing establishments.	7	28	8	2	3	1	14	No ^a	15	Jy ^a	13	15	13	1	1	1	34,712
50	Shirts.	11	2,224	2	38	143	79	1,962	De	2,184	Ap	1,866	2,184	99	2,024	1	60	3,763,304
51	Show cases.	5	277	4	18	14	9	232	Je	271	Ja	187	234	234	234	234	234	623,062
52	Signs and advertising novelties.	8	247	2	20	10	1	214	No	268	Fe	169	219	178	38	3	3	364,296
53	Slaughtering and meat packing.	38	3,756	23	181	550	136	2,866	Ja	3,232	Ap	2,683	2,915	2,737	172	6	6	77,801,624
54	Stoves and hot-air furnaces.	13	2,403	91	255	46	2,011	De	2,306	Ja	1,668	2,284	2,284	2,267	15	2	2	10,669,167
55	Structural ironwork, not made in steel works or rolling mills.	23	980	7	66	96	19	792	De	895	My	719	888	888	888	888	888	3,492,119
56	Surgical appliances.	13	160	8	16	10	51	75	Je ^a	79	Ja ^a	69	76	35	40	1	1	457,167
57	Tinware, not elsewhere specified.	5	985	41	30	17	897	De	1,018	Mh	830	1,024	1,024	652	351	14	7	2,519,717
58	Tobacco manufactures.	168	3,868	167	94	476	7	3,124	Ja	3,587	Mh	2,591	3,318	1,701	1,657	12	43	12,449,811
59	Tools, not elsewhere specified.	13	423	11	24	15	23	353	De	453	Je	296	346	331	8	7	7	1,226,235
60	Trunks and valises.	8	854	1	32	58	20	743	Oc	819	Ja	669	781	667	109	4	1	1,773,331
61	Vinegar and cider.	4	32	1	6	3	2	20	Oc	32	Ja ^a	17	19	19	19	19	19	110,487

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—MISSOURI.

41

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 on-gines (not tur-bines).	Steam tur-bines.	Inter-nal-com-bus-tion en-gines.	Wate-r pow-er. ¹		

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

Dollars. 22,969	Dollars. 3,082	Dollars. 66,379	Dollars. 2,100	Dollars. 4,876	Dollars. 793	Dollars. 50,442	Dollars. 851	Dollars. 188,695	Dollars. 131,402	30	30	30	30	30	30	30	30	1
53,530	117,625	211,836	.....	21,455	30,820	584,282	8,601	1,307,650	714,767	394	245	.....	.....	.....	.....	149	150	2
150,955	86,303	310,426	.....	6,120	39,689	11,460,135	52,280	12,928,163	1,415,748	2,105	1,710	.....	.....	.....	.....	395	20	3
289,182	309,441	635,288	.....	66,800	208,319	12,335,827	79,368	15,230,112	2,823,917	2,280	1,169	.....	.....	.....	.....	1,036	318	4
1,574,595	1,368,172	7,491,627	14,324	160,253	1,349,740	11,639,515	588,318	31,300,271	19,081,438	11,595	2,210	1,650	54	.....	.....	7,681	1,055	5
153,538	100,278	577,204	.....	20,022	377,537	1,182,173	32,520	2,924,409	1,709,716	1,214	190	.....	.....	.....	.....	1,024	.....	6
289,712	78,100	2,050,121	11,655	9,628	409,554	2,355,668	332,479	6,395,372	3,707,225	2,278	520	.....	.....	.....	.....	1,758	244	7
1,059,336	1,091,533	4,396,836	2,609	120,355	512,296	7,305,828	108,732	19,850,703	12,316,143	5,088	1,500	.....	.....	.....	.....	3,541	811	8
72,009	98,261	458,400	.....	10,248	50,353	735,846	54,587	2,138,787	1,348,354	3,015	1,650	.....	.....	.....	.....	1,358	.....	9
22,695	14,730	58,193	.....	13,435	14,015	208,854	1,420	515,968	305,688	28	.....	.....	.....	.....	.....	28	.....	10
96,030	447,253	241,131	500	14,702	16,239	1,591,451	2,700	2,540,760	946,558	40	.....	.....	.....	.....	.....	40	.....	11
601,697	475,529	2,948,981	1,122	94,034	188,435	7,194,302	107,784	13,958,300	6,656,124	5,913	3,755	.....	40	.....	.....	2,118	607	12
260,124	123,487	1,371,169	1,122	61,898	71,138	2,513,680	36,128	5,415,128	2,865,320	2,842	2,505	.....	.....	.....	.....	337	390	13
341,673	352,042	1,577,812	.....	32,136	117,297	4,680,712	71,656	8,543,172	3,700,804	3,071	1,250	.....	40	.....	.....	1,781	217	14
8,180	780	66,220	600	30	1,992	214,616	19,593	360,135	125,926	147	73	.....	.....	.....	.....	74	.....	15
76,463	47,405	253,561	.....	20,546	2,745	880,596	8,218	1,483,510	596,066	43	.....	.....	.....	.....	.....	43	.....	16
4,120	3,850	14,848	.....	1,796	829	107,838	1,827	190,856	81,191	110	.....	.....	.....	.....	.....	110	.....	17
120,682	23,851	398,724	.....	11,084	112,950	168,214	490,741	2,588,112	1,929,157	10,103	7,735	750	.....	.....	.....	1,618	972	18
15,540	17,807	52,419	.....	2,790	959	63,058	2,352	184,607	119,197	41	.....	.....	.....	.....	.....	41	.....	19
58,191	35,535	320,540	5,706	20,322	20,703	528,070	1,255	1,161,027	631,702	102	.....	.....	.....	.....	.....	102	.....	20
39,085	14,720	81,834	.....	0,132	3,374	337,003	5,288	574,996	232,105	419	.....	.....	.....	.....	.....	419	.....	21
435,054	875,428	3,048,600	.....	3,800	4,420,273	2,596,493	479,117	20,591,404	17,515,794	21,187	18,679	550	1,040	.....	.....	18	12,083	22
129,789	106,632	248,912	5,028	18,175	5,714	410,907	8,829	1,084,038	658,202	221	.....	.....	.....	.....	.....	221	.....	23
288,438	118,160	1,898,082	804	54,058	101,098	3,950,750	70,474	7,434,254	3,413,030	6,410	3,576	.....	.....	.....	.....	2,834	250	24
101,339	27,965	357,348	3,072	15,898	10,741	520,344	25,517	1,209,193	717,332	1,081	300	.....	11	.....	.....	770	.....	25
50,374	30,405	139,191	.....	11,380	7,493	554,585	7,057	920,773	350,131	220	.....	.....	.....	.....	.....	220	.....	26
363,705	140,908	854,752	2,395	67,309	54,091	2,605,079	17,431	5,069,774	2,446,664	173	20	.....	.....	.....	.....	153	.....	27
51,963	106,702	183,046	.....	17,070	74,158	742,815	10,226	1,856,905	1,103,864	328	150	.....	.....	.....	.....	178	.....	28
24,921	3,819	160,750	.....	0,547	5,935	362,573	43,053	810,404	404,778	587	280	.....	.....	.....	.....	307	30	29
32,302	8,095	197,712	427	9,775	1,637	76,423	5,429	454,890	373,038	123	.....	.....	.....	.....	.....	123	.....	30
57,936	135,018	150,644	10,247	3,000	169,037	3,052,554	34,703	4,414,888	727,631	903	840	.....	.....	.....	.....	63	301	31
233,395	323,188	661,100	200	34,516	143,709	7,256,201	109,167	10,864,510	3,499,142	2,202	1,720	.....	.....	.....	.....	572	944	32
674,739	715,323	782,593	10,342	87,508	1,430,491	4,400,114	33,747	12,575,220	8,141,359	749	265	.....	.....	.....	.....	484	103	33
602,544	604,917	723,093	10,342	74,876	1,423,955	4,082,076	30,552	11,808,666	7,606,038	644	205	.....	.....	.....	.....	379	103	34
72,195	110,406	60,500	.....	12,092	12,530	818,038	3,195	766,554	445,321	105	.....	.....	.....	.....	.....	105	.....	35
42,650	15,620	190,370	.....	5,373	5,942	40,599	44,558	465,607	380,450	1,357	760	.....	.....	.....	.....	597	.....	36
51,999	160,638	59,690	1,284	9,046	27,804	583,400	0,033	1,898,970	1,297,477	103	.....	.....	.....	.....	.....	103	.....	37
94,229	60,048	227,210	.....	17,089	1,834	112,074	5,004	652,236	533,658	109	.....	.....	.....	.....	.....	109	.....	38
60,790	115,971	252,605	.....	7,500	38,870	3,986,013	17,805	4,794,168	680,385	359	.....	.....	.....	.....	.....	359	.....	39
1,135,450	1,051,277	3,958,769	550,709	249,006	423,180	5,612,919	121,347	16,888,498	11,234,232	3,977	820	.....	.....	.....	.....	3,157	150	40
1,053,170	900,150	3,848,456	194,079	234,589	419,091	5,422,989	117,067	15,789,304	10,248,348	3,945	820	.....	.....	.....	.....	3,125	150	41
78,380	140,567	24,798	364,590	11,093	3,556	81,446	471	980,092	848,175	15	.....	.....	.....	.....	.....	15	.....	42
1,900	1,580	85,515	1,100	2,724	539	8,484	2,909	149,102	137,709	17	.....	.....	.....	.....	.....	17	.....	43
1,360,895	1,745,070	1,072,984	535,013	151,674	381,004	5,112,558	85,844	13,832,301	8,639,899	2,774	585	.....	.....	.....	.....	2,180	267	44
1,085,497	1,087,744	1,295,332	42,753	68,620	328,486	3,920,917	65,438	9,331,435	5,345,080	2,124	550	.....	.....	.....	.....	1,574	105	45
124,317	380,507	668,873	30,058	58,454	42,479	1,005,892	20,079	3,047,615	2,021,074	649	35	.....	.....	.....	.....	614	162	46
151,081	277,419	8,779	462,202	24,600	10,639	185,779	327	1,453,251	1,267,145	1	.....	.....	.....	.....	.....	1	.....	47
112,913	160,230	557,323	.....	48,057	96,040	2,643,336	11,005	4,680,496	1,632,155	216	.....	.....	.....	.....	.....	212	.....	48
8,400	5,200	18,294	.....	2,073	668	200,817	2,260	263,285	60,208	89	.....	.....	.....	.....	.....	8	.....	49
215,185	450,125	1,426,765	8,447	40,086	132,018	5,209,808	28,052	8,686,057	3,888,797	890	600	125	.....	.....	.....	105	460	50
35,040	38,298	244,407	.....	9,090	6,886	445,079	12,720	959,810	602,011	503	.....	.....	.....	.....	.....	503	.....	51
57,431	13,243	172,933	.....	8,730	17,228	321,246	5,658	639,785	812,881	98	.....	.....	.....	.....	.....	98	.....	52
323,419	1,067,920	3,670,295	45,583	24,521	133,110	87,195,782	409,711	96,044,220	8,433,727	8,164	7,430	345	.....	.....	.....	389	3,072	53
419,910	702,808	2,381,935	26,223	18,804	516,905	5,891,045	90,559	13,569,872	8,088,208	2,372	1,705	.....	.....	.....	.....	667	1,092	54
211,760	173,520	902,046	7,959	17,083	320,324	1,819,256	51,277	3,745,068	1,875,135	2,077	619	.....	.....	.....	.....	2,158	285	55
60,745	74,412	68,929	745	5,356	17,795	370,734	2,395	983,449	610,320	26	.....	.....	.....	.....	.....	26	.....	56
130,394	72,022	672,339	.....	24,060	192,872	1,840,894	32,107	3,631,417	1,652,416	653	225	.....	.....	.....	.....	428	270	57
731,361	782,417	2,438,340	347	20,096	11,682,090	25,787,044	136,008	45,947,000	20,024,038	2,486	2,235	.....	.....	.....	.....	251	1,638	58
96,017	28,468	415,891	.....	9,855	14,636	444,517	27,496	1,162,944	690,931	549	225	.....	.....	.....	.....	324	.....	59
96,705	146,156	789,409	.....	40,073	180,871	2,074,727	22,025	3,725,246	1,628,494	423	290	.....	.....	.....	.....	133	225	60
21,007	3,142	16,553	240	4,344	7,076	149,319	2,233	356,846	205,294	81	60	.....	.....	.....	.....	21	.....	61

MANUFACTURES—MISSOURI.

TABLE 31.—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.

ST. LOUIS—Continued.															Dollars.
1 Window and door screens and weather strips.	6	93	3	10	12	1	67	My	88	Ja	48	66	66	.....	284, 102
2 Wirework, including wire rope and cable, not elsewhere specified.	10	1,131	6	27	117	31	950	Mh	1,008	Oc	765	970	890	79	5,633, 295
3 Wood, turned and carved.	5	36	5	3	.....	1	27	De	36	My	21	36	36	.....	17, 560
4 All other industries *	399	28,385	188	1,349	2,520	1,199	23,129	.....	.....	.....	.....	25,082	20,677	4,102	154,142,911

*All other industries embrace—	Butter.	5	Cotton goods.	1	Glass.	2
Aeroplanes, seaplanes, and airships, and parts.	Buttons.	1	Cutlery and edge tools.	2	Glass, cutting, staining, and ornamenting.	15
Aluminum manufactures.	Canning and preserving, fruits and vegetables.	1	Dairymen's, poultrymen's, and apiarists' supplies.	2	Glue, not elsewhere specified.	2
Artificial flowers.	Carpets, rag.	4	Dyeing and finishing textiles, exclusive of that done in textile mills.	2	Hair work.	3
Artificial stone products.	Carriage and wagon materials.	2	Emery and other abrasive wheels.	1	Hand stamps.	3
Artists' materials.	Cars and general shop construction and repairs by electric-railroad companies.	1	Enameling.	2	Hardware.	8
Asbestos products, not including steam packing.	Cars, electric-railroad, not including operations of railroad companies.	1	Engines, steam, gas, and water.	3	Hat and cap materials.	3
Automobiles.	Cars, steam-railroad, not including operations of railroad companies.	1	Engravers' materials.	3	Hats, fur-felt.	4
Babbitt metal and solder.	Cash registers and calculating machines.	5	Engraving, wood.	6	Hats, straw.	9
Baking powders and yeast.	Chewing gum.	6	Fancy articles, not elsewhere specified.	5	Ink, writing.	2
Baskets, and rattan and willow ware.	Clothing, men's, buttonholes.	1	Feathers and plumes.	2	Instruments, professional and scientific.	6
Bells.	Cloth, sponging and refinishing.	1	Felt goods.	1	Iron and steel, blast furnaces.	1
Belting, leather.	Coal-tar products.	2	Fire extinguishers, chemical.	2	Iron and steel, steel works and rolling mills.	4
Billiard tables, bowling alleys, and accessories.	Cordage and twine.	4	Flavoring extracts.	11	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.	1
Bluing.	Cordials and flavoring sirups.	1	Furs, dressed.	1	Iron and steel, doors and shutters.	2
Boot and shoe findings.	Corsets.	1	Gas and electric fixtures.	4	Iron and steel forgings, not made in steel works or rolling mills.	3
Boots and shoes, rubber.		1	Gas, illuminating and heating.	1	Japanning.	2
Bones, cigar.		8				
Brushes.		8				

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

1 CAPE GIRARDEAU.	50	1,851	49	183	140	52	1,427	Au	1,581	Ja	1,225	1,549	1,095	437	16	1	4,864, 128
2 CARTHAGE.	49	801	52	237	32	35	515	Oc	548	Ja	494	570	402	144	24	.....	1,883, 908
3 COLUMBIA.	25	583	20	128	34	22	379	De	421	Mh	345	422	273	148	1	.....	1,752, 147
4 HANNIBAL.	67	3,253	58	126	168	101	2,800	No	2,892	Ap	2,726	2,908	2,348	533	16	11	6,729, 495
5 INDEPENDENCE.	21	436	15	117	12	9	283	Au	333	Mh	266	294	264	23	5	2	2,859, 706
6 JEFFERSON CITY.	42	2,009	28	95	108	65	1,713	No	1,824	Ja	1,518	1,806	1,135	635	28	8	5,683, 498
7 JOPLIN.	139	2,496	138	140	290	118	1,810	De	2,064	Fe	1,582	2,088	1,466	618	3	1	10,113, 614
8 MOBERLY.	25	762	19	40	96	37	570	Jy	650	Fe	438	590	355	199	32	4	2,450, 825
9 SEDALIA.	66	1,389	54	57	75	40	1,163	No	1,295	Mh	1,035	1,315	1,023	280	12	.....	2,851, 120
10 SPRINGFIELD.	107	3,486	82	168	225	101	2,910	De	3,191	Ja	2,521	3,239	2,469	758	7	5	12,856, 574

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.	Wago 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.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.							
24,000	10,880	45,204	.....	780	4,215	82,507	3,493	301,693	215,693	237	100	.....	6	100	31	52	1
259,507	234,040	674,146	.....	4,368	1,190,038	4,566,634	37,127	7,438,233	2,834,472	1,648	350	.....	.....	.....	1,298	250	2
4,370	720	19,927	.....	2,143	202	22,530	2,032	67,431	42,869	112	.....	.....	.....	.....	112	.....	3
4,219,316	4,787,558	25,438,203	.....	894,663	608,068	10,490,555	106,524,905	3,981,244	185,509,766	74,995,517	53,972	28,127	3,465	2,183	20,197	25,967	4

Jewelry and instrument cases.....	3	Optical goods.....	4	Saws.....	1	Suspenders, garters, and elastic woven goods.....	1
Knife goods.....	1	Paper goods, not elsewhere specified.....	2	Scales and balances.....	4	Theatrical scenery.....	1
Labels and tags.....	6	Peanuts, grading, roasting, cleaning, and shelling.....	2	Screws, machine.....	1	Tin foil and other foils, not elsewhere specified.....	1
Lamps and reflectors.....	1	Pencils, lead.....	1	Sewing machines and attachments.....	2	Toys and games.....	5
Lapidary work.....	1	Photographs and graphophones.....	1	Shipbuilding, steel.....	1	Type founding.....	1
Leads.....	2	Photographic apparatus.....	4	Shipbuilding, wooden, including boat building.....	2	Umbrellas and canes.....	3
Lead, bar, pipe, and sheet.....	1	Photographic materials.....	3	Soap.....	2	Varnishes.....	5
Leather, tanned, curried, and finished.....	6	Plumbers' supplies, not elsewhere specified.....	2	Soda-water apparatus.....	1	Vault lights and ventilators.....	1
Looking-glass and picture frames.....	3	Pocketbooks.....	1	Sporting and athletic goods.....	2	Wall plaster and composition flooring.....	1
Lumber and timber products.....	6	Pottery.....	1	Springs, steel, car and carriage, not made in steel works or rolling mills.....	2	Washing machines and clothes wringers.....	2
Machine tools.....	4	Printing and publishing, music.....	5	Stamped ware, not elsewhere specified.....	5	Waste.....	1
Mirrors, framed and unframed, not elsewhere specified.....	6	Printing materials.....	2	Stationery goods, not elsewhere specified.....	2	Whips.....	1
Mucilage, paste, and other adhesives, not elsewhere specified.....	4	Pumps, not including power pumps.....	3	Statuary and art goods.....	7	Window shades and fixtures.....	3
Musical instruments and materials, not elsewhere specified.....	1	Pumps, steam and other power.....	3	Steam fittings and steam and hot-water heating apparatus.....	5	Wooden goods, not elsewhere specified.....	4
Musical instruments, organs.....	2	Refrigerators.....	5	Stencils and brands.....	1		
Needles, pins, and hooks and eyes.....	1	Regalia, and society badges and emblems.....	4	Stereotyping and electrotyping.....	3		
Nets and seines.....	1	Roofing materials.....	2	Stoves, gas and oil.....	4		
Oil, not elsewhere specified.....	2	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	5				

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

120,505	342,675	1,187,467	600	10,046	199,193	5,020,405	68,108	8,586,593	2,897,990	4,732	1,995	2,256	4	.....	477	365	1
142,627	74,215	436,461	275	16,007	60,570	5,300,856	40,340	6,627,782	1,250,586	1,734	710	.....	57	180	787	.....	2
74,141	70,581	256,663	1,038	10,163	39,354	1,516,677	33,008	2,232,207	681,922	988	675	19	.....	.....	294	225	3
354,398	434,197	2,894,342	415	14,848	254,314	8,282,155	232,655	14,026,833	5,512,023	3,046	2,511	.....	.....	.....	1,135	1,369	4
82,835	36,570	353,219	5,400	5,363	80,063	4,257,897	80,427	5,344,137	1,005,813	1,544	1,265	.....	25	.....	254	.....	5
260,888	263,354	1,292,443	8,331	17,193	103,271	7,231,495	133,210	10,188,406	2,823,701	2,149	1,050	.....	21	.....	1,078	35	6
361,071	484,096	1,580,512	24,112	55,100	323,108	9,275,404	338,671	14,219,935	4,605,860	4,719	1,104	.....	340	.....	3,275	173	7
108,018	190,349	431,413	.....	11,652	59,964	3,153,217	91,497	4,496,894	1,244,180	1,250	800	.....	.....	.....	450	247	8
144,855	188,005	1,328,690	4,456	20,208	76,709	3,306,291	121,697	5,501,865	2,073,907	3,099	1,651	.....	23	.....	1,425	50	9
530,432	345,735	2,950,317	30,257	42,145	287,057	12,210,558	380,120	18,812,549	6,215,865	0,423	2,932	5	126	.....	3,360	967	10

² 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

MONTANA

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.

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.

MONTANA.

GENERAL STATISTICS.

General character of the state.—Montana has a gross area of 146,997 square miles, of which 146,131 represent land surface. The inhabitants of the state in 1900 numbered 243,329; in 1910, 376,053; and in 1920, 548,889. In total population Montana ranked thirtieth among the states in 1920. The average number of inhabitants per square mile in 1910 was 2.6, the corresponding figures being 3.8 for 1920.

In 1920 there were six cities in the state—Anaconda, Billings, Butte, Great Falls, Helena, and Missoula—having more than 10,000 inhabitants. The cities, with an aggregate population of 117,205, formed 21.4 per cent of the total population for Montana in that year, and in 1919 reported 15.7 per cent of the value of the state's manufactured products.

Importance and growth of manufactures (Table 1).—The large increases in wages, cost of materials, and the value of products, as presented in this table, are principally 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 to 1919. However, the increases in average number of wage earners and horsepower evidence the growth of the manufacturing activities of the state.

Statistics for the state, by counties (Table 2).—Figures are not available for comparison of county totals for previous censuses with those for 1919. Separate data for Deer Lodge, Lewis and Clark, and Treasure Counties can not be shown without the possibility of disclosing the operations of individual establishments.

Principal industries, ranked by value of products (Table 3).—The ranking of industries by value of products is often misleading as to their real importance from a manufacturing standpoint. For instance, of the industries shown in this table, flour-mill and grist-mill products ranked first in value of products, sixth in average number of wage earners, and fourth in 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 27.

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

are those which employed more than 130 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).—Increases are shown in practically all of the details for the six cities from 1914 to 1919.

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, for selected industries, similar data are given for males and females for all industries combined for the state and for each city having 10,000 inhabitants or more. There were few industries in the state in 1919 where the number of female wage earners predominated.

Prevailing hours of labor (Table 9).—Since 1914 there has been a marked shortening of the working day in Montana. In that year 18.6 per cent of the wage earners were included in the group "48 and under," as against 57.9 per cent in 1919. In 1914 the "60" and "over 60" groups constituted 20.5 per cent of the total wage earners, as compared with 11.3 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, 97.5 per cent were in the several classes having less than 101 wage earners, while such establishments employed but 34.4 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.

MANUFACTURES—MONTANA.

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 with those of some other group 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 illustrates the fact that the number of establishments of itself is no real index of manufacturing activities.

Character of ownership (Table 14).—The predominance of corporate ownership is clearly brought out in this table. Although corporations controlled but 27.4 per cent of the number of establishments in the state in 1919, they reported 86.5 per cent of the average number of wage earners and 92.1 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 2,660, or 21.8 per cent, and the value of products \$74,170,685, or 93.5 per cent.

Manufactures, by population groups, in cities of 10,000 inhabitants or more (Table 15).—This table shows that the number of establishments in these six cities in 1919 represented but 29.5 per cent of the total in the state. They reported in that year 25.5 per cent of the wage earners and 15.7 per cent of the value of products.

Number and horsepower of types of prime movers (Table 16).—The total horsepower shows an increase of 78,535, or 85.7 per cent, from 1914 to 1919. The increase for rented power was much greater than that for owned power, being 74,114 horsepower, or 266.6 per cent, as compared with 4,421 horsepower, or 6.9 per cent, for owned power.

Fuel consumed (Table 17).—This table shows the quantity of the 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 the quantity of fuel used in the six cities. Decreases are shown in all kinds of fuel from 1914 to 1919, except in gas.

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.....	1,290	939	677	382	395	37.4	38.7	77.2	-3.3
Persons engaged.....	20,692	16,363	13,694	10,196	(²)	26.5	19.5	34.3	.....
Proprietors and firm members.....	1,200	832	659	334	(²)	44.2	26.3	97.3	.....
Salvaged employees.....	2,332	1,827	1,380	905	508	27.6	32.4	52.5	78.1
Wage earners (average number).....	17,100	13,704	11,655	8,957	9,854	25.2	17.6	30.1	-9.1
Primary horsepower.....	170,206	91,671	90,402	46,736	43,670	85.7	1.4	93.4	7.0
Capital.....	\$137,476,277	\$79,246,396	\$44,588,368	\$52,589,810	\$38,224,915	73.5	77.7	-15.2	37.6
Salaries and wages.....	29,424,017	15,779,858	12,955,474	10,158,425	8,162,559	86.8	21.8	27.5	24.5
Salaries.....	4,741,455	2,778,653	2,054,022	1,536,208	785,737	70.6	35.3	36.4	91.7
Wages.....	24,742,562	13,001,205	10,901,452	8,652,217	7,376,822	90.3	19.3	26.0	17.3
Paid for contract work.....	555,842	789,361	322,110	224,330	(²)	-29.6	145.1	43.5	.....
Rent and taxes.....	2,212,765	1,597,778	2,307,144	1,677,872	(²)	38.5	-30.7	.....	.....
Cost of materials.....	122,151,924	46,743,986	49,180,239	40,930,060	30,068,101	161.3	-5.0	20.2	36.1
Value of products.....	160,604,518	84,446,136	73,271,793	66,415,452	52,744,997	97.4	15.3	10.3	25.9
Value added by manufacture.....	44,512,594	37,702,150	24,091,654	25,485,392	22,676,896	18.1	56.5	-5.5	12.4

¹ A minus sign (—) denotes decrease.

² Figures not available.

³ Exclusive of internal revenue.

⁴ Value of products less cost of materials.

MANUFACTURES—MONTANA.

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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.....	1,290	17,160	\$24,742,562	\$2,212,765	\$122,151,924	\$160,664,518	\$44,512,594	170,206
Beaverhead.....	23	61	78,661	12,722	147,062	343,181	196,119	219
Big Horn.....	22	22	28,966	4,948	66,159	148,733	82,574	100
Blaine.....	10	14	15,902	2,679	118,024	163,011	44,087	179
Broadwater.....	5	16	18,621	12,733	621,488	771,103	149,015	150
Carbon.....	47	146	231,502	19,059	306,847	761,218	454,371	562
Carter.....	11	10	10,594	969	20,024	52,523	31,899	265
Cascade.....	86	2,129	3,124,539	349,212	53,625,907	59,443,547	5,817,640	52,619
Chouteau.....	10	12	15,947	2,916	97,103	110,262	43,140	163
Custer.....	19	682	1,078,738	14,261	883,157	2,209,804	1,326,647	760
Dawson.....	11	205	334,466	9,929	309,985	706,126	396,141	172
Fallon.....	8	8	9,621	5,999	66,970	120,132	50,162	62
Fergus.....	84	319	487,610	41,696	943,510	1,802,493	558,983	2,510
Flathead.....	64	1,248	1,368,596	118,045	1,814,153	4,286,317	2,472,164	3,573
Gallatin.....	55	336	406,493	74,017	3,190,673	4,368,359	1,177,686	5,407
Garfield.....	5	3	4,500	420	13,774	33,770	19,966	43
Glacier.....	4	2	4,485	2,665	12,983	29,882	16,899	54
Granite.....	9	17	20,738	3,677	46,477	131,081	85,504	104
Hill.....	25	414	620,476	21,906	363,940	1,060,142	690,202	620
Jefferson.....	10	48	52,437	2,718	71,554	150,469	78,915	226
Liberty.....	3	1	625	728	6,627	14,110	7,483	30
Lincoln.....	22	1,008	1,457,960	140,911	1,292,429	3,798,067	2,505,638	6,944
McCone.....	5	3	2,758	492	45,050	61,305	16,255	441
Madison.....	19	17	21,316	4,381	38,905	89,244	50,339	306
Meagher.....	11	43	53,284	1,757	21,933	105,204	83,271	255
Mineral.....	7	107	233,850	3,664	50,103	332,246	282,143	706
Missoula.....	61	1,888	2,516,975	122,985	3,271,620	6,857,815	3,580,186	4,493
Musselshell.....	42	135	193,533	10,357	310,399	625,645	315,336	441
Park.....	46	741	832,845	34,770	766,319	1,856,050	1,030,731	1,953
Phillips.....	13	98	102,605	8,726	64,144	203,229	130,085	160
Pondera.....	7	4	4,764	1,477	17,990	40,488	23,398	17
Powder River.....	4	4	4,396	357	19,064	30,654	11,590	70
Powell.....	15	440	813,400	2,892	252,302	1,180,625	928,324	1,104
Prairie.....	4	6	5,072	747	13,328	27,738	14,410	17
Ravalli.....	25	124	132,375	5,352	430,827	699,916	269,089	490
Richland.....	16	41	46,147	9,229	709,354	847,965	138,611	306
Roosevelt.....	21	39	49,961	19,543	795,911	940,849	144,938	415
Rosebud.....	15	63	106,921	4,920	425,544	778,936	353,462	202
Sanders.....	22	192	235,291	5,070	526,280	894,830	368,544	524
Shelburne.....	30	182	207,314	11,669	255,400	542,809	287,349	359
Silver Bow.....	125	1,238	1,717,471	183,405	9,808,493	13,979,782	4,171,289	5,785
Stillwater.....	14	19	30,490	2,408	34,041	93,153	59,112	139
Sweet Grass.....	16	24	51,323	3,257	72,941	135,212	62,271	123
Teton.....	9	147	154,686	4,922	104,347	263,826	179,479	127
Toole.....	5	3	4,200	658	11,827	25,012	14,085	12
Valley.....	19	35	43,743	7,688	301,634	412,614	111,030	230
Wheatland.....	15	173	277,778	22,600	1,131,185	1,430,565	299,380	519
Wibaux.....	3	4	6,040	1,667	4,761	21,294	13,533	6
Yellowstone.....	105	1,184	1,681,864	382,261	5,514,117	9,064,815	3,550,098	5,674
All other counties ¹	83	3,445	5,856,804	513,071	33,131,724	44,560,516	11,428,792	70,892

¹ All other counties include Deer Lodge, Lewis and Clark, and Treasure.

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.....	1,290	17,160	100.0	\$166,665	100.0	\$44,513	100.0	Lumber, planing-mill products, not including planing mills connected with sawmills.....	30	176	1.0	\$1,205	0.7	\$426	1.0
Flour-mill and gristmill products.....	69	360	2.1	16,388	9.8	2,294	5.2	Printing and publishing, book and job.....	22	182	1.1	850	0.5	573	1.3
Lumber and timber products.....	153	3,693	21.5	10,992	6.6	7,785	17.5	Confectionery and ice cream.....	37	134	0.8	810	0.5	358	0.8
Cars and general shop construction and repairs by steam-railroad companies.....	30	5,312	31.0	10,957	6.6	8,067	18.1	Copper, tin, and sheet-iron work.....	34	70	0.4	565	0.3	272	0.6
Slaughtering and meat packing.....	12	210	1.2	6,859	4.1	1,035	2.3	Brick.....	14	145	0.8	505	0.3	305	0.7
Butter.....	47	190	1.1	4,210	2.5	756	1.7	Gas, illuminating and heating.....	6	63	0.4	487	0.3	290	0.6
Printing and publishing, newspapers and periodicals.....	225	829	4.8	3,913	2.4	2,863	6.4	Mineral and carbonated waters.....	31	48	0.3	377	0.2	180	0.4
Bread and other bakery products.....	119	384	2.2	3,124	1.9	1,190	2.7	Liquors, cereal beverages.....	7	46	0.3	355	0.2	221	0.5
Automobile repairing.....	255	520	3.0	2,039	1.2	1,434	3.2	Saddlery and harness.....	11	36	0.2	319	0.2	114	0.3
Foundry and machine-shop products.....	22	359	2.1	1,495	0.9	923	2.1	All other industries ¹	166	4,403	25.7	101,208	60.7	15,427	34.7

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: Brass, bronze, and copper products; cement; explosives; smelting and refining, copper; smelting, lead; and sugar, beet.

MANUFACTURES—MONTANA.

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 1914 1909	20,092 16,303 13,694	19,664 15,820 13,387	1,028 543 307	95.0 99.7 97.8	5.0 3.3 2.2	Clerks and other subordinate sala- ried employees.	1919 1914 1909	1,509 1,307 896	1,096 1,138 796	413 174 100	72.6 86.7 88.8	27.4 13.3 11.2
Proprietors and officials.....	1919 1914 1909	2,023 1,352 1,143	1,902 1,313 1,126	61 39 17	97.0 97.1 97.9	3.0 2.9 2.1	Wage earners (average number).....	1919 1914 1909	17,160 13,704 11,655	16,608 13,374 11,405	552 330 190	96.8 97.6 98.4	3.2 2.4 1.6
Proprietors and firm members....	1919 1914 1909	1,200 832 659	1,161 799 645	39 33 14	96.8 96.0 97.9	3.2 4.0 2.1	16 years of age and over.....	1919 1914 1909	17,096 13,641 11,625	16,545 13,323 11,436	551 318 189	96.8 97.7 98.4	3.2 2.3 1.6
Salaried officers of corporations...	1919 1914 1909	184 129 89	178 124 88	6 5 1	96.7 96.1 95.9	3.3 3.9 4.1	Under 16 years of age.....	1919 1914 1909	64 63 30	63 51 29	1 12 1	98.4 81.0 96.7	1.6 19.0 3.3
Superintendents and managers...	1919 1914 1909	639 391 395	623 390 393	16 1 2	97.5 99.7 99.5	2.5 0.3 0.5							

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 1914 1909	17,160 13,704 11,655	96.4 97.2 98.1	3.2 2.3 1.6	0.4 0.5 0.3	Foundry and machine-shop products ¹	1919 1914	365 384	100.0 100.0	.....	.....
Automobile repairing.....	1919 1914	520 18	100.0 100.0	.....	.....	Lumber and timber products.....	1919 1914	3,693 2,873	99.7 99.9	0.2 0.1	(²) (²)
Bread and other bakery products.....	1919 1914	384 274	67.2 67.9	32.3 24.1	0.5 8.0	Lumber, planing-mill products, not includ- ing planing mills connected with sawmills.	1919 1914	176 92	98.9 97.8	1.1 1.1	..... 1.1
Brick.....	1919 1914	145 191	99.3 99.0	0.7 .....	..... 1.0	Printing and publishing, book and job....	1919 1914	182 116	78.6 77.6	21.4 19.8	..... 2.6
Butter.....	1919 1914	190 71	87.9 91.5	12.1 8.5	.....	Printing and publishing, newspapers and periodicals.	1919 1914	829 784	83.7 86.9	9.7 11.0	6.6 2.2
Cars and general shop construction and repairs by steam-railroad companies.	1919 1914	5,312 3,611	98.3 99.9	1.7 .....	..... 0.1	Slaughtering and meat packing.....	1919 1914	210 96	92.9 91.7	6.2 7.3	1.0 1.0
Confectionery and ice cream.....	1919 1914	134 130	41.8 31.5	56.7 67.7	1.5 0.8	All other industries.....	1919 1914	4,660 4,808	98.0 99.0	1.9 0.7	(²) 0.2
Flour-mill and gristmill products.....	1919 1914	360 256	98.3 98.0	1.7 1.2	..... 0.8						

¹ Includes "iron and steel, welding."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	1919	1914	1909
Anaconda.....	272	251	97	265	239	88	7	8	8	.....	4	1	\$1,340,695	\$753,516	\$591,632
Billings.....	573	329	226	537	305	212	31	20	10	5	4	4	5,417,140	1,633,741	1,243,185
Butte.....	930	659	622	772	550	558	110	101	59	48	8	5	5,261,592	2,900,495	2,463,780
Great Falls.....	1,157	1,708	.....	1,107	1,687	.....	49	119	.....	1	.....	.....	6,850,837	1,382,004	.....
Helena.....	539	495	420	449	400	360	89	72	60	1	23	.....	3,016,238	1,481,932	1,302,725
Missoula.....	908	447	428	873	432	428	35	8	.....	.....	7	.....	4,296,371	1,112,792	1,171,436

¹ Figures do not agree with those published, because it was necessary to revise the totals in order to include data only for those establishments located within the corporate limits of the city.

MANUFACTURES—MONTANA.

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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.....	17,539	14,280	10,873	96.2	91.0	82.8	July.....	17,554	15,677	11,550	96.3	100.0	88.0
February.....	16,890	13,154	10,772	92.7	83.9	82.1	August.....	16,906	13,232	11,841	92.7	84.4	90.2
March.....	16,603	13,187	10,900	91.1	84.1	83.0	September.....	16,973	12,386	12,435	93.1	79.0	94.7
April.....	16,239	14,395	10,874	89.1	91.8	82.8	October.....	17,421	12,920	13,127	95.6	82.4	100.0
May.....	17,062	15,172	11,292	93.6	96.8	86.0	November.....	18,228	12,368	12,966	100.0	78.9	99.0
June.....	17,719	15,280	11,195	97.2	97.5	85.3	December.....	16,786	12,417	12,003	92.1	79.2	91.4

¹The 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.....	17,160	17,539	16,890	16,603	16,239	17,062	17,719	17,554	16,906	16,973	17,421	18,228	16,786	89.1
Males.....	10,608	17,016	16,389	16,113	15,719	16,529	17,187	16,972	16,326	16,413	16,810	17,684	16,238	89.4
Females.....	552	523	501	490	520	533	532	582	580	560	611	644	548	76.1
Automobile repairing.....	520	413	426	448	500	556	603	623	621	593	527	471	459	66.3
Bread and other bakery products.....	334	382	369	369	378	392	386	395	401	390	384	387	375	92.0
Brick.....	145	76	68	104	161	191	225	261	195	137	133	118	66	25.3
Butter.....	190	154	136	146	181	205	236	238	232	218	200	180	174	56.3
Cars and general shop construction and repairs by steam-railroad companies.....	5,812	5,317	5,388	5,116	5,048	5,135	5,139	5,130	5,309	5,303	5,583	5,662	5,529	89.1
Confectionery and ice cream.....	134	107	115	110	127	128	133	144	148	153	147	151	151	63.9
Flour-mill and gristmill products.....	390	397	399	405	398	361	347	244	327	348	356	368	370	60.2
Foundry and machine-shop products.....	359	446	422	414	385	386	383	391	297	299	299	294	284	59.9
Lumber and timber products.....	3,603	3,489	3,077	3,449	3,128	3,601	3,399	3,613	3,634	3,771	4,001	4,071	3,983	76.8
Lumber, planing-mill products, not including planing mills connected with sawmills.....	176	130	132	120	151	169	202	210	213	213	195	192	176	60.6
Printing and publishing, book and job.....	182	180	177	181	183	179	181	182	181	183	183	186	188	94.1
Printing and publishing, newspapers and periodicals.....	829	801	799	809	829	831	836	843	829	830	840	861	840	92.8
Slaughtering and meat packing.....	210	219	217	207	204	203	209	222	223	210	216	198	195	86.9
All other industries.....	4,696	5,448	4,565	4,707	4,671	4,725	4,940	5,064	4,331	4,274	4,376	4,993	3,993	73.4
<i>Industries showing large proportion of females.</i>														
Bread and other bakery products.....	125	127	117	113	121	132	124	131	132	126	127	129	121	85.6
Butter.....	23	22	17	18	21	29	28	27	27	24	22	20	21	58.0
Cars and general shop construction and repairs by steam-railroad companies.....	89	121	103	93	92	85	81	80	81	82	82	80	80	66.1
Confectionery and ice cream.....	76	66	66	67	72	71	73	74	78	83	83	85	81	60.2
Printing and publishing, book and job.....	39	36	38	38	45	38	38	39	40	40	40	37	39	80.0
Printing and publishing, newspapers and periodicals.....	80	73	75	71	77	81	82	87	81	82	84	85	82	81.6
Total for cities.....	4,379	4,332	4,286	4,193	4,315	4,282	4,383	4,427	4,508	4,435	4,526	4,523	4,338	92.6
Males.....	4,058	4,022	3,980	3,898	4,003	3,958	4,065	4,108	4,179	4,105	4,190	4,181	4,001	93.0
Females.....	321	310	300	295	312	324	318	319	329	330	336	342	337	80.3
ANACONDA.....	272	328	319	312	298	311	301	282	246	210	223	250	184	56.1
Males.....	205	321	312	305	291	304	294	275	239	203	216	243	177	55.1
Females.....	7	7	7	7	7	7	7	7	7	7	7	7	7	.....
BILLINGS.....	573	513	521	525	543	574	594	626	616	612	597	592	593	81.9
Males.....	542	485	494	497	514	545	595	597	581	581	565	555	527	80.9
Females.....	31	30	27	28	29	29	20	29	35	31	32	37	36	73.0
BUTTE.....	930	899	875	892	928	909	929	971	950	960	957	964	926	90.1
Males.....	820	791	768	791	820	802	822	870	844	842	840	843	807	88.3
Females.....	110	108	107	101	108	107	107	101	106	118	117	121	119	83.5
GREAT FALLS.....	1,167	1,275	1,229	1,107	1,155	1,054	1,111	1,079	1,153	1,128	1,202	1,215	1,176	82.7
Males.....	1,108	1,232	1,188	1,065	1,112	1,007	1,058	1,027	1,101	1,075	1,147	1,161	1,123	81.7
Females.....	49	43	41	42	43	47	53	52	52	53	55	54	53	74.5
HELENA.....	539	528	527	533	537	551	539	540	552	541	546	534	550	94.7
Males.....	450	438	440	441	447	455	454	448	462	457	455	443	460	94.8
Females.....	89	90	87	92	90	96	85	92	90	84	91	91	90	85.4
MISSOULA.....	908	789	815	834	854	883	909	929	991	984	1,001	998	939	78.8
Males.....	873	767	784	799	819	845	872	891	952	947	967	936	907	78.3
Females.....	35	32	31	35	35	38	37	38	39	37	34	32	32	79.5

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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 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
All industries.....	1919	17,160	272	2,056	7,603	216	1,358	3,719	1,390	540
	1914	13,704	(¹)	(¹)	2,552	2,598	2,531	3,220	2,429	374
	1909	11,655	(¹)	(¹)	1,607	154	3,285	4,195	1,965	443
Automobile repairing.....	1919	520	22		158	6	273	11	37	13
	1914	18	(¹)	(¹)	11		7			
Bread and other bakery products.....	1919	354		70	241	2	33	16	21	1
	1914	274	(¹)	(¹)	84	4	132	7	20	18
Brick.....	1919	145	16		94			26	4	5
	1914	191	(¹)	(¹)	131	3	10	18	29	
Butter.....	1919	190	1		58	2	24	76	20	9
	1914	71	(¹)	(¹)	5		36	1	16	13
Cars and general shop construction and repairs by steam-railroad companies.	1919	5,312		1,858	3,448		1,001	1,656		6
	1914	3,611	(¹)	(¹)	445	385				124
Confectionery and ice cream.....	1919	134	23		47	3	5	44	11	1
	1914	130	(¹)	(¹)	22	45	52	4	4	3
Flour-mill and gristmill products.....	1919	360			210		97		46	7
	1914	256	(¹)	(¹)	96		95		63	2
Foundry and machine-shop products *.....	1919	365	1		351		13			
	1914	384	(¹)	(¹)	331	4	43		5	1
Lumber and timber products.....	1919	3,683	8	17	1,718	6	682	5	1,192	65
	1914	2,873	(¹)	(¹)	35		941	36	1,795	66
Lumber, planing-mill products, not including planing mills connected with sawmills.	1919	176	37		96		10	33		
	1914	92	(¹)	(¹)	34		31		27	
Printing and publishing, book and job.....	1919	182			182					
	1914	116	(¹)	(¹)	116					
Printing and publishing, newspapers and periodicals.....	1919	829	4	94	506	143	15	59	8	
	1914	784	(¹)	(¹)	595	28	98	59	4	
Slaughtering and meat packing.....	1919	210			5	54	145		6	
	1914	96	(¹)	(¹)	35		12		49	
All other industries.....	1919	4,660	160	17	489		61	3,449	45	439
	1914	4,808	(¹)	(¹)	612	2,129	73	1,439	408	147
Total for cities.....	1919	4,379	209	447	2,703	183	523	244	20	50
	1914	2,857	(¹)	(¹)	1,543	57	373	815	73	26
ANACONDA.....	1919	272	4		162			65		41
	1914	251	(¹)	(¹)	175		71	3	2	
BILLINGS.....	1919	573	16	150	236	57	90	13	10	1
	1914	329	(¹)	(¹)	132	6	54	103	32	2
BUTTE.....	1919	930	109	157	487	126	2	69		
	1914	659	(¹)	(¹)	408	26	72	138	12	3
GREAT FALLS.....	1919	1,157	61	54	957		37	47	1	
	1914	706	(¹)	(¹)	560	4	53	79	10	
HELENA.....	1919	539	16	86	360		33	34	2	8
	1914	495	(¹)	(¹)	183	21	104	155	12	20
MISSOULA.....	1919	908	3		521		361	16	7	
	1914	447	(¹)	(¹)	85		19	337	5	1

¹ Includes 48 and under for 1914 and 1909.² Corresponding figures not available.³ Includes "iron and steel, welding."

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.	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.
All industries.....	1,290	17,160	203	854	1,047	139	1,526	50	1,859	12	878	15	2,117	11	3,657	5	3,325	1	2,151	
Automobile repairing.....	255	520	32	210	400	13	120													
Bread and other bakery products.....	119	384	31	71	152	16	162			1	70									
Brick.....	14	145		7	21	6	84	1	40											
Butter.....	47	190	4	36	77	5	41	2	72											
Cars and general shop construction and repairs by steam-railroad companies.....	30	5,312				5	62	6	272	4	304	7	1,009	5	1,754	3	1,911			
Confectionery and ice cream.....	37	134	7	25	62	4	49	1	23											
Flour-mill and gristmill products.....	69	360	6	48	64	11	119	3	115	1	62									
Foundry and machine-shop products.....	22	359	1	12	22	4	55	4	106			1	176							
Lumber and timber products.....	153	3,693	3	105	198	18	227	15	535	3	191	4	556	4	1,366	1	620			
Lumber, planing-mill products, not including planing mills connected with sawmills.....	30	176	3	19	45	6	50	2	72											
Printing and publishing, book and job.....	22	182	3	7	13	10	99	2	70											
Printing and publishing, newspapers and periodicals.....	225	820	65	141	250	10	116	8	340			1	123							
Slaughtering and meat packing.....	12	210		6	17	3	36	2	84	1	73									
All other industries.....	255	4,666	48	167	326	28	297	4	130	2	178	2	253	2	537	1	794	1	2,151	
Total for cities.....	381	4,379	56	220	516	70	762	21	699	7	445	4	537	2	716	1	704			
ANACONDA.....	22	272	5	12	30	1	9	2	81	2	152									
BILLINGS.....	85	573	4	62	146	15	141	1	31	2	111	1	144							
BUTTE.....	115	930	18	64	149	20	215	11	338			2	228							
GREAT FALLS.....	73	1,157	14	37	81	16	190	5	182							1	704			
HELENA.....	52	539	9	24	52	15	173	1	25	2	124	1	165							
MISSOULA.....	34	608	6	21	58	3	34	1	42	1	58			2	716					

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.....	1,200	939	677	17,160	13,704	11,655	\$160,604,518	\$84,446,136	\$73,271,793	\$44,512,594	\$37,702,150	\$24,091,554
Less than \$5,000.....	445	421	261	289	348	227	1,238,673	1,021,532	649,143	876,019	729,553	457,008
\$5,000 to \$20,000.....	474	309	236	1,008	955	754	4,752,545	2,921,890	2,437,212	2,871,270	1,795,281	1,535,283
\$20,000 to \$100,000.....	247	135	118	1,942	1,742	1,708	10,696,909	5,905,385	5,092,318	5,151,393	3,041,045	3,108,691
\$100,000 to \$500,000.....	86	57	56	3,738	4,739	4,836	18,010,547	13,024,271	15,221,904	8,461,888	8,899,240	8,024,645
\$500,000 to \$1,000,000.....	17	8		1,717			12,150,756	5,168,755		4,410,262		
\$1,000,000 and over.....	21	9	6	8,466	5,920	4,130	119,815,088	56,404,303	49,871,216	22,742,262	23,237,031	10,965,927
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.....	34.5	44.8	38.6	1.7	2.5	1.9	0.7	1.2	0.9	2.0	1.9	1.9
\$5,000 to \$20,000.....	36.7	32.9	34.9	5.9	7.0	6.5	2.9	3.5	3.3	6.5	4.8	6.4
\$20,000 to \$100,000.....	19.1	14.4	17.4	11.3	12.7	14.7	6.4	7.0	6.9	11.6	8.1	12.9
\$100,000 to \$500,000.....	6.7	6.1		21.8	34.6	41.5	10.8	15.4	20.4	19.0		33.3
\$500,000 to \$1,000,000.....	1.3	0.9		10.0			7.3	6.1		9.9		
\$1,000,000 and over.....	1.6	1.0	0.9	49.3	43.2	35.4	71.9	66.8	68.1	51.1	61.6	45.5

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
AUTOMOBILE REPAIRING	255	8	100.0	100.0	520	18	100.0	100.0	\$2,038,836	\$35,505	100.0	100.0	\$1,433,551	\$31,772	100.0	100.0
Less than \$5,000	115	5	45.1	62.5	102	6	19.6	33.3	365,906	14,404	17.9	40.6	270,055	11,491	18.8	36.2
\$5,000 to \$20,000	123	3	48.2	37.5	297	12	57.1	66.7	1,183,473	21,101	58.0	59.4	812,834	20,281	56.7	63.8
\$20,000 to \$100,000	17		6.7		121		23.3		489,457		24.0		350,662		24.5	
BREAD AND OTHER BAKERY PRODUCTS	119	105	100.0	100.0	384	274	100.0	100.0	3,124,232	1,311,259	100.0	100.0	1,189,547	600,680	100.0	100.0
Less than \$5,000	25	37	21.0	35.2	2	15	0.5	5.5	73,046	98,150	2.4	7.5	20,157	46,914	2.5	7.8
\$5,000 to \$20,000	57	50	47.9	47.6	78	91	20.3	33.2	625,835	468,210	20.0	35.7	244,589	231,809	20.6	38.6
\$20,000 to \$100,000	32	18	26.9	17.1	178	108	46.4	61.3	1,443,033	744,899	46.2	56.8	518,222	321,897	43.6	53.8
\$100,000 to \$500,000	5		4.2		126		32.8		981,718		31.4		397,579		33.4	
BUTTER	47	32	100.0	100.0	190	71	100.0	100.0	4,210,316	1,217,683	100.0	100.0	755,885	206,661	100.0	100.0
Less than \$5,000		4		12.5		1		1.4		11,497		0.9		2,892		1.4
\$5,000 to \$20,000	7	14	14.9	43.8	4	14	2.1	19.7	87,930	178,190	2.1	14.6	16,589	29,087	2.2	14.1
\$20,000 to \$100,000	29	11	61.7	34.4	55	35	28.9	49.3	1,414,732	424,862	33.5	34.9	208,644	75,193	27.6	36.4
\$100,000 and over	11	3	23.4	9.4	131	21	68.9	29.6	2,716,654	603,134	64.4	49.5	530,632	99,519	70.2	43.2
CARS AND GENERAL SHOP CONSTRUCTION AND REPAIRS BY STEAM-RAILROAD COMPANIES	30	16	100.0	100.0	5,312	3,611	100.0	100.0	10,957,439	5,833,618	100.0	100.0	8,060,892	3,291,692	100.0	100.0
Less than \$100,000	8	4	26.7	25.0	172	137	3.2	3.8	304,944	203,091	2.8	3.5	238,052	140,414	3.0	4.3
\$100,000 to \$500,000	14	9	46.7	56.3	1,550	3,474	29.2	96.2	2,988,575	2,031,711	27.3	34.8	2,246,241	3,151,248	27.8	95.7
\$500,000 to \$1,000,000	3	3	10.0	18.8	851		16.0		1,991,792	3,598,816	18.2	61.7	1,355,279		16.8	
\$1,000,000 and over	5		16.7		2,739		51.6		5,672,128		51.8		4,220,420		52.4	
FLOUR-MILL AND GRISTMILL PRODUCTS	69	33	100.0	100.0	360	256	100.0	100.0	16,386,055	4,890,275	100.0	100.0	2,293,799	988,343	100.0	100.0
Less than \$5,000	6	3	8.7	9.1	3	1	0.8	0.4	16,245	6,872	0.1	0.1	5,287	2,020	0.2	0.2
\$5,000 to \$20,000	22	10	31.9	30.3	14	8	3.9	3.1	274,061	115,744	1.7	2.4	60,019	29,230	2.6	3.0
\$20,000 to \$100,000	19	11	27.5	33.3	29	35	8.1	13.7	770,639	576,179	4.7	11.8	144,164	95,082	6.3	9.7
\$100,000 to \$500,000	11	6	15.9	18.2	55	212	15.3	82.8	2,349,919	1,722,654	14.3	35.2	269,352	381,111	11.7	87.1
\$500,000 to \$1,000,000	7	3	10.1	9.1	82		22.8		4,944,048	2,468,826	30.2	50.5	626,548		27.3	
\$1,000,000 and over	4		5.8		177		49.2		8,031,143		49.0		1,188,429		51.8	
LUMBER AND TIMBER PRODUCTS	153	145	100.0	100.0	3,693	2,873	100.0	100.0	10,991,632	6,206,473	100.0	100.0	7,784,854	4,157,705	100.0	100.0
Less than \$5,000	70	32	45.8	56.6	67	126	1.8	4.4	169,216	172,815	1.5	2.8	137,465	143,707	1.8	3.5
\$5,000 to \$20,000	41	34	26.8	23.4	163	277	4.4	9.6	377,439	337,839	3.4	5.4	310,258	269,258	4.0	6.5
\$20,000 to \$100,000	23	17	15.0	11.7	436	565	11.8	19.7	1,073,371	793,436	9.8	12.8	867,393	590,591	11.1	13.5
\$100,000 to \$500,000	13	9	8.5	6.2	925	1,905	25.0	66.3	2,516,539	2,509,375	22.9	41.4	1,960,773	3,184,149	25.2	76.6
\$500,000 and over	6	3	3.9	2.1	2,102		56.9		6,855,067	2,333,008	62.4	37.6	4,508,965		57.9	
PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS	225	221	100.0	100.0	820	784	100.0	100.0	3,912,779	2,460,911	100.0	100.0	2,862,718	1,874,298	100.0	100.0
Less than \$5,000	115	142	51.1	64.3	58	102	7.0	13.0	310,291	341,320	7.9	13.9	241,514	286,475	8.4	15.3
\$5,000 to \$20,000	86	59	38.2	26.7	177	181	21.4	23.1	805,716	524,549	20.6	21.3	597,090	423,271	20.9	22.6
\$20,000 to \$100,000	16	13	7.1	5.9	166	135	20.0	17.2	762,129	401,428	19.5	16.3	590,462	322,686	20.6	17.2
\$100,000 to \$500,000	8	7	3.6	3.2	428	366	51.6	46.7	2,034,043	1,193,614	52.0	48.5	1,433,052	841,866	50.1	44.9
SLAUGHTERING AND MEAT PACKING	12	8	100.0	100.0	210	96	100.0	100.0	6,858,703	2,119,539	100.0	100.0	1,034,559	402,818	100.0	100.0
Less than \$100,000	3		25.0				2.9		225,033		3.3		38,480		3.7	
\$100,000 to \$500,000	6	4	50.0	100.0	48	96	22.9	100.0	1,608,360	2,119,535	23.4	100.0	220,053	4,402,818	21.3	100.0
\$500,000 and over	3		25.0		150		74.3		5,025,310		73.3		776,026		75.0	

¹ Includes the group "\$100,000 to \$500,000."² Includes the groups "\$500,000 to \$1,000,000" and "\$1,000,000 and over."³ Includes the group "\$1,000,000 and over."⁴ Includes the groups "Less than \$100,000" and "\$500,000 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.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
ANACONDA	22	272	100.0	\$1,340,695	100.0	\$851,538	100.0
Less than \$5,000	8						
\$5,000 to \$20,000	7	13	4.8	16,042	1.2	10,075	1.3
\$20,000 to \$100,000	5	25	9.2	191,901	14.3	87,822	10.3
\$100,000 to \$500,000	4	234	86.0	1,065,659	79.5	712,957	83.7
BILLINGS	85	573	100.0	5,417,140	100.0	1,855,077	100.0
Less than \$5,000	16	11	1.9	47,147	0.9	33,359	1.8
\$5,000 to \$20,000	38	102	17.8	432,655	8.0	286,965	15.5
\$20,000 to \$100,000	23	138	24.1	785,964	14.5	392,205	21.1
\$100,000 and over	8	322	56.2	4,151,374	76.6	1,142,448	61.0

MANUFACTURES—MONTANA.

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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.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
BUTTE.....	115	930	100.0	\$5,261,592	100.0	\$2,439,055	100.0
Less than \$5,000.....	29	10	1.1	69,011	1.3	49,598	2.0
\$5,000 to \$20,000.....	37	76	8.2	430,839	8.2	238,826	9.8
\$20,000 to \$100,000.....	37	361	38.8	1,711,185	32.5	870,194	35.7
\$100,000 and over.....	12	483	51.9	3,050,557	58.0	1,280,437	52.5
GREAT FALLS.....	73	1,157	100.0	6,850,837	100.0	2,795,116	100.0
Less than \$5,000.....	15	4	0.3	34,684	0.5	20,828	0.7
\$5,000 to \$20,000.....	30	52	4.5	312,219	4.6	190,101	7.0
\$20,000 to \$100,000.....	19	177	15.3	962,002	14.0	541,190	19.4
\$100,000 and over.....	9	924	79.9	5,541,932	80.9	2,030,997	72.9
HELENA.....	52	539	100.0	3,016,238	100.0	1,483,778	100.0
Less than \$5,000.....	8	2	0.4	23,203	0.8	15,615	1.1
\$5,000 to \$20,000.....	21	39	7.2	209,758	7.0	141,872	9.6
\$20,000 to \$100,000.....	13	142	26.3	643,280	21.3	353,589	23.8
\$100,000 to \$500,000.....	10	356	66.0	2,139,997	70.9	972,702	65.6
MISSOULA.....	34	908	100.0	4,206,371	100.0	1,844,140	100.0
Less than \$5,000.....	9	2	0.2	23,833	0.6	14,332	0.8
\$5,000 to \$20,000.....	6	11	1.2	63,472	1.5	31,595	1.7
\$20,000 to \$100,000.....	12	60	6.6	444,901	10.4	192,366	10.4
\$100,000 to \$500,000.....	4	76	8.4	794,251	18.5	255,242	13.8
\$500,000 and over.....	3	759	83.6	2,969,854	69.1	1,350,605	73.2

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.								
		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.				
All industries.....	1919	697	353	240	17,160	1,662	14,839	659	9.7	86.5	3.8	\$166,664,518	\$8,372,148	\$153,484,858	\$4,807,512	5.0	92.1	2.9				
	1914	531	260	142	13,704	1,105	12,179	420	8.1	88.9	3.1	84,446,136	3,637,211	79,314,173	1,494,752	4.3	93.9	1.8				
	1900	352	203	122	11,655	1,108	10,041	506	9.5	89.2	4.3	73,271,793	3,265,067	68,468,197	1,548,529	4.5	93.4	2.1				
Automobile repairing.....	1919	146	33	76	520	282	111	127	54.2	21.3	24.4	2,038,836	1,113,809	347,326	577,701	54.6	17.0	28.3				
	1914	2	3	3	18	11	17	11	61.1	38.9		35,505	17,615	17,890		49.6	50.4					
Bread and other bakery products.	1919	86	13	20	384	157	163	64	40.9	42.4	16.7	3,124,232	1,307,938	1,234,076	582,218	41.9	39.5	18.6				
	1914	85	6	14	274	150	97	27	54.7	35.4	9.9	1,311,259	792,504	336,818	181,847	60.4	25.7	13.9				
Butter.....	1919	14	25	8	190	20	146	24	10.5	76.8	12.6	4,219,316	630,939	2,951,898	636,479	15.0	70.0	15.1				
	1914	10	19	3	71	18	49	4	25.4	69.0	5.6	1,217,683	185,776	874,204	167,703	15.3	71.8	13.0				
Cars and general shop construction and repairs by steam-railroad companies.	1919	80	16	1	5,312	5,312			100.0			10,957,439	10,957,439			100.0						
	1914	16	1		3,611	3,611			100.0			5,833,618	5,833,618			100.0						
Flour-mill and gristmill products.	1919	17	43	9	360	26	316	18	7.2	87.8	5.0	16,396,055	852,151	14,415,056	1,118,848	5.2	88.0	6.8				
	1914	8	22	3	256	13	237	6	5.1	92.6	2.3	4,890,275	208,925	4,570,000	111,350	4.3	93.4	2.3				
Lumber and timber products.	1919	91	20	42	3,693	664	2,780	249	18.0	75.3	6.7	10,991,632	1,569,014	8,863,087	559,531	14.3	80.6	5.1				
	1914	81	32	32	2,873	381	2,282	210	13.3	79.4	7.3	6,206,473	451,566	5,455,440	299,467	7.3	87.9	4.8				
Printing and publishing, newspapers and periodicals.	1919	143	57	25	829	161	648	20	19.4	78.2	2.4	3,912,779	761,476	3,026,980	124,323	19.5	77.4	3.2				
	1914	139	46	36	784	180	562	42	23.0	71.7	5.4	2,460,911	566,301	1,750,744	143,866	23.0	71.1	5.8				
Slaughtering and meat packing.	1919	1	10	1	210	210			100.0			6,858,703	6,858,703			100.0						
	1914	2	5	1	96	296			100.0			2,119,539	2,119,539			100.0						
Total for cities.....	1919	166	142	73	4,379	409	3,795	175	9.3	86.7	4.0	26,182,873	2,417,349	22,255,493	1,510,031	9.2	85.0	5.8				
	1914	146	121	42	2,887	262	2,512	113	9.1	87.0	3.9	11,264,570	1,189,666	9,489,300	585,604	10.6	84.2	5.2				
ANACONDA.....	1919	12	6	4	272	28	242	2	10.3	89.0	0.7	1,340,695	215,071	1,108,712	16,912	16.0	82.7	1.3				
	1914	12	6	1	251	27	223	1	10.8	88.8	0.4	753,516	112,457	638,809	2,250	14.9	84.8	0.3				
BILLINGS.....	1919	36	25	24	573	107	408	58	18.7	71.2	10.1	5,417,140	487,893	4,577,099	352,145	9.0	84.5	6.5				
	1914	17	18	7	329	31	293	5	9.4	89.1	1.5	1,503,741	180,858	1,430,948	51,935	9.2	87.6	3.2				
BUTTE.....	1919	54	43	18	930	120	758	52	12.9	81.5	5.6	5,261,592	657,099	4,202,398	401,405	12.5	79.9	7.6				
	1914	53	40	14	659	74	545	40	11.2	82.7	6.1	2,900,495	305,451	2,388,371	206,673	10.5	82.3	7.1				
GREAT FALLS.....	1919	31	31	11	1,157	59	1,072	26	5.1	92.7	2.2	6,850,837	324,215	6,302,093	224,520	4.7	92.0	3.3				
	1914	21	26	7	706	51	612	43	7.2	86.7	6.1	3,382,094	259,470	3,024,573	98,051	7.7	80.4	2.9				
HELENA.....	1919	20	22	10	539	64	446	29	11.9	82.7	5.4	3,016,238	516,385	2,067,290	432,613	17.1	68.5	14.3				
	1914	23	20	10	495	51	424	20	10.3	85.7	4.0	1,481,932	206,334	1,070,304	205,204	13.9	72.2	13.8				
MISSOULA.....	1919	13	15	6	908	31	869	8	3.4	95.7	0.9	4,206,371	216,136	3,997,901	82,334	5.0	93.1	1.9				
	1914	20	11	3	447	28	415	4	6.3	92.8	0.9	1,112,792	155,096	936,205	21,491	13.9	84.1	1.9				

¹ Includes the group "Individuals."

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

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		6		5		1			
	1914		6		5		1			
	1909		5		4		1			
Population ¹	1920	548,889	117,205	21.4	75,504	13.8	41,611	7.6	431,684	78.6
	1915	432,614	108,923	25.2	67,142	15.5	41,781	9.7	323,691	74.8
	1910	376,063	84,714	22.5	45,549	12.1	39,165	10.4	291,339	77.5
Number of establishments.....	1910	1,290	381	29.5	266	20.6 ^d	115	8.9	909	70.5
	1914	939	309	32.9	202	21.5	107	11.4	630	67.1
	1909	677	186	27.5	120	17.7	66	9.7	491	72.5
Average number of wage earners.....	1910	17,160	4,379	25.5	3,449	20.1	930	5.4	12,781	74.5
	1914	13,704	2,887	21.1	2,228	16.3	659	4.8	10,817	78.9
	1909	11,655	1,793	15.4	1,171	10.0	622	5.3	9,862	84.6
Value of products.....	1910	\$166,664,518	\$26,182,873	15.7	\$20,921,281	12.6	\$5,261,592	3.2	\$140,481,045	84.3
	1914	84,446,136	11,264,570	13.3	8,364,075	9.9	2,900,495	3.4	73,181,566	86.7
	1909	73,271,793	6,772,158	9.2	4,308,378	5.9	2,463,780	3.4	66,469,635	90.8
Value added by manufacture.....	1910	44,512,594	11,268,704	25.3	8,829,649	10.8	2,439,055	5.5	33,243,890	74.7
	1914	37,702,150	5,774,766	15.3	4,188,592	11.1	1,580,174	4.2	31,927,384	84.7
	1909	24,091,554	4,035,122	16.7	2,491,313	10.3	1,513,809	6.4	20,056,432	83.3

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

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909
Primary power, total.....	4,295	2,152	1,291	170,206	91,671	90,402	100.0	100.0	100.0
Owned.....	580	527	503	68,294	63,873	63,523	40.1	69.7	70.3
Steam.....	314	368	412	42,099	52,918	49,654	24.7	57.7	54.9
Engines.....	307	(¹)	(¹)	38,805	(¹)	(¹)	22.8		
Turbines.....	7	(¹)	(¹)	3,234	(¹)	(¹)	1.9		
Internal-combustion engines.....	224	131	54	1,484	820	223	0.9	0.9	0.2
Water.....	42	28	37	24,711	10,135	13,646	14.5	11.1	15.1
Water wheels and turbines.....	21	22	26	7,992	10,102	13,583	4.7	11.0	15.0
Water motors.....	21	6	11	16,719	33	63	9.8	(²)	0.1
Rented.....	3,715	1,625	788	101,912	27,798	26,879	59.9	30.3	29.7
Electric.....	3,715	1,625	788	101,910	27,798	26,504	59.9	30.3	29.3
Other.....				2		375	(²)		0.4
Electric.....	3,920	1,802	834	106,207	38,109	27,301	100.0	100.0	100.0
Rented.....	3,715	1,625	788	101,910	27,798	26,504	96.0	72.9	97.1
Generated by establishments reporting.....	205	177	46	4,297	10,311	797	4.0	27.1	2.9

¹ Not reported separately.² Less than one-tenth of 1 per cent.

TABLE 17.—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 2,240 pounds).	Bituminous (tons 2,000 pounds).				Natural.	Manufactured.
All industries.....	234	539,302	64,795	22,517	1,739	90,421	6,989
Per cent of increase ¹	556	578,234	196,481	39,036	(¹)	11,211	(¹)
	-57.9	-6.7	-67.0	-37.9	(¹)	768.9	(¹)
Automobile repairing.....	13	3,671		8	407	1,820	1,736
Bread and other bakery products.....	135	3,983	870		37	608	2,324
Brick.....		14,931		12	76		
Cars and general shop construction and repairs by steam-railroad companies.....		103,073	200	1,251			
Cement.....		26,449					
Explosives.....		4,800	3,700				
Flour-mill and gristmill products.....	1	16,560	330	478	373	602	
Foundry and machine-shop products.....	13	3,523	1,756	415	90		
Gas, illuminating and heating.....		17,072	1,730	7,984			
Liquors, cereal beverages.....		7,567					
Lumber and timber products.....		6,943			76		
Slaughtering and meat packing.....		8,065			28		

¹ Included in figures for fuel oils.

Included in figures for natural gas.

² A minus sign (—) denotes decrease.

TABLE 17.—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).				Natural.	Manufac- tured.
Smelting and refining, copper.....		285,005	39,963	3,708			
Smelting, lead.....		7,596	15,366	1,715	38		
Sugar, beet.....		17,368	729				
All other industries.....	72	12,696	151	6,946	614	87,391	2,866
Total for cities.....	145	74,512	3,635	8,015	170		6,627
ANACONDA.....		4,899	44		14		
BILLINGS.....	10	17,819	1,137	4,050	74		2,391
BUTTE.....		13,826	811		47		1,306
GREAT FALLS.....		24,289	617	3,028			1,414
HELENA.....	135	9,319	727	937	26		95
MISSOULA.....		4,360	199		9		1,420

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 four of these industries in Montana are here presented.

Flour-mill and gristmill products (Table 18).—Wheat flour, the chief product of the industry, represented 84.2 per cent of the total value in 1919, 80.1 per cent in 1914, and 85.5 per cent in 1909. As illustrative of the high prices of commodities in 1919, as compared with 1914; the quantity of wheat flour increased 45.9 per cent during that five-year period, while the value shows a gain of 252 per cent.

TABLE 18.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILLS): 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$16,380,055	\$4,890,275	\$2,175,236
Wheat flour:			
Barrels.....	1,271,861	871,918	375,440
Value.....	\$13,794,193	\$3,919,318	\$1,800,081
Rye flour:			
Barrels.....	138	799	850
Value.....	\$1,494	\$2,836	\$4,794
Corn meal and corn flour:			
Barrels.....	10	318	
Value.....	\$100	\$1,509	
Buckwheat flour:			
Pounds.....	2,325		
Value.....	\$180		
Bran and middlings:			
Tons.....	46,202	34,543	
Value.....	\$1,089,705	\$603,076	
Feed and offal:			14,036
Tons.....	7,427	8,771	
Value.....	\$439,920	\$214,252	\$266,822
Hominy and grits:			
Pounds.....	1,000		
Value.....	\$100		
Oatmeal:			
Pounds.....	6,995,200	334,200	
Value.....	\$342,709	\$14,725	
Breakfast foods:			
Pounds.....	1,867,746	606,448	
Value.....	\$117,378	\$15,059	(¹)
All other cereal products, value.....	\$270		
All other products, value.....		\$59,500	\$42,939

¹ Not reported separately.

Lumber and timber products (Table 19).—The production of western yellow pine lumber reported for 1919 was 108,548 M feet board measure, or 37.8 per cent, of the total for the state. Larch was next in importance, contributing 101,714 M feet, or 35.4 per cent. The cut of Douglas fir was 40,675 M feet, or 14.2 per cent, and spruce 34,064 M feet, or 11.9 per cent. Other species, which combined, represented less than 1 per cent of the total, were cottonwood, white fir, Idaho white pine, lodge-pole pine, cedar, and hemlock.

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

PRODUCT.	QUANTITY.		
	1919	1914	1909
Lumber..... M feet b. m.	287,378	317,842	308,582
Lath..... thousands..	21,362	(²)	35,430
Shingles..... thousands..	253	(²)	525

¹ Does not include data for custom mills.

² Not reported.

Slaughtering and meat packing (Table 20).—This table gives the quantity and value of the principal products of the industry reported at the censuses of 1919, 1914, and 1909.

The product was largely fresh meat, only a small proportion having been cured. There has been, however, a very large increase in cured pork during the periods for which statistics are presented in the table. In 1909 the value of cured pork represented only 1.6 per cent of the total value of products; in 1914, 4.7 per cent; while in 1919 it formed 12 per cent.

All products show increases in the last census period except mutton and lamb. This class shows a decrease of 959,190 pounds in meat production, but an increase of \$31,592 in value, while the pelts decreased 22,193 in number, but increased \$35,444 in value.

TABLE 20.—SLAUGHTERING AND MEAT PACKING: 1919, 1914, AND 1909.

	1919	1914	1909 ¹
Products, total value.....	\$6,858,703	\$2,119,539	\$2,053,609
Fresh meat:			
Beef—			
Pounds.....	16,932,467	10,111,419	12,253,541
Value.....	\$2,890,636	\$1,063,814	\$1,043,864
Veal—			
Pounds.....	1,597,812	186,806	1,815,825
Value.....	\$284,650	\$23,689	\$175,256
Mutton and lamb—			
Pounds.....	1,622,989	2,582,179	2,365,440
Value.....	\$304,805	\$273,213	\$240,720
Pork—			
Pounds.....	4,730,542	2,308,259	2,171,894
Value.....	\$1,058,018	\$266,426	\$246,118
Edible offal, and all other fresh meat ² —			
Pounds.....	586,720	170,953	52,500
Value.....	\$96,586	\$10,129	\$3,148
Pork, pickled and other cured:			
Pounds.....	2,440,720	685,800	214,000
Value.....	\$822,434	\$99,023	\$33,081
Sausage:			
Pounds.....	1,090,379	234,700	446,738
Value.....	\$200,930	\$22,080	\$56,909
Lard:			
Pounds.....	924,625	455,971	145,319
Value.....	\$248,679	\$38,321	\$21,122
Tallow:			
Pounds.....	1,008,128	636,906	874,810
Value.....	\$114,690	\$39,047	\$38,773
Hides and pelts:			
Cattle—			
Number.....	31,863	15,358	
Pounds.....	1,877,597	1,005,015	
Value.....	\$555,499	\$147,511	31,022
Calf—			
Number.....	8,573	950	1,505,935
Pounds.....	130,710	11,976	\$149,772
Value.....	\$51,406	\$2,103	
Sheep—			
Number.....	34,019	50,212	48,615
Value.....	\$96,259	\$60,815	\$48,663
All other products, value ³	\$134,111	\$73,368	\$16,123

¹ Includes data for 1 establishment manufacturing sausage, to avoid disclosure of individual operations.

² Includes dressed poultry.

³ Includes value of cured beef, lard compounds, meat puddings, sausage casings, fertilizer materials, and wool.

Printing and publishing (Table 21).—This table gives the number of publications and the aggregate circulation per issue for all newspapers and periodicals published in Montana during 1919, 1914, and 1909.

The large decrease in the reported circulation of weekly newspapers since 1914 is due almost wholly to the reduction in circulation, as reported, of one weekly agricultural periodical established in 1913. It is probable that the circulation figures given for this establishment at the census of 1914 represented, in part, copies sent broadcast to aid in firmly establishing the new enterprise. Of the daily newspapers, 11, with a circulation of 44,397, were published in the afternoon. All publications were printed in the English language.

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.....	248	248	139	431,919	507,892	246,798
Daily.....	22	21	17	111,518	87,113	70,203
Sunday.....	10	7	7	88,093	60,321	48,088
Semiweekly.....	3	4	8	3,200	6,762	13,180
Weekly.....	201	203	101	185,202	292,746	92,027
Monthly ¹	12	13	6	42,906	60,950	23,300

¹ Includes 2 semimonthly publications in 1919 and 1914 and 1 in 1909.

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 Montana for 1919 and 1914.

TABLE 22.—POWER LAUNDRIES: 1919 AND 1914.

	NUMBER OR AMOUNT.		Per cent of increase, 1914-1919.
	1919	1914	
Number of establishments.....	49	42	
Persons engaged.....	1,092	920	18.7
Proprietors and firm members.....	34	37	
Salaried employees.....	87	64	
Wage earners (average number).....	971	819	18.6
Primary horsepower.....	1,463	909	46.4
Capital.....	\$1,373,349	\$954,412	43.9
Salaries and wages.....	1,003,662	688,234	45.8
Salaries.....	163,891	88,745	84.7
Wages.....	839,771	599,489	40.1
Paid for contract work.....	100	1,600	-93.8
Rent and taxes.....	51,791	33,829	53.1
Cost of materials.....	473,189	226,350	109.1
Amount received for work done.....	1,894,356	1,266,562	49.6

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

Dyeing and cleaning (Table 23).—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 23.—DYEING AND CLEANING: 1919.

	Number or amount.
Number of establishments.....	23
Persons engaged.....	125
Proprietors and firm members.....	27
Salaried employees.....	4
Wage earners (average number).....	94
Primary horsepower.....	115
Capital.....	\$170,027
Salaries and wages.....	125,280
Salaries.....	9,790
Wages.....	115,490
Rent and taxes.....	19,700
Cost of materials.....	56,071
Amount received for work done.....	312,189

Custom sawmills and gristmills (Tables 24 and 25).—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 in 1914. Tables 24 and 25, however, summarize the statistics for such mills for 1919 and 1909. The value of products for custom sawmills represents the amount charged for the work performed, and that for custom gristmills the selling value of the grain milled.

TABLE 24.—CUSTOM SAWMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	7	14	.....
Persons engaged.....	15	43	.....
Proprietors and firm members.....	10	19	.....
Wage earners (average number).....	5	24	.....
Primary horsepower.....	269	534	-49.6
Capital.....	\$10,400	\$32,600	-40.5
Wages.....	4,254	8,741	-51.3
Rent and taxes.....	141	(²)	.....
Cost of materials.....	485	670	-27.6
Value of products ³	10,792	24,249	-55.5

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

² Figures not available.

³ Amount received for work done.

TABLE 25.—CUSTOM GRISTMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	7	2	.....
Persons engaged.....	8	4	.....
Proprietors and firm members.....	3	3	.....
Salaried employees.....	1	1	.....
Wage earners (average number).....	4	1	.....
Primary horsepower.....	236	42	.....
Capital.....	\$59,554	\$11,600	413.4
Salaries and wages.....	6,930	595	1,064.7
Salaries.....	1,200	.....	.....
Wages.....	5,730	595	883.0
Rent and taxes.....	593	(²)	.....
Cost of materials ³	95,954	13,190	627.5
Value of products ³	110,073	14,175	718.9

¹ Percentages are omitted where base is less than 100.

² Figures not available.

³ Includes estimate of all grain ground.

GENERAL TABLES.

Table 26 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 all industries combined and for selected industries in the state, and for cities having 10,000 inhabitants or more similar data for all industries combined. Certain kindred industries

are combined in some instances for comparison with 1909.

Table 27 presents, for 1919, statistics in detail for the state as a whole and for each industry for which figures can be shown without the disclosure of individual operations, and for all industries combined in the six cities of 10,000 or more inhabitants.

TABLE 26.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909.

INDUSTRY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
All industries.....	1919	1,290	17,160	170,200	\$24,743	\$122,152	\$166,065
	1914	939	13,704	61,671	13,001	46,744	84,446
	1909	677	11,655	90,402	10,901	49,180	73,272
Bread and other bakery products.....	1919	119	384	488	437	1,935	3,124
	1914	105	274	234	222	711	1,311
	1909	71	214	109	165	618	1,096
Brick.....	1919	14	145	2,139	194	200	505
	1914	17	191	1,488	183	150	474
	1909	21	189	1,135	166	83	371
Butter.....	1919	47	190	1,200	254	3,463	4,210
	1914	32	71	509	69	1,011	1,218
	1909	20	29	235	24	354	410
Cars and general shop construction and repairs by steam-railroad companies.....	1919	30	5,312	5,689	7,477	2,891	10,957
	1914	16	3,611	5,376	3,009	2,542	5,834
	1909	12	1,913	2,670	1,538	1,086	2,811
Confectionery and ice cream.....	1919	37	134	218	130	452	810
	1914	27	130	95	67	272	495
Copper, tin, and sheet-iron work.....	1919	34	70	22	122	293	565
	1914	20	78	21	87	161	335
	1909	9	31	5	35	65	137
Flour-mill and gristmill products.....	1919	69	360	6,572	475	14,092	16,386
	1914	33	266	4,078	209	3,902	4,890
	1909	12	105	2,313*	105	1,693	2,175
Foundry and machine-shop products. ¹	1919	281	885	2,613	1,348	1,181	3,551
	1914	32	402	1,308	438	508	1,270
	1909	14	316	741	354	381	986
Gas, illuminating and heating.....	1919	6	63	170	99	197	487
	1914	6	59	172	58	95	206
	1909	5	48	120	41	77	190
Liquors, malt, including cereal beverages.....	1919	7	46	1,002	80	134	355
	1914	19	278	2,276	391	776	2,567
	1909	21	246	2,472	359	602	2,440
Lumber and timber products. ²	1919	183	3,869	17,220	4,930	3,987	12,197
	1914	104	2,905	20,978	2,270	2,356	6,721
	1909	155	3,106	14,337	2,185	1,865	6,324
Marble and stone work.....	1919	13	45	248	77	89	297
	1914	16	68	166	79	71	244
	1909	21	78	123	102	57	230
Mineral and carbonated waters.....	1919	31	48	115	\$67	\$167	\$377
	1914	22	29	62	26	49	150
	1909	22	28	105	28	51	159
Printing and publishing.....	1919	247	1,011	1,489	1,344	1,327	4,763
	1914	238	900	908	929	700	2,795
	1909	135	691	679	685	403	2,111
Saddlery and harness.....	1919	11	36	22	45	205	319
	1914	16	42	66	51	168	274
	1909	15	35	(³)	39	84	190
Slaughtering and meat packing.....	1919	12	210	1,714	274	5,824	6,859
	1914	8	96	299	101	1,717	2,120
	1909	8	105	(³)	92	1,781	2,053
Tobacco, cigars.....	1919	29	44	4	57	145	285
	1914	70	32	4	69	118	306
	1909	53	91	.....	85	132	320
All other industries.....	1919	120	4,308	129,281	7,333	\$5,540	100,609
	1914	98	4,172	53,631	4,743	31,437	53,176
	1909	83	4,430	65,349	4,898	39,848	51,250
CITY.							
ANACONDA.....	1919	22	272	1,008	504	489	1,341
	1914	19	251	770	285	260	754
	1909	13	97	258	134	157	501
BILLINGS.....	1919	85	573	1,602	768	3,562	5,417
	1914	42	329	1,397	296	902	1,634
	1909	37	226	661	229	765	1,243
BUTTE.....	1919	115	930	2,017	1,204	2,823	5,262
	1914	107	659	1,226	671	1,314	2,900
	1909	66	622	1,217	649	920	2,464
GREAT FALLS.....	1919	73	1,157	3,345	1,485	4,056	6,851
	1914	54	706	2,145	675	1,899	3,382
HELENA.....	1919	52	539	658	685	1,532	3,010
	1914	53	495	691	402	709	1,482
	1909	44	420	788	362	493	1,303
MISSOULA.....	1919	34	908	1,580	1,245	2,452	4,206
	1914	34	447	684	382	405	1,113
	1909	26	428	594	403	402	1,171

¹ Includes "Automobile repairing" and "Iron and steel, welding."

² Includes "Lumber, planing-mill products, not including planing mills connected with sawmills."

³ Figures not available.

MANUFACTURES—MONTANA.

TABLE 27.—DETAILED STATEMENT OF ALL INDUSTRIES

[illegible]

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

	All industries.....	1, 290	20, 692	1, 200	823	1, 006	413	17, 160	No 18, 228	Ap 16, 230	(^a)	(^a)	(^a)	(^a)	(^a)	Dollars, 137, 476, 277
1	Artificial stone products.....	8	31	10	1	.....	1	19	Jy 31	Fe 2	29	29	.....	.....	.....	40, 807
2	Automobile bodies and parts.....	6	11	7	.....	.....	.....	14	Ja 4	Fe 4	4	3	.....	.....	.....	16, 167
3	Automobile repairing.....	255	908	309	32	21	26	520	Jy 623	Ja 413	524	524	.....	.....	.....	1, 242, 893
4	Awnings, tents, and sails.....	5	12	6	.....	.....	.....	6	Ja 11	Ja 2	6	5	1	.....	.....	19, 175
5	Bread and other bakery products.....	119	585	157	22	25	27	384	An 401	Fe 4 360	390	250	120	1	1	1, 483, 641
6	Brick.....	14	180	9	16	9	1	145	Jy 261	De 66	155	154	1	.....	.....	889, 367
7	Butter.....	47	301	24	28	36	23	190	Jy 238	Ja 134	187	165	22	.....	.....	1, 900, 458
8	Carriages and wagons, repair work only.....	4	10	3	.....	.....	.....	7	Se 9	De 5	5	4	.....	1	.....	88, 885
9	Cars and general shop construction and repairs by electric-railroad companies.....	5	57	.....	5	2	.....	50	Ja 60	Oc 43	49	49	.....	.....	.....	434, 130
10	Cars and general shop construction and repairs by steam-railroad companies.....	30	5, 530	.....	134	36	48	5, 312	No 5, 662	Ap 5, 043	5, 340	5, 251	89	.....	.....	9, 584, 572
11	Cheese.....	6	10	5	.....	.....	.....	5	Fe 8	Ja 4	3	6	5	1	.....	42, 550
12	Confectionery and ice cream.....	37	195	40	8	8	5	134	De 94	Ja 52	94	60	91	2	.....	395, 219
13	Confectionery.....	19	106	22	2	5	3	74	Do Au 70	Fe 51	59	33	66	1	.....	231, 202
14	Ice cream.....	18	89	15	6	3	2	60	Au 70	Fe 51	59	33	66	1	.....	176, 037
15	Copper, tin, and sheet-iron work.....	34	110	28	9	3	.....	70	Se 77	Fe 53	79	79	25	1	.....	223, 322
16	Flour-mill and gristmill products.....	69	506	33	77	67	29	13	Mh 405	Jy 244	384	376	8	.....	.....	0, 727, 370
17	Food preparations.....	11	17	13	.....	1	.....	13	Ja 7	Fe 4 3	15	6	6	.....	.....	51, 625
18	Sweetening sirups, other than cane.....	8	12	2	.....	1	1	8	Ja 14	Oc 5	9	3	6	.....	.....	19, 851
19	All other.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1, 628, 042
20	Foundry and machine-shop products.....	22	427	17	30	15	6	359	Jy 100	Ja 91	100	100	.....	.....	.....	451, 437
21	Machine shops.....	16	127	16	12	3	1	95	Ja 355	Au 170	191	191	.....	.....	.....	1, 176, 605
22	All other.....	6	300	1	18	12	5	264	Oc 26	Jo 15	24	9	15	.....	.....	68, 726
23	Fur goods.....	6	3	6	4	.....	2	2	(e) 2	(e) 2	2	2	1	.....	.....	11, 605
24	Furs, dressed.....	3	5	3	.....	.....	.....	63	Au 68	Mh 50	63	63	1	.....	.....	1, 815, 946
25	Gas, illuminating and heating.....	0	89	.....	9	14	3	14	Je 18	Ja 10	14	14	.....	.....	.....	74, 419
26	Ice, manufactured.....	5	24	5	1	2	2	6	Mh 7	Ja 5	6	6	.....	.....	.....	17, 525
27	Iron and steel, welding.....	4	11	5	.....	.....	.....	3	(e) 3	(e) 3	3	3	.....	.....	.....	19, 050
28	Jewelry.....	7	66	3	13	5	2	46	Se 62	Mh 23	56	55	1	.....	.....	1, 432, 703
29	Liquors, cereal beverages.....	153	4, 107	182	75	141	16	3, 693	No 4, 071	Ap 3, 128	5, 000	4, 933	16	1	.....	12, 983, 837
30	Lumber and timber products.....	30	233	32	13	7	5	176	Au 213	Mh 129	193	191	2	.....	.....	1, 532, 820
31	Lumber, planing-mill products, not including planing mills connected with sawmills.....	13	76	13	5	9	4	45	My 58	Ja 25	48	48	.....	.....	.....	235, 608
32	Marble and stone work, other than slate.....	31	95	27	7	10	3	48	Au 64	De 38	47	40	.....	1	.....	280, 128
33	Mineral and carbonated waters.....	4	13	2	2	6	.....	3	Ja 11	Jy 4	1	11	8	.....	.....	21, 392
34	Patent medicines and compounds.....	22	253	10	25	21	15	182	De 188	Fe 177	189	149	40	.....	.....	794, 187
35	Printing and publishing, book and job.....	225	1, 336	192	92	134	89	829	.....	.....	855	712	87	56	.....	2, 841, 772
36	Printing and publishing, newspapers and periodicals.....	13	202	7	16	35	27	117	No 129	Ja 107	124	120	4	.....	.....	456, 805
37	Printing, publishing, and job printing.....	199	1, 113	176	71	95	59	712	No 732	Fe 691	731	592	83	56	.....	2, 363, 955
38	Publishing without printing.....	13	21	9	5	4	3	.....	.....	.....	.....	.....	.....	.....	.....	21, 012
39	Saddlery and harness.....	11	57	10	5	6	.....	38	Jy 40	Ja 25	37	37	.....	.....	.....	260, 993
40	Slaughtering and meat packing.....	12	305	3	26	47	10	210	Jy 4	De 193	212	196	14	2	.....	3, 371, 027
41	Tobacco, cigars.....	29	77	33	.....	.....	.....	44	Ja 47	De 40	52	40	11	1	.....	79, 965
42	All other industries *.....	54	4, 945	43	184	471	85	4, 162	.....	.....	.....	.....	.....	.....	.....	83, 738, 065

* All other industries embrace—

Artificial limbs.....	1	Brooms, from broom corn.....	1	Cleansing preparations.....	1	Electrical machinery, apparatus, and	
Bone and carbon black.....	1	Canning and preserving, vegetables..	1	Clothing, men's.....	1	supplies.....	1
Boxes, wooden packing, except cigar		Carpets, rag.....	1	Coffee, roasting and grinding.....	2	Explosives.....	1
boxes.....	1	Cement.....	2	Cutlery, scissors, shears, and clippers..	1	Fertilizers.....	1
Brass, bronze, and copper products..	2	Chemicals.....	2	Dairymen's and apiarists' supplies..	1	Furniture, store and office fixtures..	1
				Druggists' preparations.....	1	Hand stamps.....	1

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

1	ANACONDA.....	22	360	21	10	45	12	272	Ja	328	Do	184	186	176	10	1,204, 16
2	BILLINGS.....	85	792	87	49	52	31	573	Jy	626	Ja	513	578	534	39	3,385, 16
3	BUTTE.....	115	1,232	95	70	80	57	930	Jy	971	Fe	875	900	820	121	4,018, 88
4	CATTLE FALLS.....	73	1,418	95	65	93	48	1,167	Ja	1,275	My	1,054	1,193	1,136	48	6,083, 37
5	HELENA.....	52	608	41	39	27	22	539	Au	552	Mh	523	552	469	1	2,138, 48
6	MISSOULA.....	34	1,018	28	38	25	21	908	Oct	1,001	Ja	789	857	891	34	3,676, 05

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

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—MONTANA.

17

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. 2,316,014	Dollars. 2,425,441	Dollars. 24,742,562	Dollars. 555,842	Dollars. 410,640	Dollars. 1,802,125	Dollars. 117,594,952	Dollars. 4,550,972	Dollars. 106,664,518	Dollars. 44,512,594	170,206	38,865	3,234	1,484	24,711	101,912	4,297	1
2,400	490	31,402	493	419	23,928	2,228	79,220	53,064	144	144	113	113	31	31	2	2	2
45,242	40,596	774,973	177	98,655	22,280	544,688	60,597	2,038,836	1,433,551	1,187	19	201	5	872	1	4	3
39,253	69,647	436,626	1,309	56,960	15,076	1,806,552	68,133	3,124,232	1,180,547	488	85	12	391	3	5	5	6
36,064	15,339	194,459	393	13,212	116,608	84,314	505,053	305,131	2,139	360	1	14	1,779	7	7	7	8
60,900	70,495	254,167	8,647	10,094	19,641	3,416,583	40,868	4,219,316	755,865	1,200	260	3	925	42	8	8	9
8,470	3,337	53,932	300	1,309	33,193	837	65,135	31,105	27	153			24	10	10	10	10
355,745	116,348	7,477,056		83,234	2,673,637	216,910	10,957,439	8,066,892	5,689	3,078			2,611	2,056	11	11	11
		6,617	227	93,455	1,655	107,110	12,000	27	12	12			3	12	12	12	12
17,260	19,293	120,600	1,250	25,048	7,057	435,150	17,052	809,950	357,748	218			213	13	13	13	13
3,590	13,093	61,642	1,250	11,553	2,840	207,673	5,337	392,523	179,208	53			51	14	14	14	14
13,670	6,200	68,042		13,405	4,208	227,172	11,715	417,427	178,540	165			162	15	15	15	15
18,679	7,132	122,210	50	12,341	4,718	289,700	3,405	565,318	272,153	22			22	16	16	16	16
180,909	141,556	474,533	15,332	183,840	13,936,735	155,521	16,356,055	2,293,799	6,672	1,720	529	250	4,073	125	17	17	17
	2,568	15,281	3,538	1,075	41,707	1,403	96,155	52,555	28				20	18	18	18	18
	3,850	6,665		825	9,240	787	38,921	28,894	8				20	19	19	19	19
	2,248	8,016	3,538	250	32,557	610	57,234	24,061	20				20	20	20	20	20
80,609	40,228	505,178	6,755	32,287	508,974	62,697	1,404,658	822,987	1,412				1,366	21	21	21	21
29,550	5,400	117,106	3,775	8,561	121,363	13,555	414,764	279,836	239				223	22	22	22	22
51,049	34,828	448,072		29,726	387,611	49,142	1,079,904	643,151	1,173				1,173	23	23	23	23
4,900	1,071	20,906	703	6,080	29,632	570	78,563	45,061	5				5	24	24	24	24
		2,531		914	10,602	341	29,014	18,028	4				4	25	25	25	25
22,857	22,270	98,570		28,556	42,006	154,293	480,767	289,568	170				170	26	26	26	26
3,000	2,706	24,270	1,550	1,113	3,661	13,465	56,062	39,536	264				264	27	27	27	27
		8,083	1,781	1,132	3,516	685	17,948	13,747	14				14	28	28	28	28
		8,160	1,380	51	7,485	311	27,064	19,238	6				6	29	29	29	29
28,401	10,045	80,332		950	32,638	105,715	28,752	355,140	220,673	1,002			464	30	30	30	30
258,890	258,520	4,066,716	400,708	3,415	292,046	3,153,597	53,181	10,991,632	7,784,854	16,087	14,073	995	126	187	31	31	31
34,637	15,696	263,420	437	4,420	6,091	766,001	13,843	1,205,349	425,505	1,153			17	32	32	32	32
12,700	17,076	77,000	670	810	5,239	84,547	4,462	296,534	207,525	248			2	33	33	33	33
12,780	11,554	66,848		6,435	5,832	190,034	7,040	377,474	180,400	115			1	34	34	34	34
2,100	2,000	2,075	3,000	90	212	15,317	226	34,943	19,400	8			7	35	35	35	35
63,470	34,575	223,458	373	17,186	20,892	268,004	8,564	840,810	573,242	183			3	36	36	36	36
223,942	326,364	1,120,993	54,862	99,718	54,054	988,924	61,137	3,912,779	2,862,718	1,306			248	37	37	37	37
51,020	117,045	165,877		16,274	19,420	140,437	9,341	817,315	653,537	202			6	38	38	38	38
164,044	201,761	955,116	14,052	82,126	34,576	839,447	51,700	3,017,805	2,126,568	1,104			242	39	39	39	39
8,878	7,558		40,210	1,318	49	40	6	77,659	77,613					40	40	40	40
12,385	9,289	45,155		4,388	4,906	203,376	1,633	318,734	113,725	22			6	41	41	41	41
71,234	121,885	273,955		7,470	30,784	5,774,590	49,554	6,858,703	1,634,559	1,714			15	42	42	42	42
		57,341		8,525	22,381	143,662	1,814	285,338	139,862	4			4	43	43	43	43
749,492	1,065,342	7,143,355	74,182	12,589	904,041	81,738,390	3,430,008	99,834,891	14,666,403	128,688	17,430	2,225	60	24,205	84,608	472	44

Lapidary work.....	2	Models and patterns, not including paper patterns.....	1	Pickles and sauces.....	1	Springs, steel, automobile.....	2
Lime.....	2	Optical goods, lenses.....	2	Shipbuilding, wooden, including boat building.....	1	Structural ironwork, not made in steel works or rolling mills.....	1
Looking-glass and picture frames.....	2	Faving materials.....	1	Smelting and refining, copper.....	3	Sugar, beet.....	1
Mattresses and spring beds.....	2	Perfumery and cosmetics.....	1	Smelting, lead.....	1	Vinegar and cider.....	1
Minerals and earths, ground or otherwise treated.....	1	Photographs and graphophones.....	1	Soap.....	1	Wood preserving.....	1
		Photo-engraving.....	2				

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

54,929	85,405	504,418	96,613	4,322	17,157	450,264	38,893	1,340,695	851,538	1,088	46		22	1,000		1
115,508	81,818	767,705	6,697	52,214	58,164	3,464,471	97,592	5,417,140	1,855,077	1,602	742			860	75	2
190,815	190,376	1,204,213	2,883	73,323	67,858	2,683,828	138,709	5,261,592	2,439,055	2,017	270			1,747	12	3
159,192	220,531	1,485,197	13,912	48,206	131,302	3,915,126	140,595	6,850,837	2,795,116	3,845	285	13		3,046		4
85,028	79,850	685,369	18,355	28,030	25,336	1,463,041	60,419	3,016,238	1,483,778	658	115	1	2	540		5
100,079	65,552	1,245,338	1,950	33,374	28,257	2,409,258	42,973	4,206,371	1,844,140	1,580	440		10	1,130		6

* 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.