DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

SAM. L. ROGERS, DIRECTOR

CENSUS OF MANUFACTURES: 1914

WASHINGTON

Prepared under the supervision of W. M. STEUART, Chief Statistician for Manufactures

CONTENTS

	Page
Explanation of terms	2
General statistics	3
General character of the state	3
Importance and growth of manufactures	3
Lumber and timber products	5
Flour-mill and gristmill products	5
Slaughtering and meat packing	5
Butter, cheese, and condensed milk	5
Printing and publishing	5
Liquors, malt	6
Canning and preserving	6
Foundry and machine-shop products	6
Persons engaged in manufacturing industries	6
Wage earners employed, by months	8
Prevailing hours of labor	10
Location of establishments	11
Character of ownership	12
General statistics—Continued.	Page
Size of establishments	13
Engines and power	17
Fuel	17
Special statistics	18
Flour-mill and gristmill products	18
Slaughtering and meat packing	18
Canning and preserving	19
Butter, cheese, and condensed milk	20
Printing and publishing	20
Laundries	20
General tables:	
Table 30.—Comparative summary for 1914, 1909, and 1904	21
Table 31.—Detail statement for the state and for cities of 50,000 inhabitants or more, by industries, and for cities of 10,000 to 50,000 inhabitants: 1914	24

WASHINGTON

GOVERNMENT PRINTING OFFICE

1917

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 should 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 whose products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1914, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city 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 very different from those covered by the class designation, and, on the other hand, may not include the total product covered by this designation, because some part of this 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 the leading industries of the state for more detailed consideration. Sometimes an industry of greater importance than some of those selected is omitted because it comprises so few establishments that these detailed presentations would reveal the operations of individual concerns.

Comparisons with previous censuses.—Owing to changes in industrial conditions it is not always possible to classify establishments by industries in such a way as to permit accurate comparison with preceding censuses. At the census of 1909 the figures for kindred industries were combined. This practice, as a rule, has been followed in compiling the statistics of 1914 when placed in comparison with those for 1909 and prior years. The comparative summary for 1914, 1909, and 1904, therefore, does not show separately all the industries given for 1914 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 1914 and 1909 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, without distinction of sex or 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 average thus obtained approximates the number of wage earners that would be required to perform the work done if all were constantly employed during the entire year. Accordingly, 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 believed not to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation. 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 particular, totals by sex and age for the wage earners reported for the representative day for all industries combined would be misleading because of the undue weight given to seasonal industries, in some of which, such as canning and preserving, the distribution of the wage earners by sex and age is materially different from that in most industries of more regular operation. In order to determine as nearly as possible the sex and age distribution of the average number of wage earners for a given state as a whole, the per cent distribution by sex and 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 number of men, women, and children 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 represent the approximate number who would be required to perform the work in any industry if all were continuously employed during the year, whereas the actual number to whom the total wages were paid would be larger.

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, all or practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

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

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

These instructions were identical with those employed at the census of 1909. The data compiled in respect to capital, however, at 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 internal revenue, corporation income tax, and state, county, and local taxes. In some instances the amount of the corporation tax for 1914 had not been ascertained when the report was prepared and the amount paid for 1913 was therefore given.

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 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 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 interest or depreciation, 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, since in most cases an engine or motor is not required to deliver continuously its full rated horsepower.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, oil, and gas. They relate to the quantity used during the year, which may be more or less than the quantity purchased. As only the principal varieties of fuel are shown, no comparison can be made with the total cost of all fuel.

WASHINGTON

By Everett Spring.

GENERAL STATISTICS.

General character of the state.—Washington, with a gross area of 69,127 square miles, of which 2,291 represent water surface, ranks nineteenth in size among the states. The inhabitants of the state in 1900 numbered 518,103 and in 1910, 1,141,990, and the estimated population in 1914 was 1,407,865. In total population Washington ranked twenty-seventh among the states in 1914, thirtieth in 1910, and thirty-fourth in 1900. The density of population for the entire state in 1914 was 21.1 per square mile, the corresponding figures for 1910 and 1900 being 17.1 and 7.8, respectively.

The urban population in 1910—that is, the population residing in cities and towns of 2,500 inhabitants or more—was 605,530, or 53 per cent of the total, as against 40.8 per cent in 1900. There were in the state in 1914 10 municipalities each having an estimated population of more than 10,000, namely, Aberdeen, Bellingham, Everett, Hoquiam, North Yakima, Seattle, Spokane, Tacoma, Vancouver, and Walla Walla. These cities, whose aggregate population in that year formed 49.5 per cent of the estimated population of Washington, reported 55.7 per cent of the state's manufactured products.

The transportation facilities, already good, are being rapidly extended, the steam-railway mileage in 1914 being 5,247 miles. Two of the most important railroad systems of the Northwest traverse the state and have their western terminals on Puget Sound, one of the best commercial harbors in the United States. The traffic movement on the Columbia River is greater than on any other river west of the Mississippi. Other rivers of the state are navigable to some extent and afford cheap transportation for the products of the inland counties.

The electric-railway mileage in 1912 was 923. Its development in eastern Washington has done much to open the fertile valleys of this section to farming and fruit growing.

The total value of farm crops in 1909 was $78,927,053, of which nearly one-half—$35,102,370—represented wheat.

According to the report of the United States Geological Survey, the mineral output of the state for 1914 was valued at $13,830,739, the principal products being coal, $6,757,511, and cement, $2,303,433.

Importance and growth of manufactures.—In 1914, measured by the value of products of its manufacturing industries—$245,326,456—Washington ranked twenty-third among the states, while in average number of wage earners engaged in such industries—67,205—it held twenty-seventh place.

Table 1 summarizes the more important data relative to all classes of manufactures combined in the state of Washington, for the censuses of 1914, 1909, 1904, and 1899, and gives the percentages of increase from census to census.

Table 1

	MANUFACTURING INDUSTRIES.				PER CENT OF INCREASE.[1]		
	1914	1909	1904	1899	1909–1914	1904–1909	1899–1904
Number of establishments	3,829	3,674	2,751	1,926	4.2	33.6	42.8
Persons engaged	78,448	80,118	51,459	(2)	−2.1	55.7	.....
Proprietors and firm members	3,155	3,264	2,602	(2)	−3.3	25.4	.....
Salaried employees	8,088	7,734	3,658	2,103	4.6	111.4	73.9
Wage earners (average number)	67,205	69,120	45,199	31,523	−2.8	52.9	43.4
Primary horsepower	399,567	297,897	168,342	87,601	34.1	77.0	92.2
Capital	$277,715,262	$222,261,229	$96,952,621	$41,574,744	24.9	129.2	133.2
Salaries and wages	63,207,140	59,592,947	34,180,206	19,128,588	6.1	74.3	78.7
Salaries	11,504,088	9,826,579	4,092,919	2,063,448	17.1	140.1	98.4
Wages	51,703,052	49,766,368	30,087,287	17,065,140	3.9	65.4	76.3
Paid for contract work	2,132,242	2,175,766	2,480,710	(2)	−2.0	−12.3	.....
Rent and taxes (including internal revenue)	5,150,538	3,457,250	[3]1,129,380	(2)	49.0	.....	.....
Cost of materials	136,609,309	117,887,688	66,166,165	38,276,944	15.9	78.2	72.9
Value of products	245,326,456	220,746,421	128,821,667	70,831,345	11.1	71.4	81.9
Value added by manufacture (value of products less cost of materials)	108,717,147	102,858,733	62,655,502	32,554,401	5.7	64.2	92.5

[1] A minus sign (−) denotes decrease. [2] Figures not available. [3] Exclusive of internal revenue.

While the manufactures of the state developed rapidly during the 15 years covered by Table 1, the greatest increase is shown for the period from 1904 to 1909. In 1914 there were almost twice as many establishments and more than double the number of wage earners reported for 1899, while the value of products increased by nearly 250 per cent, and horsepower of the engines and other prime movers by more than 350 per cent. The decrease in the number of wage earners reported for 1914, as compared with the num-

ber for 1909, is due primarily to the depression in the lumber industry.

The amount paid annually for contract work depends upon the methods followed in the different establishments, rather than on the magnitude of the operations, therefore the decrease in this item is of no significance.

The statistics do not include the operations of the Puget Sound Navy Yard, located at Bremerton. In 1914 this establishment employed an average of 1,349 wage earners, and the products, consisting principally of repair work, were valued at $2,775,849. In 1909 this establishment employed an average of 1,065 wage earners, and the products were valued at $1,771,683.

Table 2 shows the relative importance of the leading manufacturing industries in 1914 and the percentages of increase for the three five-year periods from 1899 to 1914.

Table 2

INDUSTRY.	CENSUS OF 1914.							PER CENT OF INCREASE.[1]								
	Number of establishments.	Wage earners.		Value of products.		Value added by manufacture.		Wage earners (average number).			Value of products.			Value added by manufacture.		
		Average number.	Per cent distribution.	Amount.	Per cent distribution.	Amount.	Per cent distribution.	1909–1914	1904–1909	1899–1904	1909–1914	1904–1909	1899–1904	1909–1914	1904–1909	1899–1904
All industries	3,829	67,205	100.0	$245,326,456	100.0	$108,717,147	100.0	−2.8	52.9	43.4	11.1	71.4	81.9	5.7	64.2	92.5
Lumber and timber products	939	38,079	56.7	83,535,760	34.0	45,062,188	41.4	−13.0	45.2	83.6	−6.3	62.1	73.7	−13.8	46.9	99.1
Flour-mill and gristmill products	100	928	1.4	23,665,382	9.6	3,392,887	3.1	44.1	5.1	25.6	32.6	21.7	116.5	42.6	25.7	68.3
Slaughtering and meat packing	11	864	1.3	18,443,526	7.5	2,542,752	2.3	4.3	142.8	47.6	17.8	150.4	27.8	34.3	128.5	29.3
Butter, cheese, and condensed milk	101	860	1.3	11,807,897	4.8	2,296,189	2.1	17.0	96.5	156.1	62.4	142.9	151.5	44.0	165.4	132.9
Printing and publishing	638	2,341	3.5	9,824,293	4.0	7,389,468	6.8	−10.9	43.8	81.1	5.8	94.9	141.3	4.6	90.4	133.1
Liquors, malt	25	883	1.3	9,458,255	3.9	6,657,580	6.1	15.4	60.7	125.5	37.0	54.4	263.3	42.5	33.9	272.6
Canning and preserving	86	2,352	3.5	9,449,549	3.8	4,170,738	3.8	15.9	195.4	−69.8	−1.5	165.3	−28.9	−8.3	259.3	−31.6
Cars and general shop construction and repairs by steam-railroad companies	26	4,543	6.8	7,026,916	2.9	3,947,008	3.6	67.3	104.7	38.8	50.6	68.5	87.1	80.9	126.3	34.1
Foundry and machine-shop products	243	2,128	3.2	6,837,241	2.8	3,836,969	3.5	−12.8	63.9	38.0	−14.4	102.5	70.0	−10.0	98.0	63.8
Bread and other bakery products	390	1,419	2.1	6,572,356	2.7	3,024,636	2.8	46.4	113.4	124.8	43.8	176.0	153.2	50.9	163.0	128.1
Shipbuilding, including boat building	64	1,444	2.1	3,101,446	1.3	2,114,583	1.9	134.4	48.5	.....	100.1	43.9	.....	141.1	86.4	.....
Cement	5	620	0.9	2,639,219	1.1	1,127,540	1.0	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gas, illuminating and heating	13	630	0.9	2,369,188	1.0	1,610,118	1.5	35.5	330.6	.....	40.7	179.7	90.5	57.4	125.8	89.5
Coffee and spice, roasting and grinding	25	193	0.3	2,236,749	0.9	734,806	0.7	47.3	.....	.....	59.9	167.0	35.1	27.8	122.0	197.7
Brick and tile, terra-cotta, and fire-clay products	40	962	1.4	2,026,801	0.8	1,497,609	1.4	−260.0	135.8	48.1	−20.8	279.1	58.1	−21.5	262.7	52.0
Confectionery	67	510	0.8	1,783,228	0.7	827,164	0.8	−16.7	33.6	100.9	−19.3	68.4	194.6	−0.8	50.0	170.6
Copper, tin, and sheet-iron products	112	415	0.6	1,619,870	0.7	791,309	0.7	−28.8	.....	.....	−16.8	.....	.....	−24.1	.....	.....
Furniture	50	544	0.8	1,097,990	0.4	645,897	0.6	−6.4	90.2	43.7	−20.4	122.2	51.3	−17.5	142.2	41.9
Clothing, men's, including shirts	9	405	0.6	974,077	0.4	370,456	0.3	50.6	58.2	.....	57.9	134.6	.....	49.2	113.8	.....
Boots and shoes	11	178	0.3	707,177	0.3	207,427	0.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Confectionery (ice cream)	33	128	0.2	691,278	0.3	286,987	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marble and stone work	27	189	0.3	673,123	0.3	396,509	0.4	−60.0	141.3	.....	−34.1	144.5	81.7	−47.3	135.3	89.3
Food preparations, not elsewhere specified	27	101	0.2	663,020	0.3	206,723	0.2	−16.5	.....	.....	−4.6	802.6	.....	35.0	509.4	.....
Leather goods	43	101	0.2	645,667	0.3	280,493	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by electric-railroad companies	13	382	0.6	632,805	0.3	374,074	0.3	−6.8	.....	.....	−13.6	.....	.....	4.3	.....	.....
Mattresses and spring beds	10	190	0.3	614,271	0.2	281,990	0.3	14.4	25.8	.....	−14.5	166.9	77.0	0.4	65.3	120.8
Cooperage and wooden goods, not elsewhere specified	8	263	0.4	580,139	0.2	296,432	0.3	.....	.....	.....	112.5	.....	.....	112.2	.....	.....
Tobacco, cigars	115	215	0.3	563,246	0.2	346,460	0.3	−29.5	19.1	92.5	−17.3	12.7	105.4	21.4	16.7	126.3
Ice, manufactured	32	159	0.2	551,429	0.2	407,736	0.4	−2.4	.....	.....	−1.4	129.6	133.7	−2.2	106.4	132.2
Carriages, wagons, and repairs	27	150	0.2	524,345	0.2	258,450	0.2	−37.8	19.3	50.7	−27.2	49.4	70.3	−35.5	36.4	69.9
Mineral and soda waters	60	108	0.2	513,478	0.1	301,363	0.3	−8.5	.....	.....	4.3	82.2	75.3	−3.1	73.5	98.9
Awnings, tents, and sails	19	72	0.1	467,902	0.2	191,287	0.2	−40.5	.....	.....	−43.5	243.6	19.3	−28.1	160.8	21.4
Jewelry	17	173	0.3	418,131	0.2	229,179	0.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clothing, women's	12	159	0.2	413,280	0.2	206,486	0.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Agricultural implements	7	134	0.2	392,053	0.2	207,630	0.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chemicals	4	32	(2)	373,553	0.1	114,888	0.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
All other industries	420	4,351	6.5	31,431,816	12.8	12,083,136	11.1	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Percentages are based on figures in table 30; a minus sign (−) denotes decrease; percentages are omitted where base is less than 100, or where comparable figures can not be given.

[2] Less than one-tenth of 1 per cent.

Although a few industries greatly predominate, there is considerable diversity in the manufactures of the state. Separate statistics are presented in the preceding table for 36 industries, or industry groups, for each of which products valued at more than $300,000 were reported for 1914. These industries include 4 with products exceeding $10,000,000 in value, 6 with products between $5,000,000 and $10,000,000, 8 between $1,000,000 and $5,000,000, and 18 with products valued at less than $1,000,000. Among those included under the head of "all other industries" are a number which have products exceeding in value some for which figures are shown in the table, but for which statistics can not be shown separately without the possibility of disclosing the operations of individual establishments. These industries are as follows: Bags, other than paper; explosives; paper and wood pulp; smelting and refining, copper; wire-work, including wire rope and cable; wood preserving; and wool pulling.

The industries in this table are arranged in the order of their importance as measured by value of products, but the arrangement would vary considerably from that given if based on average number of

wage earners or value added by manufacture. The lumber industry is the only one shown in the table which held the same rank in all three items. Flour-mill and gristmill products, second in value of products, was ninth in number of wage earners and seventh in value added by manufacture; slaughtering and meat packing, third in value of products, held only eleventh place in number of wage earners and ninth in value added by manufacture; while butter, cheese, and condensed milk, fourth in value of products, ranked twelfth in average number of wage earners and tenth in value added by manufacture. On the other hand, printing and publishing, fifth in value of products, was fourth in average number of wage earners and second in value added by manufacture. The canning and preserving industry and foundries and machine shops also held a higher rank in respect to wage earners employed and value added by manufacture than in value of products.

In rank according to value of products, there were a number of changes in 1914 as compared with 1909. Of the more important industries shown in the table, lumber and timber, flour mills and gristmills, slaughtering and meat packing, and printing and publishing held the same rank in value of products at both censuses. Butter, cheese, and condensed milk, liquors, malt, and railroad repair shops, ranking fourth, sixth, and eighth in 1914, were seventh, eighth, and ninth, respectively, in 1909. Canning and preserving, and foundry and machine shops, which ranked fourth and sixth, respectively, in 1909, fell to seventh and ninth places in 1914. The remaining industries show slight changes from 1909 to 1914.

Lumber and timber products.—The forests of western Washington inevitably lead to the lumber industry, and its wonderful timber growth supplies the material for the state's most important manufactures. For the last two censuses Washington has led all other states in these products. Although this industry employed 56.7 per cent of the total wage earners and produced 34 per cent of the state's manufactures for 1914, it showed a decrease from 1909 to 1914 in number of establishments, average number of wage earners, and value of products. The decrease was largely due to the depression in the lumber industry in the latter part of 1914 and also to the abandonment of a number of small mills. This industry embraces logging operations, sawmills, planing mills, and establishments engaged in the manufacture of wooden packing boxes, and window and door screens and weather strips, but does not include mills engaged exclusively in custom sawing for local consumption. The largest increase in this industry, both in average number of wage earners and value of products, was during the five-year period 1899–1904, the increases being 83.6 per cent and 73.7 per cent, respectively. For the five-year period 1904–1909 the percentages of increase for the same items were 45.2 per cent and 62.1 per cent, respectively, while for the later five-year period 1909–1914 these items showed decreases of 13 per cent and 6.3 per cent, respectively. In 1914 the lumber industry gave employment to 38,079 wage earners and reported products valued at $83,535,760. It is probable that some mills engaged in merchant sawing in 1899, 1904, or 1909, reported only custom work in 1914 and were omitted. This condition would account in part for the decrease in number of establishments.

Flour-mill and gristmill products.—This industry includes statistics for all mills grinding wheat, corn, rye, and other cereals, except custom mills grinding exclusively for toll or local consumption. Measured by value of products, the industry ranked second in the state both in 1909 and 1914.

During the last semidecade there was a large increase in both number of wage earners and value of products. In 1914 products valued at $23,665,382 were reported and employment was given to 928 wage earners. This is an increase over 1909 in value of products of 32.6 per cent and in average number of wage earners of 44.1 per cent.

Slaughtering and meat packing.—This classification includes the wholesale slaughtering and meat-packing establishments and those engaged in the manufacture of sausage, but not the numerous retail butcher shops which slaughter animals for their own trade. Measured by value of products, this is the third largest industry in the state. The value of the output in 1914 was $18,443,526, or 7.5 per cent of the total manufactured products. From 1909 to 1914 the value of products increased only 17.8 per cent, as compared with 150.4 per cent for the preceding five years. The industry is largely confined to the cities of Seattle, Tacoma, and Spokane.

Butter, cheese, and condensed milk.—This industry includes butter factories, cheese factories, and condensed-milk factories. In 1914 the average number of wage earners was 860, an increase of 17 per cent from 1909, and the value of products was $11,807,897, or an increase of 62.4 per cent during the same period. While this industry shows marked progress during the five years, 1909 to 1914, the percentages of increase in each of the items shown were not so great as during the preceding five-year periods. In 1914 the state ranked fourth in the production of condensed milk, eleventh in the output of cheese, and fifteenth in butter. While condensed milk exceeds in value any of the other products reported, the statistics can not be shown separately without disclosing the operations of individual establishments.

Printing and publishing.—Establishments engaged in bookbinding and blank-book making; steel and copper plate engraving, including plate printing; lithographing; job printing, and the printing and publishing of books, newspapers and periodicals, and music are included in this classification. The industry as a whole shows an advance of 5.8 per cent in value of products from 1909 to 1914, but this increase is much

less than the relative gain during the two preceding five-year periods.

Liquors, malt.—The manufacture of malt liquors is one of the most important industries in the state, ranking sixth in value of products. The total output of this industry in 1914 was valued at $9,458,255, an increase of 37 per cent over 1909. While this industry shows a substantial increase from 1909 to 1914 in all items covered in this table, except in number of establishments, the percentages of increase for value of products and average number of wage earners were not so great as for the two preceding five-year periods. In 1914 there were 25 breweries in the state, as compared with 31 in both 1909 and 1904. This decrease in the number of establishments is due to a greater centralization of the industry, causing the abandonment of some smaller concerns. In value added by manufacture an increase of 42.5 per cent is shown for the five-year period 1909–1914, the corresponding increases for the two preceding censuses being 33.9 per cent and 272.6 per cent, respectively.

Canning and preserving.—This industry covers the canning of fruits and vegetables, fish, oysters, clams, etc.; the packing of dried fruits by packing houses which make a specialty of such business; the preparation of pickled, smoked, and salted fish; and the manufacture of pickles, preserves, jellies, sauces, etc. It does not include the drying and packing of fruits by the grower on the farm, nor does it include the canning of meats, soups, and similar products in meat-packing establishments, the statistics for which are included with those for the slaughtering and meat-packing industry. The period of greatest growth in this industry was between 1904 and 1909, when the average number of wage earners increased 195.4 per cent and the value of products 165.3 per cent. From 1909 to 1914 there was a decrease of 1.5 per cent in value of products, but an increase of 15.9 per cent in the average number of wage earners employed. Of the 86 establishments reported in 1914, 48 were engaged in the canning and preserving of fish. The output of these establishments was valued at $7,634,076, or 80.8 per cent of the total product of the entire industry.

Foundry and machine-shop products.—A great diversity of products is included under this heading, which embraces not only foundries and machine shops but also establishments primarily engaged in automobile repairing and in the manufacture of steam and gas engines, hardware, plumbers' supplies, steam pumps, steam fittings, and structural ironwork. The industry was really of greater importance in the state than is indicated by the statistics, as some machine shops manufactured a distinctive product and were assigned to other classifications. Among the most important products of this industry in 1914 were milling machinery, logging and mining equipment, and marine machinery and equipment for vessels. The industry shows a decrease from 1909 to 1914 of 12.8 per cent in average number of wage earners and 14.4 per cent in value of products, due to several large concerns going out of business and to the change in classification of an important establishment.

Persons engaged in manufacturing industries.—Table 3 shows, for 1909 and 1914, the number of persons engaged in manufactures, distributed by sex, the average number of wage earners being distributed also by age. The sex and 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."

Table 3

CLASS.	Census year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.				
		Total.	Male.	Female.	Per cent of total.	
					Male.	Female.
All classes	1914	78,448	73,957	4,491	94.3	5.7
	1909	80,118	76,342	3,776	95.3	4.7
Proprietors and officials	1914	6,074	5,913	161	97.3	2.7
	1909	6,314	6,201	113	98.2	1.8
Proprietors and firm members	1914	3,155	3,028	127	96.0	4.0
	1909	3,264	3,178	86	97.4	2.6
Salaried officers of corporations	1914	1,063	1,038	25	97.6	2.4
	1909	1,094	1,078	16	98.5	1.5
Superintendents and managers	1914	1,856	1,847	9	99.5	0.5
	1909	1,956	1,945	11	99.4	0.6
Clerks and other subordinate salaried employees.	1914	5,169	4,158	1,011	80.4	19.6
	1909	4,684	3,880	804	82.8	17.2
Wage earners (average number)	1914	67,205	63,886	3,319	95.1	4.9
	1909	69,120	66,261	2,859	95.9	4.1
16 years of age and over	1914	66,955	63,686	3,269	95.1	4.9
	1909	68,854	66,042	2,812	95.9	4.1
Under 16 years of age	1914	250	200	50	80.0	20.0
	1909	266	219	47	82.3	17.7

In 1914 the number of persons engaged in manufactures was 78,448, of whom 67,205, or 85.7 per cent, were wage earners; 6,074 were proprietors and officials and 5,169 were clerks. Of the wage earners 16 years of age and over, 63,686, or 95.1 per cent, were males and 3,269, or 4.9 per cent, were females. Figures for the sex and age distribution of wage earners for individual industries will be found in Table 6.

Table 4 gives, for the several classes of persons engaged in manufactures, the percentages of increase from 1909 to 1914 and the per cent distibution at the two censuses.

This table shows decreases for the five-year period in the total number of the several classes of employees with the exception of clerks and other subordinate salaried employees, in which class there was an increase of 10.4 per cent. The decreases are due to the lumber industry which shows a greater decrease in wage earners than is shown in all industries combined. The largest percentage of decrease for both sexes combined, 6 per cent, is shown for wage earners under 16 years of age, but the proportion which this class formed of the total number of employees was insignificant, being only three-tenths of 1 per cent in

both 1914 and 1909. Females engaged in manufacturing industries in 1914, were distributed among the several classes as follows: 73.9 per cent were wage earners, 22.5 clerks, and 3.6, proprietors and officials.

Table 4

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES. Per cent of increase,[1] 1909–1914. Total.	Male.	Female.	Per cent distribution. Total. 1914	Total. 1909	Male. 1914	Male. 1909	Female. 1914	Female. 1909
All classes	−2.1	−3.1	18.9	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials	−3.8	−4.6	42.5	7.8	7.9	8.0	8.1	3.6	3.0
Proprietors and firm members	−3.3	−4.7	.....	4.0	4.1	4.1	4.2	2.8	2.3
Salaried officers of corporations	−2.8	−3.7	.....	1.4	1.4	1.4	1.4	0.6	0.4
Superintendents and managers	−5.1	−5.0	.....	2.4	2.4	2.5	2.5	0.2	0.3
Clerks and other subordinate salaried employees	10.4	7.2	25.7	6.6	5.8	5.6	5.1	22.5	21.3
Wage earners (average number)	−2.8	−3.6	16.1	85.7	86.3	86.4	86.8	73.9	75.7
16 years of age and over	−2.8	−3.6	16.3	85.3	86.0	86.1	86.5	72.8	74.5
Under 16 years of age	−6.0	−8.7	.....	0.3	0.3	0.3	0.3	1.1	1.2

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

In order to compare the distribution of persons engaged in manufactures in 1914 with that shown in the census of 1904 it is necessary to use the classifications employed in the earlier census (see "Explanation of terms"). Table 5 makes this comparison according to occupational status.

Table 5

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES. Number. 1914	1909	1904	Per cent distribution. 1914	1909	1904	Per cent of increase.[1] 1909–1914	1904–1909
Total	78,448	80,118	51,459	100.0	100.0	100.0	−2.1	55.7
Proprietors and firm members	3,155	3,264	2,602	4.0	4.1	5.1	−3.3	25.4
Salaried employees	8,088	7,734	3,658	10.3	9.7	7.1	4.6	111.4
Wage earners (average number)	67,205	69,120	45,199	85.7	86.3	87.8	−2.8	52.9

[1] A minus sign (−) denotes decrease.

The number of salaried employees increased at each successive census, although much the larger increase was shown for the five-year period 1904–1909. Each of the other two classes and the total for all classes combined show increases for the five-year period 1904–1909 and decreases for the five-year period 1909–1914.

The average number of wage earners employed, and their per cent distribution as males 16 years of age and over, females 16 years of age and over, and wage earners under 16 years of age are given in Table 6 for 1914, 1909, and 1904. The table also shows for some of the important industries separately a similar distribution of wage earners for 1914 and 1909.

For all industries combined, the proportion of male wage earners over 16 years of age has been less at each successive census, while the proportions for females over 16 years of age and wage earners under 16 years of age have increased.

The actual number of wage earners under 16 years of age decreased with each succeeding census, but the proportion was the same in 1914 as in 1909, though greater than in 1904.

Table 6

INDUSTRY.	Census year.	WAGE EARNERS. Average number.[1]	Per cent of total. 16 years of age and over. Male.	Female.	Under 16 years of age.
All industries	1914	67,205	94.7	4.9	0.4
	1909	69,120	95.5	4.1	0.4
	1904	45,199	96.9	2.9	0.2
Bread and other bakery products	1914	1,419	66.6	31.9	1.5
	1909	969	70.4	28.9	0.7
Brick and tile, terra-cotta, and fire-clay products.	1914	962	99.1	.....	0.9
	1909	1,589	99.6	0.3	0.1
Butter, cheese, and condensed milk	1914	860	90.6	7.3	2.1
	1909	735	84.4	15.0	0.7
Canning and preserving	1914	2,352	75.3	22.4	2.3
	1909	2,029	75.1	23.5	1.4
Cars and general shop construction and repairs by electric-railroad companies.	1914	382	100.0	.....	.....
	1909	410	100.0	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	4,543	100.0	.....	.....
	1909	2,716	100.0	.....	.....
Clothing, men's, including shirts	1914	405	7.9	92.1	.....
	1909	269	4.5	95.5	.....
Confectionery	1914	510	35.3	64.1	0.6
	1909	612	33.7	66.0	0.3
Cooperage and wooden goods, not elsewhere specified.	1914	263	97.0	3.0	.....
	1909	97	99.0	1.0	.....
Copper, tin, and sheet-iron products	1914	415	97.6	1.9	0.5
	1909	583	98.6	1.2	0.2
Flour-mill and gristmill products	1914	928	97.7	2.3	.....
	1909	644	98.9	1.1	.....
Foundry and machine-shop products	1914	2,128	99.9	(2)	(2)
	1909	2,439	99.8	(2)	0.2
Furniture	1914	544	97.4	1.5	1.1
	1909	582	96.6	1.7	1.7
Gas, illuminating and heating	1914	630	100.0	.....	.....
	1909	465	100.0	.....	.....
Liquors, malt	1914	883	99.1	0.9	.....
	1909	765	99.3	0.7	.....
Lumber and timber products	1914	38,079	99.6	0.3	0.1
	1909	43,749	99.5	0.4	0.1
Printing and publishing	1914	2,341	84.6	13.5	1.9
	1909	2,624	81.8	13.3	5.0
Shipbuilding, including boat building	1914	1,444	99.9	0.1	.....
	1909	744	99.9	0.1	.....
Slaughtering and meat packing	1914	864	96.2	3.8	.....
	1909	828	97.5	2.5	.....
Tobacco, cigars	1914	215	80.9	19.1	.....
	1909	305	82.0	17.0	1.0
All other industries	1914	7,038	88.3	11.3	0.4
	1909	5,966	87.7	12.1	0.3

[1] For method of estimating the distribution of the average number for all industries combined, by sex and age periods, see "Explanation of terms."
[2] Less than one-tenth of 1 per cent.

Of the 20 industries for which separate figures are given in this table, 8 show an increase from 1909 to 1914 in the proportion of both males and females, while the proportion of 4 remained unchanged, 3 of these employing only males 16 years of age and over.

There were only 250 wage earners under 16 years of age reported as employed in the manufactures of the state during 1914 and 266 in 1909. Wage earners under 16 years of age were employed in only 10 of the industries shown in Table 6, and the numbers in each case were so small that the per cent distribution is a negligible figure.

In 1914 the industries employing the largest proportion of women wage earners were men's clothing, confectionery, bakery, and canning and preserving, which reported 92.1 per cent, 64.1 per cent, 31.9 per cent, and 22.4 per cent, respectively, while the proportion of wage earners under 16 years of age was greatest in the canning and preserving, butter, cheese, and condensed milk, and the printing and publishing industries.

Table 7 shows the average number and the per cent distribution of wage earners employed in each of the 10 cities having more than 10,000 inhabitants, classified according to age periods, and in the case of those 16 years of age and over, according to sex, for 1914, 1909, and 1904.

Table 7

Sex and age.	Census year.	Average number of wage earners in—									
		Aberdeen.	Bellingham.	Everett.	Hoquiam.	North Yakima.	Seattle.	Spokane.	Tacoma.	Vancouver.	Walla Walla.
Total	1914	1,568	1,922	1,959	1,657	582	12,429	3,020	6,765	360	311
	1909	1,509	1,566	[1]2,200	.....	[1]601	[1]11,523	[1]3,901	[1]6,820	.....	388
	1904	.....	1,314	.....	.....	.....	6,390	2,428	[1]4,457	.....	242
16 years of age and over:											
Male	1914	1,523	1,828	1,914	1,621	561	10,924	2,532	6,366	327	289
	1909	1,480	1,456	[1]2,142	.....	[1]558	[1]10,397	[1]3,492	[1]6,485	.....	370
	1904	.....	1,282	.....	.....	.....	5,763	2,297	[1]4,240	.....	233
Female	1914	43	76	41	36	9	1,450	451	387	33	14
	1909	26	73	[1]46	.....	23	[1]1,080	[1]395	[1]322	.....	16
	1904	.....	29	.....	.....	.....	596	129	209	.....	7
Under 16 years of age	1914	2	18	4	.....	12	55	37	12	.....	8
	1909	3	37	[1]12	.....	20	[1]46	[1]14	[1]13	.....	2
	1904	.....	3	.....	.....	.....	31	2	8	.....	2
Per cent of total:											
16 years of age and over—											
Male	1914	97.1	95.1	97.7	97.8	96.4	87.9	83.8	94.1	90.8	92.9
	1909	98.1	93.0	97.4	.....	92.8	90.2	89.5	95.1	.....	95.4
	1904	.....	97.6	.....	.....	.....	90.2	94.6	95.1	.....	96.3
Female	1914	2.7	4.0	2.1	2.2	1.5	11.7	14.9	5.7	9.2	4.5
	1909	1.7	4.7	2.1	.....	3.8	9.4	10.1	4.7	.....	4.1
	1904	.....	2.2	.....	.....	.....	9.3	5.3	4.7	.....	2.9
Under 16 years of age	1914	0.1	0.9	0.2	.....	2.1	0.4	1.2	0.2	.....	2.6
	1909	0.2	2.4	0.5	.....	3.3	0.4	0.4	0.2	.....	0.5
	1904	.....	0.2	.....	.....	.....	0.5	0.1	0.2	.....	0.8

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

Seattle, the most important manufacturing city of Washington, gave employment to 18.5 per cent of the total number of wage earners reported for all industries in the state during 1914. During the ten-year period 1904–1914 the number of wage earners increased 94.5 per cent, and the number of males 16 years of age and over, 89.6 per cent. For the five-year period 1909–1914 the increase for all classes of wage earners was 7.9 per cent, and for males 16 years and over, 5.1 per cent. While there were 12,429 wage earners employed on the average during 1914 in the manufactures of the city, Table 9 shows that at times larger numbers were employed, the greatest number, 13,112, being reported for the month of May. More than one-half of the industries of the city, as shown by Table 31, gave employment to females 16 years of age and over, the largest numbers being reported for the manufacture of men's clothing and confectionery.

Of the three cities having a population of over 50,000, the largest proportion of male wage earners 16 years of age and over and the smallest proportion of females over 16 years of age and of children under 16 years are shown for Tacoma. For the ten-year period 1904–1914 the total average number of wage earners reported for the city increased 51.8 per cent, and the average number of males 16 years of age and over, 50.1 per cent.

During the decade the number of wage earners of all classes in Spokane increased 24.4 per cent, but there were 881 less employed in 1914 than in 1909—the decrease being in the males 16 years of age and over. Several of the most important industries shared in this loss, some establishments having gone out of business since 1909 and others having remained idle throughout the census year 1914. Of the cities listed, Spokane shows the smallest proportion of male wage earners (83.8 per cent), and the largest proportion of females (14.9 per cent). Of the smaller cities, Aberdeen and Bellingham show increases in the total average number of wage earners from 1909 to 1914, while Everett, North Yakima, and Walla Walla show decreases. The largest decrease, 11 per cent, occurred in Everett where the loss is accounted for by a foundry and machine-shop establishment, located in the city in 1909, having been subsequently burned and rebuilt outside the corporate limits of the city.

Wage earners employed, by months.—The following table gives, for all industries combined, the total number of wage earners employed on the 15th of each month, or the nearest representative day, for 1914 and 1909, and the average number employed during each

month in 1904, together with the percentage which the number reported for each month forms of the greatest number reported for any month.

Table 8

MONTH.	WAGE EARNERS IN MANUFACTURING INDUSTRIES.					
	Number.[1]			Per cent of maximum.		
	1914	1909	1904	1914	1909	1904
January	58,748	54,719	40,156	78.1	74.0	82.1
February	62,691	60,419	43,095	83.4	81.7	88.1
March	69,411	66,778	45,958	92.3	90.3	94.0
April	73,351	71,091	47,690	97.6	96.1	97.5
May	74,736	72,717	48,912	99.4	98.3	100.0
June	75,182	72,159	47,141	100.0	97.6	96.4
July	72,996	70,744	44,070	97.1	95.7	90.1
August	73,757	72,990	44,895	98.1	98.7	91.8
September	70,227	73,617	46,544	93.4	99.6	95.2
October	64,047	73,949	46,685	85.2	100.0	95.4
November	58,243	72,614	44,864	77.5	98.2	91.7
December	53,071	67,645	42,378	70.6	91.5	86.6

[1] The figures for 1914 and 1909 represent the number employed on the 15th of each month, or the nearest representative day; those for 1904, the average number employed during the month.

For 1904 and 1914 the late spring and early summer months show the greatest activity in the combined industries of the state, the maximum number of wage earners for 1904 being reported in May and for 1914 in June. The year 1909 shows a different season of greatest activity, October being the month of maximum employment. The greatest difference between the maximum and minimum months in any one of the three census years was 22,111 in 1914.

Table 9 gives the total average number of wage earners employed during 1914, together with the total number employed on the 15th of each month, or the nearest representative day, for the combined industries of the state, for a number of selected industries, and for the total industries of each of the 10 cities having more than 10,000 inhabitants and the per cent which the minumum is of the maximum.

Table 9

WAGE EARNERS: 1914.
[Month of maximum employment for each industry is indicated by **boldface** figures and that of minimum 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	67,205	58,748	62,691	69,411	73,351	74,736	**75,182**	72,996	73,757	70,227	64,047	58,243	*53,071*	70.6
Bread and other bakery products	1,419	1,356	*1,335*	1,393	1,405	1,402	1,403	1,423	1,428	1,480	**1,483**	1,476	1,444	90.0
Brick and tile, terra-cotta, and fire-clay products	962	783	897	905	1,122	1,228	**1,288**	1,106	1,073	971	828	735	*608*	47.2
Butter, cheese, and condensed milk	860	*714*	728	773	891	999	**1,004**	982	945	897	832	792	763	71.1
Canning and preserving	2,352	*517*	809	1,157	1,611	2,165	3,090	4,054	**4,271**	3,830	3,438	2,194	1,088	12.1
Cars and general shop construction and repairs by electric-railroad companies	382	390	401	413	420	**421**	417	407	352	341	341	341	*340*	80.8
Cars and general shop construction and repairs by steam-railroad companies	4,543	4,268	4,325	4,457	4,630	4,667	4,639	4,669	4,731	**4,747**	4,623	4,562	*4,198*	88.4
Clothing, men's, including shirts	405	**470**	468	440	422	411	377	395	389	401	391	*336*	360	71.5
Confectionery	510	476	*474*	476	487	481	485	474	476	539	551	573	**628**	75.5
Cooperage and wooden goods, not elsewhere specified	263	*160*	160	169	309	310	312	193	310	304	309	**313**	307	51.1
Copper, tin, and sheet-iron products	415	367	*360*	368	394	416	419	438	**499**	454	447	416	402	72.1
Flour-mill and gristmill products	928	997	991	926	855	829	804	*791*	870	**1,076**	1,069	965	963	73.5
Foundry and machine-shop products	2,128	2,287	2,249	**2,381**	2,375	2,372	2,173	2,071	2,149	2,049	1,894	*1,751*	1,795	73.5
Furniture	544	567	545	550	**573**	549	539	522	532	553	539	539	*520*	90.8
Gas, illuminating and heating	630	586	634	634	**702**	694	619	644	568	694	649	576	*560*	79.8
Liquors, malt	883	877	887	871	882	898	907	**998**	948	938	839	810	*741*	74.2
Lumber and timber products	38,079	31,793	35,401	41,251	43,646	**44,422**	44,213	41,743	42,118	39,248	34,221	31,214	*27,678*	62.3
Printing and publishing	2,341	2,313	2,309	2,334	2,315	2,366	2,337	*2,264*	2,286	2,336	**2,549**	2,315	2,469	88.8
Shipbuilding, including boat building	1,444	1,649	**1,717**	1,663	1,698	1,639	1,474	1,375	1,277	1,273	1,182	*1,126*	1,255	65.6
Slaughtering and meat packing	864	896	908	**912**	866	871	860	841	855	842	838	*829*	842	91.1
Tobacco, cigars	215	212	219	218	212	217	220	*206*	210	214	**222**	213	217	92.8
All other industries	7,038	7,070	6,874	7,120	7,536	7,379	**7,602**	7,400	7,470	7,040	6,802	6,167	*5,893*	77.5
Total for cities	30,573	28,873	29,441	31,145	32,032	**32,602**	32,547	32,410	32,328	31,122	29,416	28,205	*26,755*	82.1
ABERDEEN	1,568	**1,691**	1,579	1,680	1,667	1,636	1,680	1,506	1,663	1,436	1,546	1,470	*1,262*	74.6
BELLINGHAM	1,922	1,414	1,754	1,928	1,972	2,130	2,379	2,492	**2,532**	2,034	1,800	1,563	*1,066*	42.1
EVERETT	1,959	1,769	1,798	1,978	2,133	2,141	2,147	2,151	**2,190**	2,161	1,938	1,642	*1,460*	66.7
HOQUIAM	1,657	1,752	1,679	1,765	1,859	1,893	1,913	**1,945**	1,537	1,495	*1,198*	1,430	1,418	61.6
NORTH YAKIMA	582	397	*392*	501	590	629	745	811	**838**	624	546	436	475	46.8
SEATTLE	12,429	12,313	12,727	12,866	12,987	**13,112**	12,768	12,393	12,405	12,474	12,058	11,527	*11,518*	87.8
SPOKANE	3,020	2,910	*2,807*	3,014	3,106	**3,209**	3,152	3,154	3,055	3,077	2,979	2,929	2,848	87.5
TACOMA	6,765	*6,025*	6,118	6,756	7,040	7,148	7,036	7,252	**7,400**	7,096	6,619	6,559	6,131	81.4
VANCOUVER	360	348	328	380	381	394	391	320	351	393	**394**	350	*290*	73.6
WALLA WALLA	311	*254*	259	277	297	310	336	**386**	357	332	338	299	287	65.8

The fluctuations in the number of wage earners employed in all industries followed closely the changes in the lumber industry, which in each month of the year gave employment to more than one-half of the total number of wage earners reported for all manufactures in the state. This industry gave employment to the greatest number of wage earners in May (44,422), and the smallest number in December (27,678, or 62.3 per cent of the maximum). The number employed in canning and preserving, which is a seasonal industry, was not sufficiently large to have much influence on the total number for all industries. It gave employment, however, to a large number of persons in the months of July, August, September, and October, and to a relatively small number throughout the winter and spring months. Other seasonal industries

did not furnish employment to enough wage earners to affect to any appreciable extent the general showing. The manufacture of brick and tile, terra-cotta, and fire-clay products, while comparatively a small industry in the state, shows a considerable fluctuation, the number of wage earners in December being but 47.2 per cent of the number in June. The least variation is shown for slaughtering and meat packing and for tobacco manufactures, for which industries the proportions which the minimum formed of the maximum were 91.1 and 92.8 per cent, respectively.

Of the 10 cities, Bellingham shows much the greatest fluctuation, the proportion that the minimum formed of the maximum for this city being 42.1 per cent. Seattle shows the least fluctuation the per cent being 87.8.

Prevailing hours of labor.—In Table 10 the average number of wage earners, for 1914 and 1909, reported for all industries combined and for selected industries throughout the state, have been classified according to number of hours of labor per week prevailing in the establishments in which they were employed. A similar classification is given for 1914 only for all industries combined in each city having more than 10,000 inhabitants. The number employed in each establishment is classified as a total, even though a few employees worked a greater or a smaller number of hours.

Table 10

Industry and city.	Census year.	Average number of wage earners.								
		Total.	In establishments where the prevailing hours of labor per week were—							
			48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
All industries	1914	67,205	10,518	1,464	7,331	4,259	40,855	1,784	518	476
	1909	69,120	5,677	1,725	7,986	1,619	48,781	2,653	270	409
Bread and other bakery products	1914	1,419	861	137	237	55	105	13	.....	11
	1909	969	22	150	341	42	364	16	21	13
Brick and tile, terra-cotta, and fire-clay products	1914	962	29	368	261	90	214	.....	.....	.....
	1909	1,589	5	.....	187	12	885	500	.....	.....
Butter, cheese, and condensed milk	1914	860	31	.....	55	23	271	478	2	.....
	1909	735	31	.....	87	16	181	415	3	2
Canning and preserving	1914	2,352	150	21	630	.....	1,311	234	6	.....
	1909	2,029	101	.....	24	58	1,359	469	18	.....
Cars and general shop construction and repairs by electric-railroad companies.	1914	382	5	.....	218	2	.....	157	.....	.....
	1909	410	.....	8	181	3	195	23	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	4,543	1,791	111	288	2,192	26	135	.....	.....
	1909	2,716	.....	574	1,419	23	601	99	.....	.....
Clothing, men's, including shirts	1914	405	405	.....	.....	.....	.....	.....	.....	.....
	1909	269	255	10	.....	.....	4	.....	.....	.....
Confectionery	1914	510	428	39	27	12	4	.....	.....	.....
	1909	612	34	22	207	221	124	3	.....	1
Cooperage and wooden goods, not elsewhere specified	1914	263	1	.....	3	113	146	.....	.....	.....
	1909	97	1	50	.....	.....	46	.....	.....	.....
Copper, tin, and sheet-iron products	1914	415	313	.....	75	5	22	.....	.....	.....
	1909	583	470	7	43	43	20	.....	.....	.....
Flour-mill and gristmill products	1914	928	156	59	8	43	655	7	.....	.....
	1909	644	45	.....	45	17	333	27	177	.....
Foundry and machine-shop products	1914	2,128	438	34	1,612	.....	44	.....	.....	.....
	1909	2,439	332	58	1,984	9	47	9	.....	.....
Furniture	1914	544	87	167	19	.....	271	.....	.....	.....
	1909	582	103	14	88	.....	377	.....	.....	.....
Gas, illuminating and heating	1914	630	63	76	18	84	383	.....	.....	6
	1909	465	.....	2	.....	99	267	84	13	.....
Liquors, malt	1914	883	850	20	.....	.....	6	.....	.....	7
	1909	765	613	67	58	9	16	2	.....	.....
Lumber and timber products	1914	38,079	387	38	1,410	345	35,828	71	.....	.....
	1909	43,749	113	32	988	313	42,102	137	.....	64
Printing and publishing	1914	2,341	2,210	28	62	27	13	1	.....	.....
	1909	2,624	1,878	294	324	37	86	2	3	.....
Shipbuilding, including boat building	1914	1,444	351	.....	1,085	.....	8	.....	.....	.....
	1909	744	272	2	452	.....	18	.....	.....	.....
Slaughtering and meat packing	1914	864	.....	.....	.....	100	764	.....	.....	.....
	1909	828	16	.....	31	.....	776	5	.....	.....
Tobacco, cigars	1914	215	204	.....	10	.....	1	.....	.....	.....
	1909	305	262	36	3	.....	4	.....	.....	.....
All other industries	1914	7,038	1,758	366	1,313	1,168	783	688	510	452
	1909	5,966	1,124	399	1,524	717	976	862	35	329
Total for cities	1914	30,573	8,336	950	5,510	2,335	13,083	347	2	10
Aberdeen	1914	1,568	125	.....	40	.....	1,400	3	.....	.....
Bellingham	1914	1,922	130	7	607	46	1,052	80	.....	.....
Everett	1914	1,959	198	31	39	1	1,655	35	.....	.....
Hoquiam	1914	1,657	57	.....	71	.....	1,529	.....	.....	.....
North Yakima	1914	582	98	.....	84	.....	392	8	.....	.....
Seattle	1914	12,429	4,581	568	3,225	793	3,092	166	.....	4
Spokane	1914	3,020	1,107	99	712	117	958	27	.....	.....
Tacoma	1914	6,765	1,699	244	620	1,354	2,821	20	2	5
Vancouver	1914	360	260	1	17	.....	82	.....	.....	.....
Walla Walla	1914	311	82	.....	95	24	102	8	.....	.....

The figures in this table for the state as a whole and for most of the selected industries emphasize the tendency toward a shortening of the working day of wage earners. In 1909, 52,113, or 75.4 per cent of the total average number of wage earners for all industries combined, were employed in establishments where the prevailing hours of labor were 60 or more per week, whereas but 43,634, or 64.9 per cent, were so employed in 1914. On the other hand, the number of wage earners in establishments where the working hours were less than 60 per week increased from 17,007, or 24.6 per cent of the total for the state in 1909 to 23,571, or 35.1 per cent of the total in 1914. There was a marked increase during the five-year period in the proportion of wage earners working 48 hours and in those working between 54 and 60 hours.

Of the selected industries, brick and tile, terra-cotta, and fire-clay products shows the greatest decrease in hours of labor. In 1909, 12.1 per cent of the wage earners in this industry were employed in establishments where the hours of labor were 54 or less per week, but in 1914 the proportion thus employed had increased to 68.4 per cent. In the lumber industry, 94.1 per cent of the average number of wage earners were employed 60 hours per week in 1914, as compared with 96.2 per cent in 1909. As this industry employs more than one-half the total number of wage earners in the state, it has a predominant influence on the hours of labor and tends to keep the prevailing hours higher than they would be otherwise. In the foundries and machine shops and in the shipbuilding industry, almost the total number of the wage earners were employed in establishments operating 54 hours or less per week. In the manufacture of copper, tin, and sheet-iron products, and in the brewery, clothing, printing and publishing, and a number of less important industries, the majority of the wage earners were employed 48 hours per week, while in the manufacture of butter, cheese, and condensed milk, the majority were employed in factories operating between 60 and 72 hours per week.

In the three cities of over 50,000 population, Seattle, Spokane, and Tacoma, 67.4 per cent, 63.5 per cent, and 37.9 per cent, respectively, of the wage earners were in establishments where the prevailing hours of labor were 54 or less.

Location of establishments.—Table 11 shows, for 1914, 1909, and 1899, the extent to which the manufactures in Washington were centralized in cities having more than 10,000 inhabitants.

Table 11

	Census year.	Aggregate.	Cities having a population of 10,000 or over.								Districts outside of cities having a population of 10,000 or over.	
			Total.		10,000 to 25,000.		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	1914	.....	10	.....	5	.....	2	.....	3	.....	.....	.....
	1910	.....	8	.....	5	.....	1	.....	2	.....	.....	.....
	1900	.....	5	.....	2	.....	3	.....	.....	.....	.....	.....
Population [1]	1914	1,407,865	696,791	49.5	82,702	5.9	61,985	4.4	552,104	39.2	711,074	50.5
	1910	1,141,990	521,557	45.7	96,218	8.4	83,743	7.3	341,596	29.9	620,433	54.3
	1900	518,103	176,344	34.0	21,111	4.1	155,233	30.0	.....	.....	341,759	66.0
Number of establishments	1914	3,829	2,024	52.9	210	5.5	184	4.8	1,630	42.6	1,805	47.1
	1909	3,674	[2] 1,629	44.3	[2] 315	8.6	[2] 277	7.5	1,037	28.2	[2] 2,045	55.7
	1899	1,926	691	35.9	81	4.2	610	31.7	.....	.....	1,235	64.1
Average number of wage earners	1914	67,205	30,573	45.5	4,478	6.7	3,881	5.8	22,214	33.1	36,632	54.5
	1909	69,120	[2] 28,508	41.2	[2] 6,264	9.1	[2] 6,820	9.9	[2] 15,424	22.3	[2] 40,612	58.8
	1899	31,523	10,767	34.2	1,715	5.4	9,052	28.7	.....	.....	20,756	65.8
Value of products	1914	$245,326,456	$136,691,774	55.7	$15,077,705	6.1	$12,794,712	5.2	$108,819,357	44.4	$108,634,682	44.3
	1909	220,746,421	[2] 113,145,124	51.3	[2] 19,251,918	8.7	[2] 24,462,198	11.1	[2] 69,431,008	31.5	[2] 107,601,297	48.7
	1899	70,831,345	32,973,483	46.6	3,593,480	5.1	29,380,003	41.5	.....	.....	37,857,862	53.4
Value added by manufacture	1914	108,717,147	56,409,858	51.9	6,778,223	6.2	5,427,963	5.0	44,203,672	40.7	52,307,289	48.1
	1909	102,858,733	[2] 48,932,527	47.6	[2] 8,857,786	8.6	[2] 9,516,417	9.3	[2] 30,558,324	29.7	[2] 53,926,206	52.4
	1899	32,554,401	13,561,487	41.7	1,419,116	4.4	12,142,371	37.3	.....	.....	18,992,914	58.3

[1] Census estimate of population for 1914.
[2] Figures do not agree with those published, because it was necessary to revise them in order to include data only for those establishments located within the corporate limits of the city.

In accepting the statistics in the table it must be remembered that two of the cities (Hoquiam and Vancouver) that had a population of 10,000 and over at the census of 1914 were included with those of outside districts in prior censuses. This is one explanation of the increase in number of establishments, average number of wage earners, value of products, and value added by manufacture, in the totals for the 10 cities combined for the five-year period. For the ten-year period 1899–1909 the increase in the relative industrial importance of this class of cities was somewhat less than the increase in their population, but for the five-year period 1909–1914 this condition has been reversed. The large proportions of the various totals for manufacturing industries reported from the districts outside the cities are mainly the result of the development of the lumber industry, canning and preserving, and the manufacture of butter, cheese, and condensed milk, which are largely confined to rural territory. The 1914 grouping of the cities in the above table is made up as follows: Walla Walla, North Yakima, Aberdeen, Vancouver, and Hoquiam, in the first group; Everett and Bellingham in the second; and Seattle, Spokane, and Tacoma in the third.

As a result of the large increases in the population of the various cities, the composition of the different groups has changed considerably since 1900. In that year there were no cities in the state with over 100,000 inhabitants, only three cities having between 25,000 and 100,000 inhabitants, and two having between 10,000 and 25,000 inhabitants, while five of the cities included in the 1914 grouping were included in the district outside of cities having a population of 10,000 or over. By 1910 Seattle and Spokane had so grown in population that each had over 100,000 inhabitants, Tacoma remained in the same group of cities as in 1900, while Everett and Bellingham grew so as to reach the group having between 25,000 and 100,000 inhabitants, and North Yakima and Aberdeen had sufficient population to be classed as cities of between 10,000 and 25,000 inhabitants. The growth of Everett in population was so rapid during the decade that in 1910 it skipped the first group entirely and advanced to the second. Two of the groups—those between 10,000 and 25,000 inhabitants and those between 25,000 and 100,000 inhabitants—show a decrease in 1914 as compared with 1909 in their relative growth as measured by each item in the table.

The 10 cities, which contained 49.5 per cent of the estimated population of the state in 1914, reported 55.7 per cent of the total value of products and 45.5 per cent of the total average number of wage earners. The corresponding proportions for 1909 were considerably less.

The relative importance in manufactures of each of the 10 cities having more than 10,000 inhabitants, as measured by average number of wage earners and by value of products in 1914, 1909, and 1904, is shown in Table 12. The cities are listed in the order of their importance as shown by value of products. Those for which comparative figures are not shown for 1909 and 1904 had less than 10,000 inhabitants in those years.

Table 12

CITY.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1914	1909	1904	1914	1909	1904
Seattle	12,429	[1] 11,523	6,390	$64,475,442	[1] $50,813,641	$25,406,574
Tacoma	6,765	[1] 6,820	4,457	27,707,606	[1] 24,462,198	14,263,818
Spokane	3,020	[1] 3,901	2,428	16,636,309	[1] 18,617,367	8,830,852
Everett	1,959	[1] 2,200	.....	6,530,405	[1] 6,593,071	.....
Bellingham	1,922	1,566	1,314	6,264,307	4,599,637	3,293,988
Hoquiam	1,657	.....	.....	5,009,410	.....	.....
Aberdeen	1,568	1,509	.....	4,815,113	3,590,230	.....
Walla Walla	311	388	242	2,014,673	2,316,813	1,485,791
North Yakima	582	602	.....	1,937,461	2,175,367	.....
Vancouver	360	.....	.....	1,301,048	.....	.....

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

The manufacturing industries of Seattle and Bellingham show an increase in both value of products and in average number of wage earners for each of the five-year periods 1904–1909 and 1909–1914, but the increase in wage earners is not proportionate to the increase in value of products. The industries contributing largely to these increases were slaughtering and meat packing, malt liquor, and the flour mills and gristmills in Seattle and the canning of fish in Bellingham.

Spokane, Walla Walla, Everett, and North Yakima each shows a decrease in wage earners and in value of products for the five-year period from 1909 to 1914.

Tacoma, the second city in manufacturing importance, shows an increase in 1914 over 1909 of 13.3 per cent in value of products, but a small decrease (0.8 per cent) in wage earners. The leading industries of the city are slaughtering and meat packing, lumber, flour mills, and the manufacture of malt liquors and foundry and machine-shop products.

In each of the remaining cities shown in the table the leading industries were as follows: Slaughtering and meat packing, printing and publishing, and lumber in Spokane; lumber and timber in Aberdeen, Hoquiam, North Yakima, and Everett; steam-railroad repair shops and malt liquors in Vancouver; and flour mills and gristmills and slaughtering and meat packing in Walla Walla.

Character of ownership.—Table 13 presents statistics concerning the character of ownership, or legal organization, of manufacturing enterprises. For all industries combined comparative figures are given for 1914, 1909, and 1904; for selected industries, statistics for 1914 and 1909 are shown; and for individual cities, the figures are for all industries combined and relate only to 1914. In order to avoid disclosing the operations of individual establishments, it is necessary to omit several important industries from this table.

This table shows for all industries combined an increase during the decade in the number of establishments operated under individual and corporate ownership and a decrease in the number for all other forms of ownership. Although corporations show a smaller proportion of the number of establishments than those owned by individuals, they largely predominate in value of products and average number of wage earners. In 1914 corporations controlled only 38 per cent of the total number of establishments in the state but they reported 88.3 per cent of the total value of products and 88.1 per cent of the total average number of wage earners. The total average number of wage earners and value of products reported by corporations have been greater, both actually and proportionately, at each successive census. In 1914 the largest proportions of the total value of products for the nine industries, for which separate statistics are given, are shown for corporate ownership. This condition prevails also in each of the 10 cities. In Hoquiam 97.9 per cent of the average number of wage earners and 97.6 per cent of the value of products are reported by corporations, which own 54.5 per cent of the total number of establishments in that city.

Table 13

Industry and city.	Census 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.	
		Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
All industries	1914	1,714	1,454	661	67,205	4,643	59,171	3,391	6.9	88.1	5.0	$245,326,456	$17,304,674	$216,661,919	$11,359,863	7.1	88.3	4.6
	1909	1,445	1,444	785	69,120	6,814	57,107	5,199	9.9	82.6	7.5	220,746,421	20,580,962	185,171,875	14,993,584	9.3	83.9	6.8
	1904	1,184	926	641	45,199	6,032	34,107	5,060	13.3	75.5	11.2	128,821,667	13,651,438	103,215,882	11,954,347	10.6	80.1	9.3
Bread and other bakery products.	1914	303	27	60	1,419	553	689	177	39.0	48.6	12.5	6,572,356	2,596,081	3,160,105	816,170	39.5	48.1	12.4
	1909	216	16	66	969	411	370	188	42.4	38.2	19.4	4,569,677	2,040,435	1,561,783	967,459	44.7	34.2	21.2
Brick and tile, terra-cotta, and fire-clay products.	1914	14	19	7	962	92	842	28	9.6	87.5	2.9	2,026,801	154,344	1,801,018	71,439	7.6	88.9	3.5
	1909	20	27	19	1,589	146	1,325	118	9.2	83.4	7.4	3,082,178	272,333	2,605,805	204,040	8.8	84.5	6.6
Butter, cheese, and condensed milk.	1914	26	50	25	860	63	723	74	7.3	84.1	8.6	11,807,897	1,041,410	9,119,409	1,647,078	8.8	77.2	13.9
	1909	27	40	30	735	58	616	61	7.9	83.8	8.3	7,271,047	787,342	5,333,026	1,150,679	10.8	73.3	15.8
Canning and preserving	1914	16	60	10	2,352	89	1,923	340	3.8	81.8	14.5	9,449,549	471,829	8,021,768	955,952	5.0	84.9	10.1
	1909	17	58	5	2,029	170	1,821	38	8.4	89.7	1.9	9,595,387	672,497	8,518,319	404,571	7.0	88.8	4.2
Copper, tin, and sheet-iron products.	1914	63	23	26	415	137	235	43	33.0	56.6	10.4	1,619,870	413,646	989,005	217,219	25.5	61.1	13.4
	1909	45	17	19	583	207	298	78	35.5	51.1	13.4	1,945,720	666,412	983,012	296,296	34.3	50.5	15.2
Flour-mill and gristmill products.	1914	28	56	16	928	55	846	27	5.9	91.2	2.9	23,665,382	1,519,030	21,735,290	411,062	6.4	91.8	1.7
	1909	24	54	18	644	38	553	53	5.9	85.9	8.2	17,852,944	720,169	16,252,788	879,987	4.0	91.0	4.9
Foundry and machine-shop products.	1914	99	94	50	2,128	178	1,733	217	8.4	81.4	10.2	6,837,241	575,917	5,607,551	653,773	8.4	82.0	9.6
	1909	62	79	37	2,439	238	2,013	188	9.8	82.5	7.7	7,987,931	608,682	6,750,053	629,196	7.6	84.5	7.9
Lumber and timber products.	1914	257	515	167	38,079	1,703	34,765	1,611	4.5	91.3	4.2	83,535,760	3,655,887	76,674,029	3,205,844	4.4	91.8	3.8
	1909	322	657	284	43,749	3,273	37,286	3,190	7.5	85.2	7.3	89,154,820	6,290,252	76,796,537	6,068,031	7.1	86.1	6.8
Printing and publishing	1914	378	155	105	2,341	537	1,645	159	22.9	70.3	6.8	9,824,293	1,846,034	7,371,656	606,603	18.8	75.0	6.2
	1909	315	107	84	2,624	882	1,498	244	33.6	57.1	9.3	9,286,188	3,335,207	4,883,678	1,067,303	35.9	52.6	11.5
Total for cities	1914	894	792	338	30,573	2,363	26,667	1,543	7.7	87.2	5.0	136,691,774	9,784,062	121,320,607	5,587,105	7.2	88.8	4.1
Aberdeen	1914	21	27	12	1,568	40	1,255	273	2.6	80.0	17.4	4,815,113	154,260	3,910,576	750,277	3.2	81.2	15.6
Bellingham	1914	41	32	13	1,922	95	1,792	35	4.9	93.2	1.8	6,264,307	371,217	5,784,700	108,390	5.9	92.3	1.7
Everett	1914	49	35	14	1,959	107	1,748	104	5.5	89.2	5.3	6,530,405	346,443	5,873,335	310,627	5.3	89.9	4.8
Hoquiam	1914	10	18	5	1,657	28	1,622	7	1.7	97.9	0.4	5,009,410	90,549	4,890,129	28,732	1.8	97.6	0.6
North Yakima	1914	16	19	7	582	50	503	29	8.6	86.4	5.0	1,937,461	430,760	1,408,485	98,216	22.2	72.7	5.1
Seattle	1914	456	391	167	12,429	1,315	10,406	708	10.6	83.7	5.7	64,475,442	5,760,442	55,879,904	2,835,096	8.9	86.7	4.4
Spokane	1914	119	111	47	3,020	311	2,546	163	10.3	84.3	5.4	16,636,309	1,003,007	15,013,615	619,687	6.0	90.2	3.7
Tacoma	1914	154	129	56	6,765	348	6,232	185	5.1	92.1	2.7	27,707,606	1,198,131	25,909,340	600,135	4.3	93.5	2.2
Vancouver	1914	14	9	5	360	30	312	18	8.3	86.7	5.0	1,301,048	113,906	1,083,592	103,550	8.8	83.3	8.0
Walla Walla	1914	14	21	12	311	39	251	21	12.5	80.7	6.8	2,014,673	315,347	1,566,931	132,395	15.7	77.8	6.6

Size of establishments.—The tendency for manufacturing to become concentrated in large establishments or the reverse is indicated by the statistics given in Table 14.

Table 14

Value of product.	Number of establishments.			Average number of wage earners.			Value of products.			Value added by manufacture.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904
All classes	3,829	3,674	2,751	67,205	69,120	45,199	$245,326,456	$220,746,421	$128,821,667	$108,717,147	$102,858,733	$62,655,502
Less than $5,000	1,327	902	765	1,069	963	895	3,277,559	2,397,468	1,962,006	2,225,976	1,639,474	1,353,090
$5,000 to $20,000	1,213	1,276	977	4,537	5,918	5,234	13,043,612	13,824,059	10,749,963	7,828,292	8,598,987	6,942,196
$20,000 to $100,000	850	1,073	758	13,280	18,671	14,562	39,264,264	47,224,421	32,957,702	19,981,501	26,287,103	19,105,365
$100,000 to $1,000,000	408	403	238	38,400	37,553	20,411	118,380,972	114,920,746	55,150,426	55,698,769	55,916,259	27,624,134
$1,000,000 and over	31	20	13	9,919	6,015	4,097	71,360,049	42,379,727	28,001,570	22,982,609	10,416,910	7,630,717
	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	34.7	24.6	27.8	1.6	1.4	2.0	1.3	1.1	1.5	2.0	1.6	2.2
$5,000 to $20,000	31.7	34.7	35.5	6.8	8.6	11.6	5.3	6.3	8.3	7.2	8.4	11.1
$20,000 to $100,000	22.2	29.2	27.6	19.8	27.0	32.2	16.0	21.4	25.6	18.4	25.6	30.5
$100,000 to $1,000,000	10.7	11.0	8.7	57.1	54.3	45.2	48.2	52.1	42.8	51.2	54.4	44.1
$1,000,000 and over	0.8	0.5	0.5	14.8	8.7	9.1	29.1	19.2	21.7	21.1	10.1	12.2

For 1914, 439 establishments, or 11.5 per cent of the total number in the state, each reported products exceeding $100,000 in value. In 1909 the proportion which establishments of this size formed of the total was the same, while in 1904 the percentage was only slightly less, but a proportional increase in value of products is shown at each successive census, from 64.5 per cent in 1904 to 71.3 per cent in 1909 and to 77.3 per cent in 1914. In 1914 this group reported 71.9 per cent of the total average number of wage earners for the state, 77.3 per cent of the total value of products, and 72.4 per cent of the total value added by manufacture. In the same year the small establishments—having products less than $5,000 in value—although 34.7 per cent of the total number, reported only 1.3 per cent of total value of products.

Table 15 gives, for 1914 and 1909, for six of the more important industries, a classification of establishments, the average number of wage earners, value of products, and the value added by manufacture similar to that presented in Table 14 for all industries combined.

Table 15

Industry and value of product.	Number of establishments.				Average number of wage earners.				Value of products.				Value added by manufacture.			
	1914	1909	Per cent distribution. 1914	Per cent distribution. 1909	1914	1909	Per cent distribution. 1914	Per cent distribution. 1909	1914	1909	Per cent distribution. 1914	Per cent distribution. 1909	1914	1909	Per cent distribution. 1914	Per cent distribution. 1909
Butter, cheese, and condensed milk	101	97	100.0	100.0	860	735	100.0	100.0	$11,807,897	$7,271,047	100.0	100.0	$2,296,189	$1,594,856	100.0	100.0
Less than $5,000	5	5	5.0	5.2	6	2	0.7	0.3	14,728	19,358	0.1	0.3	3,438	3,894	0.1	0.2
$5,000 to $20,000	27	27	26.7	27.8	40	35	4.7	4.8	523,638	325,382	4.4	4.5	124,388	60,071	5.4	3.8
$20,000 to $100,000	52	50	51.5	51.5	160	148	18.6	20.1	2,472,420	2,372,212	20.9	32.6	358,181	338,208	15.6	21.2
$100,000 and over [1]	17	15	16.8	15.5	654	550	76.0	74.8	8,797,111	4,554,095	74.5	62.6	1,810,182	1,192,683	78.8	74.8
Canning and preserving	86	80	100.0	100.0	2,352	2,029	100.0	100.0	9,449,549	9,595,387	100.0	100.0	4,170,738	4,549,864	100.0	100.0
Less than $5,000	5	8	5.8	10.0	8	14	0.3	0.7	8,694	21,237	(2)	0.2	6,303	11,236	0.2	0.2
$5,000 to $20,000	23	15	26.7	18.8	147	111	6.2	5.5	251,541	165,447	2.7	1.7	114,614	92,392	2.7	2.0
$20,000 to $100,000	31	25	36.0	31.2	483	334	20.5	16.5	1,603,181	1,064,505	17.0	11.1	706,860	458,446	16.9	10.1
$100,000 and over [1]	27	32	31.4	40.0	1,714	1,570	72.9	77.4	7,586,133	8,344,198	80.3	87.0	3,342,961	3,987,790	80.2	87.6
Flour-mill and gristmill products	100	96	100.0	100.0	928	644	100.0	100.0	23,665,382	17,852,944	100.0	100.0	3,392,887	2,378,848	100.0	100.0
Less than $5,000	7	3	7.0	3.1	2	1	0.2	0.2	24,895	7,040	0.1	0.1	6,188	1,475	0.2	0.1
$5,000 to $20,000	25	24	25.0	25.0	30	24	3.2	3.7	286,065	294,065	1.2	1.6	65,933	55,148	1.9	2.3
$20,000 to $100,000	30	33	30.0	34.4	74	90	8.0	14.0	1,436,694	1,529,688	6.1	8.6	250,720	260,368	7.4	10.9
$100,000 to $1,000,000	31	32	31.0	33.3	362	390	39.0	60.6	8,938,838	10,630,124	37.8	59.5	1,250,315	1,503,703	36.9	63.2
$1,000,000 and over	7	4	7.0	4.2	460	139	49.6	21.6	12,978,890	5,392,027	54.8	30.2	1,819,731	558,154	53.6	23.5
Foundry and machine-shop products	243	178	100.0	100.0	2,128	2,439	100.0	100.0	6,837,241	7,987,931	100.0	100.0	3,836,969	4,263,909	100.0	100.0
Less than $5,000	89	42	36.6	23.6	72	52	3.4	2.1	235,694	128,740	3.4	1.6	164,233	86,426	4.3	2.0
$5,000 to $20,000	81	60	33.3	33.7	346	230	16.3	9.4	876,087	625,964	12.8	7.8	580,303	387,864	15.1	9.1
$20,000 to $100,000	59	64	24.3	36.0	683	921	32.1	37.8	2,299,862	2,626,980	33.6	32.9	1,285,108	1,524,797	33.5	35.8
$100,000 and over	14	12	5.8	6.7	1,027	1,236	48.3	50.7	3,425,598	4,606,247	50.1	57.7	1,807,325	2,264,822	47.1	53.1
Lumber and timber products	939	1,263	100.0	100.0	38,079	43,749	100.0	100.0	83,535,760	89,154,820	100.0	100.0	45,062,188	52,275,954	100.0	100.0
Less than $5,000	218	161	23.2	12.7	354	323	0.9	0.7	510,050	437,304	0.6	0.5	362,455	322,212	0.8	0.6
$5,000 to $20,000	227	390	24.2	30.9	1,499	2,844	3.9	6.5	2,563,038	4,595,974	3.1	5.2	1,649,696	3,074,419	3.7	5.9
$20,000 to $100,000	286	505	30.5	40.0	6,712	11,998	17.6	27.4	14,234,485	22,997,212	17.0	25.8	7,891,704	14,473,202	17.5	27.7
$100,000 to $1,000,000	202	204	21.5	16.2	26,391	26,884	69.3	61.4	59,576,738	57,507,240	71.3	64.5	31,806,630	32,694,937	70.6	62.5
$1,000,000 and over	6	3	0.6	0.2	3,123	1,700	8.2	3.9	6,651,449	3,617,090	8.0	4.1	3,351,703	1,711,184	7.4	3.3
Printing and publishing	638	506	100.0	100.0	2,341	2,624	100.0	100.0	9,824,293	9,286,188	100.0	100.0	7,389,468	7,062,598	100.0	100.0
Less than $5,000	367	242	57.5	47.8	215	220	9.2	8.4	927,405	647,984	9.4	7.0	764,805	512,531	10.3	7.3
$5,000 to $20,000	197	200	30.9	39.5	547	684	23.4	26.1	1,968,073	1,859,002	20.0	20.0	1,584,556	1,449,025	21.4	20.5
$20,000 to $100,000	59	54	9.2	10.7	656	885	28.0	33.7	2,649,421	2,290,718	27.0	24.7	2,151,430	1,689,976	29.1	23.9
$100,000 and over [1]	15	10	2.4	2.0	923	835	39.4	31.8	4,279,394	4,488,484	43.6	48.3	2,888,677	3,411,066	39.1	48.3

[1] Includes the group "$1,000,000 and over."

[2] Less than one-tenth of 1 per cent.

For 1914, as compared with 1909, only one of the six selected industries, namely, canning and preserving, showed a decrease in the number of establishments having products under $5,000 in value. All other industries in this group show an increase, except butter, cheese, and condensed milk, which shows the same number of establishments in 1914 as in 1909. For the establishments having products valued at $100,000 and over, all of the industries, except foundry and machine shops, show an increase in the average number of wage earners. Butter, cheese, and condensed-milk factories, flour mills and gristmills, and the lumber industry for establishments "$100,000 and over," show increases in value of products, but canning and preserving, foundry and machine shops and printing and publishing show decreases.

Table 16 presents, for 1914, for all industries combined in each of the 10 cities having more than 10,000 inhabitants, statistics similar to those given in Table 14 for the state as a whole.

In the cities the same general condition prevails as that found throughout the state, namely, a preponderance as to number of wage earners, value of products, and value added by manufactures, for establishments having products valued at $100,000 and over. The highest percentage of total value of products reported by establishments of this class, 92.1, appears for Hoquiam, and the lowest, 48.6, is shown for Walla Walla.

Each of the 10 cities shows a considerable proportion of the total number of establishments as having products valued at less than $20,000, but their combined value of products was relatively small. Of the total number of such establishments for the 3 cities having over 100,000 inhabitants, those in Seattle represented 65.2 per cent, Spokane 67.5 per cent, and Tacoma 68.7 per cent, whereas the value of products formed only 7 per cent, 8.2 per cent, and 5.2 per cent, respectively.

Table 16

City and value of product.	Number of establishments.	Wage earners. Average number.	Wage earners. Per cent of total.	Value of products. Amount.	Value of products. Per cent of total.	Value added by manufacture. Amount.	Value added by manufacture. Per cent of total.
Aberdeen	60	1,568	100.0	$4,815,113	100.0	$2,203,411	100.0
Less than $5,000	14	9	0.6	43,272	0.9	27,597	1.3
$5,000 to $20,000	24	103	6.6	247,862	5.1	152,555	6.9
$20,000 to $100,000	11	190	12.1	587,135	12.2	260,643	11.8
$100,000 and over	11	1,266	80.7	3,936,844	81.8	1,762,616	80.0
Bellingham	86	1,922	100.0	6,264,307	100.0	2,898,003	100.0
Less than $5,000	25	14	0.7	61,511	1.0	36,542	1.3
$5,000 to $20,000	31	128	6.7	351,663	5.6	206,453	7.1
$20,000 to $100,000	19	251	13.1	753,037	12.0	388,970	13.4
$100,000 and over [1]	11	1,529	79.6	5,098,096	81.4	2,266,038	78.2
Everett	98	1,959	100.0	6,530,405	100.0	2,529,960	100.0
Less than $5,000	34	23	1.2	90,637	1.4	59,572	2.4
$5,000 to $20,000	30	119	6.1	401,320	6.1	270,307	10.7
$20,000 to $100,000	23	348	17.8	1,121,022	17.2	605,621	23.9
$100,000 and over	11	1,469	75.0	4,917,426	75.3	1,594,460	63.0
Hoquiam	33	1,657	100.0	5,009,410	100.0	1,967,549	100.0
Less than $5,000	5	1	0.1	11,404	0.2	6,594	0.3
$5,000 to $20,000	12	37	2.2	113,999	2.3	74,503	3.8
$20,000 to $100,000	7	96	5.8	269,117	5.4	146,674	7.5
$100,000 and over [1]	9	1,523	91.9	4,614,890	92.1	1,739,778	88.4
North Yakima	42	582	100.0	1,937,461	100.0	1,064,901	100.0
Less than $5,000	9	12	2.1	29,247	1.5	20,253	1.9
$5,000 to $20,000	16	49	8.4	183,751	9.5	79,590	7.5
$20,000 to $100,000	14	150	25.8	583,729	30.1	378,625	35.6
$100,000 and over	3	371	63.7	1,140,734	58.9	586,433	55.1
Seattle	1,014	12,429	100.0	$64,475,442	100.0	$26,705,318	100.0
Less than $5,000	316	188	1.5	854,188	1.3	577,519	2.2
$5,000 to $20,000	345	1,052	8.5	3,677,101	5.7	2,289,439	8.6
$20,000 to $100,000	258	3,428	27.6	11,263,643	17.5	6,027,459	22.6
$100,000 to $1,000,000	83	5,065	40.8	21,371,790	33.1	8,792,598	32.9
$1,000,000 and over	12	2,696	21.7	27,308,720	42.4	9,018,303	33.8
Spokane	277	3,020	100.0	16,636,309	100.0	7,181,897	100.0
Less than $5,000	81	50	1.7	198,245	1.2	139,473	1.9
$5,000 to $20,000	106	365	12.1	1,172,972	7.1	702,360	9.8
$20,000 to $100,000	60	684	22.6	2,806,720	16.9	1,586,482	22.1
$100,000 and over [1]	30	1,921	63.6	12,458,372	74.9	4,753,582	66.2
Tacoma	339	6,765	100.0	27,707,606	100.0	10,316,457	100.0
Less than $5,000	127	97	1.4	289,392	1.0	188,604	1.8
$5,000 to $20,000	106	371	5.5	1,154,576	4.2	683,128	6.6
$20,000 to $100,000	61	821	12.1	2,706,024	9.8	1,228,639	11.9
$100,000 to $1,000,000	38	2,889	42.7	9,596,833	34.6	4,964,120	48.1
$1,000,000 and over	7	2,587	38.2	13,960,781	50.4	3,251,966	31.5
Vancouver	28	360	100.0	1,301,048	100.0	743,698	100.0
Less than $5,000	10	7	1.9	23,877	1.8	15,951	2.2
$5,000 to $20,000	9	38	10.6	95,550	7.3	62,695	8.4
$20,000 to $100,000	6	33	9.2	308,671	23.7	85,306	11.5
$100,000 and over	3	282	78.3	872,950	67.1	579,746	77.9
Walla Walla	47	311	100.0	2,014,673	100.0	798,664	100.0
Less than $5,000	9	5	1.6	25,223	1.2	15,284	1.9
$5,000 to $20,000	18	75	24.1	362,323	18.0	179,899	22.5
$20,000 to $100,000	15	170	54.7	648,553	32.2	321,650	40.3
$100,000 and over	5	61	19.6	978,574	48.6	281,831	35.3

[1] Includes the group "$1,000,000 and over."

Table 17 shows the size of establishments in 1914 as measured by the number of wage earners employed, for all industries combined, for 20 of the more important industries, and for each of the 10 cities having more than 10,000 inhabitants. Table 18 presents, for 1914, percentages based on the figures in Table 17, and for 1909 similar percentages for all industries combined and for individual industries in the state as a whole.

Table 17

Industry and city.	Total. Establishments.	Total. Wage earners (average number).	Establishments employing— No wage earners. Establishments.	1 to 5 wage earners. Establishments.	1 to 5 wage earners. Wage earners.	6 to 20 wage earners. Establishments.	6 to 20 wage earners. Wage earners.	21 to 50 wage earners. Establishments.	21 to 50 wage earners. Wage earners.
All industries	3,829	67,205	688	1,830	4,149	745	8,362	267	8,613
Bread and other bakery products	390	1,419	123	214	418	41	364	8	215
Brick and tile, terra-cotta, and fire-clay products	40	962	.....	18	45	13	140	6	181
Butter, cheese, and condensed milk	101	860	5	75	165	14	130	4	121
Canning and preserving	86	2,352	1	26	89	31	368	19	582
Cars and general shop construction and repairs by electric-railroad companies	13	382	.....	5	13	4	52	2	64
Cars and general shop construction and repairs by steam-railroad companies	26	4,543	.....	1	5	6	85	5	181
Clothing, men's, including shirts	9	405	.....	1	4	4	25	1	46
Confectionery	67	510	8	42	107	13	163	2	43
Cooperage and wooden goods, not elsewhere specified	8	263	.....	5	9	.....	.....	1	28
Copper, tin, and sheet-iron products	112	415	20	74	143	15	159	3	113
Flour-mill and gristmill products	100	928	8	59	126	23	266	6	188
Foundry and machine-shop products	243	2,128	40	121	307	63	660	9	276
Furniture	50	544	11	23	49	12	126	1	47
Gas, illuminating and heating	13	630	.....	4	11	4	61	3	109
Liquors, malt	25	883	2	3	13	13	174	4	153
Lumber and timber products	939	38,079	32	314	775	264	3,135	128	4,238
Printing and publishing	638	2,341	239	324	665	56	612	13	439
Shipbuilding, including boat building	64	1,444	13	31	81	14	135	4	135
Slaughtering and meat packing	11	864	.....	3	5	2	24	2	68
Tobacco, cigars	115	215	52	53	110	9	82	1	23
All other industries	779	7,038	134	434	1,009	144	1,601	45	1,363
Total for cities	2,024	30,573	398	950	2,350	418	4,642	143	4,607
Aberdeen	60	1,568	8	28	63	11	170	4	130
Bellingham	86	1,922	16	34	71	24	227	6	175
Everett	98	1,959	16	45	101	23	283	7	230
Hoquiam	33	1,657	4	13	38	6	75	2	69
North Yakima	42	582	3	25	67	12	115	1	38
Seattle	1,014	12,429	223	464	1,165	204	2,272	76	2,382
Spokane	277	3,020	52	134	346	58	571	21	691
Tacoma	339	6,765	69	164	405	62	737	21	762
Vancouver	28	360	2	17	31	6	48	1	26
Walla Walla	47	311	5	26	63	12	144	4	104

Table 17—Continued.

INDUSTRY AND CITY.	ESTABLISHMENTS EMPLOYING— 51 to 100 wage earners.		101 to 250 wage earners.		251 to 500 wage earners.		501 to 1,000 wage earners.		Over 1,000 wage earners.	
	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries	121	8,727	139	20,945	29	9,455		5,936	1	1,018
Bread and other bakery products	3	235	1	187						
Brick and tile, terra-cotta, and fire-clay products	1	68	1	160	1	368				
Butter, cheese, and condensed milk	2	133			1	311				
Canning and preserving	5	330	3	481			1	502		
Cars and general shop construction and repairs by electric-railroad companies			2	253						
Cars and general shop construction and repairs by steam-railroad companies	4	279	6	1,071			4	2,922		
Clothing, mens, including shirts	1	84	2	246						
Confectionery	1	87	1	110						
Cooperage and wooden goods, not elsewhere specified			2	226						
Copper, tin, and sheet-iron products										
Flour-mill and gristmill products	2	134	2	214						
Foundry and machine-shop products	6	313	4	572						
Furniture	1	74	2	248						
Gas, illuminating and heating	1	76			1	373				
Liquors, malt	2	157			1	386				
Lumber and timber products	75	5,519	100	15,176	22	6,724	4	2,512		
Printing and publishing	3	224	3	401						
Shipbuilding, including boat building	1	75							1	1,018
Slaughtering and meat packing	2	198	1	226	1	343				
Tobacco, cigars										
All other industries	11	741	9	1,374	2	950				
Total for cities	44	3,206	54	7,874	12	4,026	4	2,850	1	1,018
ABERDEEN	2	157	7	1,048						
BELLINGHAM			4	548	1	399	1	502		
EVERETT	1	83	5	993	1	269				
HOQUIAM	2	116	3	462	3	897				
NORTH YAKIMA					1	362				
SEATTLE	21	1,402	21	2,800	4	1,390			1	1,018
SPOKANE	7	586	4	559	1	267				
TACOMA	10	805	9	1,266	1	442	3	2,348		
VANCOUVER	1	57	1	198						
WALLA WALLA										

Table 18

INDUSTRY AND CITY	Census year.	PER CENT OF TOTAL AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS EMPLOYING SPECIFIED NUMBER. 1 to 5	6 to 20	21 to 50	51 to 100	101 to 250	251 to 500	501 to 1,000	Over 1,000
All industries	1914	6.2	12.4	12.8	13.0	31.2	14.1	8.8	1.5
	1909	5.9	17.0	15.7	15.9	27.5	14.4	2.1	1.6
Bread and other bakery products.	1914	29.4	25.7	15.2	16.6	13.2			
	1909	42.0	27.9	7.5	10.2	12.4			
Brick and tile, terra-cotta, and fire-clay products.	1914	4.7	14.6	18.8	7.1	16.6	38.2		
	1909	5.4	16.4	20.8			57.4		
Butter, cheese, and condensed milk.	1914	19.2	15.1	14.1	15.5		36.2		
	1909	19.2	13.9	16.5	28.1	22.4			
Canning and preserving	1914	3.8	15.6	24.7	14.0	20.5		21.3	
	1909	3.4	21.9	24.0	14.9		35.9		
Cars and general shop construction and repairs by electric-railroad companies.	1914	3.4	13.6	16.8		66.2			
	1909	1.7	12.9		43.9	41.5			
Cars and general shop construction and repairs by steam-railroad companies.	1914	0.1	1.9	4.0	6.1	23.6		64.3	
	1909	0.3	1.6	2.8	9.1	21.2	25.1		39.9
Clothing, men's, including shirts.	1914	1.0	6.2	11.4	20.7	60.7			
	1909	5.6	8.2	30.9	55.4				
Confectionery	1914	21.0	32.0	8.4	17.1	21.6			
	1909	13.1	23.5	3.6	42.8	17.0			
Cooperage and wooden goods, not elsewhere specified.	1914	3.4		10.6		85.9			
	1909	11.3	14.4	74.2					
Copper, tin, and sheet-iron products.	1914	34.5	38.3	27.2					
	1909	19.7	45.3	35.0					
Flour-mill and gristmill products.	1914	13.6	28.7	20.3	14.4	23.1			
	1909	22.5	41.3	27.6	8.5				
Foundry and machine-shop products.	1914	14.4	31.0	13.0	14.7	26.9			
	1909	8.2	29.8	16.0	6.5	39.6			
Furniture	1914	9.0	23.2	8.6	13.6	45.6			
	1909	10.0	13.7	31.6	15.5	29.2			
Gas, illuminating and heating	1914	1.7	9.7	17.3	12.1		59.2		
	1909	0.9	11.0	5.6	30.7	51.8			
Liquors, malt	1914	1.5	19.7	17.3	17.8		43.7		
	1909	1.7	24.3	19.9	17.5		36.6		
Lumber and timber products	1914	2.0	8.2	11.1	14.5	39.9	17.7	6.6	
	1909	2.3	13.6	14.7	18.1	33.1	15.0	3.3	
Printing and publishing	1914	28.4	26.1	18.8	9.7	17.1			
	1909	25.1	29.1	15.7	18.8	11.3			
Shipbuilding, including boat building.	1914	5.6	9.3	9.3	5.2				70.5
	1909	7.7	27.0	16.7	10.1		38.6		
Slaughtering and meat packing	1914	0.6	2.8	7.9	22.9	26.2	39.7		
	1909	0.8	8.3	4.8	7.4	47.3	31.3		
Tobacco, cigars	1914	51.2	38.1	10.7					
	1909	45.9	20.3	33.8					
All other industries	1914	14.3	22.7	19.4	10.5	19.5	13.5		
	1909	13.4	28.8	22.6	6.8	19.1	9.4		
Total for cities	1914	7.7	15.2	15.1	10.5	25.8	13.2	9.3	3.3
ABERDEEN	1914	4.0	10.8	8.3	10.0	66.8			
BELLINGHAM	1914	3.7	11.8	9.1		28.5	20.8	26.1	
EVERETT	1914	5.2	14.4	11.7	4.2	50.7	13.7		
HOQUIAM	1914	2.3	4.5	4.2	7.0	27.9	54.1		
NORTH YAKIMA	1914	11.5	19.8	6.5			62.2		
SEATTLE	1914	9.4	18.3	19.1	11.3	22.5	11.2		8.2
SPOKANE	1914	11.5	18.9	22.9	19.4	18.5	8.8		
TACOMA	1914	6.0	10.9	11.3	11.9	18.7	6.5	34.7	
VANCOUVER	1914	8.6	13.3	7.2	15.8	55.0			
WALLA WALLA	1914	20.3	46.3	33.4					

Of the total number of establishments for all industries combined, 688 or 18 per cent, employed no wage earners in 1914. These were small establishments in which the work was done by the proprietors or firm members. In some cases they employed a few wage earners for short periods, but the number was so small and the periods so short that in computing the average number as described in the "Explanation of terms" no wage earners could be shown for the establishment. Of the establishments employing wage earners, 2,575, or 82 per cent, reported 20 or less; 388, or 12.4 per cent, reported more than 20 but less than 100; and 178, or 5.7 per cent, reported over 100. The corresponding percentages for 1909 are 80.9, 14.4, and 4.7, respectively.

Although there were only 178 establishments in the state in which over 100 wage earners were reported in 1914, this group gave employment to 37,354, or 55.6 per cent of the total number of wage earners. During the period from 1909 to 1914 the proportion of wage earners increased for the group reporting 101 to 250 and the one reporting 501 to 1,000, while it decreased slightly for the one employing 251 to 500 and the one for over 1,000. The smaller establishments are largely confined to the bakeries, printing, and tobacco manufactures, in each of which the majority employ from 1 to 5 wage earners. On the other hand, in the manufacfacture of brick and tile, terra-cotta, and fire-clay products, men's clothing, and gas, in the steam and electric railroad repair shops, in the lumber industry, and in slaughtering and meat packing, the majority of wage earners were in establishments where more than 100 were employed. With the exception of printing and publishing, which ranked first in the number of establishments having 1 to 5 wage earners, the lumber industry shows the largest number of establishments and the largest number of wage earners in each of the groups shown in the table.

Among the cities, the highest percentages of the total number of wage earners reported by establishments employing more than 100 wage earners each are shown for Hoquiam (82) and Bellingham (75.4).

Engines and power.—Table 19 shows, for 1914, 1909, and 1904, for all industries combined, the number and total horsepower of engines or motors employed in generating power (including electric motors operated by purchased current). It also shows separately the number and horsepower and per cent distribution of electric motors operated by current generated by the establishments reporting.

Table 19

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904
Primary power, total	9,280	6,149	2,257	399,567	297,897	168,342	100.0	100.0	100.0
Owned	3,275	3,291	2,257	314,391	266,808	155,933	78.7	89.6	92.6
Steam engines and turbines [1]	2,899	2,957	2,038	301,923	257,249	150,798	75.6	86.4	89.6
Internal-combustion engines	260	178	72	3,162	1,494	493	0.8	0.5	0.3
Water wheels, turbines, and motors	116	156	147	9,306	8,065	4,642	2.3	2.7	2.8
Rented	6,005	2,858	.....	85,176	31,089	12,409	21.3	10.4	7.3
Electric	6,005	2,858	(2)	84,953	30,951	11,650	21.3	10.4	6.9
Other	.....	.....	.....	223	138	759	(3)	(3)	0.4
Electric	7,344	3,564	.....	112,485	43,615	15,290	100.0	100.0	100.0
Rented	6,005	2,858	(2)	84,953	30,951	11,650	75.5	71.0	76.2
Generated by establishments reporting	1,339	706	274	27,532	12,664	3,640	24.5	29.0	23.8

[1] Figures for horsepower include for 1909 and 1904 the amounts reported under the head of "other" owned power.
[2] Not reported.
[3] Less than one-tenth of 1 per cent.

This table shows an increase in primary power amounting to 101,670 horsepower, or 34.1 per cent, from 1909 to 1914. The use of rented power, now almost wholly electric, has greatly increased since 1904, when it represented only 7.3 per cent of the total primary power reported. In 1909 the amount of rented power had increased to 10.4 per cent of the total and in 1914 to 21.3 per cent. The increase in the use of electric motors run by current generated within the same establishment has been considerable since 1904.

Of the total increase from 1909 to 1914 in primary power, 44,674 horsepower, or 17.4 per cent, was in that generated by steam. The use of internal-combustion engines increased rapidly during the decade. The capacity of such engines, however, represented only eight-tenths of 1 per cent of the total primary power in 1914. During the last five-year period there was a slight increase in the horsepower of water wheels, turbines, and motors, but a slight decrease in its proportion to the total primary power.

Fuel.—Closely related to the subject of power employed in manufactures is that of the fuel consumed in generating this power or otherwise used in the manufacturing processes.

Table 20 shows, for 1914, the quantity of each kind of fuel used, for which data were obtained, for all industries combined and for selected industries in the state as a whole, and for all industries combined in each city.

Table 20

INDUSTRY AND CITY.	COAL. Anthracite (tons, 2,240 lbs.).	COAL. Bituminous (tons, 2,000 lbs.).	Coke (tons, 2,000 lbs.).	Oil, including gasoline (barrels).	Gas (1,000 cubic feet).
All industries	4,525	490,801	69,355	1,496,957	88,491
Bread and other bakery products	40	9,188	511	8,791	11,568
Brick and tile, terra-cotta, and fire-clay products	1,520	82,142	.....	43,860	.....
Butter, cheese, and condensed milk	.....	8,013	.....	50,599	252
Canning and preserving	541	9,712	.....	54,975	413
Cars and general shop construction and repairs by electric-railroad companies	.....	1,171	100	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	.....	37,878	5	56,774	.....
Cement	.....	35,935	.....	388,426	.....
Flour-mill and gristmill products	6	1,878	.....	19,683	1,000
Foundry and machine-shop products	70	1,685	8,078	10,245	2,689
Gas, illuminating and heating	28	116,493	14,563	74,633	.....
Ice, manufactured	.....	3,420	.....	8,613	350
Liquors, malt	1,645	7,130	1,368	101,479	329
Lumber and timber products	70	30,515	.....	203,784	18,864
Printing and publishing	24	1,335	17	762	14,830
Slaughtering and meat packing	.....	10,489	.....	.....	100
All other industries	581	133,817	44,713	474,333	38,096
Total for cities	3,679	181,355	25,221	348,665	64,261
ABERDEEN	5	4,801	1,962	17	482
BELLINGHAM	.....	7,223	408	27,444	4,729
EVERETT	4	814	2,264	6,653	3,963
HOQUIAM	.....	32	91	6	201
NORTH YAKIMA	6	7,578	60	352	366
SEATTLE	1,957	97,045	4,008	230,057	37,614
SPOKANE	1,669	27,194	3,097	8,237	8,095
TACOMA	18	31,867	13,169	62,037	8,058
VANCOUVER	.....	225	51	13,862	124
WALLA WALLA	20	4,576	111	.....	629

SPECIAL STATISTICS.

For certain industries the Census Bureau collects, by means of special schedules, details regarding the quantities and cost of materials, the quantities and values of products, and other information, for which no provision is made on the general schedule. Certain data of this character for five important industries in Washington are here presented. Statistics for power laundries are also given.

Flour-mill and gristmill products.—Washington possesses a great diversity of soil admirably adapted to the raising of wheat, barley, oats, and other cereals, which are largely utilized by the flour mills and gristmills of the state.

Table 21 gives quantities and values of flour-mill and gristmill products for the last three census years.

Table 21

	1914	1909	1904
Total value	$23,665,382	$17,852,944	$14,663,612
Wheat flour:			
Barrels	3,765,070	2,804,242	3,024,287
Value	$15,685,353	$12,484,701	$11,154,330
Rye flour:			
Barrels	6,343	5,500	1,115
Value	$34,887	$27,500	$4,670
Barley meal:			
Pounds	1,235,024	517,700	7,164,000
Value	$28,167	$9,413	$87,795
Corn meal and corn flour:			
Barrels	620	6,240	7,625
Value	$3,453	$23,669	$21,034
Bran and middlings:			
Tons	121,537	(1)	(1)
Value	$2,675,237		
Feed and offal:			
Tons	120,260	189,420	155,720
Value	$3,588,665	$4,788,673	$3,014,454
Breakfast foods:			
Pounds	8,413,648	(2)	(2)
Value	$251,117	(2)	(2)
All other cereal products, value	$154,028	$441,879	$744
All other products, value	$1,244,475	$77,109	$380,585

[1] Included in "feed and offal." [2] Not reported separately.

With the exception of corn meal and corn flour, there was an increase from 1909 to 1914 in the value of all classes of products shown in this table. Wheat flour, the most important product of the mills, shows an increase of 34.3 per cent in quantity and 25.6 per cent in value.

Of the 70 mills grinding wheat in 1914, 8 manufactured 2,426,583 barrels of flour, or 64.4 per cent of the total output of the state. The equipment reported for 1914 consisted of 712 stands of rolls, 49 runs of stone, and 74 attrition mills. In 1914 five establishments manufactured sacks to be used as containers.

Slaughtering and meat packing.—The kind, number, and cost of animals slaughtered, and the value of the main products reported for this industry at the last three censuses are presented in the following table:

Table 22

	1914	1909	1904[1]
MATERIALS.			
Total cost	$15,900,774	$13,759,982	$5,423,134
Animals slaughtered:			
Beeves—			
Number	85,774	117,522	54,359
Cost	$5,770,209	$5,851,681	$2,348,411
Calves—			
Number	3,571	14,218	5,463
Cost	$51,031	$190,168	$55,716
Sheep and lambs—			
Number	362,854	290,383	179,819
Cost	$1,879,239	$1,394,189	$720,781
Hogs—			
Number	373,321	239,352	122,343
Cost	$5,508,290	$4,107,508	$1,504,273
Dressed meat purchased for curing, cost	[2] $933,618	[2] $657,108	$625,682
All other materials, cost	$1,708,387	$1,559,328	$168,271
PRODUCTS.			
Total value	$18,443,526	$15,653,998	$6,251,705
Fresh meat:			
Beef—			
Pounds	48,921,624	69,288,504	33,548,474
Value	$5,296,910	$6,035,883	$2,253,838
Veal—			
Pounds	490,047	1,949,493	761,286
Value	$52,871	$219,574	$61,700
Mutton and lamb—			
Pounds	15,187,952	13,393,776	8,355,285
Value	$1,887,127	$1,361,955	$610,336
Pork—			
Pounds	27,016,711	16,774,450	8,092,695
Value	$2,744,224	$1,876,529	$699,795
Edible offal and all other fresh meat—			
Pounds	4,862,441	2,060,561	1,076,070
Value	$367,927	$175,686	$96,546
Pork, pickled and other cured:			
Pounds	22,352,555	17,116,659	10,900,124
Value	$3,064,477	$2,486,833	$1,305,726
Sausage:			
Pounds	4,985,362	3,453,182	1,404,442
Value	$540,669	$300,188	$108,430

[1] Excludes two establishments, to avoid disclosure of individual operations.
[2] Includes cost of "all other animals," to avoid disclosure of individual operations.

Table 22—Continued.	1914	1909	1904
PRODUCTS—continued.			
Lard compounds and substitutes:			
Pounds	11,126,466	(1)	(1)
Value	$540,750	(1)	(1)
Tallow, oleo stock, and stearin:			
Pounds	4,080,450	2,939,617	(1)
Value	$201,140	$168,144	(1)
Fertilizers and fertilizer materials:			
Tons	2,657	2,045	681
Value	$81,345	$55,319	$30,000
Hides and pelts:			
Cattle—			
Number	85,774		
Pounds	5,398,177		
Value	$902,678	124,887	59,833
Calf—		7,325,634	2,416,270
Number	2,790	$902,944	$317,169
Pounds	37,146		
Value	$5,476		
Sheep—			
Number	362,854	290,298	179,819
Value	$334,931	$326,207	$196,084
Wool:			
Pounds	448,913	(2)	.....
Value	$92,493	(2)	.....
All other products, value	$2,330,508	$1,744,736	$572,081

[1] Not reported separately.
[2] Figures can not be shown without disclosing individual operations.

The development of this industry is best measured by the production of beef and pork. While beef shows a decrease from 1909 to 1914 in both quantity and value, it was the leading product in 1914, contributing nearly one-third of the total value of all products reported for the industry. The decrease in the value of beef is more than counterbalanced by the increase in the value of pork. The most notable decrease was in veal, which was 1,459,446 pounds, or 74.9 per cent, in quantity, and $166,703, or 75.9 per cent, in value. The increase from 1909 to 1914 in the output of all products, except beef and veal, has enabled the industry to retain its importance among the leading industries of the state.

Canning and preserving.—The remarkable combination of salt and fresh water within the jurisdiction of Washington produces a condition favorable to the canning and curing of fish and the canning of oysters and clams. The state owns and operates several trout and salmon hatcheries, producing many millions of fish, which are planted in the several lakes throughout the state and in Puget Sound and other waters on the coast.

The canning and preserving industry in Washington is largely confined to the canning and curing of fish and the canning of oysters and clams. In recent years this branch of the industry has received an impetus through the importation of salmon, halibut, and cod caught in Alaskan waters and brought into the state to be cured, as well as from state and Government aid in scientifically restocking local waters and by the conservation of the natural supply of fish.

Table 23 shows the quantities and values of the different products of the combined industry for the census years 1914, 1909, and 1904.

Canned salmon, which was the most important product, shows a decrease in value of products of $1,198,011, or 16.3 per cent, from 1909 to 1914. The value of canned salmon reported in 1914, however, represents an increase of 153.2 per cent as compared with 1904. Clams show an increase in value. The greatest production of smoked fish was reported for 1904, the year of least production for canned and salt fish. In 1914 the production of smoked salmon was nearly ten times that of smoked halibut. Of the salted fish products cod shows an increase in production of 17.9 per cent from 1909 to 1914 and in value of products 22.9 per cent, while herring shows a decrease in the same items of 35.8 per cent and 21.2 per cent, respectively.

Table 23	1914	1909	1904
Total value	[1] $9,449,549	$9,595,387	$3,617,310
Fruits and vegetables	$951,190	$478,895	
Canned vegetables:			
Cases	47,072	30,585	
Value	$78,677	$65,594	
Canned fruits:			
Cases	324,723	78,936	
Value	$757,175	$154,392	
Apples—			
Cases (No. 3 size cans)	33,745	22,533	
Value	$54,912	$42,319	
Berries—			$173,289
Case (No. 2 size cans)	218,922	36,549	
Value	$537,866	$72,832	
Pears—			
Cases (No. 3 size cans)	25,850	11,549	
Value	$71,696	$26,058	
All other—			
Cases	46,206	8,305	
Value	$92,701	$13,183	
Dried fruits:			
Pounds	1,766,313	5,445,017	
Value	$115,338	$258,909	
Fish, clams, etc	$7,030,524	$8,624,717	$3,229,844
Canned fish, clams, etc.:			
Cases, 48 cans	1,152,325	(2)	(2)
Value	$6,406,955	$7,690,370	$2,492,080
Salmon—			
Cases (No. 1 size can)	1,096,366	(2)	(2)
Value	$6,156,558	$7,354,569	$2,431,605
Clams—			
Cases (No. 1 size cans)	53,000	(2)	(2)
Value	$239,716	$178,596	$57,475
All other—			
Cases	2,959	(2)	(2)
Value	$10,721	$157,205	$3,000
Smoked fish:			
Pounds	1,619,831	4,173,700	6,040,560
Value	$167,039	$415,204	$565,746
Halibut—			
Pounds	129,143	191,600	1,550,000
Value	$12,421	$18,692	$151,400
Salmon—			
Pounds	1,231,193	3,827,000	4,189,560
Value	$123,217	$389,620	$405,026
All other—			
Pounds	259,495	155,100	301,000
Value	$31,401	$6,892	$9,320
Salted fish:			
Pounds	8,337,998	9,763,799	3,594,071
Value	$456,530	$519,143	$172,018
Cod—			
Pounds	5,790,747	4,910,329	876,850
Value	$247,230	$201,118	$49,366
Herring—			
Pounds	61,997	96,500	750,000
Value	$2,603	$3,305	$26,000
All other—			
Pounds	2,485,254	4,756,970	1,967,221
Value	$206,697	$314,720	$96,652
All other products, value	$1,467,835	$491,775	$214,177

[1] In addition, canned fruits and vegetables, dried fruits, and pickles, preserves, and sauces to the value of $16,300 were reported by establishments in other industries.
[2] Reported in pounds in 1909 and 1904.

The value of fruits and vegetables canned and preserved formed approximately one-tenth of the total for the industry in 1914. This branch of the industry has shown a remarkable growth, the value of the products in 1914 being nearly twice that reported in 1909. Canned berries and "all other" show the greatest rate of increase both in quantity and value. Dried fruits is the only product showing a decrease,

which was 67.6 per cent in quantity and 55.5 per cent in value.

Butter, cheese, and condensed milk.—Table 24 shows the quantity and value of products reported for the industry at the last three censuses.

Table 24	1914	1909	1904
Total value	$11,807,897	$7,271,047	$2,992,576
Butter:			
Pounds	16,813,044	11,302,591	7,722,911
Value	$5,107,803	$3,692,931	$1,968,682
Packed solid—			
Pounds	5,407,664	1,418,308	466,999
Value	$1,550,648	$434,227	$126,974
Prints or rolls—			
Pounds	11,405,380	9,884,283	7,255,912
Value	$3,557,155	$3,258,704	$1,841,708
Cream sold:			
Pounds	2,740,350	3,009,180	830,662
Value	$407,957	$341,981	$89,095
Cheese:[1]			
Pounds	1,355,423	422,290	921,383
Value	$214,710	$65,597	$102,601
Condensed and evaporated milk:[2]			
Pounds	(3)	53,614,242	13,841,906
Value	(3)	$2,976,326	$738,688
All other butter, cheese, and condensed-milk factory products, value	$5,926,480	$47,960	$41,868
All other products, not specified, value	$150,947	$146,252	$51,642

[1] Includes full-cream, part-cream, and other kinds.
[2] Includes sweetened, unsweetened, and evaporated milk.
[3] Included in "all other butter, cheese, and condensed-milk factory products," to avoid the disclosure of individual operations.

The production of butter increased 5,510,453 pounds, or 48.8 per cent, from 1909 to 1914, as compared with an increase of 3,579,680 pounds, or 46.4 per cent, from 1904 to 1909. Butter put up in prints or rolls formed more than two-thirds of the total quantity reported in 1914. Cheese, which decreased 54.2 per cent in quantity from 1904 to 1909, increased 221 per cent from 1909 to 1914, while for the decade the increase was 47.1 per cent in quantity and 109.3 per cent in value. The largest increase during this period was made in the manufacture of condensed and evaporated milk, but neither the quantity nor the value can be shown separately without disclosing the operations of individual establishments. The value of these products is therefore included in that for "all other butter, cheese, and condensed-milk factory products."

Printing and publishing.—The newspapers and periodicals of Washington show a decided growth for the last two five-year periods. Table 25 shows the number of publications and aggregate circulation per issue, classified according to period of issue, for the census years 1914, 1909, and 1904.

There was an increase of 69 in the number of publications during the period from 1909 to 1914, and 53 from 1904 to 1909, while the aggregate circulation per issue increased 307,941, or 28.8 per cent, during the more recent period, and 313,228, or 41.5 per cent, during the earlier period. From 1909 to 1914 the aggregate circulation per issue of each class of publications increased, with the exception of the semiweeklies, which decreased 13,899. The Sunday publications show an increase of 32,549 in circulation. Of the 43 daily papers published in 1914, 17, with an aggregate circulation of 146,251, were morning papers.

Table 25 — Period of issue	Number of publications			Aggregate circulation per issue		
	1914	1909	1904	1914	1909	1904
Total	438	369	316	1,376,495	1,068,554	755,326
Daily	43	41	29	456,489	317,158	186,618
Sunday	12	13	9	276,212	243,663	130,161
Semiweekly	[1] 11	10	7	46,038	59,937	85,811
Weekly	307	268	226	276,979	252,396	217,845
Monthly	53	32	42	256,479	161,624	118,491
All other classes	12	5	3	64,298	33,776	16,400

[1] Includes two triweeklies.

In 1914 the largest class of publications in foreign languages consisted of the weeklies, which also had the largest circulation. The distribution of the publications in foreign languages in 1914, according to the language in which printed, is shown in the following statement:

Period of issue	Number of publications in foreign languages				
	All classes.	Daily.	Sunday.	Weekly.	Monthly.
Total	30	4	2	20	4
German	10	1	2	6	1
Italian	2			2	
Japanese	8	3		4	1
Croatian	1			1	
Danish	1				1
Norwegian	3			2	1
Swedish	4			4	
Norwegian-Danish	1			1	

Laundries.—Statistics for power laundries are not included in the general tables or in the totals for all manufacturing industries. Table 26, however, summarizes these statistics for Washington for 1914 and 1909.

Table 26 — Power laundries	Number or amount.		Per cent of increase,[1] 1909–1914.
	1914	1909	
Number of establishments	192	172	11.6
Persons engaged	3,744	3,731	0.3
Proprietors and firm members	205	195	5.1
Salaried employees	241	272	−11.4
Wage earners (average number)	3,298	3,264	1.0
Primary horsepower	4,022	3,084	30.4
Capital	$2,838,858	$2,165,715	31.1
Salaries and wages	2,160,303	2,032,703	6.3
Salaries	265,045	275,057	−3.6
Wages	1,895,258	1,757,646	7.8
Paid for contract work	7,160	11,692	−38.8
Rent and taxes	131,329	113,580	15.6
Cost of materials	655,300	546,545	19.9
Amount received for work done	4,251,620	3,814,825	11.4

[1] A minus sign (−) denotes decrease.

In 1914 Washington ranked tenth among the states in amount received for work done and thirteenth in number of persons engaged in the industry.

Table 27 shows, for 1914 and 1909, the number of wage earners employed in the laundries on the 15th

of each month, or the nearest representative day, and the percentage which this number represents of the greatest number employed in any month of the same year.

Table 27

MONTH.	WAGE EARNERS. Number. 1914	Number. 1909	Per cent of maximum. 1914	Per cent of maximum. 1909
January	3,282	2,946	97.2	80.4
February	3,227	2,957	95.6	80.7
March	3,267	2,986	96.7	81.5
April	3,300	3,066	97.7	83.7
May	3,318	3,169	98.3	86.5
June	3,316	3,389	98.2	92.5
July	3,370	3,537	99.8	96.6
August	3,344	3,663	99.0	100.0
September	3,377	3,579	100.0	97.7
October	3,268	3,391	96.8	92.6
November	3,260	3,262	96.5	89.1
December	3,241	3,229	96.0	88.2

Table 28 gives statistics as to kinds and amounts of power used in the laundries of the state in 1914 and 1909, together with the percentages of increases for the five-year period.

The kinds and quantities of fuel used in the laundries as reported at the censuses of 1914 and 1909, with the percentages of increase, are given in Table 29.

Table 28

POWER.	NUMBER OF ENGINES OR MOTORS. 1914	Number of engines or motors. 1909	HORSEPOWER. Amount. 1914	Horsepower. Amount. 1909	Per cent of increase,[1] 1909–1914.
Primary power, total	249	200	4,022	3,084	30.4
Owned	107	104	3,049	2,418	26.1
Steam engines	104	98	3,024	2,392	26.4
Internal-combustion engines	2	5	23	24	.....
Water wheels and motors	1	1	2	2	.....
Rented	142	96	973	666	46.1
Electric	142	96	961	594	61.8
Other	.....	.....	12	72	.....
Electric—Generated in establishments reporting	326	.....	1,585	.....	.....

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

Table 29

KIND.	Unit.	QUANTITY. 1914	Quantity. 1909	Per cent of increase,[1] 1909–1914.
Anthracite coal	Tons (2,240 lbs.)	250	8	.....
Bituminous coal	Tons (2,000 lbs.)	9,880	10,279	–3.9
Coke	Tons (2,000 lbs.)	809	1,883	–57.0
Oil, including gasoline	Barrels	44,724	17,499	155.6
Gas	1,000 cubic feet	9,500	14,765	–35.7

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

GENERAL TABLES.

Table 30 gives, for 1914, 1909, and 1904, 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 having 50,000 inhabitants or more, and for the cities having from 10,000 to 50,000 inhabitants, similar data for all industries combined.

Table 31 presents, for 1914, in the state as a whole and in cities with 50,000 inhabitants or more, statistics in detail for each industry that can be shown without the disclosure of 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 1914, 1909, AND 1904.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages. (Expressed in thousands.)	Cost of materials. (Expressed in thousands.)	Value of products. (Expressed in thousands.)
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.							
All industries	1914	3,829	67,205	399,567	$51,703	$136,609	$245,326
	1909	3,674	69,120	297,897	49,766	117,888	220,746
	1904	2,751	45,199	168,342	30,087	66,166	128,822
Artificial stone products	1914	23	72	136	65	106	243
	1909	41	105	117	79	122	325
	1904	3	8	.....	8	3	13
Awnings, tents, and sails	1914	19	72	40	59	277	468
	1909	19	121	42	88	562	828
	1904	9	46	14	32	139	241
Boxes and cartons, paper	1914	8	133	60	58	85	216
	1909	6	110	42	46	97	197
	1904	4	44	.....	14	19	49
Brass and bronze products	1914	11	45	118	42	84	180
	1909	7	40	60	33	60	136
	1904	7	38	.....	21	24	54
Bread and other bakery products	1914	390	1,419	1,265	1,001	3,548	6,572
	1909	298	969	412	704	2,566	4,570
	1904	165	454	117	314	894	1,656
Brick and tile, terra-cotta, and fire-clay products	1914	40	962	5,404	626	529	2,027
	1909	66	1,589	6,060	989	763	3,082
	1904	57	674	2,665	420	270	1,091
Butter, cheese, and condensed milk	1914	101	860	3,212	657	9,512	11,808
	1909	97	735	2,203	457	5,676	7,271
	1904	88	374	987	219	2,392	2,993
Canning and preserving	1914	[1] 86	2,352	4,565	$1,322	$5,279	$9,450
	1909	80	2,029	2,433	1,272	5,046	9,595
	1904	61	689	1,491	380	2,351	3,617
Carriages, wagons, and repairs	1914	27	150	289	147	266	524
	1909	37	241	254	203	319	720
	1904	[2] 25	201	130	158	188	482
Cars and general shop construction and repairs by electric-railroad companies	1914	13	382	1,223	341	259	633
	1909	11	410	598	346	342	733
	1904	([3])	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	1914	26	4,543	7,160	3,541	3,080	7,027
	1909	17	2,716	3,609	1,990	2,484	4,666
	1904	10	1,327	1,341	869	1,805	2,769
Clothing, men's, including shirts	1914	9	405	180	173	604	974
	1909	10	269	81	100	369	617
	1904	11	170	31	61	147	263
Clothing, women's	1914	12	159	35	103	207	413
	1909	6	62	16	41	81	168
	1904	5	41	.....	22	52	106
Coffee and spice, roasting and grinding	1914	25	193	299	117	1,502	2,237
	1909	15	131	280	76	824	1,399
	1904	8	64	104	38	265	524
Confectionery	1914	67	510	258	277	956	1,783
	1909	52	612	333	296	1,211	2,208
	1904	28	458	.....	204	679	1,311

[1] Includes "canning and preserving, fish"; "canning and preserving, fruits and vegetables"; "canning and preserving, oysters"; and "pickles, preserves, and sauces."
[2] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[3] Figures can not be shown without disclosing individual operations.

TABLE 30.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

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

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages. (Expressed in thousands.)	Cost of materials. (Expressed in thousands.)	Value of products. (Expressed in thousands.)
Cooperage and wooden goods, not elsewhere specified.	1914	8	263	1,062	$189	$284	$580
	1909	8	97	912	61	134	273
	1904	[1] 4	86	90	41	61	143
Copper, tin, and sheet-iron products.	1914	[2] 112	415	273	355	829	1,620
	1909	81	583	207	521	903	1,946
	1904	[1] 33	246	41	238	288	727
Flour-mill and gristmill products.	1914	100	928	13,401	744	20,272	23,665
	1909	96	644	11,773	464	15,474	17,853
	1904	76	613	8,516	410	12,771	14,664
Food preparations, not elsewhere specified.	1914	27	101	491	62	456	663
	1909	30	121	157	72	372	695
	1904	6	25	76	13	24	77
Foundry and machine-shop products.	1914	[3] 243	2,128	6,645	1,834	3,000	6,837
	1909	178	2,439	5,117	1,967	3,724	7,988
	1904	112	1,487	2,851	1,090	1,791	3,945
Fur goods	1914	14	55	17	38	60	164
	1909	15	71	14	55	144	316
	1904	11	51	6	31	53	132
Furniture	1914	50	544	1,407	353	452	1,098
	1909	36	582	1,284	410	602	1,389
	1904	23	306	677	174	300	625
Gas, illuminating and heating.	1914	13	630	2,568	487	759	2,369
	1909	12	465	1,479	273	661	1,684
	1904	7	108	454	78	149	602
Gloves and mittens, leather.	1914	6	52	17	29	79	148
	1909	6	59	10	21	59	120
	1904	7	53	.....	23	55	108
Ice, manufactured	1914	32	159	3,080	147	144	551
	1909	25	163	2,210	140	141	558
	1904	12	99	905	78	41	243
Leather goods	1914	[4] 43	101	67	82	365	646
	1909	34	160	76	123	602	1,012
	1904	[1] 30	117	31	81	203	436
Lime	1914	6	154	384	112	80	250
	1909	12	188	245	126	109	376
	1904	6	171	68	87	150	335
Liquors, malt	1914	25	883	6,315	933	2,801	9,458
	1909	31	765	5,675	709	2,231	6,903
	1904	31	476	2,907	501	984	4,472
Lumber and timber products.	1914	[5] 939	38,079	275,848	$29,336	$38,474	$83,536
	1909	1,263	43,749	224,455	31,327	36,879	89,155
	1904	1,099	30,137	128,236	19,820	19,418	54,999
Marble and stone work	1914	27	189	1,612	160	277	673
	1909	38	473	1,210	410	269	1,022
	1904	18	196	394	157	98	418
Mattresses and spring beds.	1914	10	190	680	142	332	614
	1909	12	166	485	131	437	718
	1904	5	132	218	61	99	269
Mineral and soda waters	1914	63	108	293	97	212	513
	1909	49	118	158	91	171	492
	1904	33	64	.....	43	85	270
Optical goods	1914	10	22	21	20	53	143
	1909	6	14	11	15	43	105
	1904	5	13	.....	7	10	52
Patent medicines and compounds and druggists' preparations.	1914	[6] 32	45	94	20	142	273
	1909	18	38	95	19	106	258
	1904	10	29	.....	13	37	99
Photo-engraving	1914	11	57	64	72	23	165
	1909	9	62	54	73	30	184
	1904	4	25	.....	20	10	56
Printing and publishing	1914	[7] 638	2,341	3,093	2,092	2,435	9,824
	1909	506	2,624	2,232	2,140	2,224	9,286
	1904	[8] 383	1,797	2,035	1,354	1,056	4,765
Shipbuilding, including boat building.	1914	64	1,444	5,866	1,152	987	3,101
	1909	60	744	2,105	643	562	1,550
	1904	39	501	.....	312	547	1,077
Slaughtering and meat packing.	1914	11	864	2,149	691	15,901	18,444
	1909	14	828	1,883	575	13,760	15,054
	1904	[8] 13	335	550	287	5,423	6,252
Stoves, hot-air furnaces, and ranges.	1914	4	53	60	44	50	143
	1909	9	72	99	53	113	211
	[9] 1904	.....	.....	.....	.....	.....	.....
Tobacco, cigars	1914	115	215	.....	158	217	563
	1909	114	305	.....	205	240	681
	1904	102	256	.....	175	226	604
All other industries	1914	369	4,928	49,816	3,825	21,631	34,730
	1909	250	3,451	19,411	2,422	17,376	23,802
	1904	201	3,288	13,407	2,233	13,059	18,283

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

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages. (Expressed in thousands.)	Cost of materials. (Expressed in thousands.)	Value of products. (Expressed in thousands.)
SEATTLE—All industries.	1914	1,014	12,429	44,001	$9,935	$37,770	$64,475
	[10] 1909	753	11,523	38,267	8,589	28,783	50,814
	1904	467	6,390	.....	4,318	14,358	25,406
Bread and other bakery products.	1914	132	534	653	416	1,283	2,355
	1909	78	295	148	260	893	1,550
	1904	38	134	.....	109	264	495
Brick, building	1914	5	79	430	69	42	176
	1909	5	137	482	100	37	259
	1904	4	61	.....	29	16	67
Butter	1914	4	46	250	32	751	909
	1909	6	22	55	19	439	514
	1904	5	30	.....	22	496	562
Canning and preserving	1914	[11] 10	210	1,123	169	424	777
	1909	7	59	233	44	234	394
	1904	[8] 4	112	.....	65	429	610
Carriages, wagons, and repairs.	1914	10	62	120	60	56	155
	1909	12	109	73	95	117	298
	1904	10	90	.....	76	100	254
Clothing, men's, including shirts.	1914	5	266	38	103	346	596
	1909	5	141	47	58	236	374
	1904	[8] 4	109	.....	40	115	188
Confectionery	1914	34	332	134	171	671	1,129
	1909	20	383	213	190	890	1,491
	1904	14	270	.....	122	456	821
Copper, tin, and sheet-iron products.	1914	[2] 45	236	133	189	481	906
	1909	36	352	116	282	557	1,131
	1904	13	120	.....	125	141	352
Flour-mill and gristmill products.	1914	10	279	3,425	$222	$6,202	$7,601
	1909	7	155	2,365	111	3,872	4,430
	1904	6	147	.....	99	4,158	4,594
Food preparations, not elsewhere specified.	1914	15	52	91	32	219	327
	1909	11	65	48	39	220	442
	1904	3	13	.....	7	17	42
Foundry and machine-shop products.	1914	[3] 82	1,004	3,125	880	1,367	3,262
	1909	71	1,230	2,787	1,023	2,042	4,290
	1904	41	562	.....	431	870	1,817
Fur goods	1914	8	32	8	20	33	91
	1909	7	37	4	32	75	150
	1904	5	32	.....	19	37	91
Furniture	1914	24	100	227	75	98	273
	1909	17	166	239	139	140	405
	1904	5	24	.....	19	18	52
Ice, manufactured	1914	4	49	1,155	43	37	209
	1909	5	61	721	53	68	225
	1904	4	55	.....	45	22	116
Leather goods	1914	[4] 10	62	30	49	227	386
	1909	8	81	41	60	267	444
	1904	[1] 9	56	.....	37	86	191
Liquors, malt	1914	5	481	2,547	503	1,063	4,800
	1909	5	362	1,880	300	877	2,815
	1904	5	176	.....	200	391	2,122
Lumber and timber products.	1914	[5] 55	2,337	15,917	1,893	3,705	6,420
	1909	65	3,268	19,971	2,242	3,918	8,148
	1904	[1] 21	1,065	.....	644	657	1,835

[1] Excludes statistics of one establishment, to avoid disclosure of individual operations.
[2] Includes "tinware, not elsewhere specified."
[3] Includes "automobile repairing"; "engines, steam, gas, and water"; "hardware"; "plumbers' supplies, not elsewhere specified"; "pumps, steam and other power"; "steam fittings and steam and hot-water heating apparatus"; and "structural ironwork, not made in steel works or rolling mills."
[4] Includes "saddlery and harness" and "trunks and valises."
[5] Includes "boxes, wooden packing"; "lumber, planing-mill products, not including planing mills connected with sawmills"; and "window and door screens."
[6] Includes "perfumery and cosmetics."
[7] Includes "bookbinding and blank-book making" and "lithographing."
[8] Excludes statistics for two establishments, to avoid disclosure of individual operations.
[9] Figures cannot be shown without disclosing individual operations.
[10] Figures do not agree with those published, because it was necessary to revise them in order to include data only for those establishments located within the corporate limits of the city.
[11] Includes "canning and preserving, fish," and "pickles, preserves, and sauces."

TABLE 30.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

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

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages. (Expressed in thousands.)	Cost of materials. (Expressed in thousands.)	Value of products. (Expressed in thousands.)
SEATTLE—Contd.							
Marble and stone work	1914	4	27	26	$28	$35	$80
	1909	5	54	38	47	81	218
	1904	[1] 3	34	.....	25	44	111
Mineral and soda waters	1914	12	32	50	35	79	167
	1909	10	54	83	42	62	191
	1904	6	24	.....	17	29	86
Patent medicines and compounds and druggists' preparations.	1914	[2] 12	20	18	12	83	156
	1909	8	24	54	12	42	153
	1904	3	15	.....	4	14	41
Printing and publishing	1914	[3] 214	1,057	1,264	952	1,148	4,613
	1909	133	1,042	791	904	1,042	4,009
	1904	[1] 90	892	.....	656	511	1,987
Slaughtering and meat packing.	1914	3	482	900	379	9,706	11,133
	1909	4	325	468	240	6,410	7,171
	1904	4	166	.....	125	3,029	3,419
Tobacco, cigars	1914	24	56	.....	45	52	145
	1909	24	65	.....	45	46	140
	1904	26	57	.....	42	57	143
All other industries	1914	287	4,594	12,337	3,559	9,662	17,809
	1909	204	3,036	7,410	2,252	6,218	11,572
	1904	144	2,146	.....	1,360	2,401	5,410
SPOKANE—All industries.	1914	277	3,020	20,362	2,465	94,454	16,636
	[4] 1909	284	3,901	9,130	3,036	10,089	18,617
	1904	188	2,428	.....	1,669	4,700	8,831
Bread and other bakery products.	1914	22	414	301	256	1,052	1,889
	1909	33	260	84	170	686	1,211
	1904	18	101	.....	58	216	359
Confectionery	1914	11	61	47	42	115	213
	1909	10	126	78	58	252	406
	1904	5	118	.....	53	165	271
Copper, tin, and sheet-ironwork.	1914	16	64	46	66	125	266
	1909	13	111	50	120	195	408
	1904	6	60	.....	51	70	164
Flour-mill and gristmill products.	1914	3	62	963	55	1,446	1,810
	1909	4	61	680	47	1,454	1,832
	1904	4	45	.....	33	918	1,089
Foundry and machine-shop products.	1914	[5] 23	221	565	202	317	730
	1909	14	288	531	213	415	871
	1904	10	196	.....	148	230	515
Furniture and refrigerators.	1914	7	18	58	15	27	55
	1909	4	16	35	12	12	37
	1904	4	11	.....	7	9	26
Leather goods	1914	[6] 4	5	6	5	28	46
	1909	6	29	11	21	150	224
	1904	[1] 3	13	.....	9	30	64
Lumber and timber products.	1914	[7] 20	798	14,868	612	1,249	2,347
	[4] 1909	22	1,190	4,088	886	1,350	3,091
	1904	24	966	.....	581	1,467	2,458
Mineral and soda waters	1914	4	7	54	$8	$23	$53
	1909	3	8	10	8	25	60
	1904	3	9	.....	8	8	26
Printing and publishing	1914	[3] 56	338	400	329	596	1,942
	1909	46	365	387	376	477	2,120
	1904	40	224	.....	194	205	1,042
Tobacco, cigars	1914	14	30	.....	23	28	68
	1909	15	46	.....	38	39	108
	1904	16	47	.....	37	50	125
All other industries	1914	97	1,002	3,054	852	4,448	7,217
	1909	114	1,401	3,176	1,087	5,034	8,249
	1904	55	638	.....	490	1,332	2,692
TACOMA—All industries.	1914	339	6,765	24,086	4,964	17,391	27,708
	[4] 1909	277	6,820	22,666	4,714	14,946	24,462
	1904	236	4,457	.....	2,906	8,157	14,264
Bread and other bakery products.	1914	36	180	122	116	412	835
	1909	26	164	109	84	333	567
	1904	19	65	.....	46	110	211
Confectionery	1914	7	64	40	33	94	200
	1909	5	26	5	14	34	65
	1904	6	56	.....	24	83	194
Copper, tin, and sheet-iron products.	1914	[8] 18	65	50	60	79	200
	1909	13	69	37	67	89	231
	1904	8	49	.....	48	64	172
Flour-mill and gristmill products.	1914	7	258	3,047	215	6,071	6,695
	1909	5	116	2,630	76	3,430	3,844
	1904	4	102	.....	70	2,069	2,294
Foundry and machine-shop products.	1914	[9] 27	370	1,014	260	695	1,321
	1909	23	392	649	289	697	1,368
	1904	[10] 15	358	.....	253	439	898
Furniture	1914	10	337	742	213	283	621
	1909	7	285	625	194	348	690
	1904	10	173	.....	97	218	420
Lumber and timber products.	1914	[7] 26	2,146	10,323	1,548	2,611	5,060
	1909	31	2,935	12,862	1,959	2,889	6,040
	1904	[1] 24	1,815	.....	1,120	1,310	3,408
Printing and publishing	1914	[11] 58	293	546	260	282	1,158
	1909	42	293	264	253	247	1,094
	1904	[10] 35	167	.....	141	119	623
Shipbuilding, wooden, including boat building.	1914	5	17	22	14	21	50
	1909	6	31	58	29	38	90
	1904	5	75	.....	65	170	274
Tobacco, cigars	1914	15	54	.....	36	46	120
	1909	17	77	.....	47	53	150
	1904	15	64	.....	37	40	125
All other industries	1914	130	2,981	8,180	2,209	6,797	11,448
	1909	102	2,432	5,427	1,702	6,788	10,323
	1904	95	1,533	.....	1,005	3,535	5,645

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

ABERDEEN	1914	60	1,568	13,280	$1,219	$2,612	$4,815
	1909	43	1,509	9,582	995	2,172	3,590
BELLINGHAM	1914	86	1,922	10,170	1,318	3,366	6,264
	1909	96	1,566	5,176	1,027	2,422	4,600
	1904	73	1,314	.....	858	1,651	3,294
EVERETT	1914	98	1,959	13,653	1,610	4,000	6,530
	[4] 1909	93	2,200	10,021	1,585	3,485	6,593
NORTH YAKIMA	1914	42	582	2,343	$402	$873	$1,937
	[4] 1909	35	601	1,967	373	930	2,152
WALLA WALLA	1914	47	311	1,737	250	1,216	2,015
	1909	48	388	1,500	323	1,385	2,317
	1904	33	242	.....	181	929	1,486

[1] Excludes statistics for two establishments, to avoid disclosure of individual operations.
[2] Includes "perfumery and cosmetics."
[3] Includes "bookbinding and blank-book making," "engraving, steel and copper plate, including plate printing" and "lithographing."
[4] Figures do not agree with those published, because it was necessary to revise them in order to include data only for those establishments located within the corporate limits of the city.
[5] Includes "automobile repairing" and "structural ironwork, not made in steel works or rolling mills."
[6] Includes "saddlery and harness" and "trunks and valises."
[7] Includes "boxes, wooden packing"; "lumber, planing-mill products, not including planing mills connected with sawmills; and "window and door screens."
[8] Includes "tinware, not elsewhere specified."
[9] Includes "automobile repairing"; "engines, steam, gas, and water"; "steam fittings and steam and hot-water heating apparatus"; and "structural ironwork not made in steel works or rolling mills."
[10] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[11] Includes "bookbinding and blank-book making" and "lithographing."

TABLE 31.—DETAIL STATEMENT FOR THE STATE AND FOR CITIES OF 50,000 INHABITANTS

	INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS, DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Capital.
	THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.															
1	All industries	3,829	78,448	3,155	2,919	4,158	1,011	67,205	Je 75,182	De 53,071	(3)	(3)	(3)	(3)	(3)	$277,715,262
2	Agricultural implements	7	155	3	10	6	2	134	Je 174	No 61	145	145	.....	.....	.....	515,112
3	Artificial limbs	6	17	3	2	1	1	10	Ja [4] 11	Je [4] 9	10	10	.....	.....	.....	11,710
4	Artificial stone products	23	106	18	9	5	2	72	Je 116	Ja [4] 48	88	88	.....	.....	.....	246,530
5	Automobile bodies and parts	13	80	13	5	1	3	58	Je 69	Ja 49	50	47	2	1	.....	148,251
6	Automobile repairing	26	99	24	4	3	1	67	Je [4] 74	Ja [4] 62	65	65	.....	.....	.....	124,044
7	Awnings, tents, and sails	19	121	21	11	12	5	72	Je 89	De 54	69	39	29	.....	1	372,623
8	Belting, leather	3	15	2	2	3	2	6	(5) 6	(5) 6	6	6	.....	.....	.....	69,947
9	Bookbinding and blank-book making.	12	56	14	3	1	2	36	Ap [4] 37	Je 34	35	24	11	.....	.....	91,631
10	Boots and shoes	11	217	7	12	14	6	178	Ja 203	Jy [4] 164	180	133	39	8	.....	1,067,937
11	Boxes and cartons, paper	8	156	3	13	4	3	133	No 173	Je 112	163	38	124	.....	1	240,623
12	Boxes, wooden packing	21	385	12	22	10	3	338	My 449	De 196	437	400	21	16	.....	750,798
13	Brass and bronze products	11	69	8	9	5	2	45	Jy 53	De 39	44	42	1	1	.....	140,089
14	Bread and other bakery products	390	2,123	437	47	149	71	1,419	Oc 1,483	Fe 1,335	1,462	974	467	14	7	2,997,999
15	Brick and tile, terra-cotta, and fire-clay products.	40	1,111	32	51	52	14	962	Je 1,288	De 608	1,106	1,096	.....	10	.....	6,588,988
16	Building brick	31	712	30	34	28	8	612	Je 800	Ja 384	724	716	.....	8	.....	4,620,955
17	All other	9	399	2	17	24	6	350	My 505	De 182	382	380	.....	2	.....	1,968,033
18	Brooms, from broom corn	9	82	11	8	2	1	60	Au [4] 65	Jy 53	66	50	16	.....	.....	147,105
19	Butter, cheese, and condensed milk	101	1,094	38	87	71	38	860	Je 1,004	Ja 714	819	745	57	16	1	5,799,740
20	Canning and preserving, fish	48	1,927	17	89	89	17	1,715	Au 3,215	Ja 385	3,102	2,547	503	37	15	11,525,141
21	Canning and preserving, fruits and vegetables.	18	420	11	19	21	2	367	Au 934	Ja [4] 6	1,108	557	535	5	11	567,640
22	Canning and preserving, oysters	8	216	3	14	11	12	176	No 329	Jy 21	434	348	86	.....	.....	314,894
23	Carpets, rag	9	33	9	.....	.....	.....	24	Au 30	Ja [4] 19	25	22	3	.....	.....	10,841
24	Carriages, wagons, and repairs	27	196	30	6	7	3	150	Ap 166	No 126	133	133	.....	.....	.....	547,948
25	Carriages and wagons	20	147	22	6	6	3	110	Ap 125	No 93	100	100	.....	.....	.....	435,080
26	Repair work only	7	49	8	.....	1	.....	40	Mh [4] 45	No [4] 33	33	33	.....	.....	.....	112,868
27	Cars and general shop construction and repairs by electric-railroad companies.	13	400	.....	6	11	1	382	My 421	De 340	340	340	.....	.....	.....	1,200,039
28	Cars and general shop construction and repairs by steam-railroad companies.	26	4,822	.....	149	109	21	4,543	Se 4,747	De 4,198	4,443	4,443	.....	.....	.....	7,176,047
29	Cement	5	718	.....	29	60	9	620	Ap 795	De 390	839	839	.....	.....	.....	9,380,375
30	Chemicals	4	45	.....	4	7	2	32	Oc 36	Fe 27	34	34	.....	.....	.....	467,646
31	Cleansing and polishing preparations.	3	5	4	1	.....	.....	.....	(6) 0	(6) 0	.....	.....	.....	.....	.....	1,237
32	Clothing, men's, including shirts	9	457	4	9	37	2	405	Ja 470	No 336	364	29	335	.....	.....	628,448
33	Clothing, women's	12	192	8	11	10	4	159	Mh 179	De 119	153	49	103	1	.....	225,275
34	Suits, skirts, and cloaks	6	97	4	7	5	3	78	Ja 96	De 41	75	38	37	.....	.....	114,378
35	Shirtwaists and dresses	6	95	4	4	5	1	81	Mh 90	Jy 73	78	11	66	1	.....	110,897
36	Coffee and spice, roasting and grinding.	25	313	15	18	71	16	193	Se 207	No 171	179	106	72	.....	1	1,022,671
37	Coffins, burial cases, and undertakers' goods.	4	52	3	8	6	2	33	Ja [4] 35	Je [4] 31	33	27	6	.....	.....	195,713
38	Confectionery and ice cream	100	886	90	38	89	31	638	De 739	Fe 581	739	307	429	2	1	1,211,765
39	Confectionery	67	697	58	24	83	22	510	De 628	Fe [4] 474	614	217	394	2	1	885,438
40	Ice cream	33	189	32	14	6	9	128	Au 157	Ja 106	125	90	35	.....	.....	326,327
41	Cooperage and wooden goods, not elsewhere specified.	8	286	5	9	7	2	263	No 313	Ja [4] 160	309	299	10	.....	.....	795,852
42	Copper, tin, and sheet-iron products.	112	611	118	39	34	5	415	Au 499	Fe 360	447	438	7	2	.....	1,070,320
43	Electroplating	4	12	6	.....	.....	1	5	(5) 5	(5) 5	5	5	.....	.....	.....	7,469
44	Engines, steam, gas, and water	8	33	10	1	1	.....	21	Ap [4] 23	De 14	19	19	.....	.....	.....	78,527
45	Flour-mill and gristmill products	100	1,355	65	109	209	44	928	Se 1,076	Jy 791	1,001	979	22	.....	.....	15,505,690
46	Food preparations, not elsewhere specified.	27	154	23	14	12	4	101	Je 140	My 87	101	89	10	2	.....	632,454
47	Macaroni, vermicelli, and noodles.	7	67	10	5	2	2	48	No 50	Ja [4] 46	47	42	5	.....	.....	213,423
48	Miscellaneous, for human consumption.	10	25	8	1	3	.....	13	Je 16	Oc [4] 11	15	11	2	2	.....	16,435
49	All others, including food for animals and fowls.	10	62	5	8	7	2	40	Je 75	Ap 30	39	36	3	.....	.....	402,596
50	Foundry and machine-shop products.	190	2,343	167	153	141	32	1,850	Ap 2,092	No 1,504	1,689	1,686	2	1	.....	9,464,447
51	Boiler shops	8	119	9	4	4	.....	102	My 141	Au 82	91	91	.....	.....	.....	170,592
52	Foundries	17	418	20	14	28	3	353	My 429	No 275	288	288	.....	.....	.....	1,567,671
53	Machine shops	165	1,806	138	135	109	29	1,395	Mh 1,569	No 1,152	1,310	1,307	2	1	.....	7,720,184
54	Fur goods	14	81	16	3	3	4	55	Oc [4] 83	Je 35	82	32	50	.....	.....	153,367
55	Furnishing goods, men's	4	97	6	2	7	1	81	Se 85	Fe 75	87	19	68	.....	.....	84,937
56	Furniture	50	633	40	30	9	10	544	Ap 573	De 520	527	514	7	6	.....	1,309,493
57	Wood, other than rattan and willow.	29	495	25	18	8	7	437	Ap 461	Jy 412	424	411	7	6	.....	1,118,937
58	Rattan, willow, and metal	3	29	.....	5	1	1	22	Ja [4] 25	Au [4] 18	22	22	.....	.....	.....	51,342
59	Store and office fixtures	18	109	15	7	.....	2	85	Ja [4] 91	Oc 73	81	81	.....	.....	.....	139,214
60	Gas, illuminating and heating	13	894	.....	43	190	31	630	Ap 702	De 560	560	560	.....	.....	.....	23,639,196
61	Gloves and mittens, leather	6	81	7	1	13	8	52	Ap 66	De 37	59	27	32	.....	.....	110,795
62	Hand stamps	10	51	8	3	4	.....	36	Je 42	No [4] 33	33	33	.....	.....	.....	51,532

[1] Owned power only. [2] Includes rented power, other than electric. [3] No figures given for reasons stated under "Explanation of terms."

OR MORE, BY INDUSTRIES, AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914.

EXPENSES.										POWER.						
Salaries and wages.				Rent and taxes.		For materials.				Primary horsepower.						
Officials.	Clerks, etc.	Wage earners.	For contract work.	Rent of factory.	Taxes, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.	Value of products.	Value added by manufacture.	Total.	Steam engines.[1]	Internal-combustion engines.[2]	Water wheels and motors.[1]	Electric (rented).	Electric horsepower generated in establishments reporting.	
THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
$6,146,340	$5,357,748	$51,703,052	$2,132,242	$1,337,671	$3,812,867	$131,352,710	$5,256,599	$245,326,456	$108,717,147	399,567	301,923	3,385	9,306	84,953	27,532	1
15,502	9,873	115,444	.....	735	1,155	177,093	7,330	392,053	207,630	202	.....	.....	.....	202	.....	2
1,820	590	7,148	1,000	3,555	58	5,479	145	29,160	23,536	7	.....	.....	.....	7	.....	3
18,835	6,425	65,302	225	3,111	1,096	104,656	1,826	243,021	136,539	136	59	46	.....	31	.....	4
7,140	2,970	56,618	.....	10,195	471	55,816	1,558	169,999	112,625	48	.....	.....	.....	48	.....	5
4,500	2,484	49,684	44	5,844	651	35,047	2,471	149,183	111,665	94	.....	18	.....	76	.....	6
12,508	17,242	58,877	42	15,780	3,906	275,340	1,275	467,902	191,287	40	.....	.....	.....	40	.....	7
3,380	5,460	6,087	516	2,940	409	16,749	123	52,768	35,896	9	.....	.....	.....	9	.....	8
4,682	867	27,768	1,174	5,574	1,051	33,460	1,094	112,059	77,505	28	.....	.....	.....	28	.....	9
23,366	21,655	111,644	.....	3,937	6,341	496,188	3,562	707,177	207,427	194	.....	.....	.....	194	.....	10
19,857	6,424	58,166	1,406	8,585	1,667	82,349	2,318	216,278	131,611	60	.....	.....	.....	60	.....	11
37,900	11,425	219,998	6,494	4,921	5,881	373,089	9,955	789,019	405,975	2,208	1,409	.....	60	739	.....	12
14,250	4,153	41,859	3,126	2,951	922	79,599	4,259	179,794	95,936	118	.....	.....	.....	118	.....	13
88,646	230,680	1,000,888	3,563	157,426	27,581	3,438,977	108,743	6,572,356	3,024,636	1,265	95	33	2	1,135	5	14
79,109	73,552	626,376	5,756	1,555	34,017	160,195	368,997	2,026,801	1,497,609	5,404	3,042	7	.....	2,355	236	15
45,849	40,421	391,722	300	1,455	23,699	109,421	216,443	1,328,182	1,002,318	3,099	942	7	.....	2,150	6	16
33,260	33,131	234,654	5,456	100	10,318	50,774	152,554	698,619	495,291	2,305	2,100	.....	.....	205	230	17
8,025	1,920	30,437	650	510	921	93,327	1,100	167,158	72,731	80	.....	.....	.....	80	.....	18
143,117	95,322	657,321	26,813	14,703	39,138	9,367,276	144,432	11,807,897	2,296,189	3,212	2,068	86	24	1,034	495	19
225,339	115,009	1,072,805	192,453	23,461	115,911	3,996,365	112,767	7,634,076	3,524,944	3,665	2,256	607	.....	802	89	20
21,604	16,416	143,603	.....	2,128	2,434	805,217	9,328	1,120,149	305,604	387	285	4	.....	98	.....	21
13,345	10,413	42,176	1,501	.....	2,461	98,479	1,932	243,212	142,801	336	303	27	.....	6	26	22
.....	.....	13,008	.....	1,632	36	4,641	574	32,900	27,685	18	.....	.....	.....	18	.....	23
8,872	9,560	147,402	600	17,958	5,627	254,598	11 297	524,345	258,450	289	.....	19	.....	270	.....	24
8,872	8,060	107,226	600	15,078	4,358	214,697	8,321	415,195	192,177	218	.....	11	.....	207	.....	25
.....	1,500	40,176	.....	2,880	1,269	39,901	2,976	109,150	66,273	71	.....	8	.....	63	.....	26
10,232	8,430	340,871	.....	.....	15,913	240,306	18,425	632,805	374,074	1,223	.....	.....	.....	1,223	12	27
209,991	110,066	3,541,193	528	.....	10,939	2,881,504	198,404	7,026,916	3,947,008	7,160	2,746	.....	.....	4,414	1,181	28
82,757	102,241	495,447	3,676	.....	30,874	754,351	757,328	2,639,219	1,127,540	18,237	3,975	.....	1,600	12,662	.....	29
10,048	7,922	25,324	.....	2,200	1,991	248,356	10,309	373,553	114,888	89	22	.....	.....	67	.....	30
600	.....	.....	832	294	21	1,257	43	4,977	3,677	.....	.....	.....	.....	.....	.....	31
19,268	39,195	172,972	.....	17,314	3,073	601,070	2,551	974,077	370,456	180	.....	.....	.....	180	.....	32
24,506	14,137	102,889	1,550	12,063	1,298	205,447	1,347	413,280	206,486	35	.....	.....	.....	35	.....	33
15,890	8,660	65,028	1,550	6,315	789	129,067	820	258,258	128,371	16	.....	.....	.....	16	.....	34
8,616	5,477	37,861	.....	5,748	509	76,380	527	155,022	78,115	19	.....	.....	.....	19	.....	35
43,395	119,396	117,478	400	30,627	8,124	1,491,932	10,011	2,236,749	734,806	299	.....	.....	.....	299	.....	36
11,745	7,187	24,687	.....	250	905	82,061	2,392	164,499	80,046	116	.....	.....	.....	116	.....	37
65,924	128,110	365,828	.....	92,730	10,372	1,318,126	42,229	2,474,506	1,114,151	642	67	22	.....	553	.....	38
44,924	116,958	276,896	.....	71,554	7,145	927,646	28,418	1,783,228	827,164	258	50	2	.....	206	.....	39
21,000	11,152	88,932	.....	21,176	3,227	390,480	13,811	691,278	286,987	384	17	20	.....	347	.....	40
18,512	11,533	189,027	.....	726	5,960	280,322	3,385	580,139	296,432	1,062	923	4	.....	135	235	41
66,178	33,595	355,315	6,152	43,357	10,090	817,366	11,197	1,619,870	791,307	273	.....	45	.....	228	.....	42
.....	520	3,176	172	1,470	26	547	700	14,917	13,670	41	.....	.....	.....	41	.....	43
1,800	720	22,494	1,289	2,656	451	30,368	1,172	84,991	53,451	50	.....	.....	.....	50	.....	44
283,001	267,938	743,620	697	31,725	119,644	20,070,584	201,911	23,665,382	3,392,887	13,401	1,917	221	2,197	9,066	35	45
19,920	9,537	62,400	.....	7,961	4,176	446,650	9,647	663,020	206,723	491	.....	.....	.....	491	.....	46
8,840	3,478	27,634	.....	480	1,126	128,812	3,715	220,376	87,849	140	.....	.....	.....	140	.....	47
900	1,800	7,477	.....	1,850	107	24,563	1,185	48,742	22,994	16	.....	.....	.....	16	.....	48
10,180	4,259	27,289	.....	5,631	2,943	293,275	4,747	393,902	95,880	335	.....	.....	.....	335	.....	49
281,664	170,738	1,580,630	20,576	83,247	76,754	2,489,680	160,045	5,975,823	3,326,098	5,993	613	347	.....	5,033	8	50
6,850	3,440	83,125	.....	7,266	2,062	141,989	7,594	297,881	148,298	708	.....	.....	.....	708	.....	51
32,175	36,808	282,898	.....	3,510	14,831	593,032	49,223	1,252,814	610,559	922	13	6	.....	903	.....	52
242,639	130,490	1,214,607	20,576	72,471	59,861	1,754,659	103,228	4,425,128	2,567,241	4,363	600	341	.....	3,422	8	53
7,554	5,780	38,022	948	9,952	1,257	59,227	538	163,613	103,848	17	.....	4	.....	13	.....	54
2,482	5,698	29,035	.....	2,970	415	103,255	739	168,904	64,910	42	.....	.....	.....	42	.....	55
45,154	16,616	352,876	12,304	15,417	13,895	438,538	13,555	1,097,990	645,897	1,407	929	28	.....	450	108	56
30,424	13,496	272,236	400	6,648	12,521	330,293	8,072	811,144	472,779	1,097	889	3	.....	205	108	57
4,720	1,800	11,867	.....	1,200	233	17,360	1,056	51,325	32,909	85	40	25	.....	20	.....	58
10,010	1,320	68,773	11,904	7,569	1,141	90,885	4,427	235,521	140,209	225	.....	.....	.....	225	.....	59
83,822	189,227	487,309	.....	126	171,411	124,816	634,254	2,369,188	1,610,118	2,568	2,027	256	.....	285	189	60
1,000	3,929	28,704	.....	2,142	1,078	77,769	1,577	147,849	68,503	17	.....	.....	.....	17	.....	61
3,950	4,740	25,992	.....	5,850	435	30,234	933	94,490	63,323	33	.....	.....	.....	33	.....	62

[4] Same number reported for one or more other months. [5] Same number reported throughout the year. [6] No wage earners employed.

TABLE 31.—DETAIL STATEMENT FOR THE STATE AND FOR CITIES OF 50,000 INHABITANTS

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

	INDUSTRY	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Number, 15th day of— Maximum month.		Number, 15th day of— Minimum month.		WAGE EARNERS, DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Capital.
1	Hosiery and knit goods	10	86	7	9	8	2	60	Oc	98	Je	34	88	26	62	.....	.....	$157,241
2	Ice, manufactured	32	223	20	25	17	2	159	Jy	227	Fe	112	162	162	.....	.....	.....	1,868,928
3	Iron and steel forgings	4	25	3	2	1	.....	19	Je	28	De	13	17	17	.....	.....	.....	47,615
4	Jewelry	17	221	19	2	15	12	173	Mh	191	De	153	154	147	5	2	.....	729,630
5	Lime	6	178	1	8	12	3	154	Au	186	De	113	138	136	2	.....	.....	1,374,547
6	Liquors, malt	25	1,141	5	77	161	15	883	Jy	998	De	741	770	763	7	.....	.....	13,879,230
7	Lithographing	4	90	.....	8	8	3	71	Se	85	Fe	61	69	57	12	.....	.....	220,009
8	Lumber and timber products	821	39,040	592	980	874	133	36,461	My	42,601	De	26,333	44,657	44,519	96	42	.....	88,412,502
9	Lumber, planing-mill products, not including planing mills connected with sawmills.	91	1,519	54	87	87	18	1,273	Jy	1,478	Ja	1,073	1,329	1,317	.....	12	.....	4,136,166
10	Marble and stone work	27	247	26	15	15	2	189	Fe	222	Jy	152	193	193	.....	.....	.....	1,262,223
11	Mattresses and spring beds	10	222	2	7	20	3	190	Ja	200	Au	181	191	173	18	.....	.....	593,626
12	Millinery and lace goods	3	45	5	1	.....	1	38	Fe	112	De	10	23	3	20	.....	.....	16,180
13	Mineral and soda waters	63	140	4	14	10	4	108	Jy	130	No	91	108	106	.....	2	.....	692,845
14	Models and patterns, not including paper patterns.	11	33	13	2	1	.....	17	Ap	20	De	14	20	18	.....	2	.....	29,474
15	Musical instruments, violins and other stringed instruments.	8	9	7	.....	.....	.....	2	(3)	2	(3)	2	2	2	.....	.....	.....	9,753
16	Optical goods	10	45	4	6	7	6	22	(3)	22	(3)	22	22	22	.....	.....	.....	70,140
17	Paints	6	58	.....	10	18	7	23	Ap	26	Ja [4]	20	22	20	2	.....	.....	198,133
18	Patent medicines and compounds	28	70	23	9	4	5	29	Je [4]	41	De	14	33	31	2	.....	.....	238,583
19	Photo-engraving	11	80	7	9	7	.....	57	Ap	60	Ja	52	57	53	3	1	.....	104,067
20	Pickles, preserves, and sauces	12	130	4	16	14	2	94	Jy	143	De	79	132	54	53	.....	25	436,031
21	Printing and publishing, book and job.	220	1,377	200	91	112	42	932	Oc	1,099	Jy	866	940	778	139	22	1	2,169,466
22	Job printing	201	1,271	186	85	70	33	897	Oc	1,064	Jy	830	904	743	138	22	1	2,019,036
23	Book publishing and printing	12	64	8	4	40	8	4	Ja	5	No	3	4	3	1	.....	.....	67,470
24	Linotype work, typesetting	7	42	6	2	2	1	31	Ap [4]	34	No	25	32	32	.....	.....	.....	82,960
25	Printing and publishing, newspapers and periodicals.	402	2,764	351	162	771	178	1,302	Oc	1,340	Au	1,268	1,331	1,153	154	24	.....	4,009,591
26	Printing and publishing	31	1,109	24	42	462	54	527	Ap	540	Au	508	534	494	38	2	.....	1,683,021
27	Printing, publishing, and job printing.	269	1,346	268	76	175	75	752	Oc	794	Au	736	775	638	115	22	.....	2,025,846
28	Publishing without printing	102	309	59	44	134	49	23	Ja [4]	24	Se [4]	21	22	21	1	.....	.....	300,724
29	Rice, cleaning and polishing	9	67	42	1	13	.....	11	Mh	12	Ap	10	11	11	.....	.....	.....	64,714
30	Saddlery and harness	33	127	39	6	7	4	71	My	74	Jy	69	74	73	1	.....	.....	414,649
31	Shipbuilding, including boat building.	64	1,623	75	36	60	8	1,444	Fe	1,717	No	1,126	1,302	1,300	2	.....	.....	4,599,883
32	Slaughtering and meat packing	11	1,039	6	31	96	42	864	Mh	912	No	829	842	810	32	.....	.....	6,923,655
33	Stoves, hot-air furnaces, and ranges	4	65	3	3	4	2	53	My	60	De	47	49	49	.....	.....	.....	131,337
34	Structural ironwork, not made in steel works or rolling mills.	13	215	8	14	15	2	176	Ja	198	No [4]	142	178	178	.....	.....	.....	603,313
35	Tobacco, cigars	115	355	127	1	6	6	215	Oc	222	Jy	206	231	187	44	.....	.....	281,155
36	Tools, not elsewhere specified	6	21	6	4	2	.....	9	Jy	13	Ja [4]	6	13	13	.....	.....	.....	67,485
37	Trunks and valises	10	46	9	5	2	.....	30	Jy [4]	34	No	22	29	26	3	.....	.....	71,165
38	Window and door screens	6	13	6	.....	.....	.....	7	De	15	Ja [4]	4	10	10	.....	.....	.....	27,790
39	Wood, turned and carved	5	15	4	1	1	.....	9	Ap	17	My [4]	6	16	16	.....	.....	.....	43,594
40	Woolen goods	4	139	.....	9	3	1	126	Mh	149	De	95	148	115	33	.....	.....	361,086
41	All other industries *	171	3,781	172	165	290	88	3,066	.....	.....	.....	.....	.....	.....	.....	.....	.....	36,776,570

[1] Owned power only.

[2] Includes rented power, other than electric.

*All other industries embrace—

Aeroplanes and parts	1
Automobiles	1
Babbitt metal and solder	3
Bags, other than paper	1
Baking powders and yeast	1
Baskets, and rattan and willow ware	4
Blacking, stains, and dressings	1
Bluing	2
Boot and shoe findings	2
Boxes, cigar	1
Brushes	4
Buttons	3
Cars, steam-railroad, not including operations of railroad companies	2
China decorating, not including that done in potteries	1
Coke, not including gas-house coke	4
Cordage and twine	1
Cordials and flavoring sirups	1
Cutlery and edge tools	1
Dairymen's, poultrymen's, and apiarists' supplies	3
Druggists' preparations	2
Electrical machinery, apparatus, and supplies	4
Emery and other abrasive wheels	1
Engraving and diesinking	3
Engraving, steel and copper plate, including plate printing	2
Explosives	2
Fancy articles, not elsewhere specified	1
Feathers and plumes	2
Fertilizers	1
Fireworks	1
Flags and banners	2
Flavoring extracts	4
Fuel, manufactured	1
Furs, dressed	1
Gas and electric fixtures	4
Glass	1
Glass, cutting, staining, and ornamenting	7
Gold and silver, reducing and refining, not from the ore	1
Grease and tallow, not including lubricating greases	1
Hardware	1
Hats and caps, other than felt, straw, and wool	3
Hats, fur-felt	1
Ink, writing	2

OR MORE, BY INDUSTRIES, AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914—Continued.

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—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, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.			Total.	Steam engines.[1]	Internal-combustion engines.[2]	Water wheels and motors.[1]	Electric (rented).		
$11,369	$5,755	$27,335	$100	$6,522	$836	$72,796	$1,004	$166,566	$92,766	28	.....	.....	.....	28	.....	1
34,420	19,203	146,673	480	6,886	18,850	65,651	78,042	551,429	407,736	3,080	1,004	57	170	1,849	6	2
3,000	240	11,806	600	1,650	324	21,582	4,144	48,876	23,150	123	90	.....	.....	33	.....	3
6,750	19,700	155,928	548	10,862	1,135	183,334	5,618	418,131	229,179	190	.....	.....	.....	190	.....	4
21,120	18,405	111,890	.....	.....	7,249	49,079	31,014	250,079	169,986	384	150	24	.....	210	.....	5
257,567	246,668	933,098	15,218	6,754	1,129,703	2,630,349	170,326	9,458,255	6,657,580	6,315	3,849	360	55	2,051	865	6
17,920	12,588	59,295	4,320	8,825	1,111	75,798	2,189	207,097	129,110	81	.....	.....	.....	81	.....	7
2,139,959	1,076,260	28,095,603	1,210,796	116,273	1,495,462	35,100,204	402,521	78,130,004	42,627,279	265,269	256,858	820	2,513	5,078	22,015	8
162,176	95,939	1,015,059	822	21,642	41,175	2,520,566	59,957	4,595,765	2,015,242	8,320	4,914	51	.....	3,355	575	9
31,275	17,325	160,315	304	9,208	7,494	264,370	12,244	673,123	396,509	1,612	630	.....	.....	982	30	10
15,170	22,858	142,075	510	17,756	6,419	324,575	7,706	614,271	281,990	680	150	.....	.....	530	.....	11
2,000	468	14,232	.....	2,882	189	31,588	250	85,042	53,204	4	.....	.....	.....	4	.....	12
19,950	12,288	96,759	225	13,500	6,899	203,182	8,933	513,478	301,363	293	66	.....	17	210	.....	13
3,120	120	12,163	.....	2,605	265	5,957	973	41,741	34,811	65	.....	.....	.....	65	.....	14
.....	.....	854	.....	2,517	54	1,090	30	13,380	12,260	3	.....	.....	.....	3	.....	15
13,080	13,335	20,390	.....	8,612	970	52,220	931	142,513	89,362	21	.....	.....	.....	21	.....	16
17,545	12,120	14,495	.....	9,388	1,653	148,453	2,438	264,502	113,611	191	.....	.....	.....	191	.....	17
11,947	5,910	11,044	6,830	7,034	1,248	92,872	3,091	199,678	103,715	80	54	7	6	13	.....	18
16,380	6,924	71,974	1,416	7,782	607	20,511	2,338	165,216	142,367	64	.....	.....	.....	64	.....	19
21,860	16,896	63,641	.....	7,390	3,058	251,338	3,385	452,112	197,389	177	96	3	20	58	.....	20
176,709	141,310	662,601	88,233	117,871	12,996	697,227	22,774	2,648,838	1,928,837	875	.....	.....	.....	875	6	21
166,690	97,819	629,772	46,298	113,205	12,096	690,171	20,589	2,423,426	1,712,666	862	.....	.....	.....	862	6	22
5,715	41,481	2,100	41,935	2,822	229	5,193	56	140,726	135,477	3	.....	.....	.....	3	.....	23
4,304	2,010	30,729	.....	1,844	671	1,863	2,129	84,686	80,694	10	.....	.....	.....	10	.....	24
368,922	948,958	1,341,974	464,745	141,847	34,628	1,543,114	59,169	6,856,299	5,254,016	2,122	30	124	37	1,931	7	25
156,020	573,725	652,497	3,082	56,046	14,885	792,174	26,318	3,110,338	2,291,846	1,103	.....	4	.....	1,099	.....	26
126,654	214,421	674,348	24,816	69,002	17,888	701,686	32,088	2,620,493	1,886,719	986	30	120	37	799	7	27
86,248	160,812	15,129	436,847	16,799	1,855	49,254	763	1,125,468	1,075,451	33	.....	.....	.....	33	.....	28
600	8,460	6,180	.....	2,785	450	195,694	1,636	261,933	64,603	108	.....	.....	.....	108	.....	29
10,150	9,055	64,891	25	23,567	3,834	332,695	2,151	562,771	227,925	58	.....	.....	.....	58	.....	30
90,250	117,970	1,151,913	32,180	14,168	45,237	951,776	35,087	3,101,446	2,114,583	5,866	3,856	122	.....	1,888	1,055	31
126,290	153,578	691,172	.....	5,040	51,078	15,822,465	78,309	18,443,526	2,542,752	2,149	445	5	.....	1,699	.....	32
6,100	3,600	43,683	.....	2,540	952	46,103	4,075	143,143	92,965	60	.....	.....	.....	60	.....	33
32,986	16,212	166,125	600	3,780	4,373	248,498	9,460	550,447	292,489	470	.....	.....	.....	470	.....	34
1,200	6,101	158,407	278	12,320	37,069	215,788	998	563,246	346,460	.....	.....	.....	.....	.....	.....	35
3,600	1,212	8,038	.....	870	4,859	6,991	1,373	37,669	29,305	47	10	8	.....	29	.....	36
3,651	1,047	17,110	.....	6,070	400	30,048	280	82,896	52,568	9	.....	.....	.....	9	.....	37
.....	.....	5,085	.....	314	100	6,691	589	20,972	13,692	51	.....	.....	.....	51	.....	38
1,200	780	5,181	.....	972	883	4,251	821	18,348	13,276	125	75	3	.....	47	.....	39
10,969	3,520	70,126	.....	740	2,039	155,144	11,703	272,163	105,316	350	100	.....	.....	250	.....	40
461,805	443,248	2,488,037	9,525	86,121	148,432	16,233,004	1,353,262	27,547,437	9,961,171	29,121	6,810	27	2,605	19,679	354	41

[3] Same number reported throughout the year.

[4] Same number reported for one or more other months.

Instruments, professional and scientific	2
Iron and steel, steel works and rolling mills	1
Iron and steel, bolts, nuts, washers, and rivets	1
Iron and steel, wrought pipe	1
Ivory, shell, and bone work, not including combs and hairpins	1
Leather goods, not elsewhere specified	2
Leather, tanned, curried, and finished	3
Liquors, distilled	1
Looking-glass and picture frames	2
Lubricating greases	1
Malt	1
Mirrors, framed and unframed	2
Musical instruments, pianos	1
Musical instruments, piano and organ materials	2
Oil, not elsewhere specified	1
Paper and wood pulp	3
Paper goods, not elsewhere specified	1
Perfumery and cosmetics	2
Plumbers' supplies, not elsewhere specified	2
Pottery	2
Printing materials	1
Pumps, steam and other power	1
Refrigerators	1
Roofing materials	2
Rubber goods, not elsewhere specified	1
Saws	3
Show cases	6
Signs and advertising novelties	4
Smelting and refining, copper	1
Soap	4
Springs, steel, car and carriage, not made in steel works or rolling mills	1
Statuary and art goods	2
Steam fittings and steam and hot-water heating apparatus	2
Steam packing	1
Stencils and brands	2
Stereotyping and electrotyping	1
Surgical appliances	1
Type founding	1
Varnishes	1
Vinegar and cider	6
Wall plaster	2
Window shades and fixtures	1
Wirework, including wire rope and cable	5
Wood preserving	5
Wool pulling	2

TABLE 31.—DETAIL STATEMENT FOR THE STATE AND FOR CITIES OF 50,000 INHABITANTS

	INDUSTRY AND CITY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS, DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Capital.
	CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.															
1	**SEATTLE**—All industries	1,014	15,761	834	738	1,422	338	12,429	Mh 13,112	De 11,518	12,117	10,650	1,413	44	10	$61,317,496
2	Artificial limbs	3	11	1	1	1	.....	8	(3) 8	(3) 8	8	8	.....	.....	.....	10,390
3	Automobile bodies and parts	6	53	5	4	1	2	41	Je 47	Ja 34	34	32	2	.....	.....	115,514
4	Automobile repairing	3	13	2	1	2	.....	8	Je 12	Oc 4 6	6	6	.....	.....	.....	10,505
5	Awnings, tents, and sails	8	69	5	5	8	4	47	Ap 56	De 34	43	24	19	.....	.....	215,786
6	Bookbinding and blank-book making	7	31	9	2	.....	2	18	Mh 21	Je 4 16	17	14	3	.....	.....	37,958
7	Boxes and cartons, paper	5	105	.....	11	4	2	88	No 102	Ap 78	94	28	65	.....	1	168,377
8	Brass, bronze, and copper products	5	49	2	6	5	1	35	Mh 4 40	De 30	35	34	1	.....	.....	102,072
9	Bread and other bakery products	132	758	151	19	39	16	533	De 554	Ja 515	557	390	162	2	3	904,629
10	Brick, building	5	97	4	8	4	2	79	Je 110	De 58	100	99	.....	1	.....	563,792
11	Butter	4	63	3	7	4	3	46	Oc 4 55	Ja 4 40	54	52	2	.....	.....	350,554
12	Canning and preserving, fish	6	202	.....	7	11	6	178	Se 251	Ja 109	216	210	6	.....	.....	1,057,089
13	Carpets, rag	5	16	5	.....	.....	.....	11	(3) 11	(3) 11	12	10	2	.....	.....	3,791
14	Carriages, wagons, and repairs	10	75	11	1	2	.....	61	Mh 67	No 4 53	53	53	.....	.....	.....	150,991
15	Cars and general shop construction and repairs by steam-railroad companies.	5	463	.....	15	11	.....	437	Mh 472	Fe 407	447	447	.....	.....	.....	933,651
16	Clothing, men's, including shirts	5	309	2	7	34	1	265	Ja 306	De 225	225	17	208	.....	.....	418,715
17	Coffee and spice, roasting and grinding	12	215	7	11	48	9	140	Ap 150	No 123	130	72	58	.....	.....	647,093
18	Confectionery and ice cream	41	519	33	20	71	14	381	De 463	Ja 4 354	449	175	272	1	1	683,991
19	Confectionery	34	455	27	15	71	10	332	De 420	Jy 294	406	139	265	1	1	531,701
20	Ice cream	7	64	6	5	.....	4	49	Ju 62	Ja 4 39	43	36	7	.....	.....	152,290
21	Copper, tin, and sheet-iron products	45	332	48	23	21	4	236	Au 293	Mh 20	253	251	1	1	.....	505,415
22	Electroplating	4	12	6	.....	.....	1	5	(3) 5	(3) 5	5	5	.....	.....	.....	7,469
23	Flour-mill and gristmill products	10	418	2	30	90	17	279	Fe 320	Jy 225	288	279	9	.....	.....	5,061,397
24	Food preparations, not elsewhere specified.	15	80	16	5	7	1	51	Je 93	Ja 4 42	46	41	3	2	.....	370,020
25	Foundry and machine-shop products	64	1,129	44	76	71	12	926	Mh 1,066	No 740	848	847	.....	1	.....	4,424,261
26	Boiler shops and foundries	13	328	13	11	14	3	287	My 380	No 218	244	244	.....	.....	.....	1,007,065
27	Machine shops	51	801	31	65	57	9	639	Mh 736	No 522	604	603	.....	1	.....	3,417,196
28	Fur goods	8	44	6	1	2	3	32	De 49	Je 22	47	19	28	.....	.....	87,900
29	Furniture	24	127	20	4	2	1	100	Ja 110	Oc 90	94	93	.....	1	.....	153,577
30	Wood, rattan, willow, and metal	14	58	11	3	2	.....	42	Je 46	Ap 39	42	41	.....	1	.....	64,391
31	Store and office fixtures	10	69	9	1	.....	1	58	Ja 68	De 51	52	52	.....	.....	.....	89,186
32	Hosiery and knit goods	6	62	7	6	7	1	41	Oc 66	Je 24	59	17	42	.....	.....	95,525
33	Ice, manufactured	4	62	.....	5	8	.....	49	Jy 70	De 34	39	39	.....	.....	.....	1,005,434
34	Liquors, malt	5	581	.....	24	68	8	481	Jy 548	De 410	410	405	5	.....	.....	5,952,316
35	Lumber and timber products	25	2,187	7	62	63	10	2,045	Je 2,226	De 1,888	2,138	2,138	.....	.....	.....	5,520,391
36	Lumber, planing-mill products, not including planing mills connected with sawmills.	23	270	15	16	17	4	218	Jy 282	Ja 157	222	222	.....	.....	.....	687,250
37	Marble and stone work	4	34	3	1	2	1	27	Se 4 39	Je 20	26	26	.....	.....	.....	73,859
38	Mattresses and spring beds	4	131	.....	4	15	2	110	Fe 121	Jy 4 102	111	100	11	.....	.....	373,089
39	Millinery and lace goods	3	45	5	1	.....	1	38	Fe 112	De 10	23	3	20	.....	.....	16,180
40	Mineral and soda waters	12	58	14	7	2	3	32	Jy 37	Ja 4 29	34	34	.....	.....	.....	201,108
41	Models and patterns, not including paper patterns.	7	29	10	2	1	.....	16	Ap 21	No 4 13	15	13	.....	2	.....	21,724
42	Musical instruments and materials, violins, and other stringed instruments.	4	5	3	.....	.....	.....	2	Ap 4 4	Jy 4 1	2	2	.....	.....	.....	5,303
43	Patent medicines and compounds	8	16	5	2	1	4	4	Ja 6	Oc 4 3	3	3	.....	.....	.....	56,367
44	Photo-engraving	6	50	2	8	4	.....	36	Mh 4 38	Ja 33	35	32	3	.....	.....	71,088
45	Pickles, preserves, and sauces	4	46	2	5	5	2	32	Jy 41	Je 26	29	17	12	.....	.....	127,099
46	Printing and publishing, book and job.	109	733	92	43	57	25	516	Oc 640	Jy 466	517	444	59	14	.....	1,016,581
47	Job printing	98	660	85	39	26	20	490	Oc 614	Jy 440	490	418	58	14	.....	921,920
48	Book publishing and printing	8	46	6	2	29	4	5	Au 8	No 3	4	3	1	.....	.....	41,051
49	Linotype work, typesetting, etc.	3	27	1	2	2	1	21	Ja 4 22	No 17	23	23	.....	.....	.....	53,610
50	Printing and publishing, newspapers and periodicals.	95	949	50	65	306	51	477	Oc 495	Au 460	484	415	65	4	.....	1,494,320
51	Printing and publishing	10	616	3	29	246	21	317	Ap 326	Au 305	323	294	27	2	.....	1,145,427
52	Printing, publishing, and job printing.	17	202	13	9	18	2	160	Oc 176	Mh 149	161	121	38	2	.....	224,416
53	Publishing without printing	68	131	34	27	42	28	.....	(5) 0	(5) 0	.....	.....	.....	.....	.....	124,477
54	Saddlery and harness	4	54	4	4	4	4	38	Mh 42	Jy 35	37	37	.....	.....	.....	181,207
55	Shipbuilding, wooden, including boat building.	26	245	32	5	8	2	198	Ap 267	No 123	210	210	.....	.....	.....	323,002
56	Slaughtering and meat packing	3	575	1	17	51	24	482	Ja 498	Mh 467	495	477	18	.....	.....	3,752,773
57	Structural ironwork, not made in steel works or rolling mills.	8	59	5	7	1	.....	46	Au 58	Fe 4 38	43	43	.....	.....	.....	106,016
58	Tobacco, cigars	24	85	24	.....	3	2	56	No 59	Mh 4 54	60	51	9	.....	.....	74,419
59	Tools, not elsewhere specified	6	21	6	4	2	.....	9	Au 13	Ja 4 6	13	13	.....	.....	.....	67,485
60	All other industries *	192	4,274	165	186	359	93	3,471	.....	.....	3,051	2,703	328	15	5	23,109,963

[1] Owned power only. [2] Includes rented power, other than electric. [3] Same number reported throughout the year.

* All other industries embrace—

Aeroplanes and parts	1
Artificial stone products	4
Automobiles	1
Aabbitt metal and solder	2
Bags, other than paper	1
Baskets, and rattan and willow ware	1
Belting, leather	2
Blacking, stains, and dressings	1
Bluing	2
Boot and shoe findings	2
Boots and shoes	8
Boxes, wooden packing	3
Brooms, from broom corn	2
Brushes	2
Buttons	2
Cars and general shop construction and repairs by electric-railroad companies	3
Cars, steam-railroad, not including operations of railroad companies	1
Chemicals	2
China decorating	1
Cleansing and polishing preparations	2
Clothing, women's	10
Coffins, burial cases, and undertakers' goods	1
Cooperage	1
Cordage and twine	1
Cutlery and edge tools	1
Druggists' preparations	2
Electrical machinery, apparatus, and supplies	2
Engines, steam, gas, and water	2
Engraving and diesinking	1
Engraving, steel and copper plate, including plate printing	1
Fancy articles, not elsewhere specified	1
Feathers and plumes	2
Fireworks	1
Flags and banners	2
Furnishing goods, men's	3
Gas and electric fixtures	2
Gas, illuminating and heating	2
Glass, cutting, staining, and ornamenting	3
Gloves and mittens, leather	2
Gold and silver, reducing and refining, not from the ore	1
Hand-knit goods	1
Hand stamps	6
Hardware	1
Hats and caps, other than felt, straw, and wool	3
Hats, fur-felt	1

OR MORE, BY INDUSTRIES, AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914—Continued.

EXPENSES.										POWER.						
Salaries and wages.				Rent and taxes.		For materials.				Primary horsepower.						
Officials.	Clerks, etc.	Wage earners.	For contract work.	Rent of factory.	Taxes, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.	Value of products.	Value added by manufacture.	Total.	Steam engines.[1]	Internal-combustion engines.[2]	Water wheels and motors.[1]	Electric (rented).	Electric horsepower generated in establishments reporting.	
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
$1,741,775	$1,947,149	$9,934,922	$347,017	$675,856	$1,066,053	$36,853,209	$916,915	$64,475,442	$26,705,318	44,001	23,491	643	15	19,852	5,568	1
520	520	5,760	.....	2,670	47	4,500	133	22,325	17,692	4	.....	.....	.....	4	.....	2
5,940	2,370	43,940	.....	7,980	213	43,145	950	127,398	83,303	26	.....	.....	.....	26	.....	3
2,100	1,584	8,583	44	1,944	34	7,695	404	26,767	18,668	13	.....	.....	.....	13	.....	4
5,162	11,292	35,692	.....	8,860	2,550	170,958	497	276,553	105,098	19	.....	.....	.....	19	.....	5
2,882	747	12,904	282	3,280	684	10,286	365	46,428	35,777	18	.....	.....	.....	18	.....	6
16,809	5,464	38,529	1,406	7,865	847	59,091	1,321	149,858	89,446	43	.....	.....	.....	43	.....	7
11,140	3,978	33,277	2,726	2,411	549	48,709	3,147	126,651	74,795	81	.....	.....	.....	81	.....	8
34,455	67,917	416,152	35	82,639	9,127	1,245,987	36,826	2,354,848	1,072,035	653	50	6	.....	597	.....	9
11,024	6,150	68,828	.....	.....	3,949	17,880	24,285	176,006	133,841	430	50	.....	.....	380	.....	10
16,680	6,386	31,563	.....	2,000	3,726	747,376	3,986	908,784	157,422	250	.....	.....	.....	250	.....	11
16,200	14,760	148,456	.....	3,256	5,097	300,204	20,508	587,831	267,119	1,085	760	240	.....	85	.....	12
.....	.....	5,481	.....	1,032	15	2,927	233	14,870	11,710	9	.....	.....	.....	9	.....	13
1,500	1,620	59,672	600	8,208	1,468	52,007	4,386	155,046	98,653	120	.....	.....	.....	120	.....	14
25,021	11,897	367,245	.....	.....	292	290,189	13,218	713,679	410,272	207	132	.....	.....	75	.....	15
14,410	37,333	103,209	.....	13,930	1,945	344,145	1,458	595,843	250,240	38	.....	.....	.....	38	.....	16
29,420	82,956	87,239	.....	21,292	4,353	1,091,534	5,720	1,598,573	501,319	163	.....	.....	.....	163	.....	17
39,414	98,740	208,761	.....	42,662	5,743	825,729	23,839	1,519,545	669,977	301	55	2	.....	244	.....	18
30,994	95,553	171,455	.....	37,912	4,327	653,288	17,791	1,228,746	557,667	134	50	2	.....	82	.....	19
8,420	3,187	37,306	.....	4,750	1,416	172,441	6,048	290,799	112,310	167	5	.....	.....	162	.....	20
42,758	19,903	188,854	4,052	25,972	5,814	476,461	4,922	906,189	424,806	133	.....	4	.....	129	.....	21
.....	520	3,176	172	1,470	26	547	700	14,917	13,670	41	.....	.....	.....	41	.....	22
99,510	125,537	222,377	.....	2,396	41,155	6,144,746	57,345	7,600,709	1,398,618	3,425	250	.....	.....	3,175	.....	23
10,440	4,319	31,588	.....	3,680	2,814	215,399	3,127	326,533	108,007	91	.....	.....	.....	91	.....	24
154,213	87,352	807,877	6,352	59,432	36,780	1,206,733	65,596	3,011,944	1,739,615	2,931	216	65	.....	2,650	.....	25
23,460	21,500	251,537	.....	9,360	10,793	321,684	23,856	787,635	442,095	1,265	.....	.....	.....	1,265	.....	26
130,753	65,852	556,340	6,352	50,072	25,987	885,049	41,740	2,224,309	1,297,520	1,666	216	65	.....	1,385	.....	27
3,000	4,940	20,483	948	7,980	1,144	32,267	352	91,336	58,717	8	.....	.....	.....	8	.....	28
4,680	2,150	75,193	12,156	10,357	1,231	94,152	4,092	272,996	174,752	227	.....	25	.....	202	.....	29
3,120	1,550	27,434	400	4,873	415	35,400	1,922	116,424	79,102	92	.....	25	.....	67	.....	30
1,560	600	47,759	11,756	5,484	816	58,752	2,170	156,572	95,650	135	.....	.....	.....	135	.....	31
7,469	4,945	21,670	100	5,610	406	53,821	458	130,331	76,052	15	.....	.....	.....	15	.....	32
13,020	9,930	42,964	480	300	9,816	12,354	24,360	209,478	172,764	1,155	239	.....	.....	916	.....	33
111,880	102,501	502,838	500	.....	575,805	999,647	63,194	4,800,292	3,737,451	2,547	1,604	.....	.....	943	322	34
156,608	77,258	1,628,332	3,764	28,988	74,699	3,123,342	9,180	5,303,062	2,170,540	14,047	13,442	.....	.....	605	3,535	35
29,200	22,053	205,373	651	11,204	10,568	437,451	10,717	880,601	432,433	1,459	510	.....	.....	949	307	36
2,400	2,860	27,962	.....	4,120	653	34,105	1,006	79,847	44,736	26	.....	.....	.....	26	.....	37
10,216	16,652	86,648	510	7,948	4,475	202,904	3,386	388,343	182,053	290	150	.....	.....	140	.....	38
2,000	468	14,232	.....	2,882	189	31,588	250	85,042	53,204	4	.....	.....	.....	4	.....	39
10,470	3,870	35,084	.....	3,072	2,391	77,334	1,444	167,427	88,649	50	.....	.....	.....	50	.....	40
3,120	120	11,039	.....	2,120	139	5,458	783	34,691	28,450	52	.....	.....	.....	52	.....	41
.....	.....	854	.....	1,695	21	795	.....	7,430	6,635	2	.....	.....	.....	2	.....	42
4,200	3,600	2,438	6,830	4,590	169	36,889	566	83,062	45,607	4	.....	.....	.....	4	.....	43
14,040	3,475	46,156	916	5,142	427	13,338	1,281	107,320	92,701	34	.....	.....	.....	34	.....	44
8,100	4,500	20,223	.....	3,360	794	102,154	1,274	188,957	85,529	38	.....	.....	.....	38	.....	45
85,528	78,342	334,046	61,638	62,883	5,476	365,062	9,367	1,367,522	993,093	489	.....	.....	.....	489	.....	46
76,324	44,742	307,668	33,601	59,567	4,916	359,665	8,300	1,206,847	838,882	482	.....	.....	.....	482	.....	47
4,900	31,590	2,100	28,037	2,246	189	4,570	56	103,055	98,429	3	.....	.....	.....	3	.....	48
4,304	2,010	24,278	.....	1,070	371	827	1,011	57,620	55,782	4	.....	.....	.....	4	.....	49
193,491	438,868	567,873	197,983	50,301	10,716	693,046	18,964	3,071,273	2,359,263	701	.....	2	.....	699	.....	50
125,750	373,488	427,231	1,920	27,275	9,554	602,485	16,711	2,181,867	1,562,671	515	.....	2	.....	513	.....	51
14,153	15,245	140,642	4,784	11,769	661	83,093	2,253	381,404	296,058	186	.....	.....	.....	186	.....	52
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53
53,588	50,135	.....	191,279	11,257	501	7,468	.....	508,002	500,534	.....	.....	.....	.....	.....	.....	54
7,750	7,670	35,606	.....	11,325	1,243	199,029	749	321,884	122,106	18	.....	.....	.....	18	.....	55
8,155	9,704	147,276	3,400	11,383	1,447	203,608	3,965	460,233	252,660	355	101	34	.....	220	.....	56
85,560	80,558	378,513	.....	.....	20,642	9,677,898	7,715	11,132,707	1,477,094	900	220	5	.....	675	.....	57
11,400	1,200	34,256	100	2,860	838	51,869	1,504	118,969	65,596	121	.....	.....	.....	121	.....	58
.....	2,561	44,701	262	2,995	8,967	51,955	184	144,993	92,854	.....	.....	.....	.....	.....	.....	59
3,600	1,212	8,038	.....	870	4,859	6,991	1,373	37,669	29,305	47	10	8	.....	29	.....	60
426,290	476,367	2,713,961	41,110	130,892	201,710	7,039,904	477,785	13,728,680	6,210,991	11,331	5,702	252	15	5,362	1,404	

[4] Same number reported for one or more other months.

[5] No wage earners employed.

Ink, writing	2
Instruments, professional and scientific	1
Iron and steel, steel works and rolling mills	1
Iron and steel, bolts, nuts, washers, and rivets	1
Iron and steel forgings	3
Iron and steel, wrought pipe	1
Ivory, shell, and bone work	1
Jewelry	8
Leather goods, not elsewhere specified	1
Leather, tanned, curried, and finished	2
Lithographing	2
Looking-glass and picture frames	1
Mirrors, framed and unframed	1
Optical goods	8
Paints	2
Paper goods, not elsewhere specified	1
Perfumery and cosmetics	2
Plumbers' supplies	2
Pottery	1
Printing material	1
Pumps, steam and other power	1
Rice, cleaning and polishing	8
Rubber goods	1
Saws	2
Shipbuilding, iron and steel	3
Show cases	1
Signs and advertising novelties	3
Soap	3
Springs, steel, car and carriage, not made in steel works or rolling mills	1
Statuary and art goods	2
Steam fittings and steam and hot-water heating apparatus	1
Steam packing	1
Stencils and brands	1
Stereotyping and electroplating	1
Stoves and hot-air furnaces	2
Surgical appliances	1
Trunks and valises	5
Type founding	1
Varnishes	1
Vinegar and cider	1
Wall plaster	1
Window and door screens	4
Window shades and fixtures	1
Wirework	3
Wood preserving	1
Wood, turned and carved	2
Wooden goods, not elsewhere specified	1
Wool pulling	2

TABLE 31.—DETAIL STATEMENT FOR THE STATE AND FOR CITIES OF 50,000 INHABITANTS

	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— Maximum month.		Number, 15th day of— Minimum month.			Male.	Female.	Male.	Female.	
	CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.																	
1	**SPOKANE**—All industries	277	4,159	226	213	549	151	3,020	My	3,209	Fe	2,807	3,039	2,548	454	36	1	$18,891,450
2	Automobile repairing	5	28	4	.....	1	.....	23	Ja [3]	25	Au [3]	22	23	23	.....	.....	.....	21,929
3	Bread and other bakery products	22	533	20	13	69	17	414	Oc	453	Fe	391	406	229	177	.....	.....	986,898
4	Brick and tile and other clay products	3	14	3	.....	.....	.....	11	My	44	Au [3]	1	45	45	.....	.....	.....	24,000
5	Carriages and wagons and materials	3	35	5	1	2	.....	27	Ap	36	De	20	21	21	.....	.....	.....	125,295
6	Cars and general shop construction and repairs by steam-railroad companies.	3	53	.....	4	2	.....	47	Ja [3]	54	Au	37	48	48	.....	.....	.....	42,113
7	Confectionery	11	83	12	2	4	4	61	De	77	Fe	46	76	30	46	.....	.....	101,548
8	Copper, tin, and sheet-iron work	16	99	16	9	9	1	64	Je	79	No	49	63	63	.....	.....	.....	283,315
9	Flour-mill and gristmill products	3	94	.....	6	21	5	62	Ja	72	Je	54	67	65	2	.....	.....	1,255,911
10	Food preparations, not elsewhere specified.	4	23	5	2	1	1	14	Mh	24	Jy [3]	8	17	13	4	.....	.....	37,425
11	Foundry and machine-shop products	14	108	14	6	6	5	77	Ap	84	No	68	76	75	1	.....	.....	447,563
12	Furniture and refrigerators	7	30	6	4	.....	1	19	My [3]	25	Fe	14	20	20	.....	.....	.....	37,315
13	Hand stamps	3	11	2	1	1	.....	7	(4)	7	(4)	7	7	7	.....	.....	.....	5,540
14	Jewelry	4	20	5	1	1	.....	13	Ja [3]	14	Mh [3]	12	15	15	.....	.....	.....	7,965
15	Leather goods	4	12	3	3	1	.....	5	(4)	5	(4)	5	5	5	.....	.....	.....	24,935
16	Liquors, malt	3	118	.....	8	16	1	93	Fe [3]	97	De	84	89	89	.....	.....	.....	2,790,537
17	Lumber and timber products	6	456	3	17	25	3	408	My	522	Fe	253	362	351	2	9	.....	1,561,088
18	Lumber, planing-mill products, not including planing mills connected with sawmills.	11	424	1	23	40	1	359	Jy	412	De	308	334	322	.....	12	.....	1,154,673
19	Mineral and soda waters	4	12	7	.....	1	.....	4	Je	9	De [3]	6	6	6	.....	.....	.....	83,316
20	Pickles, preserves, and sauces	3	18	1	5	3	.....	9	My [3]	11	Ja [3]	8	9	2	7	.....	.....	79,451
21	Printing and publishing	53	692	53	39	216	68	316	.....	.....	.....	.....	324	274	45	4	1	1,204,904
22	Book and job	40	270	40	17	29	7	177	Mh	192	My	160	186	143	38	4	1	603,197
23	Newspapers and periodicals	13	422	13	22	187	61	139	Fe [3]	144	Mh	134	138	131	7	.....	.....	601,707
24	Tobacco, cigars	14	50	16	.....	2	3	29	Jy	30	Ja [3]	28	29	24	5	.....	.....	38,214
25	All other industries *	81	1,246	50	69	128	41	958	.....	.....	.....	.....	997	821	165	11	.....	8,577,515

* All other industries embrace—
Agricultural implements 1
Artificial limbs 1
Artificial stone products 2
Automobile bodies and parts 2
Awnings, tents, and sails 2
Bookbinding and blank-book making 1
Boxes, fancy and paper 1
Boxes, wooden packing 2
Brass and bronze products 1
Brooms 2
Brushes 1
Butter 3
Buttons 1
Cars and general shop construction and repairs by electric-railroad companies 2
Clothing, men's 2
Clothing, women's 1
Coffee and spice, roasting and grinding 4
Coffins, burial cases, and undertakers' goods 2
Confectionery (ice cream) 2
Cooperage 1
Electrical machinery, apparatus, and supplies 1
Engraving, steel and copper plate, including plate printing 1
Fur goods 5
Gas and electric fixtures 2

1	**TACOMA**—All industries	339	8,084	278	313	622	106	6,765	Au	7,400	Ja	6,025	6,854	6,450	392	7	5	$28,287,257
2	Automobile bodies and parts	3	9	4	.....	.....	.....	5	(4)	5	(4)	5	5	4	.....	1	.....	5,150
3	Awnings, tents, and sails	3	15	8	.....	3	.....	4	Mh	7	Ja	2	6	2	4	.....	.....	48,675
4	Brass and bronze products	3	11	4	.....	.....	1	6	Au	8	Ja [3]	5	5	4	.....	1	.....	17,668
5	Bread and other bakery products	36	272	42	9	36	5	180	No	195	Fe	147	192	112	75	1	4	437,225
6	Brooms, from broom corn	3	6	4	.....	.....	.....	2	Jy [3]	4	Ja [3]	2	2	2	.....	.....	.....	11,608
7	Cars and general shop construction and repairs by electric-railroad companies.	3	63	.....	1	2	.....	60	Jy	66	De	54	54	54	.....	.....	.....	112,166
8	Coffee and spice, roasting and grinding.	7	69	2	6	20	6	35	Je	39	No	30	31	22	8	.....	1	241,274
9	Confectionery and ice cream	11	132	6	10	8	2	106	Jy	118	Fe	93	119	53	66	.....	.....	159,944
10	Confectionery	7	81	5	6	4	2	64	De	72	Fe	58	75	27	48	.....	.....	116,036
11	Ice cream	4	51	1	4	4	.....	42	Jy	56	Ja [3]	35	44	26	18	.....	.....	43,908
12	Copper, tin, and sheet-iron products	18	94	19	7	3	.....	65	Se [3]	71	Fe	53	73	71	1	1	.....	104,657
13	Flour-mill and gristmill products	7	321	.....	20	31	12	258	Oc	283	Je	229	265	260	5	.....	.....	3,094,527
14	Food preparations, not elsewhere specified.	4	32	1	5	4	1	21	Fe [3]	24	Ap [3]	18	20	17	3	.....	.....	98,454
15	Foundry and machine-shop products	22	435	16	24	34	4	357	Fe	405	Jy	241	334	334	.....	.....	.....	2,054,074
16	Furniture	10	372	6	15	7	7	337	Ap	360	Jy	306	326	319	7	.....	.....	967,033
17	Lumber and timber products	26	2,327	7	62	101	10	2,147	Au	2,582	Ja	1,704	2,163	2,163	.....	.....	.....	5,723,372
18	Marble and stone work	5	85	3	5	6	1	70	Ap	88	Je [3]	55	65	65	.....	.....	.....	158,218
19	Mineral and soda waters	5	23	6	1	2	.....	14	My [3]	16	De	12	13	13	.....	.....	.....	50,725
20	Patent medicines and compounds	11	16	13	1	.....	.....	2	(4)	2	(4)	2	2	2	.....	.....	.....	7,598
21	Printing and publishing	58	615	49	29	217	27	293	Oc	311	Ja	283	298	261	35	2	.....	737,757
22	Saddlery and harness	3	9	3	.....	.....	.....	6	Mh [3]	7	Se [3]	5	7	7	.....	.....	.....	14,850
23	Shipbuilding, wooden, including boat building.	5	24	7	.....	.....	.....	17	Mh [3]	24	Se	7	26	26	.....	.....	.....	14,510
24	Show cases	3	5	3	.....	.....	.....	2	Fe [3]	4	Oc [3]	1	3	3	.....	.....	.....	2,225
25	Tobacco, cigars	15	76	21	.....	1	.....	54	Je	64	Jy	45	57	45	12	.....	.....	65,333
26	All other industries *	78	3,073	54	118	145	30	2,724	.....	.....	.....	.....	2,788	2,611	176	1	.....	14,159,614

* All other industries embrace—
Artificial limbs 2
Artificial stone products 4
Automobile repairing 2
Babbitt metal and solder 1
Baskets, and rattan and willow ware 1
Boots and shoes 2
Boxes, cigar 1
Boxes, fancy and paper 2
Brick and tile, terra-cotta and fire-clay products 1
Brushes 1
Butter 2
Canning and preserving, fish 1
Carpets, rag 2
Carriages, wagons, and repairs 4
Car and general shop construction and repairs by steam-railroad companies 3
Chemicals 1
Cleansing and polishing preparations 1
Clothing, men's 1
Clothing, women's 1
Cordials and flavoring sirups 1
Electrical machinery, apparatus, and supplies 1
Engines, steam, gas, and water 1
Flavoring extracts 2
Furnishing goods, men's 1
Furs, dressed 1
Gas, illuminating and heating 1

[1] Owned power only.

[2] Includes rented power, other than electric.

OR MORE, BY INDUSTRIES, AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914—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, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.			Total.	Steam engines.[1]	Internal-combustion engines.[2]	Water wheels and motors.[1]	Electric (rented).		
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.																
$464,708	$687,598	$2,465,024	$287,576	$169,856	$240,396	$9,153,541	$300,871	$16,636,309	$7,181,897	20,362	13,373	16	900	6,073	43	1
.....	660	16,293	.....	1,020	193	14,708	492	54,247	39,047	11	.....	.....	.....	11	.....	2
27,446	95,765	255,544	3,350	17,170	9,055	1,021,783	30,590	1,889,276	836,903	301	45	.....	.....	256	.....	3
.....	.....	6,212	.....	225	154	1,165	3,055	15,200	10,980	125	.....	.....	.....	125	.....	4
1,800	2,180	22,961	.....	90	1,695	19,284	2,426	58,082	36,372	55	.....	.....	.....	55	.....	5
6,660	1,400	46,148	385	.....	106	33,559	2,747	93,819	57,513	112	.....	.....	.....	112	.....	6
3,000	6,792	41,495	.....	16,420	538	109,685	5,282	213,040	98,083	47	.....	.....	.....	47	.....	7
12,450	10,078	66,411	1,238	4,072	1,731	124,175	1,196	266,356	140,985	46	.....	.....	.....	46	.....	8
27,365	25,667	54,720	695	17,439	6,723	1,437,828	8,242	1,810,235	364,165	963	.....	.....	350	613	.....	9
768	570	8,273	.....	3,000	270	15,328	1,034	46,265	29,903	49	.....	.....	.....	49	.....	10
10,000	10,753	63,327	240	3,269	5,146	104,164	5,279	268,457	159,014	220	36	.....	.....	184	.....	11
6,000	720	14,592	.....	1,550	256	25,590	1,003	54,846	28,253	58	.....	12	.....	46	.....	12
1,200	650	5,058	.....	1,650	36	4,422	194	19,512	14,896	9	.....	.....	.....	9	.....	13
.....	520	9,542	200	956	70	5,717	183	22,200	16,300	12	.....	.....	.....	12	.....	14
3,752	900	4,772	.....	2,412	746	28,005	82	45,629	17,542	6	.....	.....	.....	6	.....	15
24,300	25,210	123,164	14,718	.....	133,202	518,535	31,052	1,287,590	738,003	829	53	.....	.....	776	.....	16
44,514	26,298	315,876	50,261	10,808	13,065	504,037	1,573	1,058,037	552,427	13,105	12,370	.....	550	185	5	17
47,594	36,025	280,825	.....	1,575	5,843	679,232	20,209	1,213,210	513,769	1,568	600	.....	.....	968	18	18
.....	750	7,837	.....	1,104	830	21,750	841	52,795	30,204	54	40	.....	.....	14	.....	19
7,680	5,536	4,876	.....	3,550	455	44,210	832	81,965	36,923	11	.....	.....	.....	11	.....	20
93,517	262,571	304,960	214,973	41,142	9,461	567,495	11,884	1,878,518	1,299,139	379	30	.....	.....	349	.....	21
35,098	30,819	141,114	6,450	26,031	3,546	148,524	6,168	559,194	404,502	157	.....	.....	.....	157	.....	22
58,419	231,752	163,846	208,523	15,111	5,915	418,971	5,716	1,319,324	894,637	222	30	.....	.....	192	.....	23
.....	2,400	22,896	16	1,445	3,424	27,468	168	68,298	40,662	.....	.....	.....	.....	.....	.....	24
146,662	172,153	789,442	1,500	40,959	47,397	3,845,401	172,507	6,138,732	2,120,814	2,402	199	4	.....	2,199	20	25

Gas, illuminating and heating..... 1
Glass, cutting, staining, and ornamenting..... 1
Hosiery and knit goods..... 1
Ice, manufactured..... 1
Lithographing 1
Looking-glass and picture frames.... 2
Marble and stone work..... 2
Mattresses and spring beds..... 2
Mirrors, framed and unframed 1
Models and patterns, not including paper patterns 1
Musical instruments and materials, not specified..... 2
Optical goods 1
Paints..... 2
Patent medicines and compounds.... 3
Photo-engraving 2
Roofing materials 1
Show cases 1
Signs and advertising novelties..... 1
Slaughtering and meat packing..... 2
Soap 1
Structural ironwork, not made in steel works or rolling mills..... 4
Vinegar and cider 2
Window and door screens 1
Wirework 1
Wood, turned and carved 1

$631,952	$714,712	$4,963,621	$45,549	$160,181	$394,251	$16,997,321	$393,828	$27,707,606	$10,316,457	24,086	15,758	27	2	8,299	4,289	1
.....	.....	3,520	.....	1,320	34	4,400	286	12,600	7,914	3	.....	.....	.....	3	.....	2
.....	3,200	3,388	.....	1,380	782	19,280	100	31,431	12,051	3	.....	.....	.....	3	.....	3
.....	175	4,692	400	360	204	8,490	430	17,743	8,823	15	.....	.....	.....	15	.....	4
18,485	49,668	116,309	.....	9,989	4,376	399,518	12,898	834,596	422,180	122	.....	.....	.....	122	.....	5
.....	.....	741	.....	240	46	7,520	48	14,750	7,182	4	.....	.....	.....	4	.....	6
1,717	1,865	49,604	.....	.....	2,190	58,368	.....	111,553	53,185	210	.....	.....	.....	210	.....	7
11,575	30,740	16,805	300	5,825	3,160	234,108	2,661	409,181	172,412	78	.....	.....	.....	78	.....	8
16,190	8,086	59,020	.....	11,966	2,153	200,932	4,722	388,083	182,429	106	.....	.....	.....	106	.....	9
9,130	4,176	33,280	.....	5,030	1,527	91,915	2,486	199,913	105,512	40	.....	.....	.....	40	.....	10
7,060	3,910	25,740	.....	6,936	626	109,017	2,236	188,170	76,917	66	.....	.....	.....	66	.....	11
10,780	2,900	60,490	.....	7,882	1,169	77,784	862	200,355	121,709	50	.....	.....	.....	50	.....	12
54,855	47,622	214,709	.....	3,661	28,954	6,023,969	47,211	6,695,231	624,051	3,047	1,167	.....	.....	1,880	.....	13
6,220	3,568	10,894	.....	762	377	100,825	1,123	156,377	54,429	61	.....	.....	.....	61	.....	14
42,463	34,270	247,693	13,329	8,420	18,816	637,596	42,460	1,285,387	605,331	988	75	5	.....	908	.....	15
28,624	13,146	212,828	.....	2,748	11,308	277,920	5,218	620,800	337,662	742	615	.....	.....	127	108	16
156,320	131,145	1,548,265	.....	11,333	84,421	2,602,627	8,569	5,059,625	2,448,429	10,323	10,039	.....	.....	284	2,716	17
10,950	7,940	62,618	.....	2,970	2,668	180,807	5,118	374,297	188,372	228	.....	.....	.....	228	.....	18
1,200	1,968	10,350	.....	1,056	447	16,451	370	48,000	31,179	10	.....	.....	2	8	.....	19
214	.....	1,080	.....	1,114	84	3,138	43	11,675	8,494	1	.....	.....	.....	1	.....	20
63,274	191,739	260,090	30,040	44,801	5,535	274,892	6,649	1,157,565	876,024	546	.....	.....	.....	546	.....	21
.....	.....	5,420	.....	2,312	236	6,700	119	17,700	10,881	4	.....	.....	.....	4	.....	22
.....	.....	13,902	780	745	85	20,448	167	50,091	29,476	22	.....	5	.....	17	.....	23
.....	.....	1,090	.....	434	31	850	100	3,425	2,475	17	.....	.....	.....	17	.....	24
.....	1,040	36,264	.....	1,878	8,833	45,345	208	120,166	74,613	.....	.....	.....	.....	.....	.....	25
209,085	185,640	2,023,849	700	38,985	218,342	5,795,353	254,466	10,086,975	4,037,156	7,506	3,862	17	.....	3,627	1,465	26

Glass, cutting, staining, and ornamenting..... 3
Gloves and mittens, leather..... 1
Grease and tallow, not including lubricating greases 1
Hand stamps..... 1
Ice, manufactured..... 2
Iron and steel forgings..... 1
Jewelry.....
Leather, tanned, curried, and finished. 1
Liquors, malt..... 2
Mattresses and spring beds..... 1
Models and patterns, not including paper patterns 2
Musical instruments and materials, not specified 2
Paints..... 2
Photo-engraving..... 2
Pickles, preserves, and sauces..... 2
Rice, cleaning and polishing..... 1
Roofing materials..... 1
Shirts..... 1
Slaughtering and meat packing..... 2
Steam fittings and steam and hot-water heating apparatus..... 1
Stencils and brands..... 1
Stoves and hot-air furnaces..... 1
Structural ironwork not made in steel works or rolling mills..... 1
Trunks and valises..... 1
Wall plaster..... 1
Wooden goods, not elsewhere specified 1

[3] Same number reported for one or more other months.

[4] Same number reported throughout the year.

TABLE 31.—DETAIL STATEMENT FOR THE STATE AND FOR CITIES OF 50,000 INHABITANTS

	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— Maximum month.		Number, 15th day of— Minimum month.		Male.	Female.	Male.	Female.	
	CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																
1	Aberdeen	60	1,729	44	52	47	18	1,568	Ja	1,691	De 1,262	1,764	1,714	48	.....	2	$4,829,962
2	Bellingham	86	2,182	78	67	95	20	1,922	Au	2,532	De 1,066	2,497	2,375	98	24	.....	6,940,221
3	Everett	98	2,209	77	62	84	27	1,959	Au	2,190	De 1,460	2,112	2,063	45	4	.....	6,297,833
4	Hoquiam	33	1,759	20	32	38	12	1,657	Jy	1,945	Oc 1,198	1,886	1,845	41	.....	.....	4,089,340
5	North Yakima	42	730	33	33	62	20	582	Au	838	Fe 392	611	590	9	12	.....	2,384,172
6	Vancouver	28	425	25	25	12	3	360	Se	393	De 290	449	408	41	.....	.....	1,088,609
7	Walla Walla	47	455	38	42	43	21	311	Jy	386	Ja 254	327	304	15	8	.....	2,425,646

[1] Owned power only.

OR MORE, BY INDUSTRIES, AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914—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, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.			Total.	Steam engines.[1]	Internal-combustion engines.[2]	Water wheels and motors.[1]	Electric (rented).		
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																
$134,303	$73,654	$1,218,618	$79,761	$16,374	$99,894	$2,571,888	$39,814	$4,815,113	$2,203,411	13,280	13,028	72	.....	180	523	1
161,137	132,731	1,318,427	115,687	33,449	93,225	3,261,756	104,548	6,264,307	2,898,003	10,170	8,256	53	.....	1,861	878	2
136,729	112,613	1,609,839	8,732	22,826	75,986	3,933,700	66,745	6,530,405	2,529,960	13,653	12,157	.....	.....	1,496	3,677	3
85,875	47,744	1,287,337	925	8,022	78,459	3,027,908	13,953	5,009,410	1,967,549	12,377	11,908	8	.....	461	300	4
46,747	61,775	402,497	97,497	14,696	32,931	816,533	56,027	1,937,461	1,064,901	2,343	1,639	7	98	599	8	5
48,493	13,716	282,094	460	3,537	61,434	522,972	34,378	1,301,048	743,698	936	675	.....	.....	261	.....	6
63,616	44,632	250,315	19,849	14,445	40,701	1,158,684	57,325	2,014,673	798,664	1,737	227	.....	193	1,317	.....	7

[1] Owned power only.

[2] Includes rented power, other than electric.

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

SAM. L. ROGERS, DIRECTOR

CENSUS OF MANUFACTURES: 1914

WEST VIRGINIA

Prepared under the supervision of W. M. STEUART, Chief Statistician for Manufactures

CONTENTS

	Page
Explanation of terms	2
General statistics	3–18
General character of the state	3
Importance and growth of manufactures	3
Lumber and timber products	4
Glass	5
Steel works and rolling mills and tin plate and terneplate establishments	5
Leather, tanned, curried, and finished	5
Cars and general shop construction and repairs by steam-railroad companies	5
Flour-mill and gristmill products	5
Brick, tile, pottery, and other clay products	5
Liquors, malt	5
Persons engaged in manufacturing industries	5
Wage earners employed, by months	8
Prevailing hours of labor	9
General Statistics—Continued.	
Location of establishments	10
Character of ownership	12
Size of establishments	13
Engines and power	17
Fuel consumed	18
Special statistics	18–20
Steel works and rolling mills	18
Tin plate and terneplate	19
Glass	19
Leather, tanned, curried, and finished	19
Flour-mill and gristmill products	19
Laundries	20
General tables	20–25
Table 31.—Comparative summary for 1914, 1909, and 1904	21
Table 32.—Detail statement for the state, by industries, and for cities of 10,000 to 50,000 inhabitants: 1914	22

WASHINGTON

GOVERNMENT PRINTING OFFICE

1917

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 should 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 whose products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1914, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city 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 very different from those covered by the class designation, and, on the other hand, may not include the total product covered by this designation, because some part of this 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 the leading industries of the state for more detailed consideration. Sometimes an industry of greater importance than some of those selected is omitted because it comprises so few establishments that these detailed presentations would reveal the operations of individual concerns.

Comparisons with previous censuses.—Owing to the 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, as a rule, has been followed in compiling the statistics of 1914 when placed in comparison with those for 1909 and prior years. The comparative summary for 1914, 1909, and 1904, therefore, does not show separately all the industries given for 1914 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 1914 and 1909 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 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 ceasuses.

The number of persons engaged in each industry, classified 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, without distinction of sex or 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 average thus obtained approximates the number of wage earners that would be required to perform the work done if all were constantly employed during the entire year. Accordingly, 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 believed not to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation. 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 particular, totals by sex and age for the wage earners reported for the representative day for all industries combined would be misleading because of the undue weight given to seasonal industries, in some of which, such as canning and preserving, the distribution of the wage earners by sex and age is materially different from that in most industries of more regular operation. In order to determine as nearly as possible the sex and age distribution of the average number of wage earners for a given state as a whole, the per cent distribution by sex and 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 number of men, women, and children 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 represent the approximate number who would be required to perform the work in any industry if all were continuously employed during the year, whereas the actual number to whom the total wages were paid would be larger.

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, all or practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

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

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

These instructions were identical with those employed at the census of 1909. The data compiled in respect to capital, however, at 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 internal revenue, corporation income tax, and state, county, and local taxes. In some instances the amount of the corporation tax for 1914 had not been ascertained when the report was prepared and the amount paid for 1913 was given.

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 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 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 interest or depreciation, 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, since in most cases an engine or motor is not required to deliver continuously its full rated horsepower.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, oil, and gas. They relate to the quantity used during the year, which may be more or less than the quantity purchased. As only the principal varieties of fuel are shown, no comparison can be made with the total cost of all fuel.

WEST VIRGINIA.

By John D. Roberts.

GENERAL STATISTICS.

General character of the state.—West Virginia was admitted to the Union as a state in 1862. With a gross area of 24,170 square miles, of which 24,022 represent land surface, it ranks fortieth in size among the states. Its inhabitants in 1900 numbered 958,800 and in 1910, 1,221,119; and its estimated population in 1914 was 1,332,910. In total population West Virginia ranked twenty-eighth among the states in 1910; and in density of population it ranked sixteenth, with 50.8 inhabitants per square mile, the corresponding figure for 1900 being 39.9.

The urban population in 1910—that is, the population residing in cities and towns of 2,500 inhabitants or more—was 228,242, or 18.7 per cent of the total, as against 13.1 per cent in 1900. There were no cities having more than 50,000 inhabitants in the state in 1914, but there were 10 cities each of which had an estimated population of more than 10,000—Bluefield, Charleston, Clarksburg, Fairmont, Huntington, Martinsburg, Morgantown, Moundsville, Parkersburg, and Wheeling. These cities, whose aggregate population in that year formed 15.2 per cent of the estimated total population of West Virginia, reported 34.8 per cent of the value of the state's manufactured products.

The cities and mining districts of the state are well supplied with railway transportation facilities, though some of the heavily wooded areas are not traversed by railroads. The steam-railway mileage in 1914 was 3,915 and the electric-railway mileage in 1912 was 370. The Ohio River, which forms the greater part of the western boundary of the state, affords cheap and adequate shipping facilities.

The mineral products of the state, in 1914, according to the reports of the United States Geological Survey, were valued at $134,071,803, consisting principally of bituminous coal, 71,707,626 short tons, valued at $71,391,408; natural gas, 238,740,162,000 cubic feet, valued at $35,515,329; and petroleum, 9,680,033 barrels, valued at $18,468,540. In total value of mineral products West Virginia ranked second among the states; in production of natural gas, first; and in production of petroleum, sixth. The number of productive petroleum wells in the state, on December 31, 1914, was 14,932. The market production of gasoline made from natural gas in that year was 9,278,108 gallons, valued at $691,899.

The total value of West Virginia's farm crops in 1909 was $40,374,776, and the value of domestic animals sold or slaughtered on farms was $18,456,118.

Importance and growth of manufactures.—West Virginia's abundant supply of fuel, especially bituminous coal and natural gas, is of great advantage to its manufacturing industries, and undoubtedly has been largely instrumental in advancing its rank in value of products from twenty-ninth in 1909 to twenty-eighth in 1914. The state's proportion of the total value of manufactured products in the United States was the same at each of the last two censuses—eight-tenths of 1 per cent.

Table 1 summarizes the more important data relative to all classes of manufactures combined in the state of West Virginia for the censuses of 1914, 1909, 1904, and 1899, together with the percentages of increase from census to census.

Table 1

	Manufacturing industries.				Per cent of increase.[1]		
	1914	1909	1904	1899	1909–1914	1904–1909	1899–1904
Number of establishments	2,749	2,586	2,109	1,824	6.3	22.6	15.6
Persons engaged	79,353	71,463	48,880	(2)	11.0	46.2	.....
Proprietors and firm members	2,559	2,599	2,230	(2)	−1.5	16.5	.....
Salaried employees	5,716	4,971	2,892	1,744	15.0	71.9	65.8
Wage earners (average number)	71,078	63,893	43,758	33,080	11.2	46.0	32.3
Primary horsepower	278,504	217,496	138,578	91,894	28.1	56.9	50.8
Capital	$175,995,011	$150,922,586	$86,820,823	$49,103,138	16.6	73.8	76.8
Salaries and wages	51,377,760	38,710,047	24,051,872	14,159,146	32.7	60.9	69.9
Salaries	7,593,754	5,709,692	2,898,830	1,519,290	33.0	97.0	90.8
Wages	43,784,006	33,000,355	21,153,042	12,639,856	32.7	56.0	67.3
Paid for contract work	2,257,677	2,201,287	1,508,180	(2)	2.6	46.0	.....
Rent and taxes (including internal revenue)	2,952,432	2,229,295	[3] 532,746	(2)	32.4	.....	.....
Cost of materials	110,033,165	92,877,988	54,419,206	37,228,253	18.5	70.7	46.2
Value of products	193,511,782	161,949,526	99,040,676	67,006,822	19.5	63.5	47.8
Value added by manufacture (value of products less cost of materials)	83,478,617	69,071,538	44,621,470	29,778,569	20.9	54.8	49.8

[1] A minus sign (−) denotes decrease. [2] Figures not available. [3] Exclusive of internal revenue.

This table shows an increase from census to census in the manufactures of the state, but the rate of increase was smaller for the five-year period 1909–1914 than for either of the preceding periods.

Between the censuses of 1909 and 1914 the number of establishments increased 163, or 6.3 per cent; the capital invested, $25,072,425, or 16.6 per cent; the average number of wage earners, 7,185, or 11.2 per

cent; the amount paid in wages, $10,783,651, or 32.7 per cent; the value of products, $31,562,256, or 19.5 per cent; and the value added by manufacture, $14,407,079, or 20.9 per cent. The value added by manufacture represents the net wealth created by manufacturing operations during each census year, as described in the "Explanation of terms" at the beginning of this bulletin.

Table 2 shows the relative importance of the leading manufacturing industries of the state and the percentages of increase for the three five-year periods from 1899 to 1914.

Table 2

INDUSTRY.	CENSUS OF 1914.							PER CENT OF INCREASE.[1]								
	Number of establishments.	Wage earners.		Value of products.		Value added by manufacture.		Wage earners (average number).			Value of products.			Value added by manufacture.		
		Average number.	Per cent distribution.	Amount.	Per cent distribution.	Amount.	Per cent distribution.	1909–1914	1904–1909	1899–1904	1909–1914	1904–1909	1899–1904	1909–1914	1904–1909	1899–1904
All industries	2,749	71,078	100.0	$193,511,782	100.0	$83,478,617	100.0	11.2	46.0	32.3	19.5	63.5	47.8	20.9	54.8	49.8
Lumber and timber products	995	17,417	24.5	28,994,240	15.0	19,411,838	23.2	−6.6	60.5	31.5	0.8	53.8	54.9	−3.3	60.7	78.2
Iron and steel, steel works and rolling mills	15	5,348	7.5	21,185,559	10.9	6,527,191	7.8	5.7	14.8	10.9	−5.6	66.7	0.4	−0.2	38.7	1.0
Tin plate and terneplate	8	1,475	2.1	15,130,551	7.8	3,263,914	3.9	10.5	227.2	.....	63.4	217.5	.....	72.7	302.1	.....
Glass	63	8,889	12.5	14,631,171	7.6	9,993,030	12.0	43.6	68.5	88.5	88.1	69.1	145.7	82.2	64.2	161.1
Leather, tanned, curried, and finished	18	1,072	1.5	11,014,540	5.7	2,319,626	2.8	−31.8	66.1	42.5	−11.6	105.4	88.8	12.2	59.9	93.0
Cars and general shop construction and repairs by steam-railroad companies	37	8,437	11.9	10,990,193	5.7	6,004,941	7.2	49.3	32.8	63.3	63.3	63.4	39.9	63.6	58.8	70.3
Flour-mill and gristmill products	229	381	0.5	7,052,814	3.6	1,124,386	1.4	−15.7	13.0	57.5	−8.4	24.1	63.5	2.7	10.9	44.3
Brick, tile, pottery, and other clay products	55	4,790	6.7	6,798,118	3.5	4,576,173	5.5	64.3	43.4	11.8	87.3	68.3	39.9	78.2	60.5	30.6
Foundry and machine-shop products	118	1,908	2.7	5,079,574	2.6	2,409,123	2.9	40.9	5.9	86.6	49.8	18.5	88.7	47.6	12.6	82.2
Slaughtering and meat packing	7	214	0.3	4,787,660	2.5	340,764	0.5	21.9	25.5	58.7	27.2	95.2	44.1	−10.9	45.8	27.4
Copper, tin, and sheet-iron products	24	1,575	2.2	4,731,760	2.4	1,521,345	1.8	71.9	144.3	941.7	120.0	179.0	.....	91.0	183.6	.....
Coke, not including gas-house coke	54	1,392	2.0	2,977,526	1.5	1,084,110	1.3	−68.6	74.7	−19.1	−60.6	81.2	18.3	−57.5	67.1	−2.2
Paper and wood pulp	8	1,033	1.5	2,804,429	1.5	1,069,639	1.3	−11.1	113.2	94.0	5.7	104.3	145.8	10.4	80.1	111.8
Printing and publishing	242	1,218	1.7	2,430,565	1.3	1,770,549	2.1	−2.9	32.9	16.5	22.0	28.2	50.1	22.0	20.6	48.7
Bread and other bakery products	138	569	0.8	2,305,438	1.2	978,283	1.2	64.4	31.6	136.9	56.8	61.2	131.5	60.1	58.7	112.7
Clothing, men's	7	491	0.7	2,172,955	1.1	738,083	0.9	21.8	28.3	.....	47.9	71.8	70.2	78.2	49.4	91.0
Liquors, malt	10	244	0.3	1,378,080	0.7	986,242	1.2	−41.2	25.4	29.3	−39.3	5.8	92.8	−40.3	−0.8	92.0
Furniture	22	560	0.8	1,278,174	0.7	629,074	0.8	.....	.....	.....	.....	48.9	42.7	.....	51.3	37.6
Lime	10	773	1.1	980,317	0.5	546,471	0.6	50.4	328.3	.....	52.1	455.2	.....	30.0	445.5	.....
Clothing, women's	6	169	0.2	867,425	0.4	268,899	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bone, carbon, and lamp black	18	161	0.2	851,332	0.4	464,478	0.5	59.4	.....	.....	42.8	117.5	.....	33.8	56.3	.....
Ice, manufactured	47	364	0.5	755,922	0.4	570,961	0.6	56.2	32.4	120.0	59.0	34.8	196.6	56.5	25.0	201.0
Woolen and worsted goods	8	276	0.4	679,401	0.4	262,692	0.3	−54.0	.....	.....	−44.7	.....	.....	−38.8	.....	.....
Cooperage	30	232	0.3	644,423	0.4	203,632	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paving materials	13	422	0.6	571,410	0.3	433,144	0.5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Electrical machinery, apparatus, and supplies	4	162	0.2	566,368	0.3	382,306	0.5	18.2	705.9	.....	42.2	1,710.6	.....	45.3	1,613.7	.....
Minerals and earths, ground	12	422	0.6	562,928	0.3	401,756	0.5	627.6	.....	.....	385.9	.....	.....	452.4	.....	.....
Saddlery and harness	17	127	0.2	555,666	0.3	262,214	0.3	(2)	.....	−45.9	17.8	28.3	15.4	34.7	46.6	−2.2
Mineral and soda waters	77	148	0.2	543,501	0.3	313,366	0.4	42.3	13.0	148.6	78.8	34.4	171.5	49.9	27.0	151.4
Marble and stone work	27	224	0.3	487,541	0.3	288,624	0.3	55.6	.....	−72.6	33.7	135.5	−46.6	25.4	148.4	−52.8
Chemicals	3	52	0.1	482,949	0.3	282,226	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Carriages and wagons	51	240	0.3	474,024	0.2	278,295	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Explosives	7	54	0.1	461,173	0.2	150,534	0.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wood, turned and carved	7	198	0.3	449,541	0.2	132,106	0.2	47.8	−22.6	10.2	43.0	−19.6	83.1	−12.3	−5.8	40.6
Artificial stone products	31	263	0.4	448,251	0.2	249,950	0.3	.....	.....	.....	174.0	.....	.....	130.6	.....	.....
Mattresses and spring beds	9	108	0.2	364,934	0.2	143,249	0.2	.....	.....	.....	36.4	88.0	.....	25.9	145.7	.....
Dyestuffs and extracts	4	66	0.1	363,026	0.2	44,473	0.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canning and preserving	29	216	0.3	351,493	0.2	87,762	0.1	−20.3	−17.1	−42.1	−41.9	−20.8	−1.3	−49.8	−53.6	6.2
Confectionery	13	82	0.1	291,593	0.2	127,687	0.1	.....	.....	.....	19.4	8.0	130.6	31.5	−11.0	211.4
All other industries	276	9,306	13.2	36,015,217	18.5	12,835,481	15.3	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Percentages are based on figures in Table 31; a minus sign (−) denotes decrease; percentages are omitted where the base is less than 100, or where comparable figures can not be given.
[2] Same number reported in both years.

In addition to the industries presented separately in the above table, there were 18 other industries in the state which reported products in 1914 to the value of $250,000 or more. These industries are included in the table under the head of "all other industries," for the reason that the operations of individual establishments would be disclosed if they were shown separately.[1]

[1] These industries are:

Boots and shoes, not including rubber boots and shoes.
Brooms.
Cars, steam-railroad, not including operations of railroad companies.
Cement.
Dyeing and finishing textiles.
Galvanizing.
Hosiery and knit goods.
Iron and steel, blast furnaces.
Iron and steel pipe, wrought.
Lamps and reflectors.
Liquors, distilled.
Oil, not elsewhere specified.
Patent medicines and compounds and druggists' preparations.
Petroleum, refining.
Smelting and refining, zinc.
Smelting and refining, not from the ore.
Tobacco manufactures.
Wood preserving.

Although certain industries predominate, it will be seen from Table 32 that there is considerable diversity among the manufactures of the state. The leading industries are lumber and timber; steel works and rolling mills; tin plate and terneplate; glass; leather, tanned, curried, and finished; cars and general shop construction and repairs by steam-railroad companies; flour mills and gristmills; and the manufacture of brick, tile, pottery, and other clay products. Several of these important industries call for special consideration.

Lumber and timber products.—Under this head are included statistics for logging and sawmill operations, for planing mills, and for the manufacture of wooden packing boxes. The industry gave employment dur-

ing the year 1914 to an average of 17,417 wage earners, with products valued at $28,994,240. These figures represent 24.5 per cent and 15 per cent of the respective totals reported for all manufacturing industries of the state. The statistics do not cover mills engaged exclusively in custom sawing for local consumption.

Glass.—West Virginia ranked fourth in 1914 and in 1909 among the states in production of glass. The abundant local supplies of natural gas and of glass-making sands are directly responsible for the great increase in this industry, which has grown from 16 establishments in 1899, employing an average of 1,949 wage earners, with products valued at $1,872,000, to 63 establishments in 1914, with an average of 8,889 wage earners, and products valued at $14,631,171. Special data for the industry are to be found on page 19.

Steel works and rolling mills and tin plate and terneplate.—West Virginia's coal resources, and the location of the mines with reference to the Pittsburgh iron district, make the hot rolling of iron and steel one of the most important industries in the state. In conjunction therewith there has been a rapid development of the tin plate and terneplate industry. Although the rolling and the coating of tin plate and terneplate are treated as separate industries, in many instances the work is all done in the same establishment. In the preceding table statistics for the two industries are given separately; but eliminating all the duplications in the consideration of the two as a consolidated industry, there were 17 plants in 1914, employing 6,823 wage earners, with products valued at $28,795,938, and value added by manufacture amounting to $9,791,105. The combined industry ranks second in value of products, slightly below lumber and timber products.

Leather, tanned, curried, and finished.—Though this industry shows a decrease, compared with 1909 figures, measured by value of products, it ranks fifth in importance among the industries of the state. There were 18 tanneries reported—2 less than in 1909. The average number of wage earners decreased 499, or 31.8 per cent. The total amount paid for wages decreased $160,170, or 20.7 per cent; cost of materials $1,688,287, or 16.3 per cent; and the value of products $1,436,052, or 11.5 per cent.

Cars and general shop construction and repairs by steam-railroad companies.—The statistics for this industry represent the work done in the car shops operated by steam-railroad companies. The operations consist principally of repairs to rolling stock and equipment, but include also shopwork done for the track and bridge and building departments.

The value of work performed increased from $6,732,575 in 1909 to $10,990,193 in 1914. Employment was given to an average of 8,437 wage earners in 1914—the third largest number reported by any of the industries specified in the table. This number represents an increase of 2,785, or 49.3 per cent, as compared with the number in 1909—5,652.

Flour-mill and gristmill products.—This is an important industry of the state, occupying seventh place in value of products in 1914. The number of wage earners employed in this industry is comparatively small, due to the fact that much of the labor is done by the proprietors or members of their families, and that the processes involved in the manufacture are simple and to a large extent mechanical. Most of the mills are small and are located in the rural districts, but there are several large mills in the cities of the state.

Brick, tile, pottery, and other clay products.—The clay-working industries of West Virginia ranked eighth in 1914 when measured by value of products ($6,798,118), of which amount $1,976,816 represents brick and tile, terra-cotta, and fire-clay products, and $4,821,302 represents the pottery industry. Thirty establishments are engaged in the production of brick and tile, terra-cotta, and fire-clay products, and 15 in the pottery industry. From the reports of the United States Geological Survey it appears that in 1914, in value of clay products, West Virginia ranked second in the United States in the production of white ware and sanitary ware; fourth in china ware, porcelain electric supplies, and vitrified paving brick; seventh in tiles, not including draintile; and seventeenth in building brick. In 1914 the capital invested in the in 55 establishments reported was $9,368,799, an increase of 79.4 per cent over $5,221,285 shown in 1909.

Liquors, malt.—This industry shows a general decrease in 1914, due to the establishments operating only six months, as the manufacture of liquors in the state of West Virginia was discontinued June 30, 1914, by an act of the state legislature.

Persons engaged in manufacturing industries.—Table 3 gives for 1914 and 1909, the number of persons engaged in manufactures, distributed by sex and age.

Table 3

CLASS.	Census year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.				
		Total.	Male.	Female.	Per cent of total.	
					Male.	Female.
All classes	1914	79,353	72,715	6,638	91.6	8.4
	1909	71,463	66,121	5,342	92.5	7.5
Proprietors and officials	1914	4,668	4,573	95	98.0	2.0
	1909	4,508	4,423	85	98.1	1.9
Proprietors and firm members	1914	2,559	2,485	74	97.1	2.9
	1909	2,599	2,527	72	97.2	2.8
Salaried officers of corporations	1914	652	639	13	98.0	2.0
	1909	568	562	6	98.9	1.1
Superintendents and managers	1914	1,457	1,449	8	99.5	0.5
	1909	1,341	1,334	7	99.5	0.5
Clerks and other subordinate salaried employees	1914	3,607	2,939	668	81.5	18.5
	1909	3,062	2,505	557	81.8	18.2
Wage earners (average number)	1914	71,078	65,199	5,879	91.7	8.3
	1909	63,893	59,193	4,700	92.6	7.4
16 years of age and over	1914	70,583	64,862	5,721	91.9	8.1
	1909	62,840	58,335	4,505	92.8	7.2
Under 16 years of age	1914	495	337	158	68.1	31.9
	1909	1,053	858	195	81.5	18.5

It should be borne in mind, however, that the sex and age classification of the wage earners in this and other tables is an estimate obtained by the methods described in the "Explanation of terms."

The total number of persons engaged in manufacturing industries for the year 1914 was 79,353, representing an increase of 7,890, or 11 per cent, as compared with 71,463 for 1909. Of the 1914 total, 2,559 were proprietors and officials, 3,607 were clerks and other subordinate employees, and 71,078 were wage earners. The figures for individual industries will be found in Table 32, page 22.

The percentages of increase from 1909 to 1914 and the per cent distribution at the two censuses for persons engaged in manufactures, are given in the following table:

Table 4

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.								
	Per cent of increase,[1] 1909–1914.			Per cent distribution.					
				Total.		Male.		Female.	
	Total.	Male.	Female.	1914	1909	1914	1909	1914	1909
All classes	11.0	10.0	24.3	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials	3.5	3.4	.....	5.9	6.3	6.3	6.7	1.4	1.6
Proprietors and firm members	−1.5	−1.7	.....	3.2	3.6	3.4	3.8	1.1	1.3
Salaried officers of corporations	14.8	13.7	.....	0.8	0.8	0.9	0.8	0.2	0.1
Superintendents and managers	8.7	8.6	.....	1.8	1.9	2.0	2.0	0.1	0.1
Clerks and other subordinate salaried employees	17.8	17.3	19.9	4.5	4.3	4.0	3.8	10.1	10.4
Wage earners (average number)	11.2	10.1	25.1	89.6	89.4	89.7	89.5	88.6	88.0
16 years of age and over	12.3	11.2	27.0	88.9	87.9	89.2	88.2	86.2	84.3
Under 16 years of age	−53.0	−60.7	−19.0	0.6	1.5	0.5	1.3	2.4	3.7

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

All classes, except proprietors and firm members, and wage earners under 16 years of age, show increases. The percentage of decrease in the number of wage earners under 16 years of age, for both sexes combined, was 53; but the proportion which this class formed of the total number of wage earners was insignificant, being only six-tenths of 1 per cent in 1914 and 1.5 per cent in 1909. Wage earners over 16 years of age constituted 89 per cent of the total number of persons engaged in manufacturing industries in the state in 1914 and 87.9 per cent in 1909.

Table 5 presents statistics for the three main classes of persons engaged in manufactures, the number and per cent distribution for 1914, 1909, and 1904, and per cent of increase for the two five-year periods.

Table 5

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUUSTRIES.							
	Number.			Per cent distribution.			Per cent of increase.[1]	
	1914	1909	1904	1914	1909	1904	1909–1914	1904–1909
Total	79,353	71,463	48,880	100.0	100.0	100.0	11.0	46.2
Proprietors and firm members	2,559	2,599	2,230	3.2	3.6	4.6	−1.5	16.5
Salaried employees	5,716	4,971	2,892	7.2	7.0	5.9	15.0	71.9
Wage earners (average number)	71,078	63,893	43,758	89.6	89.4	89.5	11.2	46.0

[1] A minus sign (−) denotes decrease.

Salaried employees and wage earners show increases at each successive census, although much the greater for the five-year period 1904–1909. The decrease of 1.5 per cent in number of proprietors and firm members, for the period 1909–1914, is due to the incorporation of many industries reported at prior censuses as under other classes of ownership.

Table 6 shows, for 1914, 1909, and 1904, the average number of wage earners employed in all industries combined, with the per cent distribution of males and females 16 years of age and over, and of children under 16 years of age. For some of the important industries, a similar distribution of wage earners is given for 1914 and 1909.

At the censuses of 1914 and 1909 the proportion of males 16 years of age and over, for all industries combined, was 91.3 per cent as compared with 90 per cent in 1904. The corresponding proportions for females were 8 per cent, 7 per cent, and 7.4 per cent, in 1914, 1909, and 1904; and for children under 16 years of age, seven-tenths of 1 per cent, 1.6 per cent, and 2.6 per cent, respectively. The proportion which the number of children under 16 years of age formed of the total number of wage earners, therefore, was about one-fourth as great in 1914 as in 1904.

Of the 21 industries for which separate figures are given in this table and for which percentages are shown, 8 show an increased proportion of males in 1914, as compared with 1909, and 8 an increased pro portion of females, while but 2 show an increase in the proportion of children under 16 years of age. Three of the industries that gave employment to children under 16 years of age in 1909 reported no employees of this class for 1914.

In the manufacture of men's clothing in 1914, four-fifths of the wage earners 16 years and over were women. On the other hand, in the manufacture of copper, tin, and sheet-iron products, of brick, tile, pottery, and other clay products, and in the printing and publishing industry but from one-fifth to one-fourth of the wage earners are females over 16 years

of age. Among the industries reporting children under 16 years of age, decreases in the proportions of such wage earners are shown for all those that employed any considerable number at the census of 1909.

Table 6

INDUSTRY.	Census year.	WAGE EARNERS. Average number.[1]	Per cent of total. 16 years of age and over. Male.	Female.	Under 16 years of age.
All industries	1914	71,078	91.3	8.0	0.7
	1909	63,893	91.3	7.0	1.6
	1904	43,758	90.0	7.4	2.6
Artificial stone products	1914	263	99.6	0.4	.....
	1909	79	.....	.....	.....
Bread and other bakery products	1914	569	85.3	14.2	0.5
	1909	346	90.5	6.9	2.6
Brick, tile, pottery, and other clay products	1914	4,790	76.2	22.9	0.9
	1909	2,916	79.5	19.5	1.0
Cars and general shop construction and repairs by steam-railroad companies.	1914	8,437	99.8	0.1	0.1
	1909	5,652	99.0	0.3	0.7
Clothing, men's	1914	491	21.0	79.0	.....
	1909	261	23.8	76.2	.....
Coke, not including gas-house coke	1914	1,392	100.0	.....	.....
	1909	4,426	100.0	.....	.....
Copper, tin, and sheet-iron products	1914	1,575	69.1	27.5	3.4
	1909	916	60.7	32.2	7.1
Flour-mill and gristmill products	1914	381	99.7	0.3	.....
	1909	452	98.9	0.4	0.7
Foundry and machine-shop products	1914	1,908	99.8	0.1	0.1
	1909	1,354	99.8	.....	0.2
Furniture	1914	560	97.7	1.8	0.5
	1909	562	97.0	1.8	1.2
Glass	1914	8,889	90.4	8.7	0.9
	1909	6,190	86.1	8.7	5.2
Ice, manufactured	1914	364	98.6	.....	1.4
	1909	233	99.6	.....	0.4
Iron and steel, steel works and rolling mills	1914	5,348	99.8	0.2	.....
	1909	5,060	99.3	0.2	0.5
Leather, tanned, curried, and finished	1914	1,072	99.9	.....	0.1
	1909	1,571	100.0	.....	.....
Lime	1914	773	100.0	.....	.....
	1909	514	100.0	.....	.....
Lumber and timber products	1914	17,417	99.6	0.2	0.2
	1909	18,643	99.4	0.1	0.6
Minerals and earths, ground	1914	422	99.8	0.2	.....
	1909	58	.....	.....	.....
Paper and wood pulp	1914	1,033	94.7	5.3	.....
	1909	1,162	96.1	3.9	.....
Paving materials	1914	422	100.0	.....	.....
	1909	.....	.....	.....	.....
Printing and publishing	1914	1,218	75.0	21.1	3.9
	1909	1,255	72.7	21.8	5.5
Tin plate and terneplate	1914	1,475	90.4	9.6	.....
	1909	1,335	90.9	8.5	0.7
All other industries	1914	12,279	78.6	19.8	1.6
	1909	10,908	72.8	22.7	4.4

[1] For method of estimating the distribution, by sex and age periods, of the average number in all industries combined, see "Explanation of terms." Percentages are omitted when base is less than 100.

Table 7 gives, for 1914, and so far as comparative figures are available, for 1909 and 1904, for each of the 10 cities with a population of 10,000 and over, the average number of wage earners classified according to age periods and for those 16 years of age and over according to sex. The per cent distribution is also shown.

Table 7

SEX AND AGE.	Census year.	Bluefield.	Charleston.	Clarksburg.	Fairmont.	Huntington.	Martinsburg.	Morgantown.	Moundsville.	Parkersburg.	Wheeling.
		AVERAGE NUMBER OF WAGE EARNERS IN—									
Total	1914	1,247	1,081	316	1,837	4,641	1,568	1,470	1,508	1,820	7,920
	1909	670	951	.....	.....	3,156	1,420	.....	.....	1,495	7,809
	1904	.....	887	.....	.....	2,229	.....	.....	.....	1,444	7,127
16 years of age and over: Male	1914	1,238	946	298	1,671	4,399	741	1,263	1,191	1,446	6,428
	1909	643	789	.....	.....	2,955	756	.....	.....	1,286	6,052
	1904	.....	[1] 767	.....	.....	1,972	.....	.....	.....	1,358	[1] 5,574
Female	1914	4	125	18	162	235	750	172	296	365	1,393
	1909	18	155	.....	.....	108	629	.....	.....	187	1,492
	1904	.....	102	.....	.....	156	.....	.....	.....	71	1,185
Under 16 years of age	1914	5	10	.....	4	7	77	35	21	9	99
	1909	9	7	.....	.....	93	35	.....	.....	22	265
	1904	.....	18	.....	.....	101	.....	.....	.....	15	368
Per cent of total: 16 years of age and over— Male	1914	99.3	87.5	94.3	91.0	94.8	47.1	85.9	79.0	79.8	81.3
	1909	96.0	83.0	.....	.....	93.6	53.2	.....	.....	86.0	77.5
	1904	.....	86.5	.....	.....	88.5	.....	.....	.....	94.0	78.2
Female	1914	0.3	11.5	5.7	8.8	5.1	47.9	11.7	19.6	19.7	17.5
	1909	2.7	16.3	.....	.....	3.4	44.3	.....	.....	12.5	19.1
	1904	.....	11.5	.....	.....	7.0	.....	.....	.....	5.0	16.6
Under 16 years of age	1914	0.4	1.0	.....	0.2	0.1	5.0	2.4	1.4	0.5	1.2
	1909	1.3	0.7	.....	.....	3.0	2.5	.....	.....	1.5	3.4
	1904	.....	2.0	.....	.....	4.5	.....	.....	.....	1.0	5.2

[1] Figures do not agree with those published as it was necessary to revise the totals to include data only for establishments located within the corporate limits of the city.

Table 8 presents, for the six cities for which statistics from the last three censuses are available, percentages of increase in average number of wage earners from census to census, based on the figures in Table 7.

Of the 10 cities for which separate totals are given the manufactures in nine gave employment to more than 1,000 wage earners on the average during the year. The industries of Wheeling gave employment

to the largest number (7,920). The six cities for which comparative data are given for 1914 and 1909 show considerable increase in the numbers employed, and the four for which comparative figures are given for three censuses show that the number of wage earners increased constantly.

Table 8

CITY.	PER CENT OF INCREASE IN AVERAGE NUMBER OF WAGE EARNERS.[1]				
	Period.	Total.	16 years of age and over.		Under 16 years of age.
			Male.	Female.	
Bluefield	1909-1914	86.1	92.5	.....	.....
Charleston	1904-1914	22.0	23.3	22.5	.....
	1909-1914	13.8	19.9	−19.4	.....
	1904-1909	7.2	2.9	52.0	.....
Huntington	1904-1914	108.2	123.1	50.6	−93.1
	1909-1914	47.1	48.9	117.6	.....
	1904-1909	41.6	49.8	−30.8	−7.9
Martinsburg	1909-1914	10.4	−2.4	19.6	.....
Parkersburg	1904-1914	26.0	7.0	.....	.....
	1909-1914	21.7	13.0	91.4	.....
	1904-1909	3.5	−5.3	.....	.....
Wheeling	1904-1914	11.1	15.4	17.1	−73.1
	1909-1914	1.4	6.3	−7.0	−62.5
	1904-1909	9.6	8.6	25.9	−28.2

[1] A minus sign (−) denotes decrease; percentages not shown where base is less than 100.

The number of male wage earners greatly exceeds the number of females in all the cities except Martinsburg. The manufacture of hosiery and knit goods and woolen goods are the principal industries in Martinsburg, and they give employment to the largest number of females. The total for the city (750) was slightly in excess of the number of males (741). The number of female wage earners reported for three of the cities for 1914 was less than the number in 1909. There was an increase in the number of females during the 10 years for each of the four cities for which data are given for 1914, 1909, and 1904. The greatest number of females (1,393) is reported for Wheeling, where they are employed principally in the manufacture of cigars; copper, tin, and sheet-iron products; glass; lamps and reflectors; patent medicines and compounds; and chewing and smoking tobacco.

There were 267 children under 16 years of age reported as wage earners in the 10 cities. Wheeling reported the greatest number (99), and they were employed largely in the manufacture of glass and the printing and publishing industry. The textile industry of Martinsburg gave employment to most of the 77 children reported for that city.

Wage earners employed, by months.—Table 9 gives, for all industries combined, for 1914 and 1909, a comparative statement of the total number of wage earners employed on the 15th of each month, or the nearest representative day; for 1904, the average number employed during each month; and for each of the three years, the percentage which the number reported for each month forms of the greatest number reported for any month.

Table 9

MONTH.	WAGE EARNERS IN MANUFACTURING INDUSTRIES.					
	Number.[1]			Per cent of maximum.		
	1914	1909	1904	1914	1909	1904
January	71,642	56,191	38,852	93.4	81.2	84.2
February	71,608	57,393	40,030	93.4	82.9	86.7
March	74,664	60,499	42,633	97.4	87.4	92.4
April	76,677	62,456	44,618	100.0	90.3	96.7
May	76,205	62,655	46,163	99.4	90.5	100.0
June	73,332	65,467	46,147	95.6	94.6	100.0
July	69,880	62,187	43,686	91.1	89.9	94.6
August	71,044	65,651	43,192	92.7	94.9	93.6
September	71,664	68,299	44,294	93.5	98.7	96.0
October	69,773	69,202	45,671	91.0	100.0	98.9
November	63,875	68,647	45,394	83.3	99.2	98.3
December	62,572	68,056	44,416	81.6	98.3	96.2

[1] The figures for 1914 and 1909 represent the number employed on the 15th of each month, or the nearest representative day; those for 1904, the average number employed during the month.

For 1914 the spring months show the greatest activity in the combined industries of the state, the maximum number of wage earners appearing for April and the minimum for December of that year. In 1909, however, the maximum employment occurred in the fall months, the greatest number being reported for October and the minimum in January. For 1904 two months—May and June—are approximately alike in showing the maximum number of wage earners. The minimum month for the year was January. The greatest difference between the maximum and minimum months in any one of the three census years was 14,105 for 1914, the corresponding figures for 1909 and 1904 being 13,011 and 7,311, respectively.

The average monthly employment of wage earners in 1914 was 71,078; in 1909, 63,893; in 1904, 43,758.

The total average number of wage earners employed during 1914, together with the total number employed on the 15th day of each month, or the nearest representative day, for the combined industries of the state, for a number of selected industries, and for the total industries of each of the 10 cities with a population of 10,000 and over, is given in Table 10. The per cent that the maximum month forms of the minimum is also given.

There are no seasonal industries of importance in West Virginia, although several of the more important industries, such as lumber and timber, glass, and iron and steel, show quite a fluctuation in number of wage earners employed, due to the unsettled trade conditions that existed during the latter part of the year 1914. For the state as a whole, the degree of fluctuation amounted to 18.4 per cent between the maximum and minimum months of April and December, the least fluctuation being for the slaughtering and meat-packing, flour-mill and gristmill, and bread and other bakery products industries. Of the cities, Moundsville and Morgantown show the greatest fluctuation, 57.4 per cent and 58.3 per cent, respectively, being the proportions that the minimum formed of the maximum number of wage earners employed in these cities.

Table 10

WAGE EARNERS: 1914.
[The month of maximum employment for each industry is indicated by **boldface** 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	71,078	71,642	71,608	74,664	**76,677**	76,205	73,332	69,880	71,044	71,664	69,773	63,875	*62,572*	81.6
Artificial stone products	263	249	243	247	267	**292**	287	284	291	283	264	*218*	231	74.7
Bread and other bakery products	569	*550*	551	551	554	577	583	**588**	586	587	578	568	555	93.5
Brick, tile, pottery, and other clay products	4,790	*4,045*	4,590	4,799	**5,156**	5,130	4,832	4,610	4,929	4,969	5,124	4,944	4,352	78.5
Canning and preserving	216	31	*25*	31	29	29	29	95	351	849	**924**	144	55	2.7
Cars and general shop construction and repairs by steam-railroad companies	8,437	8,538	8,473	8,615	8,245	8,100	8,255	8,626	8,806	**9,006**	8,942	8,115	*7,523*	83.5
Clothing, men's	491	495	489	**521**	499	510	493	456	*449*	493	501	493	493	86.2
Coke, not including gas-house coke	1,392	**1,690**	1,650	1,678	1,624	1,432	1,341	1,252	1,278	1,238	1,194	1,186	*1,141*	67.5
Copper, tin, and sheet-iron products	1,575	*1,390*	1,397	1,566	**1,740**	1,706	1,637	1,658	1,631	1,646	1,606	1,491	1,432	79.9
Flour-mill and gristmill products	381	*355*	357	359	363	364	366	368	382	386	424	422	**426**	83.3
Foundry and machine-shop products	1,908	2,002	1,916	1,961	2,076	**2,107**	2,032	2,032	1,911	1,799	1,808	1,675	*1,577*	74.8
Glass	8,889	9,229	10,011	10,137	10,082	10,173	8,152	*6,089*	7,138	8,271	8,413	9,431	9,542	59.9
Ice, manufactured	364	216	*213*	226	301	380	485	538	511	489	421	305	283	39.6
Iron and steel, steel works and rolling mills	5,348	6,093	6,054	6,599	**6,860**	5,426	5,229	4,919	4,991	5,253	4,681	*3,657*	4,414	53.3
Leather, tanned, curried, and finished	1,072	*828*	849	995	1,022	1,105	1,171	**1,218**	1,186	1,176	1,138	1,093	1,083	68.0
Lime	773	772	662	801	850	**897**	745	737	814	896	709	738	*655*	73.0
Liquors, malt	244	415	401	403	426	440	543	83	67	57	38	*25*	30	4.6
Lumber and timber products	17,417	17,476	17,081	18,006	18,870	**19,687**	19,491	18,941	18,403	16,762	16,164	14,519	*13,604*	69.1
Marble and stone work	224	224	219	216	**237**	236	234	230	227	221	220	216	*208*	87.8
Minerals and earths, ground	422	499	483	525	**592**	516	464	339	371	328	333	335	*279*	47.1
Paper and wood pulp	1,033	1,035	1,092	1,071	1,125	**1,128**	1,071	1,029	*958*	971	965	974	977	84.9
Printing and publishing	1,218	1,212	1,201	1,213	1,212	1,202	*1,190*	1,194	*1,190*	1,232	1,249	1,258	**1,263**	94.2
Slaughtering and meat packing	214	212	212	215	213	211	212	214	217	*210*	217	215	220	95.5
Tin plate and terneplate	1,475	1,528	1,420	1,468	1,556	1,606	1,636	1,509	1,480	**1,637**	1,512	*1,121*	1,227	68.5
Woolen and worsted goods	276	264	280	277	282	253	255	249	*235*	246	**374**	298	299	66.6
All other industries	12,087	12,294	11,739	12,184	12,496	**12,698**	12,599	12,622	12,642	12,659	11,974	*10,434*	10,703	82.2
Total for cities	23,408	23,126	23,390	24,259	24,658	**24,978**	24,579	22,736	23,631	24,128	22,968	*21,060*	21,383	84.3
BLUEFIELD	1,247	1,217	1,252	1,287	*1,143*	1,206	1,181	1,211	1,279	1,292	**1,400**	1,353	1,143	81.6
CHARLESTON	1,081	1,086	1,024	1,088	1,104	1,110	1,163	1,119	1,092	1,084	1,100	*1,000*	1,002	86.0
CLARKSBURG	316	*276*	*276*	*276*	305	311	333	342	**372**	335	332	318	316	74.2
FAIRMONT	1,837	1,852	1,873	1,950	2,013	1,980	2,079	*1,511*	1,859	**2,081**	1,771	1,515	1,560	72.6
HUNTINGTON	4,641	**5,005**	4,619	4,739	4,694	4,988	4,710	4,711	4,557	4,581	4,455	*4,172*	4,461	83.4
MARTINSBURG	1,568	1,453	*1,444*	1,476	1,501	1,544	1,597	1,592	1,606	**1,664**	1,657	1,654	1,628	86.8
MORGANTOWN	1,470	1,442	1,446	1,372	1,551	1,596	1,595	*937*	1,428	**1,607**	1,572	1,544	1,550	58.3
MOUNDSVILLE	1,508	*968*	1,571	**1,720**	1,685	1,655	1,576	1,470	1,505	1,519	1,512	1,509	1,406	56.3
PARKERSBURG	1,820	1,850	1,769	1,889	1,996	**2,034**	1,989	1,796	1,805	1,860	1,655	1,619	*1,578*	79.6
WHEELING	7,920	7,977	8,116	8,462	**8,666**	8,554	8,356	8,047	8,128	8,105	7,514	*6,376*	6,739	77.8

Prevailing hours of labor.—Table 11 shows the average number of wage earners classified according to the hours of labor per week prevailing in the establishments in which they were employed for 1914 and 1909. The number employed in each establishment is classified as a total, even though a few employees worked a greater or less number of hours. The figures for the state relate to all industries combined and to a number of selected industries, and for the cities, to all industries combined.

Table 11

AVERAGE NUMBER OF WAGE EARNERS.

INDUSTRY AND CITY.	Census year.	Total.	In establishments where the prevailing hours of labor per week were—							
			48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
All industries	1914	71,078	12,286	7,316	7,503	6,201	26,454	10,141	772	405
	1909	63,893	7,181	3,162	6,503	7,304	31,480	6,209	274	1,780
Artificial stone products	1914	263	.....	10	70	2	181	.....	.....	.....
	1909	79	.....	1	14	47	17	.....	.....	.....
Bread and other bakery products	1914	569	60	.....	75	65	314	31	20	4
	1909	346	29	.....	27	5	227	8	33	17
Brick, tile, pottery, and other clay products	1914	4,790	2,468	756	564	15	987	.....	.....	.....
	1909	2,916	1,291	220	480	65	860	.....	.....	.....
Canning and preserving	1914	216	17	.....	13	.....	186	.....	.....	.....
	1909	271	.....	.....	2	.....	261	.....	8	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	8,437	2,089	472	1,010	.....	306	4,534	16	10
	1909	5,652	.....	50	35	1,614	2,489	411	.....	1,053
Clothing, men's	1914	491	115	89	273	.....	14	.....	.....	.....
	1909	261	.....	.....	28	148	85	.....	.....	.....
Coke, not including gas-house coke	1914	1,392	.....	29	195	.....	717	406	45	.....
	1909	4,426	21	38	316	16	3,966	.....	.....	69

Table 11—Continued.

INDUSTRY AND CITY.	Census year.	AVERAGE NUMBER OF WAGE EARNERS.								
		Total.	In establishments where the prevailing hours of labor per week were—							
			48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
Copper, tin, and sheet-iron products	1914	1,575	38	.....	87	430	508	512	.....	.....
	1909	916	8	.....	67	248	593	.....	.....	.....
Flour-mill and gristmill products	1914	381	16	.....	20	19	294	14	18	.....
	1909	452	74	4	17	25	273	35	22	2
Foundry and machine-shop products	1914	1,908	155	10	872	227	644	.....	.....	.....
	1909	1,354	10	31	512	169	598	34	.....	.....
Glass	1914	8,889	2,315	3,931	532	983	1,128	.....	.....	.....
	1909	6,190	1,866	2,252	1,424	385	263	.....	.....	.....
Ice, manufactured	1914	364	.....	1	41	16	141	85	24	56
	1909	233	.....	.....	35	5	71	20	33	69
Iron and steel, steel works and rolling mills	1914	5,348	2,123	51	962	740	535	937	.....	.....
	1909	5,060	1,779	.....	812	312	315	1,842	.....	.....
Leather, tanned, curried, and finished	1914	1,072	.....	80	139	.....	853	.....	.....	.....
	1909	1,571	.....	1	68	128	1,374	.....	.....	.....
Lime	1914	773	.....	.....	.....	88	558	.....	.....	127
	1909	514	.....	.....	1	.....	513	.....	.....	.....
Liquors, malt	1914	244	85	.....	146	.....	13	.....	.....	.....
	1909	415	208	.....	129	.....	42	36	.....	.....
Lumber and timber products	1914	17,417	308	190	397	219	13,233	3,070	.....	.....
	1909	18,643	168	205	364	757	13,998	3,148	3	.....
Marble and stone work	1914	224	81	10	110	.....	23	.....	.....	.....
	1909	144	11	5	79	5	44	.....	.....	.....
Minerals and earths, ground	1914	422	.....	.....	10	.....	410	.....	2	.....
	1909	58	.....	.....	.....	.....	50	.....	8	.....
Paper and wood pulp	1914	1,033	.....	.....	.....	66	666	.....	301	.....
	1909	1,162	.....	.....	.....	57	680	329	96	.....
Printing and publishing	1914	1,218	741	90	288	10	80	.....	.....	.....
	1909	1,255	601	35	479	41	99	.....	.....	.....
Slaughtering and meat packing	1914	214	.....	171	1	.....	42	.....	.....	.....
	1909	167	.....	.....	.....	.....	21	146	.....	.....
Tin plate and terneplate	1914	1,475	857	.....	328	290	.....	.....	.....	.....
	1909	1,335	523	.....	456	356	.....	.....	.....	.....
Woolen and worsted goods	1914	276	.....	.....	36	.....	240	.....	.....	.....
	1909	599	.....	.....	4	1	594	.....	.....	.....
All other industries	1914	12,087	818	1,426	1,334	3,031	4,372	552	346	208
	1909	9,874	592	320	1,154	2,920	4,047	200	71	570
Total for cities	1914	23,408	4,355	3,995	4,196	4,530	4,330	1,788	29	185
BLUEFIELD	1914	1,247	52	.....	24	15	86	1,054	16	.....
CHARLESTON	1914	1,081	138	12	146	207	528	50	.....	.....
CLARKSBURG	1914	316	47	9	103	36	63	33	.....	25
FAIRMONT	1914	1,837	103	891	143	460	209	31	.....	.....
HUNTINGTON	1914	4,641	2,537	64	379	333	1,293	9	2	24
MARTINSBURG	1914	1,568	9	134	62	1,208	155	.....	.....	.....
MORGANTOWN	1914	1,470	452	319	266	4	424	.....	4	1
MOUNDSVILLE	1914	1,508	17	823	41	46	59	520	2	.....
PARKERSBURG	1914	1,820	238	.....	1,013	39	496	29	2	3
WHEELING	1914	7,920	762	1,743	2,019	2,182	1,017	62	3	132

From these figures it appears that 56.5 per cent of the wage earners in all industries throughout the state in 1914 were employed in establishments in which the prevailing hours were from 54 to 60 per week; that 27.5 per cent were employed in establishments in which the prevailing hours were less than 54; and that 15.9 per cent were in establishments where the prevailing hours were more than 60. In the cities, taken as a group, for the same three classes referred to, the percentages differ somewhat from those for the state as a whole, being 55.8, 35.7, and 8.6, respectively.

The majority of wage earners in Fairmont, Huntington, Morgantown, and Moundsville were employed in establishments in which the prevailing hours were less than 54; in Charleston, Clarksburg, Martinsburg, Parkersburg, and Wheeling, in establishments with prevailing hours from 54 to 60, inclusive; and in Bluefield, in establishments with prevailing hours between 60 and 72.

Location of establishments.—Table 12 shows, for 1914, 1909, and 1899, the extent to which the manufactures in West Virginia are centralized in the 10 cities with a population of 10,000 and over.

In accepting the statistics in this table it must be remembered that some of the cities that had a population of 10,000 or more in 1914 were included in the district outside of cities at prior censuses: Clarksburg, Fairmont, Morgantown, and Moundsville in 1909 and 1899, and Bluefield and Martinsburg in 1899.

The 10 cities having a population estimated at 10,000 or over in 1914 show 15.2 per cent of the total population estimated for the state, 25.6 per cent of the total number of establishments, 32.9 per cent of the total average number of wage earners, and 34.8 per cent of the total value of products.

Table 12

	Census year.	Aggregate.	Cities having a population of 10,000 or over.						Districts 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 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	1914	.....	10	.....	7	.....	3	.....	.....	.....
	1910	.....	6	.....	4	.....	2	.....	.....	.....
	1900	.....	4	.....	3	.....	1	.....	.....	.....
Population [1]	1914	1,332,910	203,265	15.2	91,230	6.8	112,035	8.4	1,129,645	84.8
	1910	1,221,119	135,526	11.1	62,724	5.1	72,802	6.0	1,085,593	88.9
	1900	958,800	75,183	7.8	36,305	3.8	38,878	4.1	883,617	92.2
Number of establishments	1914	2,749	705	25.6	313	11.4	392	14.3	2,044	74.4
	1909	2,586	435	16.8	192	7.4	243	9.4	2,151	83.2
	1899	1,824	327	17.9	149	8.2	178	9.8	1,497	82.1
Average number of wage earners	1914	71,078	23,408	32.9	9,766	13.7	13,642	19.2	47,670	67.1
	1909	63,893	15,501	24.3	4,536	7.1	10,965	17.2	48,392	75.7
	1899	33,080	9,830	29.7	3,640	11.0	6,190	18.7	23,250	70.3
Value of products	1914	$193,511,782	$67,321,100	34.8	$24,342,252	12.6	$42,978,848	22.2	$126,190,682	65.2
	1909	161,949,526	46,302,723	28.6	12,714,312	7.9	33,588,411	20.7	115,646,803	71.4
	1899	67,006,822	23,070,313	34.4	8,004,968	11.9	15,074,345	22.5	43,927,509	65.6
Value added by manufacture	1914	83,478,617	29,399,155	35.2	11,342,784	13.6	18,056,371	21.6	54,079,462	64.8
	1909	69,071,538	19,032,710	27.6	4,851,460	7.0	14,181,250	20.5	50,038,828	72.4
	1899	29,778,569	9,630,783	32.3	2,962,341	9.9	6,668,442	22.4	20,147,786	67.7

[1] Census estimate of population for 1914.

Table 13 shows, for 1914, 1909, and 1904, the relative importance in manufactures of each of the cities having more than 10,000 inhabitants, as measured by average number of wage earners and by value of products. The cities are listed in the order of their rank in respect to value of products in 1914.

Table 13

City.	Average number of wage earners.			Value of products.		
	1914	1909	1904	1914	1909	1904
Wheeling	7,920	7,809	7,127	$27,878,933	$27,077,151	$21,797,475
Huntington	4,641	3,156	2,229	11,400,468	6,511,260	4,407,153
Parkersburg	1,820	1,495	1,444	7,142,990	5,498,452	3,778,139
Fairmont	1,837	.....	.....	4,383,674	.....	.....
Charleston	1,081	951	887	3,699,447	3,235,363	2,100,470
Moundsville	1,508	.....	.....	3,628,793	.....	.....
Martinsburg	1,568	1,420	.....	3,021,938	2,515,458	.....
Morgantown	1,470	.....	.....	2,337,990	.....	.....
Bluefield	1,247	670	.....	2,173,008	1,465,039	.....
Clarksburg	316	.....	.....	1,653,859	.....	.....

Each of the cities for which comparable figures are given shows increases in value of products and average number of wage earners.

Wheeling, the most important city of the state, is noted especially for its iron and steel industries, but there were 16 industries in the city that reported products valued at more than $500,000 each in 1914. In order of importance these industries ranked as follows: Steel works and rolling mills; tobacco, chewing and smoking; copper, tin, and sheet-iron products; cigars and cigarettes; tin plate and terneplate; foundry and machine-shop products; iron and steel, blast furnaces; patent medicines and compounds; galvanizing; slaughtering and meat packing; glass; printing and publishing; lamps and reflectors; liquors, malt; bread and other bakery products; and leather, tanned, curried, and finished. There were 123 establishments reported for these industries and they gave employment to 6,729 wage earners, or 85 per cent of the total number for all industries in the city; and their products were valued at $24,273,176, or 85.6 per cent of the total.

For the period 1909–1914 the greatest relative gain in value of products, 60 per cent, was made by Huntington. This was largely the result of the increased output of the steam-railroad repair shops and of its flour and lumber mills, glassworks, furniture, mattress and spring bed factories, the construction of steam-railroad cars and printing and publishing industries.

In Charleston the 14.3 per cent increase was divided among its principal industries, all of which showed substantial increases in value of products. These industries, with products valued at more than $200,000 each, are bread and other bakery products, flour-mill and gristmill products, foundry and machine-shop products, lumber and timber products, and printing and publishing.

Parkersburg, with an increase of $1,644,538 in value of products between 1909 and 1914, reported in detail 83 establishments, which represented 35 industries. Those industries having products valued at more than $250,000 are: Boots and shoes; cars and general shop construction and repairs by steam-railroad companies; clothing, men's; foundry and machine-shop products; furniture; lumber and timber products; oils, not elsewhere specified; petroleum refining; and printing and publishing.

Martinsburg shows an increase of 20.2 per cent in value of products between 1909 and 1914. The principal industries reported were carriages and wagons, flour-mill and gristmill products, hosiery and knit goods, distilled liquors, and woolen goods.

At the census of 1914 four cities—Clarksburg, Fairmont, Morgantown, and Moundsville—were added to those having 10,000 or more inhabitants. The principal industries in Clarksburg are bread and other bakery products, confectionery, foundry and machine-shop products, manufactured ice, and printing and publishing. The leading industries in Fairmont are glass, and the manufacture of foundry and machine-shop products, and lumber and timber products. The leading industry of Morgantown is the manufacture of glass. Among other important industries are bread and other bakery products, confectionery, foundry and machine-shop products, and printing and publishing. Moundsville reported products valued at $3,628,793, made by 27 establishments representing 20 different industries, the most prominent being brooms and brushes, men's and women's clothing, glass, and stamped and enameled ware.

Character of ownership.—Table 14 presents statistics in respect to character of ownership, or legal organization, of manufacturing enterprises. For all industries combined for the state as a whole comparative figures are given for 1914, 1909, and 1904, while for the selected industries figures for 1914 and 1909 only are given. For individual cities the figures are for all industries combined and relate only to 1914. To avoid disclosing the operations of individual establishments several important industries are omitted.

Table 14

Industry and city.	Census 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.		
		Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
All industries	1914	1,304	905	540	71,078	5,060	62,436	3,582	7.1	87.8	5.0	$193,511,782	$11,258,657	$171,832,947	$10,420,178	5.8	88.8	5.4
	1909	1,188	813	585	63,893	6,113	53,306	4,474	9.6	83.4	7.0	161,949,526	11,086,973	140,385,264	10,477,289	6.8	86.7	6.5
	1904	920	638	551	43,758	4,922	35,065	3,771	11.2	80.1	8.6	99,040,676	10,014,225	78,951,053	10,075,398	10.1	79.7	10.2
Bread and other bakery products.	1914	114	7	17	569	331	135	103	58.2	23.7	18.1	2,305,438	1,304,367	630,714	370,357	56.6	27.4	16.1
	1909	124	10	17	346	224	86	36	64.7	24.9	10.4	1,469,911	897,665	423,001	149,245	61.1	28.8	10.2
Brick, tile, pottery, and other clay products.	1914	5	48	2	4,790	[1] 85	4,705	.....	1.8	98.2	.....	6,798,118	[1] 116,408	6,681,710	.....	1.7	98.3	.....
	1909	6	39	5	2,916	45	2,793	78	1.5	95.8	2.7	3,629,037	28,345	3,527,969	72,723	0.8	97.2	2.0
Copper, tin, and sheet-iron products.	1914	8	13	3	1,575	31	1,533	11	2.0	97.3	0.7	4,731,760	63,574	4,636,138	32,048	1.3	98.0	0.7
	1909	3	11	5	916	14	885	17	1.5	96.6	1.9	2,150,789	32,965	2,084,889	32,935	1.5	96.9	1.5
Flour-mill and gristmill products.	1914	112	41	76	381	101	200	80	26.5	52.5	21.0	7,052,814	1,391,957	4,666,226	994,631	19.7	66.2	14.1
	1909	90	38	79	452	126	220	106	27.9	48.7	23.5	7,695,801	1,517,216	4,786,234	1,392,351	19.7	62.2	18.1
Foundry and machine-shop products.	1914	32	60	26	1,908	97	1,696	115	5.1	88.9	6.0	5,079,574	259,701	4,436,946	382,927	5.1	87.3	7.5
	1909	27	38	18	1,354	144	1,088	122	10.6	80.3	9.0	3,391,930	286,552	2,748,527	356,851	8.4	81.0	10.5
Glass	1914	5	54	4	8,889	49	8,551	289	0.6	96.2	3.3	14,631,171	48,038	14,283,733	299,400	0.3	97.6	2.0
	1909	5	42	4	6,190	44	6,066	80	0.7	98.0	1.3	7,779,483	49,969	7,657,301	72,213	0.6	98.4	0.9
Ice, manufactured	1914	5	39	3	364	6	345	13	1.6	94.8	3.6	755,922	15,617	719,632	20,673	2.1	95.2	2.7
	1909	2	26	7	233	.....	207	[2] 26	.....	88.8	11.2	478,887	.....	425,726	[2] 53,161	.....	88.9	11.0
Lumber and timber products.	1914	601	152	242	17,417	2,318	13,136	1,963	13.3	75.4	11.3	28,994,240	3,569,287	21,515,216	3,909,737	12.3	74.2	13.5
	1909	549	173	294	18,643	3,249	12,320	3,074	17.4	66.1	16.5	28,758,481	4,137,601	20,267,413	4,353,467	14.4	70.5	15.1
Printing and publishing	1914	134	71	37	1,218	336	810	72	27.6	66.5	5.9	2,430,565	614,283	1,671,316	144,966	25.3	68.8	5.9
	1909	132	68	35	1,255	296	872	87	23.6	69.5	6.9	1,992,036	498,579	1,353,748	139,709	25.0	68.0	7.0
Total for cities	1914	283	328	94	23,408	1,805	20,839	764	7.7	89.0	3.3	67,321,100	4,780,505	59,068,436	3,472,159	7.1	87.7	5.2
Bluefield	1914	8	16	.....	1,247	37	1,210	.....	3.0	97.0	.....	2,173,008	127,853	2,045,155	.....	5.9	94.1	.....
Charleston	1914	29	48	12	1,081	69	951	61	6.4	88.0	5.6	3,699,447	284,093	3,202,889	212,465	7.7	86.6	5.7
Clarksburg	1914	18	19	6	316	88	176	52	27.8	55.7	16.5	1,653,859	289,115	1,183,113	181,631	17.5	71.5	11.0
Fairmont	1914	20	25	5	1,837	80	1,728	29	4.4	94.1	1.6	4,383,674	170,075	4,156,361	57,238	3.9	94.8	1.3
Huntington	1914	41	51	10	4,641	224	4,365	52	4.8	94.1	1.1	11,400,468	575,277	10,723,242	101,949	5.0	94.1	0.9
Martinsburg	1914	16	12	9	1,568	75	1,434	59	4.8	91.5	3.8	3,021,938	293,462	2,509,260	219,216	9.7	83.0	7.3
Morgantown	1914	21	19	9	1,470	34	1,420	16	2.3	96.6	1.1	2,337,990	189,843	2,080,396	67,751	8.1	89.0	2.9
Moundsville	1914	13	8	6	1,508	60	1,407	41	4.0	93.3	2.7	3,628,793	549,009	1,650,903	1,428,881	15.1	45.5	39.4
Parkersburg	1914	29	42	12	1,820	103	1,571	146	5.7	86.3	8.0	7,142,990	292,660	6,460,221	390,109	4.1	90.4	5.5
Wheeling	1914	88	88	25	7,920	1,035	6,577	308	13.1	83.0	3.9	27,878,933	2,009,118	25,056,896	812,919	7 2	89.9	2.9

[1] Includes the group "all others."

[2] Includes the group "individuals."

For all industries combined the statistics for 1914 show that the establishments under corporate ownership, while representing only 32.9 per cent of the total number of establishments, reported 87.9 per cent of the total average number of wage earners and 88.8 per cent of the total value of products. The corresponding percentages for 1909 were 31.4, 83.4, and 86.7, respectively, and for 1904, 30.3, 80.1, and 79.7, respectively. Individual ownership represented 47 per cent of the total number of establishments in the state, but the percentages reported by this class for wage earners and value of products were only 7.1 and 5.8, respectively.

In the individual industries the forms of ownership prevailing vary. The bread and other bakery products, lumber and timber products, and printing and publishing industries are more largely controlled by individual and all other forms of ownership than are the other industries for which figures are given. This is particularly the case with the bread and other

bakery products industry, in which 131 out of a total of 138 establishments in 1914, with 76.3 per cent of the total number of wage earners and 72.6 per cent of the total value of products, were under individual and all other forms of ownership.

In Bluefield, Charleston, and Parkersburg, more than half, and in Fairmont and Huntington one-half of the establishments were under corporate ownership; in the other cities the majority were under individual and all other forms of ownership. The average number of wage earners, however, shows the percentage reported by corporations was in excess of the percentage reported for individual and all other forms of ownership combined; and the same condition exists in respect to value of products, except in the case of Moundsville, for which only 45.4 per cent of the total value of products was reported by establishments under corporate ownership. This condition is due to the fact that a large amount of contract work was done in the state penitentiary in Moundsville, which was reported as part of the value of products of establishments under all other ownership. Since the prisoners employed in the performance of this work are not reported as wage earners, however, the per cent distribution of the wage earners in Moundsville is not radically different from that for all the cities taken as a group.

Size of establishments.—It is of interest from the standpoint of industrial organization to note the tendency toward concentration of manufactures in large establishments. The following table groups the establishments according to the value of their products and gives, for each group, for 1914, 1909, and 1904 the average number of wage earners, the value of products, and the value added by manufacture, together with the per cent distribution.

Table 15 — VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904
All classes	2,749	2,586	2,109	71,078	63,893	43,758	$193,511,782	$161,949,526	$99,040,676	$83,478,617	$69,071,538	$44,621,470
Less than $5,000	1,166	1,082	775	1,767	1,988	1,180	2,644,911	2,548,624	1,818,126	1,800,714	1,734,907	1,209,794
$5,000 to $20,000	786	759	707	4,107	4,240	3,914	8,031,347	7,566,470	7,340,887	4,644,685	4,352,873	4,036,852
$20,000 to $100,000	488	462	443	10,082	10,384	10,657	22,485,402	21,017,729	19,041,458	11,464,927	10,417,819	10,011,781
$100,000 to $1,000,000	266	250	170	35,227	32,553	21,487	79,149,733	68,334,808	45,685,216	40,266,968	33,764,126	21,889,469
$1,000,000 and over	43	33	14	19,895	14,728	6,520	81,200,389	62,481,895	25,154,989	25,301,323	18,801,813	7,473,574
	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	42.4	41.8	36.7	2.5	3.1	2.7	1.4	1.6	1.8	2.2	2.5	2.7
$5,000 to $20,000	28.6	29.4	33.5	5.8	6.6	8.9	4.2	4.7	7.4	5.6	6.3	9.0
$20,000 to $100,000	17.8	17.9	21.0	14.2	16.3	24.4	11.6	13.0	19.2	13.7	15.1	22.4
$100,000 to $1,000,000	9.7	9.7	8.1	49.6	50.9	49.1	40.9	42.2	46.1	48.2	48.9	49.1
$1,000,000 and over	1.6	1.3	0.7	28.0	23.1	14.9	42.0	38.6	25.4	30.3	27.2	16.7

It will be seen from this table that 43 of the 2,749 establishments reported in 1914, or 1.6 per cent, turned out products valued at more than $1,000,000. These establishments employed an average of 19,895 wage earners, or 27.9 per cent of the total for all wage earners, and reported 42 per cent of the total value of products and 30.3 per cent of the total value added by manufacture.

On the other hand, the very small establishmnets—that is, those having products valued at less than $5,000—although constituting 42.4 per cent of the total number of establishments, reported only 1.4 per cent of the total value of products. The great bulk of the manufacturing was reported by establishments having products valued at $100,000 or more.

The table shows that during the five years from 1909 to 1914 there was a considerable increase, as measured by both value of products and value added by manufacture, in the relative importance of the largest establishments—those reporting products valued at not less than $1,000,000—and a decrease in that of each of the other classes. A similar but more pronounced change took place between 1904 and 1909.

The average value of products per establishment, for all classes of establishments combined, increased during the last five-year period from $62,625 to $70,394, and the average value added by manufacture from $26,710 to $30,367; but this fact should not be taken as being in itself an indication of a tendency toward concentration, since the increased values are in all probability due in part to the increases that have taken place in the prices of commodities.

Table 16 shows for seven of the more important industries, for 1914 and 1909, a classification similar to that presented in Table 15.

It will be noted that the average number of wage earners, value of products, and value added by manufacture, per establishment, are high in the glass, copper, tin, and sheet-iron products, and brick, tile, pottery, and other clay products industries; while the averages are low in the foundry and machine-shop, flour-mill and gristmill, lumber and timber, and printing and publishing industries. The average value of products in the glass industry was $232,200, and in the printing and publishing industry approximately $10,000. The largest establishments in the state,

however, as measured by average value of products per establishment, were in the tin-plate and terne-plate industry, with an average of $1,891,320; the steel works and rolling mills industry, with $1,412,371; and the slaughtering and meat-packing industry, with $683,950; but in order to avoid disclosing the operations of individual establishments, these industries could not be shown in the detail given in the table.

Table 16

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.		AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
	1914	1909	1914	1909	Per cent distribution. 1914	Per cent distribution. 1909	1914	1909	Per cent distribution. 1914	Per cent distribution. 1909	1914	1909	Per cent distribution. 1914	Per cent distribution. 1909
BRICK, TILE, POTTERY, AND OTHER CLAY PRODUCTS	55	50	4,790	2,916	100.0	100.0	$6,798,118	$3,629,037	100.0	100.0	$4,576,173	$2,568,098	100.0	100.0
Less than $20,000[1]	19	25	237	222	4.9	7.6	183,926	184,071	2.7	5.1	137,453	141,365	3.0	5.5
$20,000 to $100,000	22	17	724	669	15.1	22.9	973,598	764,892	14.3	21.1	733,716	548,082	16.0	21.3
$100,000 and over[2]	14	8	3,829	2,025	79.9	69.4	5,640,594	2,680,074	83.0	73.9	3,705,004	1,878,651	81.0	73.2
COPPER, TIN, AND SHEET-IRON PRODUCTS	24	19	1,575	916	100.0	100.0	4,731,760	2,150,789	100.0	100.0	1,521,345	796,565	100.0	100.0
Less than $5,000	7	3	10	3	0.6	0.3	18,530	9,985	0.4	0.5	10,644	6,351	0.7	0.8
$5,000 to $100,000[3]	8	10	76	59	4.8	6.4	172,331	136,765	3.6	6.4	79,878	73,394	5.3	9.2
$100,000 and over[2]	9	6	1,489	854	94.5	93.2	4,540,899	2,004,039	96.0	93.2	1,430,823	716,820	94.0	90.0
FLOUR-MILL AND GRISTMILL PRODUCTS	229	207	381	452	100.0	100.0	7,052,814	7,695,801	100.0	100.0	1,124,386	1,094,654	100.0	100.0
Less than $5,000	64	34	27	26	7.1	5.8	183,312	109,153	2.6	1.4	45,573	20,702	4.1	1.9
$5,000 to $20,000	100	93	96	105	25.2	23.2	1,082,202	1,037,257	15.3	13.5	239,736	214,799	21.3	19.6
$20,000 to $100,000	54	67	142	164	37.3	36.3	2,199,466	2,594,193	31.2	33.7	429,825	426,012	38.2	38.9
$100,000 and over[2]	11	13	116	157	30.4	34.7	3,587,834	3,955,198	50.9	51.4	409,252	433,141	36.4	39.6
FOUNDRY AND MACHINE-SHOP PRODUCTS	118	83	1,908	1,354	100.0	100.0	5,079,574	3,391,930	100.0	100.0	2,409,123	1,632,252	100.0	100.0
Less than $5,000	47	22	91	45	4.8	3.3	129,480	65,683	2.5	1.9	86,884	37,711	3.6	2.3
$5,000 to $20,000	34	25	151	146	7.9	10.8	334,960	242,844	6.6	7.2	227,906	160,587	9.5	9.8
$20,000 to $100,000	27	29	488	587	25.6	43.4	1,254,556	1,418,392	24.7	41.8	664,194	731,322	27.6	44.8
$100,000 to $1,000,000	10	7	1,178	576	61.7	42.5	3,360,578	1,665,011	66.2	49.1	1,430,139	702,632	59.4	43.0
GLASS	63	51	8,889	6,190	100.0	100.0	14,631,171	7,779,483	100.0	100.0	9,993,030	5,483,555	100.0	100.0
Less than $20,000[1]	6	7	36	40	0.4	0.6	31,888	37,675	0.2	0.5	19,572	29,349	0.2	0.5
$20,000 to $100,000	12	15	483	755	5.4	12.2	658,968	844,316	4.5	10.9	453,059	579,102	4.5	10.6
$100,000 and over[2]	45	29	8,370	5,395	94.2	87.2	13,940,315	6,897,492	95.3	88.7	9,520,399	4,875,104	95.3	88.9
LUMBER AND TIMBER PRODUCTS	995	1,016	17,417	18,643	100.0	100.0	28,994,240	28,758,481	100.0	100.0	19,411,838	20,082,394	100.0	100.0
Less than $5,000	575	524	960	1,130	5.5	6.1	1,205,746	1,185,419	4.2	4.1	924,723	880,883	4.8	4.4
$5,000 to $20,000	235	294	1,626	2,286	9.3	12.3	2,334,064	2,839,905	8.1	9.9	1,706,505	2,002,584	8.8	10.0
$20,000 to $100,000	116	128	2,951	3,379	16.9	18.1	5,733,233	5,847,802	19.8	20.3	3,342,071	3,467,986	17.2	17.3
$100,000 and over[2]	69	70	11,880	11,848	68.2	63.6	19,721,197	18,885,355	68.0	65.7	13,438,539	13,730,941	69.2	68.4
PRINTING AND PUBLISHING	242	235	1,218	1,255	100.0	100.0	2,430,565	1,992,036	100.0	100.0	1,770,549	1,451,498	100.0	100.0
Less than $5,000	147	158	239	274	19.6	21.8	343,993	368,047	14.2	18.5	276,057	290,596	15.6	20.0
$5,000 to $20,000	69	54	322	315	26.4	25.1	580,790	477,927	23.9	24.0	438,009	370,669	24.7	25.5
$20,000 and over[4]	26	23	657	666	53.9	53.1	1,505,782	1,146,062	62.0	57.5	1,056,483	790,233	59.7	54.4

[1] Includes the group "less than $5,000."
[2] Includes the group "$1,000,000 and over."
[3] Includes the group "$20,000 to $100,000."
[4] Includes the group "$100,000 to $1,000,000" in 1914, and the group "$1,000,000 and over" in 1909.

Table 17 shows, for 1914, for each of the 10 cities having a population of 10,000 and over, for all industries combined, the number of establishments classified according to value of products per establishment, and for each group the average number of wage earners, value of products, and value added by manufacture. The per cent distribution of the items constituting each total is also given.

Table 17

CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS. Average number.	WAGE EARNERS. Per cent of total.	VALUE OF PRODUCTS. Amount.	VALUE OF PRODUCTS. Per cent of total.	VALUE ADDED BY MANUFACTURE. Amount.	VALUE ADDED BY MANUFACTURE. Per cent of total.
BLUEFIELD	24	1,247	100.0	$2,173,008	100.0	$1,094,644	100.0
Less than $5,000	6	6	0.5	10,210	0.5	8,313	0.8
$5,000 to $20,000	9	46	3.7	106,520	4.9	62,201	5.7
$20,000 and over[1]	9	1,195	95.8	2,056,278	94.6	1,024,130	93.6
CHARLESTON	89	1,081	100.0	3,699,447	100.0	1,527,591	100.0
Less than $5,000	24	30	2.8	61,877	1.7	39,880	2.6
$5,000 to $20,000	28	131	12.1	312,825	8.5	182,418	11.9
$20,000 to $100,000	25	410	37.9	1,120,413	30.3	579,616	37.9
$100,000 to $1,000,000	12	510	47.2	2,204,332	59.6	725,677	47.5
CLARKSBURG	43	316	100.0	1,653,859	.....	643,884	100.0
Less than $5,000	8	16	5.1	19,529	1.2	12,875	2.0
$5,000 to $20,000	17	68	21.5	178,728	10.8	96,817	15.0
$20,000 and over[2]	18	232	73.4	1,455,602	88.0	534,192	83.0

[1] Includes the groups "$100,000 to $1,000,000" and "$1,000,000 and over."
[2] Includes the group "$100,000 to $1,000,000."

Table 17—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.
FAIRMONT	50	1,837	100.0	4,383,674	100.0	2,775,403	100.0
Less than $5,000	9	21	1.1	22,106	0.5	15,004	0.5
$5,000 to $20,000	20	104	5.7	211,456	4.8	121,360	4.4
$20,000 to $100,000	16	302	16.4	894,232	20.4	372,011	13.4
$100,000 and over [1]	5	1,410	76.8	3,255,880	74.3	2,267,028	81.7
HUNTINGTON	102	4,641	100.0	11,400,468	100.0	4,623,369	100.0
Less than $5,000	25	33	0.7	60,060	0.5	37,836	0.8
$5,000 to $20,000	25	99	2.1	232,948	2.0	134,659	2.9
$20,000 to $100,000	31	555	12.0	1,281,606	11.7	672,076	14.5
$100,000 to $1,000,000	18	1,354	29.2	3,357,206	29.4	1,649,946	35.7
$1,000,000 and over	3	2,600	56.0	6,468,648	56.7	2,128,852	46.0
MARTINSBURG	37	1,568	100.0	3,021,938	100.0	1,313,344	100.0
Less than $5,000	8	13	0.8	18,365	0.6	12,676	1.0
$5,000 to $20,000	13	58	3.7	128,690	4.3	76,377	5.8
$20,000 to $100,000	11	144	9.2	476,816	15.8	155,200	11.8
$100,000 and over [1]	5	1,353	86.3	2,398,067	79.4	1,069,091	81.4
MORGANTOWN	49	1,470	100.0	2,337,990	100.0	1,584,314	100.0
Less than $5,000	18	16	1.1	42,170	1.8	25,778	1.6
$5,000 to $20,000	16	64	4.4	179,387	7.7	90,784	5.7
$20,000 to $100,000	9	118	8.0	384,423	16.4	185,521	11.7
$100,000 and over	6	1,272	86.5	1,732,010	74.1	1,282,231	80.9
MOUNDSVILLE	27	1,508	100.0	3,628,793	100.0	1,533,326	100.0
Less than $5,000	5	7	0.5	11,854	0.3	8,255	0.5
$5,000 to $20,000	7	44	2.9	85,627	2.4	48,335	3.2
$20,000 to $100,000	10	140	9.3	310,733	8.6	145,585	9.5
$100,000 and over [1]	5	1,317	87.3	3,220,579	88.8	1,331,151	86.8
PARKERSBURG	83	1,820	100.0	7,142,990	100.0	2,397,869	100.0
Less than $5,000	25	33	1.8	65,337	0.9	35,977	1.5
$5,000 to $20,000	19	86	4.7	195,116	2.7	103,030	4.3
$20,000 to $100,000	25	442	24.3	1,053,012	14.7	588,950	24.6
$100,000 and over [1]	14	1,259	69.2	5,829,525	81.6	1,669,912	69.6
WHEELING	201	7,920	100.0	27,878,933	100.0	11,905,411	100.0
Less than $5,000	65	136	1.7	162,173	0.6	111,892	0.9
$5,000 to $20,000	57	318	4.0	641,972	2.3	367,896	3.1
$20,000 to $100,000	38	757	9.6	1,756,699	6.3	891,898	7.5
$100,000 to $1,000,000	32	4,034	50.9	11,597,129	41.6	5,273,487	44.3
$1,000,000 and over	9	2,675	33.8	13,720,960	49.2	5,260,238	44.2

[1] Includes the group "$1,000,000 and over."

The cities having the highest average value per establishment, for all classes combined, were Wheeling, with $138,701, and Moundsville, with $134,400; and those having the lowest averages were Clarksburg and Charleston, with $38,462 and $41,567, respectively. The highest average value for establishments having products in excess of $1,000,000 was reported for Huntington—three establishments with an average of $2,189,549. The lowest average for establishments with products valued at less than $5,000 appears for Bluefield—six establishments with an average of $1,702.

Table 18 shows the size of establishments as measured by the average number of wage earners employed in 1914. The figures given are for the combined industries of the state and for the 24 industries giving employment to more than 200 wage earners. Similar statistics are shown for the combined industries of each of the 10 cities of 10,000 or more inhabitants.

Of the 2,749 establishments reported for all industries, 1,545, or 56.2 per cent, reported from 1 to 5 wage earners; 25.2 per cent, from 6 to 50 wage earners; and 19.6 per cent, 51 or more; while 7.9 per cent employed no wage earners. The establishments employing more than 100 wage earner numbered 158, of which 22 employed more than 500 each. Of the latter, 5 were steam-railroad repair shops, 3 were glass factories, 3 were steel works and rolling mills, and 4 were establishments manufacturing lumber and timber products.

Of the total number of wage earners, 47 per cent were in establishments employing more than 250 wage earners. The single group reporting the largest number of employees is that comprising the establishments having 251 to 500 wage earners, which gave employment to 14,180 wage earners, or 20 per cent of the total for all industries. This group shows an average of 346 wage earners per establishment. More than one-half of the total number of wage earners employed in the steel works and rolling mills were in this group.

There were 245 establishments reporting no wage earners. In these small establishments the proprietors and members of their families not receiving compensation in the form of wages did all the work. The principal industries in which establishments of this character were found are bread and other bakery products, flour-mill and gristmill products, printing and publishing, and lumber and timber products (sawmills).

Table 18—Continued.

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING—						
			No wage earners.	1 to 5 wage earners.		6 to 20 wage earners.		21 to 50 wage earners.	
	Establishments.	Wage earners (average number).	Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries	2,749	71,078	245	1,545	3,391	472	5,092	220	7,119
Artificial stone products	31	263	2	23	55	3	34	2	43
Bread and other bakery products	138	569	22	87	219	27	271	2	79
Brick, tile, pottery, and other clay products	55	4,790		3	7	17	216	18	559
Canning and preserving	29	216	1	11	34	17	182		
Cars and general shop construction and repairs by steam-railroad companies	37	8,437		5	12	6	82	2	47
Clothing, men's	7	491	1			1	14	1	28
Coke, not including gas-house coke	54	1,392		2	7	19	212	29	886
Copper, tin, and sheet-iron products	24	1,575	1	11	30	4	38	2	62
Flour-mill and gristmill products	229	381	62	154	245	12	106	1	30
Foundry and machine-shop products	118	1,908	6	68	160	24	257	12	359
Glass	63	8,889		4	14	3	31	9	294
Ice, manufactured	47	364		27	63	16	181	4	120
Iron and steel, steel works and rolling mills	15	5,348						2	97
Leather, tanned, curried, and finished	18	1,072	1	4	7			4	175
Lime	10	773		3	5	2	18	1	26
Liquors, malt	10	244		1	2	5	66	3	120
Lumber and timber products	995	17,417	32	667	1,366	174	1,902	57	1,828
Marble and stone work	27	224	2	17	39	5	50	2	75
Minerals and earths, ground	12	422		2	5	2	30	6	187
Paper and wood pulp	8	1,033						3	116
Printing and publishing	242	1,218	36	161	392	34	378	10	348
Slaughtering and meat packing	7	214		1	1	4	50	1	30
Tin plate and terneplate	8	1,475						1	45
Woolen and worsted goods	8	276		2	4	1	6	3	91
All other industries	557	12,087	79	292	724	96	968	45	1,474
Total for cities	705	23,408	51	320	833	181	1,970	75	2,340
BLUEFIELD	24	1,247	3	9	26	9	121	2	49
CHARLESTON	89	1,081	10	42	127	22	231	9	289
CLARKSBURG	43	316		25	72	15	175	3	69
FAIRMONT	50	1,837	2	20	42	17	186	6	164
HUNTINGTON	102	4,641	10	41	116	20	227	16	520
MARTINSBURG	37	1,568	3	17	48	11	114	3	108
MORGANTOWN	49	1,470	6	27	53	8	80	2	65
MOUNDSVILLE	27	1,508	7	6	19	9	80	3	91
PARKERSBURG	83	1,820	4	38	86	22	259	9	277
WHEELING	201	7,920	6	95	244	48	497	22	708

Table 18—Continued.

INDUSTRY AND CITY.	ESTABLISHMENTS EMPLOYING—									
	51 to 100 wage earners.		101 to 250 wage earners		251 to 500 wage earners.		501 to 1,000 wage earners.		Over 1,000 wage earners.	
	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries	109	8,045	95	14,038	41	14,180	16	10,840	6	8,373
Artificial stone products			1	131						
Brick, tile, pottery, and other clay products	7	529	5	787	4	1,464			1	1,228
Cars and general shop construction and repairs by steam-railroad companies	8	614	7	1,140	4	1,464	3	1,938	2	3,140
Clothing, men's	2	120	2	329						
Coke, not including gas-house coke	4	287								
Copper, tin, and sheet-iron products	3	238			2	695	1	512		
Foundry and machine-shop products	3	189	4	493	1	450				
Glass	16	1,206	23	3,483	5	1,659	3	2,202		
Iron and steel, steel works and rolling mills	1	71			9	2,950	2	1,206	1	1,024
Leather, tanned, curried, and finished	5	391	4	499						
Lime	1	88	2	316	1	320				
Liquors, malt	1	56								
Lumber and timber products	27	2,036	28	4,124	6	1,968	3	2,382	1	1,811
Marble and stone work	1	60								
Minerals and earths, ground	1	68	1	132						
Paper and wood pulp	2	141	2	316	1	460				
Printing and publishing	1	100								
Slaughtering and meat packing			1	133						
Tin plate and terneplate	2	156	3	417	1	338	1	519		
Woolen and worsted goods	1	68	1	107						
All other industries	23	1,627	11	1,631	7	2,412	3	2,081	1	1,170
Total for cities	32	2,296	24	3,609	14	4,672	5	3,378	3	4,310
BLUEFIELD									1	1,051
CHARLESTON	5	323	1	111						
FAIRMONT	2	146	1	129	1	375	1	795		
HUNTINGTON	9	631	4	577	1	481			1	2,089
MARTINSBURG	2	128							1	1,170
MORGANTOWN			4	656	2	616				
MOUNDSVILLE							2	1,318		
PARKERSBURG	5	429	5	769						
WHEELING	9	639	9	1,367	10	3,200	2	1,265		

Of the 705 establishments in the 10 cities having a population of 10,000 and over, 51, or 7.2 per cent, employed no wage earners; 320, or 45.4 per cent, employed from 1 to 5 wage earners; and 22, or 3 per cent, employed more than 250 wage earners. This latter class averaged 562 wage earners per establishment.

Table 19 presents, for 1914, percentages based on the figures in Table 18 together with similar percentages for 1909 with reference to all industries combined and to individual industries in the state as a whole.

Wage earners in establishments employing an average of 250 or less decreased 7.5 per cent between 1909 and 1914, with a corresponding increase for those in establishments employing more than 250. Among the industries showing increases for the establishments employing more than 250 wage earners are brick, tile, pottery, and other clay products; cars and general shop construction and repairs by steam-railroad companies; copper, tin, and sheet-iron products; steel works and rolling mills; lime; lumber and timber products; and tin plate and terneplate. The industries that show a decrease in this respect are coke; leather, tanned, curried, and finished; paper and wood pulp; and woolen and worsted goods.

For the cities 52.8 per cent of the wage earners in 1914 were reported for the establishments employing 251 or more. The cities showing the largest percentages in these establishments are Bluefield, Fairmont, Huntington, Martinsburg, Moundsville, and Wheeling.

Table 19

INDUSTRY AND CITY.	Census year.	PER CENT OF TOTAL AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS EMPLOYING SPECIFIED NUMBER.							
		1 to 5	6 to 20	21 to 50	51 to 100	101 to 250	251 to 500	501 to 1,000	Over 1,000.
All industries	1914	4.8	7.2	10.0	11.3	19.8	19.9	15.2	11.8
	1909	5.1	8.5	11.0	12.7	23.3	17.7	17.4	4.2
Artificial stone products	1914	20.9	12.9	16.4	.....	49.8	.....	.....	.....
	1909	32.9	7.6	59.5	.....	.....	.....	.....	.....
Bread and other bakery products.	1914	38.5	47.6	13.9	.....	.....	.....	.....	.....
	1909	54.6	37.3	8.1	.....	.....	.....	.....	.....
Brick, tile, pottery, and other clay products.	1914	0.1	4.5	11.7	11.0	16.4	30.6	.....	25.6
	1909	0.5	8.6	11.2	16.8	24.0	9.8	29.1	.....
Canning and preserving	1914	15.7	84.3	.....	.....	.....	.....	.....	.....
	1909	11.8	58.3	9.6	20.3	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	0.1	1.0	0.6	7.3	13.5	17.4	23.0	37.2
	1909	.....	0.8	1.4	5.0	18.9	28.2	18.5	27.2
Clothing, men's	1914	.....	2.9	5.7	24.4	67.0	.....	.....	.....
	1909	.....	16.5	.....	83.5	.....	.....	.....	.....
Coke, not including gas-house coke.	1914	0.5	15.2	63.7	20.6	.....	.....	.....	.....
	1909	0.4	2.8	24.3	27.8	15.7	.....	29.0	.....
Copper, tin, and sheet-iron products.	1914	1.9	2.4	3.9	15.1	.....	44.1	32.5	.....
	1909	2.6	6.2	4.1	7.4	35.5	44.1	.....	.....
Flour-mill and gristmill products.	1914	64.3	27.8	7.9	.....	.....	.....	.....	.....
	1909	61.3	25.2	13.5	.....	.....	.....	.....	.....
Foundry and machine-shop products.	1914	8.4	13.5	18.8	9.9	25.8	23.6	.....	.....
	1909	6.4	26.1	28.4	14.9	.....	24.1	.....	.....
Glass	1914	0.2	0.3	3.3	13.6	39.2	18.7	24.8	.....
	1909	0.2	0.8	3.5	14.0	42.8	28.7	10.1	.....
Ice, manufactured	1914	17.3	49.7	33.0	.....	.....	.....	.....	.....
	1909	20.6	49.8	29.6	.....	.....	.....	.....	.....
Iron and steel, steel works and rolling mills.	1914	.....	.....	1.8	1.3	.....	55.2	22.6	19.1
	1909	.....	0.3	0.9	3.2	9.7	50.1	12.8	23.0
Leather, tanned, curried, and finished.	1914	0.7	.....	16.3	36.5	46.5	.....	.....	.....
	1909	0.3	.....	13.6	18.3	48.3	19.5	.....	.....
Lime	1914	0.6	2.3	3.4	11.4	40.9	41.4	.....	.....
	1909	2.5	7.8	14.0	.....	75.7	.....	.....	.....
Liquors, malt	1914	0.8	27.0	49.2	23.0	.....	.....	.....	.....
	1909	.....	25.1	20.2	54.7	.....	.....	.....	.....
Lumber and timber products	1914	7.8	10.9	10.5	11.7	23.7	11.3	13.7	10.4
	1909	7.8	13.2	13.6	11.9	28.0	10.7	14.7	.....
Marble and stone work	1914	17.4	22.3	33.5	26.8	.....	.....	.....	.....
	1909	38.2	29.9	31.9	.....	.....	.....	.....	.....
Minerals and earths, ground	1914	1.2	7.1	44.3	16.1	31.3	.....	.....	.....
	1909	.....	31.0	69.0	.....	.....	.....	.....	.....
Paper and wood pulp	1914	.....	.....	11.2	13.6	30.6	44.5	.....	.....
	1909	.....	.....	12.0	9.6	28.3	.....	50.2	.....
Printing and publishing	1914	32.2	31.0	28.6	8.2	.....	.....	.....	.....
	1909	31.1	28.4	21.8	.....	18.8	.....	.....	.....
Slaughtering and meat packing.	1914	0.5	23.4	14.0	.....	62.1	.....	.....	.....
	1909	3.6	31.7	.....	.....	64.7	.....	.....	.....
Tin plate and terneplate	1914	.....	.....	3.1	10.6	28.3	22.9	35.2	.....
	1909	.....	.....	2.8	.....	58.1	.....	39.1	.....
Woolen and worsted goods	1914	1.4	2.2	33.0	24.6	38.8	.....	.....	.....
	1909	1.0	13.5	6.8	33.6	.....	45.1	.....	.....
All other industries	1914	6.0	8.0	12.2	13.4	13.5	20.0	17.3	9.7
	1909	6.2	8.5	11.8	15.4	11.6	18.3	28.2	.....
Total for cities	1914	3.6	8.4	10.0	9.8	15.4	20.0	14.4	18.4
BLUEFIELD	1914	2.1	9.7	3.9	.....	.....	.....	.....	84.3
CHARLESTON	1914	11.7	21.4	26.7	29.9	10.3	.....	.....	.....
CLARKSBURG	1914	22.8	55.4	21.8	.....	.....	.....	.....	.....
FAIRMONT	1914	2.3	10.1	8.9	7.9	7.0	20.4	43.3	.....
HUNTINGTON	1914	2.5	4.9	11.2	13.6	12.4	10.4	.....	45.0
MARTINSBURG	1914	3.1	7.3	6.9	8.2	.....	.....	.....	74.6
MORGANTOWN	1914	3.6	5.4	4.4	.....	44.6	41.9	.....	.....
MOUNDSVILLE	1914	1.3	5.3	6.0	.....	.....	.....	87.4	.....
PARKERSBURG	1914	4.7	14.2	15.2	23.6	42.3	.....	.....	.....
WHEELING	1914	3.1	6.3	8.9	8.1	17.3	40.4	16.0	.....

Engines and power.—Table 20 presents, for the state as a whole, for the census years 1914, 1909, and 1904, statistics as to the kind, number, and horsepower of engines and motors, together with the per cent distribution.

For 1914 the total primary power reported was 278,504 horsepower, as compared with 217,496 in 1909, the increase being 61,008 horsepower, or 28.1 per cent. Although steam furnishes the bulk of power used, its relative importance diminished between the two censuses. The total horsepower of steam engines and turbines in use in 1914 was 216,976 horsepower, or 77.9 per cent of the primary power, as compared with 184,591 horsepower, or 84.9 per cent of the total, in 1909. This decrease in relative importance is due to the increasing use of rented electric power and of internal-combustion engines, which together represented 20 per cent of the total primary power in 1914, as against 10.2 per cent in 1909. The use of water power shows a marked decline during the same period, the horsepower of water wheels, turbines, and motors being only a trifle more than half as great in 1914 as in 1909, while the proportion which such power formed of the total decreased to a still greater extent.

Table 20

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904
Primary power, total	5,338	4,527	2,326	278,504	217,496	138,578	100.0	100.0	100.0
Owned	3,294	4,078	2,326	251,067	211,913	137,708	90.1	97.4	99.4
Steam engines and turbines [1]	2,369	3,336	1,864	216,976	184,591	124,735	77.9	84.9	90.0
Internal-combustion engines	779	574	312	28,537	16,705	6,569	10.2	7.7	4.8
Water wheels, turbines, and motors	146	168	150	5,554	10,617	6,404	2.0	4.8	4.6
Rented	2,044	449	(2)	27,437	5,583	870	9.9	2.6	0.6
Electric	2,044	449	(2)	27,152	5,330	776	9.8	2.5	0.5
Other	.....	.....	.....	285	253	94	0.1	0.1	0.1
Electric	4,678	1,715	311	66,676	28,543	5,199	100.0	100.0	100.0
Rented	2,044	449	(2)	27,152	5,330	776	40.7	18.7	14.9
Generated by establishments reporting	2,634	1,266	311	39,524	23,213	4,423	59.3	81.3	85.1

[1] Figures for horsepower include for 1909 and 1904 the amounts reported under the head of "other" owned power.

[2] Not reported.

The power of motors operated by current generated in the same establishments was equivalent to 14.2 per cent of the total primary power in 1914, as against 10.6 per cent in 1909. The aggregate capacity of the electric motors in use—both those run by rented current and those run by current generated in the same establishments—in 1914 was 66,676 horsepower, equivalent to 20.3 per cent of the total primary power reported for that year. The use of electric power, both owned and rented, during the five-year period 1909–1914 increased by 133.6 per cent, while the increase in the total primary power amounted to only 28.1 per cent. The increase in the horsepower of motors operated by current generated in the same establishments was 70.3 per cent, and in the power of motors run by rented current, 409.4 per cent. Practically all industries reported electric power, the most important being steel works and rolling mills, with 10,573 horsepower; foundry and machine-shop products, with 9,093; and glass, with 5,836.

Fuel consumed.—The quantities of the several kinds of fuel consumed in all industries for the state and in several selected industries, as well as for the 10 cities, all industries combined, are given in Table 21 for 1914. Coal, coke, oil, and gas were the only kinds of fuel covered by the census inquiry.

The principal fuel used was gas, and except that reported for industries in the cities of Bluefield and Martinsburg, outside of natural gas, practically all the oil consumed in the state was gasoline, for internal-combustion engines. There was no anthracite coal used by the manufacturers of the state.

Table 21

INDUSTRY AND CITY.	Bituminous coal (tons, 2,000 lbs.).	Coke (tons, 2,000 lbs.).	Oil, including gasoline (barrels).	Gas (1,000 cubic feet).
All industries	3,627,404	208,374	18,221	51,808,846
Bone, carbon, and lamp black	.....	.....	.....	19,456,506
Brick, tile, pottery, and other clay products	151,215	628	345	4,083,775
Bread and other bakery products	1,131	628	39	110,378
Cars and general shop construction and repairs by steam-railroad companies	114,036	807	985	1,039,718
Coke, not including gas-house coke	2,296,107	.....	.....	.....
Copper, tin, and sheet-iron products	4,819	.....	.....	431,959
Electrical machinery, apparatus, and supplies	113	.....	.....	438,040
Flour-mill and gristmill products	8,257	105	508	139,526
Foundry and machine-shop products	13,056	6,244	38	470,809
Glass	28,583	160	.....	10,606,469
Ice, manufactured	28,359	.....	29	1,132,126
Iron and steel, steel works and rolling mills	405,324	16,454	.....	2,803,410
Leather, tanned, curried, and finished	40,016	.....	.....	5,174
Lime	47,179	15,348	.....	58,974
Liquors, malt	18,802	.....	51	133,520
Lumber and timber products	123,325	.....	642	69,133
Paper and wood pulp	50,089	200	.....	1,375,190
Printing and publishing	549	.....	158	76,312
Salt	25,217	.....	.....	280,000
Slaughtering and meat packing	8,888	.....	.....	104,397
Tin plate and terneplate	11,633	.....	.....	558,489
All other industries	250,706	167,800	15,426	8,434,341
Total for cities	314,232	93,541	15,145	8,989,408
BLUEFIELD	27,915	1,133	.....	174
CHARLESTON	3,757	601	.....	400,394
CLARKSBURG	585	153	.....	184,174
FAIRMONT	2,073	364	.....	2,337,858
HUNTINGTON	21,418	3,883	350	1,791,656
MARTINSBURG	11,702	928	1,609	705
MORGANTOWN	25,134	609	.....	1,183,751
MOUNDSVILLE	13,849	.....	.....	615,578
PARKERSBURG	17,622	1,513	5,656	1,570,826
WHEELING	190,177	84,357	7,530	904,292

SPECIAL STATISTICS.

For certain industries the Census Bureau collects, by means of special schedules, details regarding the quantities and cost of materials, the quantities and values of products, and other information for securing which no provision is made on the general schedule. Certain data of this character for five important industries in West Virginia are here presented, together with statistics for power laundries.

Steel works and rolling mills.—Table 22 shows the quantities and values of the chief products reported for 1914 in comparison with similar data for 1909 and 1904. The year 1914 covered a period of marked depression and the output of the steel mills of West Virginia during that year was 7.5 per cent less in tonnage and 6 per cent less in value of products than in 1909. In the face of this industrial depression, however, there was a large increase in the black-plate product, from 111,152 tons in 1909 to 200,825 tons in 1914, or nearly 90 per cent. Of the total tonnage, black plate constituted 35.5 per cent in 1914, compared with 18.2 per cent in 1909.

Table 22	1914	1909	1904
Total value	$21,185,559	$22,435,411	$13,454,802
Rolled, forged, and other classified products:			
Tons [1]	566,252	609,022	384,932
Value	$19,610,516	$20,069,576	$11,243,473
Plates and sheets, not including nail and tack plates:			
Tons [1]	100,277	98,322	34,036
Value	$4,305,709	$4,349,096	$2,052,449
Black plates for tinning:			
Tons [1]	200,825	111,152	42,803
Value	$8,803,540	$4,887,291	$2,098,954
Skelp:			
Tons [1]	114,020	201,794	192,644
Value	$3,013,905	$6,060,225	$5,108,286
All other:			
Tons [1]	151,130	197,754	49,948
Value	$3,487,362	$4,772,964	$1,983,784
Miscellaneous iron and steel products, including scrap sold and value added to rolling-mill products by further manufacture, value	$1,483,988	$2,209,563	$2,208,329
All other products, value	$91,055	$156,272	$3,000

[1] Of 2,000 pounds.

Tin plate and terneplate.—The tin plate and terneplate industry is closely allied to the rolling mills, and, in fact, most of the tin and terne dipping plants are departments of black-plate rolling mills and are operated in conjunction therewith. This is one of the leading industries of the state, ranking third in value of products. West Virginia ranks second among the states in combined production of tin plate and terneplate, being led in this respect by Pennsylvania only; and ranks first in output of terneplate alone, with 85 per cent of the total for the United States. Table 23 gives comparative statistics for 1914 and 1909.

Table 23	1914	1909
MATERIALS.		
Total cost	$11,866,637	$7,367,266
Black plates or sheets:		
Pounds	420,367,239	254,685,445
Cost	$7,855,440	$5,039,683
Pig tin:		
Pounds	5,831,235	4,663,663
Cost	$2,295,177	$1,370,502
Pig lead:		
Pounds	1,107,986	935,148
Cost	$46,196	$40,248
Terne mixture purchased:		
Pounds	5,252,717	2,328,903
Cost	$621,605	$259,225
All other materials, cost	$1,048,219	$657,608
PRODUCTS.		
Total value	$15,130,551	$9,257,524
Tin plate and terneplate:		
Pounds	417,861,666	257,807,156
Value	$14,758,408	$8,922,099
Tin plate:		
Pounds	303,561,325	189,239,233
Value	$10,530,194	$6,360,880
Terneplate:		
Pounds	114,300,341	68,567,923
Value	$4,228,214	$2,561,219
All other products, value	$372,143	$335,425
EQUIPMENT.		
Tin-plate and terneplate dipping sets at end of year:		
Number	150	99
Daily capacity, single turn, pounds	787,688	471,931

Glass.—Table 24 shows, for the census years 1914, 1909, and 1904, the values of the several products of this industry.

In 1914 the value of building glass manufactured amounted to $4,410,710, showing an increase in annual production of 233.1 per cent in 10 years. The value of pressed and blown glass increased 139 per cent, and of bottles and jars, 527.5 per cent, during the same period. In 1914 West Virginia produced more than one-half of the jelly glasses, tumblers, and goblets, and about 40 per cent of the stem ware made in the United States.

Table 24	1914	1909	1904
Total value	$14,631,171	$7,779,483	$4.598,563
Building glass	4,410,710	2,751,133	1,323,896
Pressed and blown glass	6,263,554	4,306,528	2,620,665
Bottles and jars	3,777,445	646,521	602,002
All other products	179,462	75,301	52,000

The equipment in use during 1914 included 32 furnaces, with a total capacity of 341 pots; 54 continuous tanks, with a capacity of 615 rings; 12 intermittent tanks, with a capacity of 95 tons; and 44 machines. In addition, there were 2 furnaces, 4 continuous tanks, and 4 intermittent or day tanks which were idle.

Leather, tanned, curried, and finished.—Table 25 shows, for the tanning, currying, and finishing of leather, the quantities and values of the various grades produced in 1914, 1909, and 1904.

Table 25	1914	1909	1904
Total value	$11,014,540	$12,450,592	$6,061,509
Sole leather:			
Sides	1,426,584	1,933,037	1,262,538
Value	$9,035,266	$10,276,164	$5,270,545
Harness, belting, and rough leather, value	$1,647,185	$1,617,354	$713,191
All other leather, value	$5,677	$4,356	$21,188
All other products, including amount received for work done for others, value	$326,412	$552,718	$56,585

Sole leather, the leading product of this industry in West Virginia, represented 82 per cent of the value of all products of the industry in the state in 1914, 82.5 per cent in 1909, and 87 per cent in 1904. Union and oak sole leather were the only kinds produced, and the former exceeded the latter in both quantity and value. The number of sides tanned, in 1914, shows a decrease as compared with the 1909 figures, but an increase over the 1904 product. The kinds of sole leather produced are not shown separately, since to do so would disclose the operations of individual establishments. Harness, belting, and rough leather, the production of which has more than doubled since 1904, are not shown separately for the same reason.

Flour-mill and gristmill products.—Table 26 gives the quantities and values of the products of this industry for the three census years 1914, 1909, and 1904.

Wheat flour contributed 38.7 per cent of the total value of products of this industry in 1914 and 47 per cent in 1909. During the five-year period the production of wheat flour decreased in quantity 17.8 per cent; buckwheat flour, 18.1 per cent; corn meal and corn flour, 26.6 per cent.

The equipment of the mills of the state in 1914 included 667 stands of rolls, 223 runs of stone, and 107 attrition mills. Four establishments manufactured barrels.

Table 26	1914	1909	1904
Total value	$7,052,814	$7,695,801	$6,200,291
Wheat flour:			
Barrels	520,949	634,132	626,670
Value	$2,732,789	$3,615,913	$3,390,156
Buckwheat flour:			
Pounds	3,680,671	4,497,690	2,213,610
Value	$113,953	$120,061	$61,138
Corn meal and corn flour:			
Barrels	233,582	318,293	339,872
Value	$775,034	$986,375	$841,827
Bran and middlings:			
Tons	20,111	101,533	81,622
Value	$570,897	$2,931,742	$1,870,150
Feed and offal:			
Tons	82,677		
Value	$2,392,851		
All other products, value	$467,290	$41,710	$37,020

Laundries.—Statistics for power laundries were first presented at the census of 1909. These statistics, however, are not included in the general tables nor in the totals for all manufacturing industries.

Table 27 summarizes the power-laundry statistics for West Virginia for 1914 and 1909.

Table 27	POWER LAUNDRIES.		
	Number or amount.		Per cent of increase,[1] 1909–1914.
	1914	1909	
Number of establishments	44	43	.....
Persons engaged in the industry	929	793	17.2
Proprietors and firm members	35	41	.....
Salaried employees	67	73	.....
Wage earners (average number)	827	679	21.8
Primary horsepower	1,305	1,048	24.5
Capital	$689,640	$415,216	66.1
Salaries and wages	$419,718	$297,741	41.0
Salaries	$61,417	$54,819	12.0
Wages	$358,301	$242,922	47.5
Cost of materials (including fuel and rented power)	$135,119	$102,057	32.4
Amount received for work done	$785,782	$581,865	35.0

[1] Percentages are omitted where base is less than 100.

In 1914 West Virginia ranked thirty-seventh among the states in amount received for work done and thirty-sixth in average number of persons engaged in the industry; in 1909 the rank was thirty-fifth for each of these items.

The foregoing summary shows increases during the five-year period in all items except number of proprietors and firm members and number of salaried employees.

Of the 44 laundries shown for the state in 1914, 23 were located in the 10 cities having a population of 10,000 and over—4 in Huntington, 3 each in Charleston, Clarksburg, Fairmont, Parkersburg, and Wheeling, and 1 each in Bluefield, Martinsburg, Morgantown, and Moundsville. These establishments represented 66.4 per cent of the capital invested and received 77.4 per cent of the total amount paid for work done in 1914.

Table 28 shows, for 1914 and 1909, the number of wage earners employed in the laundries on the 15th day of each month, or the nearest representative day, and the percentage which this number forms of the greatest number employed in any month of the same year. It will be noted that in the monthly employment of wage earners there was a greater variation in 1914 than in 1909.

Table 28	WAGE EARNERS.			
MONTH.	Number.		Per cent of maximum.	
	1914	1909	1914	1909
January	730	633	83.1	88.8
February	741	644	84.4	90.3
March	755	644	86.0	91.3
April	771	654	87.8	91.7
May	846	684	96.4	95.9
June	859	696	97.8	97.6
July	871	713	99.2	100.0
August	876	708	99.8	99.3
September	878	712	100.0	99.9
October	863	689	98.3	96.6
November	869	677	99.0	95.0
December	870	694	99.1	97.3

Table 29 shows the kinds and amounts of power used in the laundries of the state in 1914 and 1909, together with per cent of increase for the five-year period.

Table 29	NUMBER OF ENGINES OR MOTORS.		HORSEPOWER.		
KIND.			Amount.		Per cent of increase, 1909–1914.
	1914	1909	1914	1909	
Primary power, total	63	52	1,305	1,048	24.5
Owned	46	41	1,227	832	47.5
Steam	35	33	1,022	732	39.6
Internal combustion	11	8	205	150	36.7
Rented, electric	17	11	178	146	21.9
Electric power generated by establishment reporting	4	.....	28	.....	.....

Table 30 shows the kinds and amounts of fuel used in the laundries, as reported at the censuses of 1914 and 1909, with the percentages of increase.

Table 30		QUANTITY.		Per cent of increase, 1909–1914.
KIND.	Unit.	1914	1909	
Bituminous coal	Tons (2,000 lbs.)	4,429	3,369	31.5
Gas	1,000 cubic feet	179,868	145,661	23.5

GENERAL TABLES.

Table 31 gives, for 1914, 1909, and 1904, 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 for the cities having more than 10,000 inhabitants, similar data for all industries combined.

Table 32 presents, for 1914, statistics in detail for each industry in the state that 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 more than 10,000 inhabitants.

TABLE 31.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904.

THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
All industries	1914	2,749	71,078	278,504	$43,784	$110,033	$193,512
	1909	2,586	63,293	217,496	33,000	92,878	161,950
	1904	2,109	43,758	138,578	21,153	54,419	99,041
Artificial stone products	1914	31	263	460	150	198	448
	1909	20	79	132	39	55	164
	[1]1904	.....	.....	.....	.....	.....	.....
Bone, carbon, and lamp black.	1914	18	161	1,016	106	387	851
	1909	16	101	641	66	249	596
	1904	10	60	310	34	52	274
Bread and other bakery products.	1914	138	569	824	346	1,327	2,305
	1909	151	346	411	188	859	1,470
	1904	111	263	198	127	527	912
Brick, tile, pottery, and other clay products.	1914	55	4,790	8,925	3,235	2,222	6,798
	1909	50	2,916	6,657	1,639	1,061	3,629
	1904	54	2,033	5,421	964	556	2,156
Canning and preserving	1914	[2]29	216	552	44	264	351
	1909	30	271	484	58	430	605
	1904	19	327	424	84	387	764
Cars and general shop construction and repairs by steam-railroad companies.	1914	37	8,437	5,060	5,540	4,985	10,990
	1909	24	5,652	5,394	3,170	3,063	6,733
	1904	24	4,255	2,469	2,114	1,809	4,120
Clothing, men's	1914	7	491	116	219	1,435	2,173
	1909	9	403	210	126	1,055	1,469
	1904	9	314	98	76	578	855
Coke, not including gas-house coke.	1914	54	1,392	2,920	692	1,893	2,978
	1909	71	4,426	5,307	1,664	5,012	7,563
	1904	74	2,533	3,507	1,004	2,647	4,174
Confectionery	1914	13	82	63	29	164	292
	1909	10	82	38	33	147	244
	1904	10	98	38	33	117	226
Copper, tin, and sheet-iron products.	1914	[3]24	1,575	1,765	784	3,210	4,732
	1909	19	916	973	383	1,354	2,151
	1904	11	375	150	142	490	771
Electrical machinery, apparatus, and supplies.	1914	4	162	1,369	75	184	566
	1909	5	137	1,115	77	135	398
	1904	.....	.....	.....	.....	.....	.....
Flour-mill and gristmill products.	1914	229	381	9,996	218	5,928	7,053
	1909	207	452	9,950	210	6,601	7,696
	1904	194	400	8,339	183	5,213	6,200
Foundry and machine-shop products.	1914	[4]118	1,908	8,784	1,294	2,670	5,080
	1909	83	1,354	3,539	820	1,760	3,392
	1904	76	1,278	2,892	721	1,413	2,863
Furniture	1914	22	560	1,628	302	649	1,278
	1909	25	578	1,469	253	384	965
	1904	19	508	971	197	264	648
Glass	1914	63	8,889	14,120	5,673	4,638	14,631
	1909	51	6,190	5,233	3,628	2,296	7,779
	1904	39	3,673	2,346	2,054	1,259	4,599
Ice, manufactured	1914	47	364	8,380	200	185	756
	1909	35	233	5,554	113	111	476
	1904	30	176	2,764	94	61	353
Iron and steel, steel works and rolling mills.	1914	15	5,348	63,002	$4,826	$14,658	$21,186
	1909	16	5,060	46,508	3,887	15,896	22,435
	1904	12	4,409	34,250	2,813	8,742	13,455
Leather, tanned, curried, and finished.	1914	18	1,072	4,887	615	8,695	11,015
	1909	20	1,571	5,305	775	10,383	12,451
	1904	33	946	2,973	434	4,769	6,062
Lime	1914	10	773	4,026	378	434	980
	1909	13	514	1,000	188	224	644
	1904	5	120	10	52	39	116
Liquors, malt	1914	[5]10	244	3,807	185	392	1,378
	1909	13	415	6,110	298	619	2,271
	1904	10	331	2,438	227	481	2,146
Lumber and timber products.	1914	[6]995	17,417	68,045	9,703	9,582	28,994
	1909	1,016	18,643	62,356	8,632	8,676	28,758
	1904	765	11,619	37,585	5,390	6,202	18,697
Marble and stone work	1914	27	224	734	132	199	488
	1909	29	144	469	87	134	365
	1904	13	65	167	31	62	155
Mattresses and spring beds	1914	9	108	299	57	222	365
	1909	7	72	263	39	154	267
	1904	4	68	125	25	96	142
Mineral and soda waters	1914	77	148	498	82	230	544
	1909	63	104	370	49	95	304
	1904	48	92	186	42	62	226
Minerals and earths, ground.	1914	12	422	4,157	203	151	563
	1909	3	58	795	45	43	116
	1904	.....	.....	.....	.....	.....	.....
Paper and wood pulp	1914	8	1,033	11,735	506	1,735	2,804
	1909	9	1,162	11,025	478	1,683	2,652
	1904	7	545	4,575	230	760	1,298
Printing and publishing	1914	[7]242	1,218	1,885	721	660	2,431
	1909	235	1,255	1,560	634	541	1,992
	1904	222	944	1,196	480	351	1,554
Saddlery and harness	1914	17	127	147	71	293	556
	1909	8	127	120	53	277	472
	1904	9	86	44	34	235	368
Slaughtering and meat packing.	1914	7	214	1,557	140	4,447	4,788
	1909	6	167	1,321	123	3,385	3,764
	1904	[8]6	133	635	74	1,668	1,928
Tin plate and terneplate	1914	8	1,475	1,421	1,182	11,867	15,131
	1909	6	1,335	890	887	7,367	9,258
	1904	.....	.....	.....	.....	.....	.....
Wood, turned and carved.	1914	7	198	1,395	75	317	450
	1909	6	134	669	67	164	314
	1904	6	173	883	64	231	391
Woolen and worsted goods.	1914	8	276	672	118	417	679
	1909	13	599	1,327	222	795	1,224
	1904	[9]12	290	726	106	218	469
All other industries	1914	390	10,541	44,259	5,883	25,395	39,878
	1909	317	8,397	30,301	4,069	17,870	29,333
	1904	277	7,644	22,858	3,324	15,130	23,119

CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED: 1914.

BLUEFIELD	1914	24	1,247	1,984	812	1,078	2,173
	1909	15	670	1,648	377	889	1,465
CHARLESTON	1914	89	1,081	4,574	637	2,172	3,699
	1909	63	951	4,106	469	2,137	3,235
	[6]1904	54	887	.....	403	998	2,100
CLARKSBURG	1914	43	316	1,414	213	1,010	1,654
FAIRMONT	1914	50	1,837	5,594	1,149	1,608	4,384
HUNTINGTON	1914	102	4,641	8,951	2,996	6,777	11,400
	1909	67	3,156	8,860	1,681	3,382	6,511
	1904	44	2,229	.....	1,033	2,676	4,407
MARTINSBURG	1914	37	1,568	1,908	602	1,709	3,022
	1909	39	1,420	1,598	520	1,277	2,515
MORGANTOWN	1914	49	1,470	4,137	930	754	2,338
MOUNDSVILLE	1914	27	1,508	1,897	707	2,095	3,629
PARKERSBURG	1914	83	1,820	5,939	1,061	4,745	7,143
	1909	75	1,495	4,031	767	3,560	5,498
	1904	68	1,444	.....	694	2,488	3,778
WHEELING	1914	201	7,920	35,963	5,110	15,974	27,879
	1909	176	7,809	29,486	4,427	16,025	27,077
	[6]1904	195	7,127	.....	3,793	12,489	21,797

[1] Figures can not be shown without disclosing individual operations.
[2] Includes "canning and preserving, vegetables and dried fruits," and "pickles, preserves, and sauces."
[3] Includes "stamped and enameled ware" and "tinware, not elsewhere specified."
[4] Includes "automobile repairing;" "plumbers' supplies, not elsewhere specified;" and "structural ironwork, not made in steel works or rolling mills."
[5] Statistics for 6 months' operation.
[6] Includes "boxes, wooden packing," and "lumber, planing-mill products, not including planing mills connected with sawmills."
[7] Includes "bookbinding and blank-book making;" "engraving, steel and copper plate, including plate printing;" and "lithographing."
[8] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[9] Excludes statistics for two establishments, to avoid disclosure of individual operations.

TABLE 32.—DETAIL STATEMENT FOR THE STATE, BY INDUSTRIES,

	INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Capital.
	THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.															
1	All industries	2,749	79,353	2,559	2,109	2,939	668	71,078	Ap 76,677	De 62,572	(3)	(3)	(3)	(3)	(3)	$175,995,011
2	Artificial stone products	31	343	42	21	13	4	263	My 292	No 218	291	290	1	.....	.....	483,926
3	Automobile repairing	34	151	27	13	4	3	104	Au 113	Fe 88	116	115	1	.....	.....	124,180
4	Awnings, tents, and sails	3	13	3	1	1	.....	8	Je 17	Ja 5	12	4	8	.....	.....	5,526
5	Bone, carbon, and lamp black	18	229	12	43	9	4	161	No 212	Ap [4] 127	195	194	1	.....	.....	4,213,139
6	Boxes, wooden packing	13	212	23	8	6	2	173	No 227	De 119	212	200	5	4	3	268,829
7	Brass, bronze, and copper products	4	74	2	15	5	3	49	De 50	No 47	47	44	3	.....	.....	221,707
8	Bread and other bakery products	138	786	151	22	33	11	569	Jy 588	Je 550	565	482	80	2	1	1,190,576
9	Brick and tile, terra-cotta, and fire-clay products.	40	1,606	11	84	45	15	1,451	.....	.....	1,662	1,587	73	2	.....	3,939,121
10	Building brick	32	1,301	11	63	34	6	1,187	My 1,405	Je 780	1,367	1,362	3	2	.....	3,166,601
11	Fire brick and stove lining	3	76	.....	5	2	1	68	Fe 83	Je 54	69	69	.....	.....	.....	233,197
12	Architectural and fireproofing terra-cotta and roofing tiles.	5	229	.....	16	9	8	196	Ap 223	Je 122	226	156	70	.....	.....	539,323
13	Butter	3	6	.....	1	.....	.....	5	No 6	De 3	6	6	.....	.....	.....	14,105
14	Canning and preserving, vegetables and dried fruits.	26	225	43	3	1	.....	178	Oc 855	De 15	892	209	551	27	105	138,992
15	Carriages, wagons, and repairs	51	320	53	10	9	8	240	.....	.....	248	244	1	3	.....	416,311
16	Carriages and wagons	41	280	39	10	9	8	214	Au 223	Fe 206	222	218	1	3	.....	375,210
17	Repair work only	10	40	14	.....	.....	.....	26	De 29	Ma 24	26	26	.....	.....	.....	41,101
18	Cars and general shop construction and repairs by electric-railroad companies.	9	163	.....	8	3	.....	152	Jy 164	De 134	145	145	.....	.....	.....	175,485
19	Cars and general shop construction and repairs by steam-railroad companies.	37	8,845	.....	86	315	7	8,437	Se 9,006	De 7,523	8,266	8,250	11	5	.....	3,787,701
20	Chemicals	3	62	.....	5	5	.....	52	My 57	Se 49	56	56	.....	.....	.....	1,276,703
21	Clothing, men's and youths'	7	591	2	28	46	24	491	Mh 521	Au 449	513	108	405	.....	.....	824,054
22	Clothing, women's	6	211	8	13	18	3	169	Ap 189	No 142	147	35	112	.....	.....	339,721
23	Coffee and spice, roasting and grinding	3	11	3	1	1	1	5	De 5	Ap 5	5	5	.....	.....	.....	73,099
24	Coke, not including gas-house coke	54	1,505	.....	64	46	3	1,392	Ja 1,690	De 1,141	1,530	1,530	.....	.....	.....	4,594,150
25	Confectionery and ice cream	45	311	43	22	35	16	195	.....	.....	226	190	34	2	.....	493,062
26	Confectionery	13	119	13	10	12	2	82	Se 86	Ja 78	85	50	33	2	.....	44,646
27	Ice cream	32	192	30	12	23	14	113	Au 162	Fe 63	141	140	1	.....	.....	448,416
28	Cooperage	30	273	23	12	4	2	232	.....	.....	262	260	.....	2	.....	569,442
29	Hogsheads and barrels	25	188	12	7	3	1	165	Je 188	No 134	191	190	.....	1	.....	305,878
30	All other	5	85	11	5	1	1	67	Ap 74	De 36	71	70	.....	1	.....	263,564
31	Copper, tin, and sheet-iron work	18	234	15	17	10	3	189	Au 218	Mh 162	185	183	1	1	.....	398,954
32	Dyestuffs and extracts	4	83	6	9	2	.....	66	Au 72	Ja 60	67	67	.....	.....	.....	303,702
33	Electrical machinery, apparatus, and supplies.	4	202	.....	12	23	5	162	Fe 193	De 139	161	160	1	.....	.....	651,491
34	Explosives	7	75	.....	6	11	4	54	De 61	Jy 51	56	56	.....	.....	.....	815,959
35	Flour-mill and gristmill products	229	775	282	43	59	10	381	De 426	Ja 355	429	428	1	.....	.....	3,812,498
36	Foundry and machine-shop products	81	2,019	67	92	154	28	1,678	.....	.....	1,511	1,511	.....	.....	.....	5,250,287
37	Boiler shops	7	184	8	5	8	.....	163	Je 187	Oc 150	152	152	.....	.....	.....	365,250
38	Foundries	10	184	5	12	5	1	161	My 187	No 132	166	166	.....	.....	.....	367,753
39	Machine shops	64	1,651	54	75	141	27	1,354	Ja 1,506	De 1,094	1,193	1,193	.....	.....	.....	4,517,284
40	Furniture, wooden, including store and office fixtures.	22	647	19	21	32	15	560	Oc 597	Jy 433	571	558	10	3	.....	1,325,062
41	Gas, illuminating and heating	5	57	.....	4	15	.....	38	Je 47	Ja 32	32	31	1	.....	.....	833,437
42	Glass	63	9,422	16	246	202	69	8,889	My 10,173	Jy 6,089	10,566	9,546	921	83	16	13,762,618
43	Glass, cutting, staining, and ornamenting.	4	37	4	3	.....	2	28	Ap 33	No 24	24	12	12	.....	.....	56,923
44	Ice, manufactured	47	456	13	46	27	6	364	Jy 538	Fe 213	414	408	.....	6	.....	2,550,517
45	Iron and steel, steel works and rolling mills.	15	5,741	.....	77	290	26	5,348	Ap 6,860	No 3,657	6,156	6,146	10	.....	.....	21,974,931
46	Leather, tanned, curried, and finished	18	1,139	14	28	22	3	1,072	Jy 1,218	Ja 828	1,066	1,065	.....	1	.....	7,725,342
47	Lime	10	814	5	11	25	.....	773	My 897	De 655	704	704	.....	.....	.....	1,338,838
48	Liquors, malt	10	321	.....	31	44	2	244	Je 543	No [4] 25	543	543	.....	.....	.....	3,324,909
49	Lumber and timber products	858	17,774	1,022	307	300	54	16,091	My 18,319	De 12,481	18,257	18,205	21	31	.....	27,053,092
50	Lumber, planing-mill products, not including planing mills connected with sawmills.	124	1,417	107	87	51	19	1,153	Ap 1,245	De 1,004	1,194	1,180	4	10	.....	3,135,764
51	Marble and stone work	27	276	31	7	8	6	224	Ap 237	De 208	221	221	.....	.....	.....	491,366
52	Mattresses and spring beds	9	132	4	10	7	3	108	Au 112	De 100	117	94	23	.....	.....	243,283
53	Mineral and soda waters	77	265	82	16	13	6	148	Jy 183	Fe 114	163	154	5	4	.....	450,179
54	Minerals and earths, ground	12	465	1	21	14	7	422	Ap 592	De 279	431	430	1	.....	.....	3,796,682
55	Paints	3	28	4	3	1	1	19	Se 24	De 10	17	17	.....	.....	.....	150,613
56	Paper and wood pulp	8	1,102	.....	27	34	8	1,033	.....	.....	1,043	987	56	.....	.....	4,079,773
57	Paper and pulp	4	665	.....	17	15	5	528	Ap 718	Au 552	632	576	56	.....	.....	2,261,030
58	Pulp exclusively	4	437	.....	10	19	3	405	My 419	De 382	411	411	.....	.....	.....	1,818,743
59	Paving materials	13	457	9	17	8	1	422	Au 591	Fe 197	498	498	.....	.....	.....	402,622
60	Pickles, preserves, and sauces	3	52	.....	5	8	1	38	Oc 69	Fe 25	63	31	32	.....	.....	160,897
61	Pottery	15	3,501	.....	66	59	37	3,339	.....	.....	3,404	2,310	1,052	28	14	5,429,678
62	China ware	7	2,624	.....	44	42	27	2,511	Oc 2,658	Jy 2,277	2,660	1,693	925	28	14	3,300,686
63	All other	8	877	.....	22	17	10	828	Ap 966	De 717	744	617	127	.....	.....	2,128,992

[1] Owned power only.

[2] Includes rented power, other than electric.

AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914.

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, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.			Total.	Steam engines.[1]	Internal-combustion engines.[2]	Water wheels and motors.[1]	Electric (rented).		
THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
$4,112,586	$3,481,171	$43,784,006	$2,257,677	$344,725	$2,607,707	$102,827,781	$7,205,384	$193,511,782	$83,478,617	278,504	216,976	28,822	5,554	27,152	39,524	1
28,660	13,153	149,620	3,230	2,130	2,285	183,545	14,756	448,251	249,950	460	26	406	.....	28	38	2
11,911	2,738	64,477	.....	10,389	645	86,241	4,059	234,924	144,624	206	50	74	.....	82	28	3
1,050	370	3,016	.....	635	5	7,551	74	15,420	7,795	2	.....	.....	.....	2	.....	4
56,681	8,767	105,573	350	5,239	9,463	201,727	185,127	851,332	464,478	1,016	110	906	.....	.....	8	5
8,521	5,417	83,824	205	1,260	1,072	304,883	1,838	475,702	168,981	955	662	165	75	53	20	6
14,042	5,923	24,608	6,300	1,390	930	100,750	2,269	192,986	89,967	125	120	.....	.....	5	.....	7
32,812	33,937	346,242	5,235	24,518	8,102	1,285,456	41,699	2,305,438	978,283	824	134	222	.....	468	89	8
117,709	55,982	1,088,302	2,178	7,008	15,562	225,172	337,380	1,976,816	1,414,264	7,245	5,770	923	.....	552	84	9
83,945	39,815	961,585	2,178	7,008	12,676	154,613	302,963	1,568,477	1,110,901	6,215	5,085	583	.....	547	43	10
7,250	2,366	31,331	.....	.....	778	22,880	7,834	109,049	78,335	455	150	305	.....	.....	28	11
26,514	13,801	95,386	.....	.....	2,108	47,679	26,583	299,290	225,028	575	535	35	.....	5	13	12
540	.....	2,754	195	.....	101	34,745	138	47,585	12,702	51	51	.....	.....	.....	.....	13
2,650	150	27,788	150	1,234	379	130,334	3,527	185,063	51,202	382	295	58	.....	29	.....	14
12,536	10,814	139,026	200	9,884	2,582	188,455	7,274	474,024	278,295	601	186	274	16	125	10	15
12,536	10,814	124,780	200	9,734	2,362	179,210	6,195	434,851	249,446	551	186	241	16	108	10	16
.....	.....	14,246	.....	150	220	9,245	1,079	39,173	28,849	50	.....	33	.....	17	.....	17
9,080	1,590[4]	99,708	.....	.....	1,159	65,805	1,770	183,259	115,684	89	.....	.....	.....	89	65	18
128,102	299,294	5,539,753	1,901	.....	18,649	4,778,787	206,465	10,990,193	6,004,941	5,060	4,555	65	.....	440	2,639	19
13,694	8,400	33,208	.....	45	8,015	188,533	12,190	482,949	282,226	150	100	.....	.....	50	.....	20
56,806	36,550	219,244	186,843	35,970	4,203	1,429,999	4,873	2,172,955	738,083	116	.....	.....	.....	116	.....	21
16,340	11,532	55,721	77,000	2,396	1,212	595,255	3,271	867,425	268,899	64	.....	25	.....	39	.....	22
1,000	620	3,100	.....	800	126	59,460	486	70,806	10,860	24	.....	21	.....	3	.....	23
61,673	32,591	691,758	.....	.....	23,784	92,015	1,801,401	2,977,526	1,084,110	2,920	2,640	.....	.....	280	946	24
22,745	42,114	117,827	957	21,210	2,469	569,122	15,064	984,015	399,829	1,105	102	428	.....	575	75	25
9,750	21,000	29,249	501	9,410	594	161,765	2,141	291,593	127,687	63	8	31	.....	24	.....	26
12,995	21,114	88,578	456	11,800	1,875	407,357	12,923	692,422	272,142	1,042	94	397	.....	551	75	27
15,405	3,851	121,298	2,377	1,486	3,678	438,378	2,413	644,423	203,632	651	454	130	.....	67	2	28
10,485	2,033	89,153	1,540	978	2,363	332,206	1,235	478,660	145,219	451	359	50	.....	42	2	29
4,920	1,818	32,145	837	508	1,315	106,172	1,178	165,763	58,413	200	95	80	.....	25	.....	30
25,070	10,183	133,854	385	3,304	2,059	985,128	3,993	1,253,595	264,474	206	3	166	.....	37	.....	31
23,060	1,208	40,241	.....	100	819	309,936	8,617	363,926	44,473	581	565	.....	.....	16	.....	32
20,696	29,443	75,100	.....	2,467	5,413	167,870	16,192	566,368	382,306	1,369	375	810	.....	184	1,088	33
17,469	17,085	48,829	947	959	2,967	304,097	6,542	461,173	150,534	864	864	.....	.....	.....	470	34
51,842	43,525	217,891	675	8,367	24,333	5,876,821	51,607	7,052,814	1,124,386	9,996	4,793	2,490	1,970	743	116	35
181,529	173,935	1,152,391	.....	8,935	26,532	2,327,872	130,037	4,598,487	2,140,578	8,048	1,149	2,326	.....	4,573	4,520	36
14,650	12,772	93,882	.....	333	2,184	239,165	6,001	424,717	179,551	397	.....	217	.....	180	.....	37
13,059	3,630	87,017	.....	54	2,421	71,972	9,885	217,301	135,444	310	144	102	.....	64	55	38
153,820	157,533	971,492	.....	8,548	21,927	2,016,735	114,151	3,956,469	1,825,583	7,341	1,005	2,007	.....	4,329	4,465	39
39,960	44,583	302,180	50	2,186	6,430	638,574	10,526	1,278,174	629,074	1,628	1,332	136	1	159	70	40
6,100	10,089	20,929	.....	.....	2,304	8,723	40,495	107,936	58,718	167	97	40	.....	30	.....	41
544,605	278,511	5,672,672	26,460	9,823	86,636	3,918,023	720,118	14,631,171	9,993,030	14,120	3,595	8,867	.....	1,658	4,178	42
2,760	606	9,727	2,705	550	253	33,014	1,559	51,123	16,550	11	.....	10	.....	1	.....	43
52,388	22,725	199,789	61	1,009	17,566	84,429	100,532	755,922	570,961	8,380	7,753	532	.....	95	68	44
315,026	342,681	4,825,980	.....	.....	75,741	13,834,625	823,743	21,185,559	6,527,191	63,002	61,690	585	.....	727	9,846	45
65,329	24,477	614,752	.....	.....	52,550	8,624,630	70,284	11,014,540	2,319,626	4,887	4,489	398	.....	.....	632	46
19,671	24,393	377,812	.....	15	5,023	212,318	221,528	980,317	546,471	4,026	781	88	.....	3,157	75	47
70,771	33,983	184,889	1,353	.....	188,144	349,395	42,443	1,378,080	986,242	3,807	3,684	.....	.....	123	460	48
597,884	404,402	8,936,002	1,786,545	35,605	266,140	6,084,634	183,535	23,857,793	17,589,624	59,819	59,172	355	107	185	852	49
123,345	61,960	683,322	19,650	9,278	22,869	2,982,853	24,659	4,660,745	1,653,233	7,271	5,757	1,064	.....	450	489	50
13,121	9,411	132,193	298	1,839	1,713	193,363	5,554	487,541	288,624	734	450	256	15	13	.....	51
12,635	7,710	57,065	.....	3,078	951	219,704	1,981	364,934	143,249	299	.....	210	.....	89	.....	52
17,395	12,774	81,638	.....	8,646	3,267	222,981	7,154	543,501	313,366	498	299	127	2	70	6	53
40,189	16,954	202,899	.....	1,762	5,998	101,592	59,580	562,928	401,756	4,157	1,680	.....	.....	2,477	93	54
6,854	3,385	14,161	.....	540	787	57,877	2,644	111,440	50,919	195	150	40	.....	5	123	55
75,354	54,411	506,133	.....	.....	27,997	1,546,450	188,340	2,804,429	1,069,639	11,735	7,550	650	3,250	285	2,340	56
28,520	25,947	208,605	.....	.....	15,409	823,295	92,804	1,388,424	472,325	5,835	2,635	.....	3,200	.....	20	57
46,834	28,464	297,528	.....	.....	12,588	723,155	95,536	1,416,005	597,314	5,900	4,915	650	50	285	2,320	58
26,179	7,020	230,286	.....	1,811	7,170	105,692	32,574	571,410	433,144	2,594	1,673	16	.....	905	.....	59
5,530	5,385	16,235	.....	1,000	984	127,908	1,962	166,430	36,560	170	170	.....	.....	.....	10	60
155,303	116,111	2,146,677	.....	1,320	19,292	1,349,315	310,078	4,821,302	3,161,909	1,680	945	228	5	502	11	61
102,511	92,735	1,531,135	.....	.....	13,527	809,884	250,045	3,266,441	2,206,512	1,135	645	133	5	352	11	62
52,792	23,376	615,542	.....	1,320	5,765	539,431	60,033	1,554,861	955,397	545	300	95	.....	150		63

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

[4] Same number reported for one or more months.

TABLE 32.—DETAIL STATEMENT FOR THE STATE, BY INDUSTRIES,

	INDUSTRY AND CITY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Capital.
	THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.															
1	Printing and publishing, job work only	58	456	56	29	19	10	342	De 355	Ap 331	358	259	92	4	3	$667,448
2	Printing and publishing, newspapers and periodicals.	181	1,295	170	81	158	40	846	.....	.....	911	691	179	41	.....	2,013,232
3	Printing and publishing	10	258	10	12	77	9	150	Jy 150	De 150	150	144	6	.....	.....	266,948
4	Printing, publishing, and job printing.	156	1,019	150	65	80	28	696	De 728	Au 673	761	547	173	41	.....	1,740,947
5	Publishing without printing	15	18	10	4	1	3	.....	.....	.....	.....	.....	.....	.....	.....	5,337
6	Saddlery and harness	17	171	20	6	15	3	127	Je 133	No 119	135	126	9	.....	.....	528,158
7	Salt	3	132	1	6	8	.....	117	No 126	Ja 107	126	126	.....	.....	.....	167,915
8	Shipbuilding, wooden, including boat building.	4	132	4	4	5	.....	119	Ap 153	Oc 86	126	126	.....	.....	.....	187,429
9	Slaughtering and meat packing	7	281	2	23	39	3	214	De 220	Se 210	218	211	7	.....	.....	1,374,157
10	Stoves and ranges	3	61	.....	5	2	.....	54	Ja 58	Jy 48	52	52	.....	.....	.....	78,163
11	Stoves, gas and oil	4	39	.....	6	3	2	28	Ja 32	Oc 24	28	24	4	.....	.....	126,769
12	Tin plate and terneplate	8	1,612	.....	20	102	15	1,475	Se 1,637	No 1,121	1,540	1,393	147	.....	.....	5,199,091
13	Vinegar and cider	9	18	10	2	.....	.....	6	Oc 20	Ja 1	16	16	.....	.....	.....	56,200
14	Wood, turned and carved	7	224	2	8	11	5	198	Mh 224	De 152	162	162	.....	.....	.....	402,139
15	Woolen and worsted goods	8	192	6	12	5	.....	276	Oc 272	Au 130	302	221	80	1	.....	691,484
16	All other industries*	199	11,312	141	235	554	168	10,107	.....	.....	.....	.....	.....	.....	.....	31,803,490
	CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.															
1	BLUEFIELD	24	1,337	9	15	61	5	1,247	Oc 1,400	Ap 1,143	1,267	1,258	4	5	.....	$1,129,602
2	CHARLESTON	89	1,333	61	79	96	16	1,081	Je 1,163	No 1,000	1,209	1,058	140	11	.....	3,226,595
3	CLARKSBURG	43	422	26	30	39	11	316	Au 372	Fe 276	366	345	21	.....	.....	948,306
4	FAIRMONT	50	2,048	29	75	87	20	1,837	Se 2,081	Jy 1,511	2,289	2,082	202	5	.....	5,276,426
5	HUNTINGTON	102	5,079	64	139	188	47	4,641	Ja 5,005	No 4,172	4,789	4,539	243	7	.....	7,843,648
6	MARTINSBURG	37	1,709	32	37	54	18	1,568	Se 1,664	Fe 1,444	1,625	768	777	40	40	2,629,707
7	MORGANTOWN	49	1,600	36	50	37	7	1,470	Se 1,607	Jy 937	1,573	1,351	184	31	7	2,306,383
8	MOUNDSVILLE	27	1,692	22	57	67	38	1,508	Mh 1,720	Ja 968	1,438	1,136	282	14	6	2,530,369
9	PARKERSBURG	83	2,179	74	83	160	42	1,820	My 2,034	De 1,578	1,768	1,405	354	7	2	5,741,036
10	WHEELING	201	9,098	142	262	601	173	7,920	Ap 8,666	No 6,376	8,067	6,547	1,419	66	35	26,857,896

[1] Owned power only.

* All other industries embrace—

Agricultural implements	1	Buttons	2	Electroplating	1
Artificial limbs	1	Carpets, rag	1	Engraving and diesinking	1
Baskets, and rattan and willow ware	1	Carriage and wagon materials	2	Engraving, steel and copper plate, including plate printing	1
Blacking, stains, and dressings	1	Cars, steam-railroad, not including operations of railroad companies	1	Fertilizers	1
Bluing	1	Cement	1	Fire extinguishers	1
Bookbinding and blank-book making	1	Coffins, burial cases, and undertakers' goods	1	Food preparations, not elsewhere specified	3
Boots and shoes	2	Cutlery and edge tools	2	Galvanizing	2
Boxes, cigar	1	Dairymen's and apiarists' supplies	1	Hand stamps	1
Boxes and cartons, paper	2	Druggists' preparations	2	Hats, fur-felt	1
Brooms, from broom corn	5	Dyeing and finishing textiles	1	Hosiery and knit goods	1
Butter, reworking	1				

AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914—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, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.			Total.	Steam engines.[1]	Internal-combustion engines.[2]	Water wheels and motors.[1]	Electric (rented).		
THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.																
$38,631	$25,702	$211,904	$1,578	$16,679	$5,877	$177,325	$9,825	$647.115	$459.965	520	15	129	.....	376	.....	1
94,596	124,009	491,582	40,808	41,632	13,828	426,820	21,497	1,729,075	1,280,758	1,315	78	607	33	597	166	2
19,285	42,480	80,094	22,833	5,480	3,525	95.943	4,051	398,989	298,995	295	75	6	.....	214	52	3
72,581	79,549	411,488	4,527	35,680	10,286	329,406	17,446	1,302,123	955,271	1,020	3	601	33	383	114	4
2,730	1,980	.....	13,448	472	17	1,471	.....	27,963	26,492	.....	.....	.....	.....	.....	.....	5
9,000	15,820	70,895	.....	6,772	2,248	291.668	1,784	555.666	262,214	147	125	3	.....	19	40	6
11,291	4,830	51,105	.....	.....	1,240	57,148	36,521	168,591	74,922	515	515	.....	.....	.....	95	7
7,009	3,921	56,590	.....	.....	736	80,261	752	160,898	79,885	138	138	.....	.....	.....	.....	8
33,438	30,612	139.554	.....	3,800	7,993	4,426,609	20,287	4,787,660	340.764	1,557	1,080	437	.....	40	162	9
3,951	1,000	38,438	.....	150	764	23,228	2,686	91,038	65,124	115	85	10	.....	20	.....	10
7,850	3,720	15,474	.....	2,375	773	57,952	883	87,167	28,332	60	10	50	.....	.....	.....	11
82,432	142,855	1,181,983	.....	.....	22,166	11,818,650	47,987	15,130,551	3,263,914	1,421	1,271	150	.....	.....	866	12
1,800	.....	2,453	.....	.....	309	22,175	811	38,640	15,654	153	105	48	.....	.....	.....	13
10,424	7,886	74,874	1,279	.....	1,585	314,040	3,395	449,541	132,106	1,395	1,295	75	25	.....	50	14
15,895	6,430	118,309	2,732	.....	5,163	406,800	9,909	679,401	262,692	672	505	42	20	105	.....	15
674,247	783,643	5,530,351	85,030	45,129	1,586,666	23,091,068	1,336,696	37,774,609	13,346,845	38,206	27,483	4,180	35	6,508	8,694	16
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																
$24,664	$67,189	$811,999	$775	$1,708	$17,319	$1,036,446	$41,918	$2,173,008	$1,094,644	1,984	1,643	.....	.....	341	895	1
115,428	83,150	637,203	8,762	25,699	31,433	2,121,589	50,267	3,699,447	1,527,591	4,574	3,393	349	35	797	540	2
35,505	41,907	212,671	2,923	18,148	22,802	988,022	21,953	1,653,859	643,884	1,414	735	381	25	273	10	3
157,528	95,839	1,149,432	676	13,870	90,795	1,466,199	142,072	4,383.674	2.775,403	5,594	1,548	3,549	.....	497	1,842	4
262,224	222,288	2,995,699	5,571	27,915	72,333	6,621,932	155,167	11,400,468	4,623,369	8,951	7,036	717	.....	1,198	2,316	5
57,926	59,478	601,738	2,541	6,066	308,848	1,654,988	53,606	3,021,938	1,313,344	1,908	580	56	15	1,257	.....	6
108,900	28,501	930,032	7,691	10,874	15,108	591,363	162,313	2,337,990	1,584,314	4,137	2,020	441	.....	1,676	300	7
115,139	105,272	706,988	316,127	2,344	17,851	1,988,094	107,373	3,628,793	1,533,326	1,897	576	1,245	.....	76	175	8
159,896	146,404	1,060,676	17,325	48,699	59,866	4,579,459	165,662	7,142,990	2,397,869	5,939	3,904	1,799	.....	236	607	9
580,110	731,978	5,109,757	69,839	74,699	1,261,890	15,239,854	733,668	27,878,933	11,905,411	35,963	29,483	3,911	5	2,564	8,336	10

[2] Includes rented power, other than electric.

* All other industries embrace—Continued.

Iron and steel, blast furnaces	2
Iron and steel, wrought pipe	1
Lamps and reflectors	2
Liquors, distilled whisky	1
Lithographing	1
Looking-glasses and picture frames	1
Models and patterns, not including paper patterns	1
Oil, not elsewhere specified	1
Paper goods, not elsewhere specified	1
Patent medicines and compounds	16
Petroleum, refining	3
Photo-engraving	1
Plumbers' supplies, not elsewhere specified	1
Refrigerators	1
Sausage	1
Shipbuilding, iron and steel	1
Shirts	3
Signs and advertising novelties	1
Silk goods, throwsters	2
Smelting and refining, zinc	1
Smelting and refining, not from the ore	3
Stamped and enameled ware	2
Structural ironwork, not made in steel works or rolling mills	
Suspenders, garters, and elastic woven goods	1
Tinware, not elsewhere specified	3
Tobacco manufactures	92
Tools, not elsewhere specified	3
Upholstering material, excelsior	1
Wall plaster	2
Window shades and fixtures	1
Wirework	1
Wood distillation	1
Wood preserving	1
Wooden goods, not elsewhere specified	1

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

SAM. L. ROGERS, DIRECTOR

CENSUS OF MANUFACTURES 1914

WISCONSIN

Prepared under the supervision of W. M. STEUART, Chief Statistician for Manufactures

CONTENTS

	Page
Explanation of terms	2
General statistics	3
General character of the state	3
Importance and growth of manufactures	3
Butter, cheese, and condensed milk	5
Foundry and machine-shop products	5
Lumber and timber products	5
Leather, tanned, curried, and finished	6
Malt and malt liquors	6
Slaughtering and meat packing	6
Paper and wood pulp	6
Flour-mill and gristmill products	6
Furniture and refrigerators	6
Agricultural implements	6
Automobiles, including bodies and parts	6
Boots and shoes, including cut stock and findings	6
Persons engaged in manufacturing industries	7
Wage earners employed, by months	10
Prevailing hours of labor	11
Location of establishments	13
Character of ownership	14
General statistics—Continued	
Size of establishments	15
Engines and power	20
Fuel	21
Special statistics	21
Butter, cheese, and condensed milk	21
Flour-mill and gristmill products	22
Slaughtering and meat packing	22
Leather, tanned, curried, and finished	23
Footwear	23
Paper and wood pulp	24
Printing and publishing	24
Automobiles, including bodies and parts	25
Carriages and wagons and materials	25
Laundries	25
General tables:	
Table 36.—Comparative summary for 1914, 1909, and 1904	26
Table 37.—Detail statement for the state and for cities of 50,000 inhabitants or more, by industries, and for cities of 10,000 to 50,000 inhabitants: 1914	30

WASHINGTON

GOVERNMENT PRINTING OFFICE

1917

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 should 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 whose products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1914, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city 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 very different from those covered by the class designation, and, on the other hand, may not include the total product covered by this designation, because some part of this 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 the leading industries of the state for more detailed consideration. Sometimes an industry of greater importance than some of those selected is omitted because it comprises so few establishments that these detailed presentations would reveal the operations of individual concerns.

Comparisons with previous censuses.—Owing to changes in industrial conditions it is not always possible to classify establishments by industries in such a way as to permit accurate comparison with preceding censuses. At the census of 1909 the figures for kindred industries were combined. This practice, as a rule, has been followed in compiling the statistics of 1914 when placed in comparison with those for 1909 and prior years. The comparative summary for 1914, 1909, and 1904, therefore, does not show separately all the industries given for 1914 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 1914 and 1909 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, without distinction of sex or 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 average thus obtained approximates the number of wage earners that would be required to perform the work done if all were constantly employed during the entire year. Accordingly, 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 believed not to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation. 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 particular, totals by sex and age for the wage earners reported for the representative day for all industries combined would be misleading because of the undue weight given to seasonal industries, in some of which, such as canning and preserving, the distribution of the wage earners by sex and age is materially different from that in most industries of more regular operation. In order to determine as nearly as possible the sex and age distribution of the average number of wage earners for a given state as a whole, the per cent distribution by sex and 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 number of men, women, and children 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 represent the approximate number who would be required to perform the work in any industry if all were continuously employed during the year, whereas the actual number to whom the total wages were paid would be larger.

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, all or practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

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

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

These instructions were identical with those employed at the census of 1909. The data compiled in respect to capital, however, at 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 internal revenue, corporation income tax, and state, county, and local taxes. In some instances the amount of the corporation tax for 1914 had not been ascertained when the report was prepared and the amount paid for 1913 was therefore given.

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 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 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 interest or depreciation, 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, since in most cases an engine or motor is not required to deliver continuously its full rated horsepower.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, oil, and gas. They relate to the quantity used during the year, which may be more or less than the quantity purchased. As only the principal varieties of fuel are shown, no comparison can be made with the total cost of all fuel.

WISCONSIN.

By George W. Fuller.

GENERAL STATISTICS.

General character of the state.—Wisconsin was admitted to the Union as a state in 1846. With a gross area of 56,066 square miles, of which 55,256 represent land surface, it ranks twenty-fifth in size among the states. Its inhabitants in 1900 numbered 2,069,042, and in 1910, 2,333,860; and its estimated population in 1914 was 2,447,000. In total population Wisconsin ranked thirteenth among the states in 1910, and in density of population it ranked twenty-second, with 42.2 inhabitants per square mile, the corresponding figure for 1900 being 37.4.

The urban population in 1910—that is, the population residing in incorporated places of 2,500 or more—was 1,004,320, or 43 per cent of the total, as against 38.2 per cent in 1900. There were in the state in 1914, 18 cities, each with an estimated population of more than 10,000. (See Table 12.) These cities, whose aggregate population in that year formed 34.1 per cent of the estimated population of Wisconsin, reported 60.7 per cent of the state's manufactured products.

The steam-railway mileage in 1914 was 7,611, and the electric-railway mileage in 1912 was 768. On the northern and eastern borders of the state are many harbors which afford excellent facilities for coastwise and foreign traffic.

The total value of all farm crops grown in Wisconsin in 1909 was $148,359,216, and of cereal crops alone, $73,141,919. The value of dairy products made on farms during the same year amounted to $53,868,028 and of domestic animals sold or slaughtered on farms, $49,804,636. Wisconsin ranked sixteenth among the states in that year in total value of farm crops, second in value of dairy products made on farms, and twelfth in value of domestic animals sold or slaughtered on farms.

Importance and growth of manufactures.—Table 1 summarizes the more important data relative to all classes of manufactures combined in the state, for the censuses of 1914, 1909, 1904, and 1899, and gives percentages of increase from census to census.

Table 1

	Manufacturing industries.				Per cent of increase.[1]		
	1914	1909	1904	1899	1909–1914	1904–1909	1899–1904
Number of establishments	9,104	9,721	8,558	7,841	−6.3	13.6	9.1
Persons engaged	230,273	213,426	173,572	(2)	7.9	23.0	.....
Proprietors and firm members	7,425	8,556	7,961	(2)	−13.2	7.5	.....
Salaried employees	28,538	22,287	14,220	10,480	28.0	56.7	35.7
Wage earners (average number)	194,310	182,583	151,391	137,525	6.4	20.6	10.1
Primary horsepower	682,339	554,179	440,234	364,380	23.1	25.9	20.8
Capital	$754,287,116	$605,657,324	$412,647,051	$286,060,566	24.5	46.8	44.3
Salaries and wages	149,762,032	119,641,684	86,970,037	66,188,378	25.2	37.6	31.4
Salaries	37,568,869	25,736,876	15,498,232	10,492,562	46.0	66.1	47.7
Wages	112,193,163	93,904,808	71,471,805	55,695,816	19.5	31.4	28.3
Paid for contract work	3,453,920	2,624,700	2,900,171	(2)	31.6	−9.5	.....
Rent and taxes (including internal revenue)	17,343,039	12,832,391	[3] 3,551,913	(2)	35.2	.....	.....
Cost of materials	417,415,074	346,356,583	227,255,092	185,695,393	20.5	52.4	22.4
Value of products	695,172,002	590,305,538	411,139,681	326,752,878	17.8	43.6	25.8
Value added by manufacture (value of products less cost of materials)	277,756,928	243,948,955	183,884,589	141,057,485	13.9	32.7	30.4

[1] A minus sign (−) denotes decrease. [2] Figures not avilable. [3] Exclusive of internal revenue.

There was a decrease in the number of establishments and proprietors and firm members during the period from 1909 to 1914. With this exception, there was a substantial increase in the manufactures of the state during the 15 years covered by Table 1. The decrease in the number of establishments is due primarily to the decrease in the number of lumber and flour mills (see Table 36). It is evident that a number of the small lumber mills discontinued operations during the period between the censuses, and as the majority of such mills were operated by individuals or firms there was a decrease in the number of proprietors and firm members. The decrease in this class is also due in part to the fact that some establishments operated by individuals or firms in 1909 were incorporated during the period between the censuses, and the proprietors or firm members reported as salaried officials at the census of 1914. In 1914 the state had 9,104 manufacturing establishments, which gave employment to an average of 230,273 persons during the year and paid out $149,762,032 in salaries and wages. Of the persons employed, 194,310 were wage earners.

These establishments turned out products to the value of $695,172,002, to produce which, materials costing $417,415,074 were used. The value added by

manufacture was $277,756,928, which figure, as explained in the "Explanation of terms," best represents the net wealth created by manufacturing operations during the year.

Table 2 shows the relative importance and growth of the leading manufacturing industries in 1914, and gives percentages of increase for the three five-year periods from 1899 to 1914.

Table 2

INDUSTRY.	CENSUS OF 1914.							PER CENT OF INCREASE.[1]								
	Number of establishments.	Wage earners.		Value of products.		Value added by manufacture.		Wage earners (average number).			Value of products.			Value added by manufacture.		
		Average number.	Per cent distribution.	Amount.	Per cent distribution.	Amount.	Per cent distribution.	1909–1914	1904–1909	1899–1904	1909–1914	1904–1909	1899–1904	1909–1914	1904–1909	1899–1904
All industries	9,104	194,310	100.0	$695,172,002	100.0	$277,756,928	100.0	6.4	20.6	10.1	17.8	43.6	25.8	13.9	32.7	30.4
Butter, cheese, and condensed milk	2,431	3,717	1.9	72,858,592	10.5	7,533,054	2.7	29.8	24.6	29.1	35.3	79.5	49.1	29.1	62.6	2.7
Foundry and machine-shop products	494	26,521	13.6	60,698,391	8.7	32,536,506	11.7	9.5	58.0	5.1	12.1	72.5	20.6	3.0	78.0	29.7
Lumber and timber products	635	32,282	16.6	55,362,511	8.0	29,894,018	10.8	−5.3	−1.1	−12.8	−4.5	−1.0	−14.3	−7.7	−4.6	0.7
Leather, tanned, curried, and finished	27	5,869	3.0	42,204,202	6.1	9,151,016	3.3	−22.2	35.9	5.6	−5.5	72.8	28.7	−7.0	64.7	48.1
Liquors, malt	132	5,414	2.8	40,884,284	5.9	27,181,523	9.8	7.0	3.9	24.8	27.3	12.0	47.9	12.2	3.1	55.1
Slaughtering and meat packing	46	2,236	1.2	34,697,955	5.0	4,157,115	1.5	18.3	19.6	5.3	27.5	64.3	17.2	9.0	52.7	31.6
Paper and wood pulp	58	8,968	4.6	31,205,395	4.5	10,637,307	3.8	20.1	17.8	49.5	20.2	45.5	63.8	14.8	29.6	71.0
Flour-mill and gristmill products	252	1,116	0.6	28,697,413	4.1	3,717,512	1.3	−5.7	−12.4	6.0	−9.4	11.7	19.6	−19.7	28.7	16.8
Furniture and refrigerators	114	11,792	6.1	22,586,531	3.2	11,944,523	4.3	6.1	14.6	16.3	21.1	50.8	30.6	21.1	49.3	27.3
Agricultural implements	46	3,143	1.6	20,119,058	2.9	11,443,424	4.1	16.2	−24.2	8.5	76.3	13.2	27.8	53.1	14.0	42.7
Automobiles, including bodies and parts	43	4,889	2.5	18,478,196	2.6	8,012,953	2.9	13.8	726.5	.....	61.5	510.1	.....	31.4	492.2	.....
Boots and shoes, including findings	65	5,814	3.0	17,832,193	2.6	5,709,760	2.1	7.1	55.4	18.8	31.1	98.7	31.9	17.8	99.8	39.5
Malt	25	637	0.3	15,533,339	2.2	3,044,462	1.1	39.7	−14.8	46.2	61.9	9.8	113.7	71.6	−1.6	97.0
Printing and publishing	829	5,653	2.9	14,455,116	2.1	9,607,841	3.5	5.5	5.1	15.5	21.9	28.2	44.4	13.4	28.2	41.2
Hosiery and knit goods	68	6,244	3.2	13,292,305	1.9	6,267,073	2.2	45.8	0.7	55.8	69.5	57.5	98.5	58.4	47.6	102.8
Cars and general shop construction and repairs by steam-railroad companies	35	9,011	4.6	10,920,886	1.6	6,380,445	2.3	0.2	65.2	20.9	−23.8	120.1	3.2	12.8	64.4	23.7
Copper, tin, and sheet-iron products	111	3,372	1.7	10,202,355	1.5	4,619,026	1.7	21.3	11.1	−51.7	43.0	43.9	−23.6	86.3	147.3	−29.6
Clothing, men's, including shirts	59	3,584	1.8	8,688,462	1.2	3,694,621	1.3	−15.7	45.5	13.4	−7.6	40.2	44.8	−6.6	25.2	46.1
Bread and other bakery products	704	2,197	1.2	8,057,702	1.2	3,521,761	1.3	25.5	2.2	29.0	17.3	27.7	48.7	23.6	27.8	27.6
Carriages and wagons and materials	185	2,638	1.4	7,544,321	1.1	3,285,165	1.2	−23.2	−6.7	5.9	−15.2	10.0	15.0	−12.1	−6.5	10.4
Rubber goods	5	1,637	0.8	7,382,108	1.1	3,287,054	1.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canning and preserving	112	2,687	1.5	7,335,338	1.1	2,765,051	1.0	51.3	35.5	70.3	52.6	46.1	142.2	50.3	43.9	94.7
Tobacco manufactures	756	2,485	1.3	6,778,989	1.0	4,152,750	1.5	3.9	−14.9	23.8	10.4	−3.2	29.8	14.3	−12.6	30.4
Confectionery	55	2,242	1.2	6,228,736	0.9	2,348,403	0.8	26.0	48.8	72.6	41.1	88.0	64.9	34.5	92.2	77.9
Iron and steel, steel works and rolling mills	12	2,029	1.0	6,008,549	0.9	2,453,409	0.9	−4.5	10.9	39.8	−44.0	45.5	22.9	−13.2	−1.8	10.3
Brass, bronze, and copper products	30	1,122	0.6	5,409,260	0.8	1,014,272	0.4	−13.0	68.5	.....	0.4	143.3	.....	−45.8	136.5	.....
Electrical machinery, apparatus, and supplies	29	2,115	1.1	5,396,802	0.8	3,333,082	1.2	50.1	17.0	135.3	40.7	20.1	245.7	39.7	9.7	284.8
Leather goods	111	1,490	0.9	5,323,246	0.8	2,088,993	0.8	−29.0	15.1	18.4	−1.1	32.7	62.3	−6.2	46.1	55.3
Gas, illuminating and heating	47	1,240	0.6	5,294,983	0.8	3,479,336	1.2	16.7	16.7	71.2	32.3	37.4	108.4	33.2	24.9	94.4
Food preparations	30	478	0.2	4,852,863	0.7	3,469,031	1.2	−9.1	45.3	45.4	−12.3	150.3	65.9	28.9	125.9	23.9
Iron and steel, blast furnaces	5	482	0.2	3,793,442	0.5	541,632	0.2	−36.4	57.3	−12.5	−20.9	55.9	6.0	−38.2	6.3	−6.9
Gloves and mittens, leather	24	1,711	0.9	2,921,587	0.4	1,175,564	0.4	4.2	17.6	337.6	4.4	26.7	335.7	1.2	33.6	362.8
Marble and stone work	117	1,390	0.7	2,913,921	0.4	1,746,156	0.6	−46.4	134.2	15.8	−29.2	105.8	15.9	−39.7	124.1	20.7
Soap	11	272	0.1	2,894,103	0.4	1,524,858	0.5	27.7	13.9	.....	79.7	60.8	.....	117.6	90.0	.....
Boxes, fancy and paper	18	1,319	0.7	2,326,767	0.3	1,208,262	0.4	60.1	68.2	49.4	76.7	164.5	106.6	78.2	138.7	136.7
Millinery and lace goods	10	656	0.3	2,154,658	0.3	956,834	0.3	113.7	−10.8	28.8	287.6	0.2	4.9	339.0	−8.4	3.5
Mineral and soda waters	176	375	0.2	1,869,237	0.3	1,024,350	0.4	8.4	−3.1	.....	18.4	−9.0	.....	14.3	−17.1	.....
Dairymen's, poutrymen's, and apiarists' supplies	28	345	0.2	1,665,700	0.2	835,121	0.3	−34.4	157.8	.....	25.4	264.1	.....	35.1	216.9	.....
Clothing, horse	6	557	0.3	1,657,784	0.2	522,373	0.2	12.8	14.9	.....	30.0	59.8	.....	28.9	50.7	.....
Paint	9	192	0.1	1,586,156	0.2	459,007	0.2	−0.5	27.0	94.9	6.3	42.4	8.8	−5.0	70.1	37.9
Lime	30	828	0.4	1,570,310	0.2	743,239	0.3	6.7	42.6	.....	23.4	62.9	.....	−2.9	68.5	.....
Patent medicines and compounds, and druggists' preparations	62	278	0.1	1,442,342	0.2	932,334	0.3	3.3	2.7	−11.8	−15.5	38.4	82.9	−26.1	44.9	95.3
Wirework, including wire rope and cable	18	327	0.2	1,298,855	0.2	488,157	0.2	44.7	−26.1	.....	45.6	36.7	.....	40.4	19.1	.....
Shipbuilding, including boat building	34	695	0.4	1,254,088	0.2	802,933	0.3	−23.3	97.4	−18.3	−16.0	80.2	−15.3	−25.7	153.8	−13.9
Brick, tile, pottery, and other clay products	78	875	0.5	1,229,934	0.2	887,516	0.3	−14.8	−37.3	11.5	3.3	−35.6	2.9	−2.4	−29.8	21.5
Cooperage and wooden goods, not elsewhere specified	35	638	0.3	1,212,831	0.2	523,012	0.2	−47.2	−38.4	−5.8	−49.3	−22.2	6.5	−58.9	−7.1	−9.4
Paving materials	16	872	0.4	1,115,862	0.2	796,895	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mattresses and spring beds	18	384	0.2	1,089,425	0.2	441,308	0.2	−23.8	−64.4	36.1	−24.6	−59.1	92.9	−24.7	−71.0	211.2
Mats and mattings, from cocoa fiber and grass	4	455	0.2	1,029,996	0.2	505,167	0.2	252.7	.....	.....	185.7	.....	.....	184.7	.....	.....
Upholstering materials	15	339	0.2	994,070	0.1	365,426	0.1	68.7	50.0	.....	110.5	24.4	.....	82.3	16.1	.....
Clothing, women's	21	521	0.3	979,806	0.1	428,730	0.2	−7.8	13.5	96.8	5.6	10.5	208.8	0.9	9.8	126.3
Coffins, burial cases, and undertakers' goods	5	356	0.2	904,891	0.1	490,149	0.2	2.0	162.4	75.0	20.0	131.3	89.5	−32.4	111.4	90.2
Coffee and spice, roasting and grinding	8	70	(2)	809,186	0.1	200,400	0.1	−5.4	48.0	.....	3.7	55.3	.....	12.0	.....	.....
Paper goods, not elsewhere specified	7	188	0.1	743,426	0.1	351,698	0.1	−42.9	135.0	.....	−24.7	188.9	.....	−10.5	109.7	.....
Artificial stone products	130	404	0.2	714,122	0.1	436,172	0.2	7.2	685.4	.....	14.4	457.1	.....	12.1	455.7	.....
Fur goods	36	225	0.1	710,526	0.1	342,710	0.1	−45.5	16.0	−14.8	−53.3	67.7	6.8	−42.5	30.6	33.6
Cleansing and polishing preparations	11	103	0.1	703,338	0.1	397,848	0.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by electric-railroad companies	16	401	0.2	648,545	0.1	273,403	0.1	86.5	141.6	.....	216.6	130.7	.....	33.1	167.0	.....

[1] Percentages are based on figures in Table 36; a minus sign (−) denotes decrease; percentages are omitted where base is in less than 100, or where comparable figures can not be given.

[2] Less than one-tenth of 1 per cent.

Table 2—Continued.

INDUSTRY.	CENSUS OF 1914.							PER CENT OF INCREASE.[1]								
	Number of establishments.	Wage earners.		Value of products.		Value added by manufacture.		Wage earners (average number).			Value of products.			Value added by manufacture.		
		Average number.	Per cent distribution.	Amount.	Per cent distribution.	Amount.	Per cent distribution.	1909–1914	1904–1909	1899–1904	1909–1914	1904–1909	1899–1904	1909–1914	1904–1909	1899–1904
Carriages and sleds, children's	4	454	0.2	$648,030	0.1	$339,367	0.1	27.2	31.7	.....	42.7	38.5	.....	40.5	64.6	.....
Gas and electric fixtures and lamps and reflectors	7	222	0.1	647,999	0.1	362,091	0.1	−59.8	126.2	62.7	−55.8	155.0	82.5	−52.3	173.0	91.7
Fuel, manufactured	3	57	(2)	474,606	0.1	131,749	0.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chemicals	7	60	(2)	436,222	0.1	206,388	0.1	−21.1	16.9	1.6	−15.0	93.6	4.3	−24.0	111.7	4.1
Cutlery and tools, not elsewhere specified	19	208	0.1	382,179	0.1	231,573	0.1	76.3	38.8	1.2	34.0	80.4	6.0	43.2	105.1	2.6
Grease and tallow	10	50	(2)	326,250	(2)	75,700	(2)	38.9	20.0	.....	16.7	64.3	.....	−8.0	101.7	.....
Photo-engraving	9	134	0.1	307,617	(2)	214,799	0.1	−21.6	66.0	102.0	−1.3	88.0	225.5	−19.2	82.2	239.5
Mirrors, framed and unframed	4	81	(2)	274,091	(2)	106,561	(2)	−6.9	52.6	.....	−13.2	88.0	.....	−8.6	144.5	.....
Brushes, exclusive of paint and varnish	11	129	0.1	270,479	(2)	177,055	0.1	−9.2	.....	.....	8.4	.....	.....	4.5	.....	.....
Brooms, from broom corn	26	96	(2)	266,305	(2)	106,786	(2)	−5.0	.....	.....	−14.9	.....	.....	−13.0	.....	.....
Boxes, cigar	8	166	0.1	266,016	(2)	148,040	0.1	−10.8	−3.6	.....	−6.0	14.4	.....	2.7	24.2	.....
All other industries	502	14,773	7.6	54,307,219	7.8	25,525,079	9.2	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Percentages are based on figures in Table 36; a minus sign (−) denotes decrease; percentages are omitted where base is in less than 100, or where comparable figures can not be given.
[2] Less than one-tenth of 1 per cent.

Separate statistics are presented for 69 industries, or industry groups, for each of which products valued at more than $250,000 were reported for 1914. These industries include 10 with products exceeding $20,000,000 in value, 7 with products between $10,000,000 and $20,000,000, 12 with products between $5,000,000 and $10,000,000, 20 with products between $1,000,000 and $5,000,000, and 20 with products valued at less than $1,000,000. Among those included under the head of "all other industries" are a number which have products exceeding in value some for which figures are shown in the table, but for which statistics can not be shown separately without the possibility of disclosing the operations of individual establishments, as follows: Aluminum ware; bags, paper; cars, steam-railroad, not including the operations of railroad companies; coke, not including gas-house coke; explosives; glue; instruments, professional and scientific; liquors, distilled; matches; motorcycles, bicycles, and parts; linseed oil; smelting and refining, zinc; steam packing; beet sugar; and windmills.

The industries in this table are arranged in the order of their importance as shown by value of products, but the arrangement would vary considerably from that given if based on the average number of wage earners or value added by manufacture. Butter, which ranks first in value of products, is twelfth in average number of wage earners and tenth in value added by manufacture, while furniture and refrigerators ranks ninth in value of products, third in number of wage earners, and fourth in value added by manufacture. Although a few industries greatly predominate in importance, it will be seen from Table 2 that there is, on the whole, considerable diversity in the manufacturing activities of the state. The most important industries call for brief consideration.

Butter, cheese, and condensed milk.—At the 1914 census 2,431 establishments were reported as engaged in the manufacture of butter, cheese, and condensed milk in Wisconsin. The value of products of these establishments, $72,859,000, represented 10.5 per cent of the total value of the state's manufactures. The state ranks first among the states in the production of butter and cheese and second in the manufacture of condensed milk. During the five-year period 1909–1914 the total value of products increased from $53,843,000 to $72,859,000, or by 35.3 per cent; the average number of wage earners from 2,863 to 3,717, or by 29.8 per cent; and the value added by manufacture from $5,837,000 to $7,533,000, or 29.1 per cent.

Foundry and machine-shop products.—This industry embraces, in addition to the foundries and machine shops, the establishments engaged in the manufacture of engines, steam, gas, and water; gas machines and gas and water meters; hardware; cast-iron and cast-steel pipe; plumbers' supplies; steam fittings and heating apparatus; structural ironwork; and in automobile repairing. During the five-year period 1909–1914 the total value of products increased from $54,124,000 to $60,698,000, or 12.1 per cent; the average number of wage earners from 24,219 to 26,521, or 9.5 per cent; and the value added by manufacture from $31,590,000 to $32,537,000, or 3 per cent.

The industry is really of greater importance in the state than indicated by the statistics, as some machine shops manufactured distinctive products, and as a result were assigned to other classifications.

Lumber and timber products.—This industry, embracing the operations of logging camps, sawmills, planing mills, and wooden-box factories, was third in importance in 1914, while in 1909 it ranked first among the industries of the state, the decrease being due to the depletion of the forests. In 1909 the industry gave employment to an average of 34,093 wage earners and in 1914 to 32,282, a decrease of 5.3 per cent. The value of products in 1909 amounted to $57,969,000 and in 1914 to $55,363,000, a decrease of 4.5 per cent.

Leather, tanned, curried, and finished.—The number of tanneries, the average number of wage earners, the value of products, and the value added by manufacture show a decrease during the five years ending with 1914. The industry, however, retains its rank, fourth, in value of products in the state. The decrease reduced the standing of Wisconsin from second to third place among the leather-producing states. In 1914 the industry gave employment to an average of 5,869 wage earners and reported products valued at $42,204,000.

Malt and malt liquors.—The number of breweries decreased from 136 in 1909 to 132 in 1914. During the same period there was an increase of 27.3 per cent in value of products. In 1914 the industry ranked fifth in value of products and third in value added by manufacture. While the same number of establishments, 25, were reported for the manufacture of malt in 1914 and 1909, the value of products increased by 61.9 per cent. During the five-year period 1909–1914 the average number of wage earners for the two industries increased from 5,517 to 6,051, or 9.7 per cent; the value of products from $41,723,000 to $56,418,000, or 35.2 per cent; and the value added by manufacture from $26,003,000 to $30,226,000, or 16.2 per cent. The figures for value of products and value added by manufacture in case of the brewing industry, included the internal-revenue tax and are, therefore, misleading as an indication of the relative importance of the industry from a manufacturing standpoint. In 1914 Wisconsin reported 9.2 per cent of the total value of malt liquors and 32.3 per cent of the total value of malt produced in the United States, ranking third among the states in the production of malt liquors and second in the output of malt.

Slaughtering and meat packing.—This classification includes wholesale slaughtering and meat-packing establishments and also those engaged primarily in the manufacture of sausage. It does not include the numerous retail butcher shops which slaughter a large number of animals. The products of the slaughtering and meat-packing establishments amounted to $32,181,000 and those of the sausage manufactures to $2,517,000. Since 1904 the value of products for the industry has more than doubled. During the five-year period 1909–1914 the total value of products increased from $27,217,000 to $34,698,000, or 27.5 per cent; the average number of wage earners from 1,890 to 2,236, or 18.3 per cent; and the value added by manufacture from $3,814,000 to $4,157,000, or 9 per cent.

Paper and wood pulp.—This industry has increased rapidly in Wisconsin, and the state ranked fourth at the census of 1914 in value of products and average number of wage earners. The value of products increased from $25,962,000 in 1909 to $31,205,000 in 1914, or 20.2 per cent; and the average number of wage earners from 7,467 in 1909 to 8,968 in 1914, or 20.1 per cent.

Flour-mill and gristmill products.—The statistics for all merchant mills grinding wheat, rye, buckwheat, corn, or other grains, are included in this classification. The industry was not as prosperous during 1914 as in prior census years. As compared with 1909, there was a decrease of 70 in number of establishments, of 68 in the average number of wage earners, and of $2,970,000 in value of products. Table 14 shows that the decrease in the number of wage earners and value of products occurred in establishments operated by individuals and firms. The increase in the number employed and value of products for corporations was not sufficient to overcome the decreases for establishments operated under other forms of ownership.

Furniture and refrigerators.—In 1914 this industry gave employment to an average of 11,792 wage earners, an increase of 6.1 per cent over 1909. The value of products increased from $18,656,000 in 1909 to $22,587,000 in 1914, or 21.1 per cent. The value of products reported for this industry places Wisconsin fifth in order of importance among the furniture-manufacturing states.

Agricultural implements.—This is one of the rapidly growing industries and the state ranked second in value of products among the states manufacturing agricultural implements in 1914. During the five-year period from 1909 to 1914 the total value of products increased from $11,411,000 to $20,119,000, or 76.3 per cent; the average number of wage earners from 2,704 to 3,143, or 16.2 per cent; and the value added by manufacture from $7,474,000 to $11,443,000, or 53.1 per cent.

Automobiles, including bodies and parts.—In 1904 reports were received for 6 establishments engaged in this industry, with products valued at $1,875,000. During the decade ending with 1914, the industry developed rapidly, the number of establishments increasing to 43 and the value of products to $18,478,000. There were 12 establishments that manufactured the complete vehicles and 31 engaged primarily in the manufacture of bodies and parts. The combination of the products for the two branches of the industry results in considerable duplication, as the bodies and parts made in the state are largely utilized in the completion of vehicles in the local factories.

Boots and shoes, including cut stock and findings.—This classification consists of 58 establishments engaged in the manufacture of leather boots and shoes; 3 engaged primarily in manufacture of other kinds of footwear, such as moccasins, felt slippers, and wooden shoes; and 4 that made a specialty of boot and shoe findings in 1914. In addition, there were 2 establishments that manufactured boot and shoe cut stock, but the statistics for them are omitted from Table 2 and included in the group of "all other industries," Table 37, in order to avoid the disclosure of the data reported by individual establishments.

Persons engaged in manufacturing industries.—Table 3 shows, for 1909 and 1914, the number of persons engaged in manufactures, distributed by sex, the average number of wage earners being distributed also by age. The sex and 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."

Of the 230,273 persons engaged in the manufactures of the state during 1914, 86.5 per cent were males and 13.5 were females. The relative number of females employed increased during the period covered by the table for all of the classes shown, except superintendents and managers, and children under 16 years of age. The largest proportion of females in both years is shown for children under 16 years of age. Figures corresponding to those in this table, but for individual industries, will be found in Table 37.

Table 3

CLASS.	Census year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES. Total.	Male.	Female.	Per cent of total. Male.	Female.
All classes	1914	230,273	199,232	31,041	86.5	13.5
	1909	213,426	186,350	27,076	87.3	12.7
Proprietors and officials	1914	15,021	14,601	420	97.2	2.8
	1909	14,622	14,294	328	97.8	2.2
Proprietors and firm members	1914	7,425	7,144	281	96.2	3.8
	1909	8,556	8,327	229	97.3	2.7
Salaried officers of corporations	1914	3,127	3,039	88	97.2	2.8
	1909	2,351	2,299	52	97.8	2.2
Superintendents and managers	1914	4,469	4,418	51	98.9	1.1
	1909	3,715	3,668	47	98.7	1.3
Clerks and other subordinate salaried employees.	1914	20,942	16,100	4,842	76.9	23.1
	1909	16,221	12,955	3,266	79.9	20.1
Wage earners (average number)	1914	194,310	168,531	25,779	86.7	13.3
	1909	182,583	159,101	23,482	87.1	12.9
16 years of age and over	1914	191,301	166,800	24,501	87.2	12.8
	1909	178,316	156,734	21,582	87.9	12.1
Under 16 years of age	1914	3,009	1,731	1,278	57.5	42.5
	1909	4,267	2,367	1,900	55.5	44.5

Table 4 gives for the several classes of persons engaged in manufactures the percentages of increase from 1909 to 1914 and the per cent distribution at the two censuses.

Table 4

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES. Per cent of increase,[1] 1909–1914. Total.	Male.	Female.	Per cent distribution. Total. 1914	Total. 1909	Male. 1914	Male. 1909	Female. 1914	Female. 1909
All classes	7.9	6.9	14.6	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials	2.7	2.1	28.0	6.5	6.9	7.3	7.7	1.4	1.2
Proprietors and firm members	−13.2	−14.2	22.7	3.2	4.0	3.6	4.5	0.9	0.8
Salaried officers of corporations	33.0	32.2	.....	1.4	1.1	1.5	1.2	0.3	0.2
Superintendents and managers	20.3	20.4	.....	1.9	1.7	2.2	2.0	0.2	0.2
Clerks and other subordinate salaried employees	29.1	24.3	48.3	9.1	7.6	8.1	7.0	15.6	12.1
Wage earners (average number)	6.4	5.9	9.8	84.4	85.5	84.6	85.4	83.0	86.7
16 years of age and over	7.3	6.4	13.5	83.1	83.5	83.7	84.1	78.9	79.7
Under 16 years of age	−29.5	−26.9	−32.7	1.3	2.0	0.9	1.3	4.1	7.0

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

This table shows an increase during the five-year period for each of the several classes of employees, with the exception of proprietors and firm members and wage earners under 16 years of age. The largest percentage of increase, 33 per cent, is shown for salaried officers of corporations. Wage earners 16 years of age and over represented 83.1 per cent of the total number of persons engaged in manufacturing industries in the state in 1914 and 83.5 per cent in 1909.

In order to compare the distribution of persons engaged in manufactures in 1914 with that shown in the census of 1904, it is necessary to use the classification employed in the earlier census (see "Explanation of terms"). Table 5 makes this comparison according to occupational status.

Table 5

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES. Number. 1914	1909	1904	Per cent distribution. 1914	1909	1904	Per cent of increase.[1] 1909–1914	1904–1909
Total	230,273	213,426	173,572	100.0	100.0	100.0	7.9	23.0
Proprietors and firm members	7,425	8,556	7,961	3.2	4.0	4.6	−13.2	7.5
Salaried employees	28,538	22,287	14,220	12.4	10.4	8.2	28.0	56.7
Wage earners (average)	194,310	182,583	151,391	84.4	85.5	87.2	6.4	20.6

[1] A minus sign (−) denotes decrease.

Each of the three classes shown in this table and the total for all classes combined show increases, except proprietors and firm members where a decrease of 13.2 per cent during 1909–1914 was reported.

The average number of wage earners employed and their per cent distribution as males and females 16 years of age and over and children under 16 years of age are given in Table 6, for 1914, 1909, and 1904. The table also shows, for some of the important industries separately, a similar distribution of wage earners for 1914 and 1909.

For all industries combined, the proportion of male wage earners 16 years of age and over has remained practically the same at each successive census, while only a small increase is shown for the females employed. The proportion of children under 16 years employed as wage earners has decreased from 2.3 per cent in 1909 to 1.5 per cent in 1914. Of the 31 industries, for which separate figures are given in this table, 21 show an increase from 1909 to 1914 in proportion of males and 13, an increase in proportion of females, while in only 7 industries was there an increase in proportion of children under 16 years of age employed. In practically all of the industries of the state the number of men employed as wage earners exceeds the number of women, but in the manufacture of fancy and paper boxes, men's clothing, confectionery, leather gloves and mittens, and hosiery and knit goods, the number of women exceeds the number of men. The largest proportion of children under 16 years of age is shown for the manufacture of confectionery.

Table 6

INDUSTRY.	Census year.	WAGE EARNERS. Average number.[1]	Per cent of total. 16 years of age and over. Male.	Female.	Under 16 years of age.
All industries	1914	194,310	85.8	12.6	1.5
	1909	182,583	85.8	11.8	2.3
	1904	151,391	85.4	11.9	2.7
Agricultural implements	1914	3,143	97.1	2.8	0.1
	1909	2,704	96.9	1.6	1.5
Automobiles, including bodies and parts	1914	4,889	98.8	1.1	0.2
	1909	4,298	99.1	0.3	0.6
Boots and shoes, including findings	1914	5,814	62.7	33.6	3.6
	1909	5,431	57.7	33.7	8.6
Boxes, fancy and paper	1914	1,319	39.6	49.9	10.5
	1909	824	27.3	54.4	18.3
Brass, bronze, and copper products	1914	1,122	99.3	0.6	0.1
	1909	1,289	97.8	0.9	1.4
Bread and other bakery products	1914	2,197	76.5	22.2	1.3
	1909	1,751	77.3	19.5	3.3
Butter, cheese, and condensed milk	1914	3,717	94.1	5.5	0.4
	1909	2,863	97.1	2.2	0.7
Canning and preserving	1914	2,687	68.8	26.7	4.5
	1909	1,776	67.9	28.9	3.2
Carriages and wagons and materials	1914	2,638	98.5	1.3	0.2
	1909	3,437	98.5	0.9	0.7
Cars and general shop construction and repairs by steam-railroad companies.	1914	9,011	99.9	0.1	.....
	1909	8,994	99.9	0.1	.....
Clothing, men's, including shirts	1914	3,584	22.7	75.1	2.2
	1909	4,252	22.3	73.3	4.5
Confectionery	1914	2,242	29.8	57.3	12.9
	1909	1,780	25.2	54.8	19.9
Copper, tin, and sheet-iron products	1914	3,372	87.9	11.5	0.6
	1909	2,780	81.8	17.2	1.0
Electrical machinery, apparatus, and supplies.	1914	2,115	91.7	7.2	1.0
	1909	1,409	93.5	5.8	0.6
Flour-mill and gristmill products	1914	1,116	99.3	0.4	0.4
	1909	1,184	99.5	0.4	0.1
Foundry and machine-shop products	1914	26,521	98.9	0.8	0.2
	1909	24,219	98.3	0.8	0.9
Furniture and refrigerators	1914	11,792	94.8	3.0	2.2
	1909	11,118	92.9	3.4	3.7
Gas, illuminating and heating	1914	1,240	100.0	.....	.....
	1909	1,063	99.2	0.8	.....
Gloves and mittens, leather	1914	1,711	33.4	62.7	3.9
	1909	1,642	31.3	62.9	5.8
Hosiery and knit goods	1914	6,244	21.8	72.6	5.6
	1909	4,282	17.7	71.7	10.6
Iron and steel, steel works and rolling mills.	1914	2,029	99.8	.....	0.2
	1909	2,124	99.7	.....	0.3
Leather goods	1914	1,490	79.7	17.7	2.4
	1909	2,099	71.7	23.6	4.7
Leather, tanned, curried, and finished	1914	5,869	94.6	5.3	(2)
	1909	7,548	95.7	3.9	0.4
Liquors, malt	1914	5,414	97.2	2.8	(2)
	1909	5,061	93.8	6.2	.....
Lumber and timber products	1914	32,282	98.3	1.1	0.6
	1909	34,093	98.0	0.9	1.1
Marble and stone work	1914	1,390	99.6	0.1	0.3
	1909	2,593	100.0	.....	(2)
Paper and wood pulp	1914	8,968	89.8	10.1	0.1
	1909	7,467	87.2	12.6	0.2
Printing and publishing	1914	5,653	69.9	24.3	5.7
	1909	5,360	68.8	25.7	5.5
Rubber goods	1914	1,637	90.0	9.7	0.2
	1909	212	78.3	15.6	6.1
Slaughtering and meat packing	1914	2,236	94.6	3.8	1.6
	1909	1,890	93.2	5.1	1.6
Tobacco manufactures	1914	2,485	71.4	28.0	0.6
	1909	2,391	73.1	26.3	0.5
All other industries	1914	28,383	82.4	16.3	1.4
	1909	24,649	80.9	16.3	2.8

[1] For method of estimating the distribution, by sex and age periods of the average number in all industries combined, see "Explanation of terms."
[2] Less than one-tenth of 1 per cent.

Table 7 shows the average number and the per cent distribution of wage earners employed in each of the 18 cities having more than 10,000 inhabitants, classified according to age periods, and in the case of those 16 years of age and over, according to sex, for 1914, 1909, and 1904.

Table 7

City.	Average number of wage earners in manufacturing industries.																				
	Total.			16 years of age and over.						Under 16 years of age.			Per cent of total.								
				Male.			Female.						16 years of age and over.						Under 16 years of age.		
													Male.			Female.					
	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904
Appleton	2,144	2,125	2,486	1,785	1,687	1,950	344	400	487	15	38	49	83.3	79.4	78.4	16.0	18.8	19.6	0.7	1.8	2.0
Ashland	797	1,116	1,361	765	1,090	1,338	28	15	22	4	11	1	96.0	97.7	98.3	3.5	1.3	1.6	0.5	1.0	0.1
Beloit	3,527	2,986	2,471	3,249	2,774	2,259	270	188	176	8	24	36	92.1	92.9	91.4	7.7	6.3	7.1	0.2	0.8	1.5
Eau Claire	2,315	2,524	1,985	2,114	2,327	1,826	174	177	147	27	20	12	91.3	92.2	92.0	7.5	7.0	7.4	1.2	0.8	0.6
Fond du Lac	1,925	2,707	2,566	1,594	2,271	2,171	313	376	353	18	60	42	82.8	83.9	84.6	16.3	13.9	13.8	0.9	2.2	1.6
Green Bay	2,724	2,579	2,111	2,318	2,267	1,829	390	273	230	16	39	52	85.1	87.9	86.6	14.3	10.6	10.9	0.6	1.5	2.5
Janesville	1,495	1,451	1,348	1,088	1,001	971	386	441	357	21	9	20	72.8	69.0	72.0	25.8	30.4	26.5	1.4	0.6	1.5
Kenosha	7,155	6,449	4,354	6,237	5,598	3,411	858	683	913	60	168	30	87.2	86.8	78.3	12.0	10.6	21.0	0.8	2.6	0.7
La Crosse	3,340	3,329	2,644	2,474	2,370	1,929	806	896	626	60	63	89	74.1	71.2	73.0	24.1	26.9	23.7	1.8	1.9	3.4
Madison	2,084	1,792	1,476	1,747	1,593	1,279	323	170	161	14	29	36	83.8	88.9	86.7	15.5	9.5	10.9	0.7	1.6	2.4
Manitowoc	2,012	1,525	1,321	1,660	1,255	1,029	294	242	273	58	28	19	82.5	82.3	77.9	14.6	15.9	20.7	2.9	1.8	1.4
Marinette	2,112	1,491	1,645	1,846	1,347	1,577	249	143	28	17	1	40	87.4	90.3	95.9	11.8	9.6	1.7	0.8	0.1	2.4
Milwaukee	61,839	59,502	43,366	48,562	46,981	[1] 33,028	11,722	10,118	8,093	1,555	2,403	2,245	78.5	79.0	76.2	19.0	17.0	18.7	2.5	4.0	5.2
Oshkosh	5,782	5,778	4,840	4,697	4,692	[1] 4,174	1,001	774	505	84	312	161	81.2	81.2	86.2	17.3	13.4	10.4	1.5	5.4	3.3
Racine	10,079	8,381	6,504	8,647	7,132	5,453	1,201	1,106	946	231	143	105	85.8	85.1	83.8	11.9	13.2	14.5	2.3	1.7	1.6
Sheboygan	7,152	5,988	5,903	6,307	5,030	[1] 4,952	632	683	646	213	275	305	88.2	84.0	83.9	8.8	11.4	10.9	3.0	4.6	5.2
Superior	2,121	1,847	1,343	1,992	1,723	1,266	128	118	60	1	6	17	93.9	93.3	94.3	6.0	6.4	4.5	(2)	0.3	1.3
Wausau	2,492	2,092	1.945	2,168	1,948	1,808	306	71	40	18	73	97	87.0	93.1	93.0	12.3	3.4	2.1	0.7	3.5	4.9

[1] Figures do not agree with those published because it was necessary to revise them in order to include data only for those establishments located within the corporate limits of the city.
[2] Less than one-tenth of 1 per cent.

Table 8 gives percentages of increase from census to census, based on the figures in Table 7, for the 18 cities shown in that table.

For all cities combined, there is little variation in the proportion of the different classes of wage earners reported at the three censuses, 1914, 1909, and 1904, the proportion of males being 82 per cent in 1914; 81.9 per cent in 1909; and 80.6 per cent in 1904. With the exception of Appleton, Ashland, and Fond du Lac all of the cities show substantial increases in the number of wage earners employed in manufactures. Milwaukee, by far the most important city in the state in respect to number of wage earners employed, shows a small increase in 1914 over 1909 in the number of male and female wage earners but a decrease in the number of children under 16 years of age employed.

Table 8

City.	Period.	Per cent of increase in average number of wage earners.[1] Total.	16 years of age and over. Male.	16 years of age and over. Female.	Under 16 years of age.
Appleton	1904-1914	−13.8	−8.5	−29.4	.....
	1909-1914	0.9	5.8	−14.0	.....
	1904-1909	−14.5	−13.5	−17.9	.....
Ashland	1904-1914	−41.4	−42.8	.....	.....
	1909-1914	−28.6	−29.8	.....	.....
	1904-1909	−18.0	−18.5	.....	.....
Beloit	1904-1914	42.7	43.8	53.4	.....
	1909-1914	18.1	17.1	43.6	.....
	1904-1909	20.8	22.8	6.8	.....
Eau Claire	1904-1914	16.6	15.8	18.4	.....
	1909-1914	−8.3	−9.2	−1.7	.....
	1904-1909	27.2	27.4	20.4	.....
Fond du Lac	1904-1914	−25.0	−26.6	−11.3	.....
	1909-1914	−28.9	−29.8	−16.8	.....
	1904-1909	5.5	4.6	6.5	.....
Green Bay	1904-1914	29.0	26.7	69.6	.....
	1909-1914	5.6	2.2	42.9	.....
	1904-1909	22.2	23.9	18.7	.....
Janesville	1904-1914	10.9	12.0	8.1	.....
	1909-1914	3.0	8.7	−12.5	.....
	1904-1909	7.6	3.1	23.5	.....
Kenosha	1904-1914	64.3	82.8	−6.0	.....
	1909-1914	10.9	11.4	25.6	−64.3
	1904-1909	48.1	64.1	−25.2	.....
La Crosse	1904-1914	26.3	28.3	28.8	.....
	1909-1914	0.3	4.4	−10.0	.....
	1904-1909	25.9	22.9	43.1	.....
Madison	1904-1914	41.2	36.6	100.6	.....
	1909-1914	16.3	9.7	90.0	.....
	1904-1909	21.4	24.6	5.6	.....
Manitowoc	1904-1914	52.3	61.3	7.7	.....
	1909-1914	31.9	32.3	21.5	.....
	1904-1909	15.4	22.0	−11.4	.....
Marinette	1904-1914	28.4	17.1	.....	.....
	1909-1914	41.6	37.0	74.1	.....
	1904-1909	−9.4	−14.6	.....	.....
Milwaukee	1904-1914	42.6	47.0	44.8	−30.7
	1909-1914	3.9	3.4	15.9	−35.3
	1904-1909	37.2	42.2	25.0	7.0
Oshkosh	1904-1914	19.5	12.5	98.2	−47.8
	1909-1914	0.1	0.1	29.3	−73.1
	1904-1909	19.4	12.4	53.3	93.8
Racine	1904-1914	55.0	58.6	27.0	120.0
	1909-1914	20.3	21.2	8.6	61.5
	1904-1909	28.9	30.8	16.9	36.2
Sheboygan	1904-1914	21.2	27.4	−2.2	−30.2
	1909-1914	19.4	25.4	−7.5	−22.5
	1904-1909	1.4	1.6	5.7	−9.8
Superior	1904-1914	57.9	57.3	.....	.....
	1909-1914	14.8	15.6	8.5	.....
	1904-1909	37.5	36.1	.....	.....
Wausau	1904-1914	28.1	19.9	.....	.....
	1909-1914	19.1	11.3	.....	.....
	1904-1909	7.6	7.7	.....	.....

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

Racine is the only city showing increases, for the 1904–1909–1914 census periods, in the proportion of children under 16 years of age. There were 231 children reported for 1914, and they were employed largely in the canning and printing industries.

Marinette shows the greatest per cent of increase in the number of males 16 years of age and over, for the last five-year period, 1909–1914, and Kenosha the greatest percentage of increase for the decade in total wage earners, 64.3 per cent.

Wage earners employed, by months.—The following table gives, for all industries combined, the total number of wage earners employed on the 15th of each month, or the nearest representative day, for the years 1914 and 1909, and the average number employed each month in 1904, together with the percentage which the number reported each month forms of the greatest number reported for any month.

For 1914 the spring months show the greatest activity in the combined industries of the state, the maximum number of wage earners appearing for March and the minimum for December. In 1909 the maximum number was employed in December and the minimum during April. In 1904 the maximum number was reported for June and the minimum for January. The greatest difference between the maximum and the minimum number reported for any of the three census years is shown for 1914, when the maximum exceeded the minimum by 23,457.

Table 9

MONTH.	WAGE EARNERS IN MANUFACTURING INDUSTRIES.					
	Number.[1]			Per cent of maximum.		
	1914	1909	1904	1914	1909	1904
January	197,347	174,937	146,685	96.0	90.9	94.6
February	203,166	178,091	149,001	98.9	92.5	96.1
March	205,512	179,007	151,121	100.0	93.0	97.5
April	199,210	173,561	149,669	96.9	90.1	96.5
May	196,041	176,625	153,263	95.4	91.7	98.9
June	196,523	180,691	155,028	95.6	93.9	100.0
July	198,170	184,290	153,160	96.4	95.7	98.8
August	193,475	185,556	153,901	94.1	96.4	99.3
September	190,652	185,592	152,470	92.8	96.4	98.3
October	187,342	188,664	151,791	91.2	98.0	97.9
November	182,227	191,447	151,399	88.7	99.4	97.7
December	182,055	192,527	149,204	88.6	100.0	96.2

[1] The figures for 1914 and 1909 represent the number employed on the 15th of each month, or the nearest representative day; those for 1904, the average number employed during the month.

Table 10 gives the total average number of wage earners employed during 1914, together with the total number employed on the 15th of each month, or the nearest representative day, for the combined industries of the state, for a number of selected industries, and for the total industries of each of the 18 cities having more than 10,000 inhabitants.

Table 10

WAGE EARNERS: 1914.
[Month of maximum employment for each industry is indicated by **boldface** figures and that of minimum 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	194,310	197,347	203,166	**205,512**	199,210	196,041	196,523	198,170	193,475	190,652	187,342	182,227	*182,055*	88.6
Agricultural implements	3,143	**4,643**	4,244	3,978	3,655	3,078	2,867	2,469	2,312	*1,918*	2,093	2,917	3,542	41.3
Automobiles, including bodies and parts	4,889	5,096	5,417	5,794	**5,820**	5,289	5,044	4,357	4,465	4,513	4,672	*4,095*	4,106	70.4
Boots and shoes, including findings	5,814	**6,113**	5,831	5,958	6,001	5,854	*5,516*	5,829	5,687	5,761	5,817	5,566	5,835	90.2
Boxes, fancy and paper	1,319	1,300	*1,277*	1,309	**1,328**	1,322	1,299	1,319	1,344	1,344	**1,378**	1,311	1,297	92.7
Brass, bronze, and copper products	1,122	*1,040*	1,109	1,169	**1,210**	1,167	1,158	1,147	1,125	1,081	1,094	1,081	1,083	86.0
Bread and other bakery products	2,197	*2,074*	2,089	2,138	2,149	2,182	2,241	**2,277**	2,258	2,261	2,251	2,240	2,204	91.1
Butter, cheese, and condensed milk	3,717	*2,830*	2,862	2,979	3,581	4,156	**4,451**	4,402	4,282	4,143	3,907	3,663	3,348	63.6
Canning and preserving	2,687	*673*	699	756	814	1,043	3,418	**9,124**	6,086	5,383	2,189	1,194	865	7.4
Carriages and wagons and materials	2,638	*2,043*	2,934	**2,994**	2,941	2,798	2,679	2,689	2,657	2,563	2,502	2,515	2,341	68.2
Cars and general shop construction and repairs by steam-railroad companies	9,011	**9,299**	8,899	8,970	8,977	9,014	9,118	8,881	9,052	9,214	9,134	8,925	*8,649*	93.0
Clothing, men's, including shirts	3,584	**3,790**	3,764	3,719	3,613	3,718	3,678	3,605	3,565	3,467	*3,287*	3,393	3,409	86.7
Confectionery	2,242	2,258	2,217	2,218	2,061	2,038	1,968	*1,928*	2,132	2,357	2,555	**2,619**	2,553	73.6
Copper, tin, and sheet-iron products	3,372	3,297	3,419	3,466	3,471	**3,533**	3,531	3,358	3,302	3,457	3,421	3,165	*3,044*	86.2
Electrical machinery, apparatus, and supplies	2,115	2,307	**2,332**	2,209	2,189	2,127	2,085	2,046	2,061	*1,987*	1,995	2,027	2,015	85.2
Flour-mill and gristmill products	1,116	1,099	1,085	1,106	1,057	1,048	1,047	*1,045*	1,084	1,209	1,199	1,197	**1,216**	85.9
Foundry and machine-shop products	26,521	28,760	28,941	**28,975**	28,305	27,240	26,783	26,457	26,691	25,219	24,071	23,497	*23,313*	80.5
Furniture and refrigerators	11,792	12,041	12,531	**12,787**	12,410	11,953	11,894	11,577	11,826	11,576	11,582	10,817	*10,510*	82.2
Gas, illuminating and heating	1,240	1,110	1,069	1,193	1,258	1,330	1,396	**1,455**	1,395	1,239	1,250	1,149	*1,036*	71.2
Gloves and mittens, leather	1,711	**1,953**	1,917	1,886	1,826	1,715	1,704	1,665	1,670	1,640	1,604	1,497	*1,455*	74.5
Hosiery and knit goods	6,244	6,373	**6,523**	6,430	6,435	6,290	6,218	6,182	6,197	6,069	6,174	*6,016*	6,021	92.2
Iron and steel, steel works and rolling mills	2,029	1,904	2,031	2,219	2,211	**2,226**	1,960	2,104	2,093	2,073	1,896	*1,815*	1,816	81.5
Leather goods	1,490	1,528	1,544	1,530	1,538	1,472	1,487	1,467	**1,551**	*1,444*	1,463	1,458	1,498	93.1
Leather, tanned, curried, and finished	5,869	6,145	6,318	**6,530**	6,197	5,873	5,628	5,550	5,564	*5,339*	5,608	5,731	5,945	81.8
Liquors, malt	5,414	5,197	5,175	5,227	5,305	5,499	5,927	**6,020**	5,813	5,476	5,250	5,063	*5,016*	83.3
Lumber and timber products	32,282	34,871	**37,842**	37,472	31,825	30,886	31,066	30,712	*29,870*	29,931	30,486	31,036	31,387	78.9
Marble and stone work	1,390	1,250	*1,216*	1,305	1,385	1,410	1,434	1,450	1,498	**1,521**	1,493	1,409	1,309	79.9
Paper and wood pulp	8,968	*8,751*	9,141	**9,349**	9,082	9,030	8,948	8,770	8,868	8,878	9,182	8,777	8,840	93.6
Printing and publishing	5,653	5,696	5,687	5,668	5,684	5,700	5,623	*5,475*	5,515	5,662	5,704	5,667	**5,755**	95.1
Rubber goods	1,637	*1,356*	1,582	1,717	1,768	**1,920**	1,855	1,774	1,580	1,587	1,587	1,464	1,454	70.6
Slaughtering and meat packing	2,236	2,751	2,425	2,206	2,095	1,942	1,993	1,956	1,867	*1,860*	2,326	2,440	**2,971**	62.6
Tobacco manufactures	2,485	2,513	2,548	**2,556**	*2,388*	2,446	2,486	2,488	2,469	2,500	2,502	2,450	2,474	93.4
All other industries	28,383	27,286	28,498	29,699	30,631	**30,742**	30,021	28,592	27,596	27,980	27,670	26,033	*25,748*	83.8

Table 10—Continued.

WAGE EARNERS: 1914.
[Month of maximum employment for each industry is indicated by **boldface** figures and that of minimum 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.	
Total for cities	121,095	123,785	127,111	**129,048**	127,231	124,646	122,034	120,455	119,660	117,466	115,809	*112,864*	113,037	87.5
APPLETON	2,144	2,119	2,164	2,218	**2,255**	2,236	2,179	2,130	2,139	2,100	2,133	2,038	*2,017*	89.4
ASHLAND	797	810	**844**	825	815	820	794	812	802	740	811	828	*663*	78.6
BELOIT	3,527	3,919	**3,926**	3,903	3,736	3,365	3,406	3,440	3,458	3,478	3,294	3,207	*3,192*	81.3
EAU CLAIRE	2,315	2,510	2,555	**2,578**	2,227	2,195	*2,153*	2,179	2,178	2,329	2,217	2,338	2,321	83.5
FOND DU LAC	1,925	*1,739*	1,850	1,890	1,924	1,948	1,942	1,851	1,888	1,993	**2,092**	2,019	1,964	83.1
GREEN BAY	2,724	2,702	2,699	2,716	2,757	2,816	2,693	**2,836**	2,802	2,702	2,671	2,684	*2,610*	92.0
JANESVILLE	1,495	1,479	1,552	1,592	**1,617**	1,556	1,523	1,422	1,395	1,473	1,525	1,427	*1,379*	85.3
KENOSHA	7,155	7,144	7,760	**7,997**	7,973	7,406	7,243	6,976	7,080	6,761	6,886	6,536	*6,098*	76.3
LA CROSSE	3,340	3,315	3,366	3,386	3,347	3,366	**3,404**	3,326	3,358	3,290	3,334	3,343	*3,245*	95.3
MADISON	2,084	2,158	2,173	2,165	**2,188**	2,097	2,020	2,028	2,110	1,979	*1,960*	2,033	2,097	89.6
MANITOWOC	2,012	1,672	1,989	2,260	2,197	2,043	1,917	2,084	2,244	**2,268**	2,095	*1,644*	1,731	72.5
MARINETTE	2,112	2,326	2,374	**2,417**	2,249	2,086	1,976	1,960	*1,886*	1,956	2,129	2,014	1,971	78.0
MILWAUKEE	61,839	64,429	64,547	**65,297**	64,917	64,540	62,838	61,542	60,468	59,826	58,587	*57,059*	58,024	87.4
OSHKOSH	5,782	*4,934*	6,193	**6,316**	6,153	6,028	5,980	5,832	5,798	5,626	5,653	5,518	5,353	78.1
RACINE	10,079	11,022	11,241	**11,360**	11,093	10,475	10,220	9,666	9,655	8,995	*8,713*	8,993	9,515	76.7
SHEBOYGAN	7,152	7,189	7,144	7,187	7,101	6,877	6,865	7,315	**7,573**	7,544	7,225	6,994	*6,810*	89.9
SUPERIOR	2,121	1,938	2,066	2,166	2,155	2,178	**2,267**	2,240	2,067	2,118	2,250	2,081	*1,926*	85.0
WAUSAU	2,492	2,380	2,668	2,775	2,527	2,614	2,614	**2,816**	2,759	2,288	2,234	*2,108*	2,121	74.9

Of the 31 industries for which statistics are given in Table 10, the greatest stability of employment during 1914 was reported for printing and publishing. The maximum number of wage earners, 5,755, was employed in December and the minimum number, 5,475, in July. Of the seasonal industries, canning and preserving shows the greatest variations in the number of wage earners employed, the maximum month being July, when 9,124 were reported, and the minimum month, January, with 673. Of the 18 cities, Manitowoc shows the greatest fluctuation in the numbers employed, the percentage that the minimum number formed of the maximum for the city being 72.5 per cent. The greatest stability of employment was reported for La Crosse, for which the minimum number formed 95.3 per cent of the maximum.

Prevailing hours of labor.—In Table 11 the average number of wage earners reported, for 1914 and 1909, for all industries combined, and for selected industries separately throughout the state, have been classified according to the number of hours of labor per week prevailing in the establishments in which they were employed. A similar classification is given for 1914 only for all industries combined in each city having more than 10,000 inhabitants. The number employed in each establishment is classified as a total, even though a few employees worked a greater or a smaller number of hours.

Table 11

AVERAGE NUMBER OF WAGE EARNERS.

INDUSTRY AND CITY.	Census year.	Total.	In establishments where the prevailing hours of labor per week were—							
			48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
All industries	1914	194,310	27,905	9,135	18,461	62,102	66,958	6,861	2,046	842
	1909	182,583	12,057	4,420	20,756	40,010	93,072	5,366	4,732	2,170
Agricultural implements	1914	3,143	4	65	88	802	2,183	1	.....	.....
	1909	2,704	.....	.....	.....	1,906	798	.....	.....	.....
Automobiles, including bodies and parts	1914	4,889	83	128	55	4,431	192	.....	.....	.....
	1909	4,298	4	.....	273	2,121	985	.....	915	.....
Boots and shoes, including findings	1914	5,814	312	16	528	2,446	2,512	.....	.....	.....
	1909	5,431	3	28	430	1,458	3,512	.....	.....	.....
Boxes, fancy and paper	1914	1,319	37	.....	178	1,041	63	.....	.....	.....
	1909	824	.....	17	411	76	320	.....	.....	.....
Brass, bronze, and copper products	1914	1,122	143	44	51	881	3	.....	.....	.....
	1909	1,289	4	.....	28	793	464	.....	.....	.....
Bread and other bakery products	1914	2,197	163	42	232	431	1,094	206	19	10
	1909	1,751	60	186	136	27	1,081	198	44	19
Butter, cheese, and condensed milk	1914	3,717	208	73	243	251	1,350	1,391	41	160
	1909	2,863	251	22	68	192	766	1,103	94	367
Canning and preserving	1914	2,687	109	207	421	442	1,311	51	131	15
	1909	1,776	.....	47	13	125	1,051	217	251	72
Carriages and wagons and materials	1914	2,638	16	78	89	1,921	534	.....	.....	.....
	1909	3,437	8	.....	119	1,241	2,069	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	9,011	6,693	.....	729	121	1,156	312	.....	.....
	1909	8,994	124	977	7,120	.....	268	409	.....	96

Table 11—Continued.

INDUSTRY AND CITY.	Census year.	AVERAGE NUMBER OF WAGE EARNERS.								
		Total.	In establishments where the prevailing hours of labor per week were—							
			48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
Clothing, men's, including shirts	1914	3,584	950	1,965	192	477	.....	.....	.....	.....
	1909	4,252	884	89	1,706	1,251	322	.....	.....	.....
Confectionery	1914	2,242	100	55	73	1,998	8	8	.....	.....
	1909	1,780	5	.....	350	409	1,016	.....	.....	.....
Copper, tin, and sheet-iron products	1914	3,372	901	173	104	1,434	760	.....	.....	.....
	1909	2,780	318	.....	68	1,054	1,340	.....	.....	.....
Electrical machinery, apparatus, and supplies	1914	2,115	3	56	685	1,345	26	.....	.....	.....
	1909	1,409	7	41	351	939	71	.....	.....	.....
Flour-mill and gristmill products	1914	1,116	108	1	76	6	722	36	165	2
	1909	1,184	248	5	4	2	837	76	10	2
Foundry and machine-shop products	1914	26,521	1,558	986	1,193	18,514	3,714	546	.....	10
	1909	24,219	44	295	511	14,549	8,816	4	.....	.....
Furniture and refrigerators	1914	11,792	176	59	1,213	4,879	5,464	1	.....	.....
	1909	11,118	46	20	151	1,121	9,780	.....	.....	.....
Gas, illuminating and heating	1914	1,240	38	.....	27	44	350	671	.....	110
	1909	1,063	9	.....	14	49	703	35	.....	253
Gloves and mittens, leather	1914	1,711	224	384	551	381	171	.....	.....	.....
	1909	1,642	53	64	188	875	462	.....	.....	.....
Hosiery and knit goods	1914	6,244	1,085	300	1,660	3,160	39	.....	.....	.....
	1909	4,282	24	96	920	2,876	366	.....	.....	.....
Iron and steel, steel works, and rolling mills	1914	2,029	89	171	32	925	812	.....	.....	.....
	1909	2,124	10	.....	10	102	977	.....	1,025	.....
Leather goods	1914	1,490	6	78	68	1,105	232	1	.....	.....
	1909	2,099	25	73	321	1,082	594	4	.....	.....
Leather, tanned, curried, and finished	1914	5,869	20	.....	67	1,319	4,448	15	.....	.....
	1909	7,548	.....	.....	13	717	6,818	.....	.....	.....
Liquors, malt	1914	5,414	3,674	60	1,038	37	502	36	7	.....
	1909	5,061	3,423	2	614	36	913	64	4	5
Lumber and timber products	1914	32,282	1,807	420	1,755	2,622	25,320	15	.....	343
	1909	34,093	230	74	808	1,202	31,217	547	9	6
Marble and stone work	1914	1,390	307	324	599	93	64	3	.....	.....
	1909	2,593	468	496	903	40	678	8	.....	.....
Paper and wood pulp	1914	8,968	378	.....	.....	485	4,473	2,136	1,496	.....
	1909	7,467	661	.....	.....	.....	3,195	1,442	2,043	126
Printing and publishing	1914	5,653	3,421	604	1,165	316	128	15	2	2
	1909	5,360	2,219	744	1,613	333	415	22	.....	14
Rubber goods	1914	1,637	.....	17	.....	1,245	375	.....	.....	.....
	1909	212	.....	38	.....	.....	169	5	.....	.....
Slaughtering and meat packing	1914	2,236	13	.....	866	112	1,244	.....	1	.....
	1909	1,890	135	.....	734	.....	1,021	.....	.....	.....
Tobacco manufactures	1914	2,485	1,953	130	135	201	58	8	.....	.....
	1909	2,391	1,863	21	173	31	288	15	.....	.....
All other industries	1914	28,383	3,326	2,699	4,348	8,637	7,590	1,409	184	190
	1909	24,649	931	1,085	2,706	5,403	11,760	1,217	337	1,210
Total for cities	1914	121,095	23,221	7,243	11,467	45,814	29,850	2,393	871	236
APPLETON	1914	2,144	61	122	163	106	1,173	131	369	19
ASHLAND	1914	797	134	6	33	39	362	.....	104	119
BELOIT	1914	3,527	7	2	203	3,065	169	61	.....	20
EAU CLAIRE	1914	2,315	66	10	118	553	1,483	82	3	.....
FOND DU LAC	1914	1,925	62	163	91	270	1,328	11	.....	.....
GREEN BAY	1914	2,724	149	74	203	679	1,321	298	.....	.....
JANESVILLE	1914	1,495	52	114	246	861	208	14	.....	.....
KENOSHA	1914	7,155	440	14	158	6,203	334	6	.....	.....
LA CROSSE	1914	3,340	733	200	703	817	848	38	1	.....
MADISON	1914	2,084	187	48	162	1,058	556	73	.....	.....
MANITOWOC	1914	2,012	56	105	773	313	761	.....	4	.....
MARINETTE	1914	2,112	202	15	8	180	1,537	1	160	9
MILWAUKEE	1914	61,839	14,713	5,465	5,804	23,555	10,482	1,583	230	7
OSHKOSH	1914	5,782	2,743	79	606	869	1,480	5	.....	.....
RACINE	1914	10,079	1,045	530	571	5,141	2,792	.....	.....	.....
SHEBOYGAN	1914	7,152	1,479	199	1,118	1,946	2,321	37	.....	52
SUPERIOR	1914	2,121	896	36	411	15	710	43	.....	10
WAUSAU	1914	2,492	196	61	96	144	1,985	10	.....	.....

The figures in this table, for the state as a whole and for the selected industries, show a tendency toward a shortening of the working day of wage earners. In 1909, 105,340, or nearly three-fifths of the total average number of wage earners for all industries combined, were employed in establishments where the prevailing hours of labor were 60 hours or more per week, whereas 76,707, or less than two-fifths, were so

employed in 1914. Among the separate industries, foundry and machine-shop products shows the most pronounced decrease in hours of labor. In 1909 only 63.6 per cent of the total number of wage earners were employed less than 60 hours per week, while in 1914 the proportion thus employed had increased to 83.9 per cent. A perceptible change in the same direction is shown for most of the industries.

In 1914, for all industries combined and a number of the important industries, the largest number of wage earners for any of the groups shown were employed in establishments in which the prevailing hours of labor were 60 per week. In the manufacture of hosiery and knit goods and in the foundry and machine-shop industry, the prevailing hours of labor were between 54 and 60 per week. In the repair shops of the steam-railroad companies 74.3 per cent of the wage earners were employed by establishments reporting 48 hours per week as the prevailing time of work, and in the printing and publishing industry 60.5 per cent of the wage earners were employed in establishments in the same group.

Of the combined total average number of wage earners, 121,095 for the 18 cities in 1914, 87,745, or 72.5 per cent, were in establishments where the prevailing hours were less than 60 per week. In most of the cities in the state, the largest number of wage earners were employed in establishments reporting 54 and 60 hours per week as the prevailing time of employment.

Location of establishments.—Table 12 shows, for 1914, 1909, and 1899, the extent to which the manufactures in Wisconsin were centralized in the cities having more than 10,000 inhabitants.

Table 12

	Census year.	Aggregate.	Cities having a population of 10,000 or over.								Districts outside of cities having a population of 10,000 or over.	
			Total.		10,000 to 25,000.		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	1914	.....	18	.....	9	.....	8	.....	1	.....	.....	.....
	1910	.....	18	.....	10	.....	7	.....	1	.....	.....	.....
	1900	.....	18	.....	13	.....	4	.....	1	.....	.....	.....
Population [1]	1914	2,446,716	835,277	34.1	145,932	6.0	269,756	11.0	419,589	17.1	1,611,439	65.9
	1910	2,333,860	752,948	32.3	160,061	6.9	219,030	9.4	373,857	16.0	1,580,912	67.7
	1900	2,069,042	599,845	29.0	197,158	9.5	117,372	5.7	285,315	13.8	1,469,197	71.0
Number of establishments	1914	9,104	3,457	38.0	672	7.4	1,057	11.6	1,728	19.0	5,647	62.0
	1909	9,721	3,330	34.2	688	7.1	878	9.0	1,764	18.1	6,391	65.7
	1899	7,841	2,700	34.4	811	10.3	470	6.0	1,419	18.1	5,141	65.6
Average number of wage earners	1914	194,310	121,095	62.3	18,819	9.7	40,437	20.8	61,839	31.8	73,215	37.7
	1909	182,583	113,662	62.3	24,466	13.4	29,694	16.3	59,502	32.6	68,921	37.7
	1899	137,525	82,056	59.7	25,944	18.9	14,892	10.8	41,220	30.0	55,469	40.3
Value of products	1914	$695,172,002	$422,301,023	60.7	$55,966,682	8.0	$142,779,199	20.5	$223,555,142	32.2	$272,870,979	39.3
	1909	590,305,538	364,736,784	61.8	73,322,285	12.4	83,090,869	14.1	208,323,630	35.3	225,568,754	38.2
	1899	326,752,878	194,671,599	59.6	49,548,271	15.2	34,269,226	10.5	110,854,102	33.9	132,081,279	40.4
Value added by manufacture	1914	277,756,928	185,835,975	66.9	22,990,386	8.3	64,166,382	23.1	98,679,207	35.5	91,920,953	33.1
	1909	243,948,955	159,063,857	65.2	30,451,355	12.5	40,110,295	16.4	88,502,207	36.3	84,885,098	34.8
	1899	141,057,485	88,677,429	62.9	23,127,463	16.4	14,389,564	10.2	51,160,402	36.3	52,380,056	37.1

[1] Census estimate of population for 1914.

In 1914, 60.7 per cent of the total value of manufactured products were reported from cities having over 10,000 inhabitants, and 62.3 per cent of the average wage earners in manufacturing establishments were employed in such cities. The figures indicate that, while very little relative change took place during the fifteen years, the manufacturing industries of the cities in question grew somewhat more rapidly than those of the districts outside. The group of cities having a population of 10,000 but less than 25,000 in 1914 shows a decrease in the value of products and average number of wage earners. This is caused by the population of the city of Kenosha increasing to such an extent that it was included with the cities having a population of 25,000 but less than 100,000 in 1914. There was only one city in the state, Milwaukee, that had a population of 100,000 and over. Of the total value of products for the state in 1914, 8 per cent was reported from nine cities having 10,000 but under 25,000 inhabitants, 20.5 per cent from the eight cities having 25,000 but under 100,000 inhabitants, and 32.2 per cent from Milwaukee.

The relative importance in manufactures of each of the 18 cities having more than 10,000 inhabitants, as measured by average number of wage earners and by value of products, in 1914, 1909, and 1904, is shown in Table 13. The cities are listed in the order of their importance as shown by value of products.

Every city, except Oshkosh, Fond du Lac, and Ashland, shows an increase in the value of products from 1909 to 1914, and for the five-year period 1904–1909 Ashland and Marinette were the only cities showing decreases. The greatest percentages of gain from 1909 to 1914 were 76.8 per cent in Racine and 77.3 per cent in Superior; the greatest from 1904 to 1909 was 87.5 per cent in Kenosha. Milwaukee, the largest and most important city in the state, shows an increase of 7.3 per cent in value of products and 3.9 per cent in the average number of wage earners from 1909 to 1914. The city reported 32.2 per cent of the

total value of products of the state in 1914 and employed 31.8 per cent of the total number of wage earners. One-third of the total value of the foundry and machine-shop products of the state, more than one-half of the value of the products for the leather and printing and publishing industries, two-thirds of the brewing industry, and the entire output of the millinery and lace goods were reported by Milwaukee. The city ranked twelfth among the cities of the United States in value of products in 1904 and tenth in 1909 and 1914.

Table 13

CITY.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1914	1900	1904	1914	1909	1904
Milwaukee	61,839	59,502	43,366	$223,555,142	$208,323,630	$137,994,965
Racine	10,079	8,381	6,504	43,632,384	24,672,669	16,458,965
Kenosha	7,155	6,449	4,354	28,341,156	23,181,672	12,362,600
Sheboygan	7,152	5,988	5,903	17,509,450	11,299,029	9,751,116
La Crosse	3,340	3,329	2,644	14,739,232	14,103,148	8,139,432
Oshkosh	5,782	5,778	4,840	13,889,936	14,739,252	8,652,462
Superior	2,121	1,847	1,343	11,662,566	6,574,457	6,356,981
Manitowoc	2,012	1,525	1,321	8,460,694	5,938,887	4,427,816
Appleton	2,144	2,125	2,486	7,557,673	6,734,405	6,672,457
Wausau	2,492	2,092	1,945	7,325,304	6,286,532	4,644,457
Beloit	3,527	2,986	2,471	6,927,601	5,885,601	4,485,224
Green Bay	2,724	2,579	2,111	6,797,505	6,235,209	4,873,027
Eau Claire	2,315	2,524	1,985	6,773,829	5,854,733	3,601,558
Fond du Lac	1,925	2,707	2,566	6,760,850	8,226,908	5,599,606
Madison	2,084	1,792	1,476	6,206,970	5,467,105	3,291,143
Janesville	1,495	1,451	1,348	5,659,226	5,155,731	3,846,038
Marinette	2,112	1,491	1,645	4,674,473	3,309,378	3,633,399
Ashland	797	1,116	1,361	1,827,032	2,748,438	4,210,365

The manufacture of paper and wood pulp was by far the most important manufacturing industry of Appleton for 1914 and 1909. The products of the foundries and machine shops for Beloit formed about 68 per cent of the total value of products for the city. The manufacture of lumber and other timber products was the most important industry in Ashland and Eau Claire. In Fond du Lac the tanning and currying of leather was the predominating industry, and in Green Bay the manufacture of paper and pulp.

In Janesville the manufacture of agricultural implements was the leading industry, as in 1909. The principal industries in Kenosha were the tanning, currying, and finishing of leather, and the manufacture of furniture, refrigerators, and automobiles; in La Crosse, flour mills and gristmills and the brewing industry; in Madison, the manufacture of electrical machinery, apparatus, and supplies, and foundry and machine-shop products; in Manitowoc, the aluminum ware and malt industries; in Marinette, the lumber and timber industry; in Oshkosh, the manufacture of matches, and lumber and planing-mill products; in Racine, the manufacture of agricultural implements, automobiles, including bodies and parts, food preparations, foundry and machine-shop products, and rubber goods; in Sheboygan, furniture and refrigerators, leather, tanned, curried, and finished, and the manufacture of plumbers' supplies; in Superior, flour mills and gristmills; in Wausau, the lumber and timber and flour-mill and gristmill industries.

Character of ownership.—Table 14 presents statistics concerning the character of ownership, or legal organization, of manufacturing enterprises. For all industries combined, for the state as a whole, comparative figures are given for 1914, 1909, and 1904; for selected industries, statistics for 1914 and 1909 are shown; and for individual cities the figures are for all industries combined and relate only to 1914. In order to avoid disclosing operations of individual establishments, it is necessary to omit several important industries from this table.

Table 14

INDUSTRY AND CITY.	Census 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.		
		Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
All industries	1914	4,446	2,523	2,135	194,310	11,462	172,909	9,939	5.9	89.0	5.1	$695,172,002	$54,000,553	$582,284,229	$58,887,220	7.8	83.8	8.5
	1909	4,975	2,422	2,324	182,583	14,256	156,027	12,300	7.8	85.5	6.7	590,305,538	53,714,983	471,360,437	65,230,118	9.1	79.8	11.1
	1904	4,420	1,981	2,157	151,391	15,224	119,697	16,470	10.1	79.1	10.8	411,139,681	43,609,849	310,912,592	56,617,240	10.6	75.6	13.8
Agricultural implements	1914	13	24	9	3,143	21	3,100	22	0.7	98.6	0.7	20,119,058	112,234	19,928,945	77,879	0.6	99.1	0.4
	1909	13	27	5	2,704	41	2,628	35	1.5	97.2	1.3	11,411,303	124,187	11,208,200	78,916	1.1	98.2	0.7
Automobiles, including bodies and parts.	1914	10	31	2	4,879	[1] 29	4,850	.....	0.6	99.4	.....	18,478,196	[1] 118,750	18,359,446	.....	0.6	99.4	.....
	1909	6	19	5	4,298	29	3,568	701	0.7	83.0	16.3	11,440,242	91,846	7,795,719	3,552,677	0.8	68.1	31.1
Boots and shoes, including findings.	1914	11	48	6	5,814	117	5,573	124	2.0	95.9	2.1	17,832,193	277,103	17,123,879	431,211	1.6	96.0	2.4
	1909	16	48	4	5,431	191	5,123	117	3.5	94.3	2.2	13,602,234	365,121	12,972,822	264,291	2.7	95.4	1.9
Bread and other bakery products.	1914	607	27	70	2,197	1,215	788	194	55.3	35.9	8.8	8,057,702	4,642,482	2,704,156	711,064	57.6	33.6	8.8
	1909	602	10	55	1,751	1,247	325	179	71.2	18.6	10.2	6,871,589	4,887,101	1,231,323	753,165	71.1	17.9	11.0
Butter, cheese, and condensed milk.	1914	1,129	253	1,049	3,717	874	1,355	1,488	23.5	36.5	40.0	72,858,592	22,849,459	20,068,099	29,941,034	31.4	27.5	41.1
	1909	1,242	283	1,105	2,863	769	808	1,286	26.9	28.2	44.9	53,843,249	19,332,700	10,438,592	24,071,957	35.9	19.4	44.7
Canning and preserving	1914	10	89	13	2,687	77	2,586	24	2.9	96.2	0.9	7,335,338	359,236	6,830,781	145,321	4.9	93.1	2.0
	1909	17	61	5	1,776	200	1,555	21	11.3	87.6	1.2	4,807,454	656,235	4,021,358	129,861	13.7	83.6	2.7
Carriages and wagons and materials.	1914	106	25	54	2,638	302	2,120	216	11.4	80.4	8.2	7,544,321	639,369	6,350,783	554,169	8.5	84.2	7.3
	1909	184	32	70	3,437	457	2,731	249	13.3	79.5	7.2	8,899,171	987,657	7,090,575	820,939	11.1	79.7	9.2
Cars and general shop construction and repairs by steam-railroad companies.	1914	.....	35	.....	9,011	.....	9,011	.....	.....	100.0	.....	10,920,886	.....	10,920,886	.....	.....	100.0	.....
	1909	.....	22	.....	8,994	.....	8,994	.....	.....	100.0	.....	14,332,152	.....	14,332,152	.....	.....	100.0	.....

[1] Includes the group "all others."

Table 14—Continued.

Industry and city.	Census 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.		
		Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
Clothing, mens', including shirts.	1914	16	31	12	3,584	190	2,933	461	5.3	81.8	12.9	$8,688,462	$147,423	$7,447,743	$1,093,296	1.7	85.7	12.6
	1909	53	31	10	4,252	739	3,039	474	17.4	71.5	11.1	9,405,184	443,847	7,874,838	1,086,499	4.7	83.7	11.6
Copper, tin, and sheet-iron products.	1914	56	30	25	3,372	186	3,005	181	5.5	89.1	5.4	10,202,355	495,032	9,246,486	460,837	4.9	90.6	4.5
	1909	49	26	30	2,780	170	2,380	230	6.1	85.6	8.3	7,136,453	434,887	6,117,785	583,781	6.1	85.7	8.2
Flour-mill and gristmill products.	1914	122	60	70	1,116	170	709	237	15.2	63.5	21.2	28,697,413	2,981,868	21,417,656	4,297,889	10.4	74.6	15.0
	1909	143	75	104	1,184	180	663	341	15.2	56.0	28.8	31,667,434	4,094,813	19,574,951	7,997,670	12.9	61.8	25.3
Foundry and machine-shop products.	1914	125	294	75	26,521	553	25,115	853	2.1	94.7	3.2	60,698,391	1,313,787	57,283,862	2,100,742	2.2	94.4	3.5
	1909	120	248	76	24,219	523	22,851	845	2.2	94.4	3.5	54,124,000	1,085,554	51,244,270	1,794,176	2.0	94.7	3.3
Furniture and refrigerators.	1914	27	80	7	11,792	280	11,405	107	2.4	96.7	0.9	22,586,531	488,660	21,853,922	243,949	2.2	96.8	1.1
	1909	24	81	9	11,118	342	10,580	196	3.1	95.2	1.8	18,655,535	465,550	17,808,053	381,932	2.5	95.5	2.0
Hosiery and knit goods	1914	21	41	6	6,244	55	6,070	119	0.9	97.2	1.9	13,292,305	101,369	12,962,360	228,576	0.8	97.5	1.7
	1909	22	36	3	4,282	97	4,166	19	2.3	97.3	0.4	7,843,389	119,081	7,662,599	61,709	1.5	97.7	0.8
Leather, tanned, curried, and finished.	1914	2	16	9	5,869	.....	5,087	[1] 782	.....	86.7	13.3	42,204,202	.....	37,214,155	[1] 4,990,047	.....	88.2	11.8
	1909	3	21	8	7,548	10	6,115	1,423	0.1	81.0	18.9	44,667,676	17,560	35,754,965	8,895,151	(2)	80.0	20.0
Liquors, malt	1914	27	88	17	5,414	156	5,160	98	2.9	95.3	1.8	40,884,284	940,266	39,323,705	620,313	2.3	96.2	1.5
	1909	38	74	24	5,061	224	4,713	124	4.4	93.1	2.5	32,125,919	1,013,956	30,565,935	546,028	3.2	95.1	1.7
Lumber and timber products.	1914	238	257	140	32,282	1,502	28,689	2,091	4.7	88.9	6.5	55,362,511	2,530,331	49,363,311	3,468,869	4.6	89.2	6.3
	1909	471	310	239	34,093	2,988	28,693	2,412	8.8	84.2	7.1	57,969,170	4,699,295	49,365,265	3,904,610	8.1	85.2	6.7
Malt	1914	1	22	2	637	.....	618	[1] 19	.....	97.0	3.0	15,533,339	.....	15,350,596	[1] 182,743	.....	98.8	1.2
	1909	2	20	3	456	.....	433	[1] 23	.....	95.0	5.0	9,597,440	.....	9,386,583	[1] 210,857	.....	97.8	2.2
Printing and publishing	1914	477	207	145	5,653	1,117	3,951	585	19.8	69.9	10.3	14,455,116	2,159,784	11,149,462	1,145,870	14.9	77.1	7.9
	1909	501	191	141	5,360	1,301	3,567	492	24.3	66.5	9.2	11,860,644	2,189,286	8,778,576	892,782	18.5	74.0	7.5
Slaughtering and meat packing.	1914	21	13	12	2,236	149	2,019	68	6.7	90.3	3.0	34,697,955	1,875,208	32,005,258	817,489	5.4	92.2	2.4
	1909	24	10	14	1,890	122	1,676	92	6.5	88.7	4.9	27,216,864	1,260,368	25,058,909	897,587	4.6	92.1	3.3
Total for cities	1914	1,627	1,356	474	121,095	6,139	110,479	4,477	5.1	91.2	3.7	422,301,023	18,375,692	385,009,681	18,915,650	4.4	91.2	4.5
Appleton	1914	49	44	14	2,144	127	1,939	78	5.9	90.4	3.6	7,557,673	340,782	7,035,648	181,243	4.5	93.1	2.4
Ashland	1914	15	16	6	797	32	742	23	4.0	93.1	2.9	1,827,032	71,841	1,679,527	75,664	3.9	91.9	4.1
Beloit	1914	17	21	12	3,527	45	3,347	135	1.3	94.9	3.8	6,927,601	116,534	6,375,662	435,405	1.7	92.0	6.3
Eau Claire	1914	39	43	12	2,315	114	2,174	27	4.9	93.9	1.2	6,773,829	446,253	6,216,047	111,529	6.6	91.8	1.6
Fond du Lac	1914	49	33	18	1,925	126	1,730	69	6.5	89.9	3.6	6,760,850	334,600	6,215,596	210,654	4.9	91.9	3.1
Green Bay	1914	44	47	13	2,724	253	2,371	100	9.3	87.0	3.7	6,797,505	764,625	5,773,758	259,122	11.2	84.9	3.8
Janesville	1914	24	35	12	1,495	59	1,378	58	3.9	92.2	3.9	5,659,226	194,504	5,273,028	191,694	3.4	93.2	3.4
Kenosha	1914	38	23	14	7,155	124	6,981	50	1.7	97.6	0.7	28,341,156	346,186	27,826,606	168,364	1.2	98.2	0.6
La Crosse	1914	74	65	28	3,340	255	2,944	141	7.6	88.1	4.2	14,739,232	751,751	13,449,687	537,794	5.1	91.3	3.6
Madison	1914	35	57	30	2,084	172	1,782	130	8.3	85.5	6.2	6,206,970	650,593	4,958,527	597,850	10.5	79.9	9.6
Manitowoc	1914	37	28	12	2,012	193	1,759	60	9.6	87.4	3.0	8,460,694	398,484	7,794,614	267,596	4.7	92.1	3.2
Marinette	1914	26	20	5	2,112	67	2,007	38	3.2	95.0	1.8	4,674,473	185,365	4,391,438	97,670	4.0	93.9	2.1
Milwaukee	1914	901	619	208	61,839	3,430	55,628	2,781	5.5	90.0	4.5	223,555,142	10,715,786	200,989,978	11,849,378	4.8	89.9	5.3
Oshkosh	1914	70	64	23	5,782	270	5,254	258	4.7	90.9	4.5	13,889,936	638,894	12,420,043	830,999	4.6	89.4	6.0
Racine	1914	65	95	29	10,079	304	9,533	242	3.0	94.6	2.4	43,632,384	1,174,533	41,368,152	1,089,699	2.7	94.8	2.5
Sheboygan	1914	49	70	13	7,152	283	6,779	90	4.0	94.8	1.2	17,509,450	576,760	16,745,267	187,423	3.3	95.6	1.1
Superior	1914	54	39	18	2,121	159	1,870	92	7.5	88.2	4.3	11,662,566	422,138	9,629,840	1,610,588	3.6	82.6	13.8
Wausau	1914	41	37	7	2,492	126	2,261	105	5.1	90.7	4.2	7,325,304	246,063	6,866,263	212,978	3.4	93.7	2.9

[1] Includes the group "individuals."

[2] Less than one-tenth of 1 per cent.

For all industries combined, this table shows a decrease in individual and "all other" forms of ownership, but an increase in corporations, in the number of establishments, average number of wage earners, and value of products. While the establishments operated by corporations at the census of 1914 formed only 27.7 per cent of the total number of establishments, they reported 83.8 per cent of the total value of manufactured products. In 1909 such establishments constituted 24.9 per cent of the total number reported and 79.8 per cent of the total value of products. In both census periods corporations controlled about four-fifths of the manufacturing activities of the state, as measured either by average number of wage earners or value of products. In 12 of the 20 industries shown separately in this table, a majority of the establishments were under corporate ownership. The bread and bakery and the butter, cheese, and condensed-milk industries were the only two in which corporations did not report the greater part of the products, the establishments in the former industry being operated mostly by individuals, and in the latter group of industries by individuals or by corporative associations. In each of the 18 cities reported separately, practically the same condition exists as in the state. The total for these cities shows, both for average number of wage earners and for value of products, 91.2 per cent reported for establishments under corporate ownership.

Size of establishments.—The tendency for manufacturing to become concentrated in large establishments is indicated by the statistics given in Table 15.

For 1914, 1,008 establishments, or 11 per cent of the total number in the state, each reported products exceeding $100,000 in value, as compared with 879, or 9.1 per cent of the total, for 1909, and 679, or 8 per cent, for 1904. For 1914 these establishments reported 80.4 per cent of the total average number of wage earners

and of the total value of products. In the same year the small establishments—those having products of less than $5,000 in value—although representing 28.9 per cent of the total number of establishments, reported only nine-tenths of 1 per cent of the total value of products. The establishments having products valued at $100,000 and over reported an increased proportion of the total value of products at each successive census, from 73.5 per cent in 1904 to 77.2 per cent in 1909, and 80.4 per cent in 1914.

Table 15

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904
All classes	9,104	9,721	8,558	194,310	182,583	151,391	$695,172,002	$590,305,538	$411,139,681	$277,756,928	$243,948,955	$183,884,589
Less than $5,000	2,631	3,071	2,955	2,779	3,458	3,598	6,527,110	7,615,812	7,739,277	3,819,033	4,457,314	4,068,563
$5,000 to $20,000	3,213	3,707	3,355	9,109	11,417	11,220	35,232,417	39,712,619	33,425,147	11,825,632	13,837,468	12,365,583
$20,000 to $100,000	2,252	2,064	1,569	26,189	26,965	26,882	94,373,593	86,957,666	67,778,742	32,216,841	32,235,366	28,705,365
$100,000 to $1,000,000	896	793	621	90,601	88,003	78,326	256,045,389	227,934,734	177,248,223	107,330,339	102,700,393	81,687,022
$1,000,000 and over	112	86	58	65,632	52,740	31,365	302,993,493	228,084,707	124,948,292	122,565,083	90,718,414	57,058,056
	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	28.9	31.6	34.5	1.4	1.9	2.4	0.9	1.3	1.9	1.4	1.8	2.2
$5,000 to $20,000	35.3	38.1	39.2	4.7	6.3	7.4	5.1	6.7	8.1	4.3	5.7	6.7
$20,000 to $100,000	24.7	21.2	18.3	13.5	14.8	17.8	13.6	14.7	16.5	11.6	13.2	15.6
$100,000 to $1,000,000	9.8	8.2	7.3	46.6	48.2	51.7	36.8	38.6	43.1	38.6	42.1	44.4
$1,000,000 and over	1.2	0.9	0.7	33.8	28.9	20.7	43.6	38.6	30.4	44.1	37.2	31.0

Table 16 gives, for 1914 and 1909, for 14 of the more important industries, a classification of establishments, wage earners, value of products, and value added by manufacture, similar to that presented in Table 15, for all industries combined.

Table 16

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
	1914	1909	Per cent distribution.		1914	1909	Per cent distribution.		1914	1909	Per cent distribution.		1914	1909	Per cent distribution.	
			1914	1909			1914	1909			1914	1909			1914	1909
AGRICULTURAL IMPLEMENTS	46	45	100.0	100.0	3,143	2,704	100.0	100.0	$20,119,058	$11,411,303	100.0	100.0	$11,443,424	$7,473,967	100.0	100.0
Less than $5,000	16	13	34.8	28.9	16	11	0.5	0.4	41,058	33,741	0.2	0.3	22,632	20,192	0.2	0.3
$5,000 to $20,000	11	9	23.9	20.0	51	39	1.6	1.4	140,183	108,374	0.7	0.9	68,723	49,214	0.6	0.7
$20,000 to $100,000	7	13	15.2	28.9	100	212	3.2	7.8	341,337	597,647	1.7	5.2	171,375	320,241	1.5	4.3
$100,000 and over[1]	12	10	26.1	22.2	2,976	2,442	94.7	90.3	19,596,480	10,671,541	97.4	93.5	11,180,694	7,084,320	97.7	94.8
BOOTS ABD SHOES, INCLUDING FINDINGS	65	68	100.0	100.0	5,814	5,431	100.0	100.0	17,832,193	13,602,234	100.0	100.0	5,709,760	4,849,398	100.0	100.0
Less than $5,000	6	9	9.2	13.2	7	12	0.1	0.2	24,068	21,115	0.1	0.2	12,884	10,606	0.2	0.2
$5,000 to $20,000	9	9	13.8	13.2	41	55	0.7	1.0	81,606	117,543	0.5	0.9	28,733	41,704	0.5	0.9
$20,000 to $100,000	16	18	24.6	26.5	316	503	5.4	9.3	839,044	957,321	4.7	7.0	302,353	333,043	5.3	6.9
$100,000 to $1,000,000	30	29	46.2	42.6	3,025	3,272	52.0	60.2	8,961,633	7,719,025	50.3	56.7	1,776,464	2,769,754	31.1	57.1
$1,000,000 and over	4	3	6.2	4.4	2,425	1,589	41.7	29.3	7,925,842	4,787,230	44.4	35.2	3,589,326	1,694,291	62.9	34.9
BUTTER, CHEESE, AND CONDENSED MILK	2,431	2,630	100.0	100.0	3,717	2,863	100.0	100.0	72,858,592	53,843,249	100.0	100.0	7,533,054	5,837,619	100.0	100.0
Less than $5,000	113	217	4.6	8.2	45	78	1.2	2.7	386,369	750,024	0.5	1.4	35,591	99,094	0.5	1.7
$5,000 to $20,000	1,305	1,645	53.7	62.5	904	1,124	24.3	39.3	16,198,515	19,089,387	22.2	35.5	1,475,887	2,192,013	19.6	37.5
$20,000 to $100,000	923	723	38.0	27.5	1,418	1,214	38.1	42.4	32,903,226	26,172,283	45.2	48.6	2,892,022	2,419,293	38.4	41.4
$100,000 and over[1]	90	45	3.7	1.7	1,350	447	36.3	15.6	23,370,482	7,831,555	32.1	14.5	3,129,554	1,127,219	41.5	19.3
CLOTHING, MEN'S, INCLUDING SHIRTS	59	94	100.0	100.0	3,584	4,252	100.0	100.0	8,688,462	9,405,184	100.0	100.0	3,694,621	3,956,977	100.0	100.0
Less than $5,000	6	20	10.2	21.3	37	79	1.0	1.9	17,547	46,900	0.2	0.5	13,799	40,839	0.4	1.0
$5,000 to $20,000	15	39	25 4	41.5	232	674	6.5	15.9	183,788	380,492	2.1	4.0	122,540	301,658	3.3	7.6
$20,000 to $100,000	18	14	30.5	14.9	416	440	11.6	10.3	723,788	643,130	8.3	6.8	270,030	320,914	7.3	8.1
$100,000 and over[1]	20	21	33.9	22.3	2,899	3,059	80.9	71.9	7,763,339	8,334,662	89.4	88.6	3,288,252	3,293,566	89.0	83.2
COPPER, TIN, AND SHEET-IRON PRODUCTS	111	105	100.0	100.0	3,372	2,780	100.0	100.0	10,202,355	7,136,453	100.0	100.0	4,619,026	2,480,265	100.0	100.0
Less than $5,000	34	29	30.6	27.6	41	39	1.2	1.4	90,801	74,809	0.9	1.0	56,466	45,800	1.2	1.8
$5,000 to $20,000	46	49	41.4	46.7	164	233	4.9	8.4	458,403	568,514	4.5	8.0	254,258	289,172	5.5	11.7
$20,000 to $100,000	21	17	18.9	16.2	276	240	8.2	8.6	778,894	729,241	7.6	10.2	363,438	315,131	7.9	12.7
$100,000 to $1,000,000	6	7	5.4	6.7	1,391	605	41.3	21.8	1,382,117	1,295,137	13.5	18.1	513,877	473,811	11.1	19.1
$1,000,000 and over	4	3	3.6	2.9	1,500	1,663	44.5	59.8	7,492,140	4,468,752	73.4	62.6	3,430,987	1,356,351	74.3	54.7
FLOUR-MILL AND GRIST-MILL PRODUCTS	252	322	100.0	100.0	1,116	1,184	100.0	100.0	28,697,413	31,667,434	100.0	100.0	3,717,512	4,629,206	100.0	100.0
Less than $5,000	22	16	8.7	5.0	15	6	1.3	0.5	66,650	46,736	0.2	0.1	10,782	7,996	0.3	0.2
$5,000 to $20,000	84	92	33.3	28.6	92	80	8.2	6.8	996,683	1,180,087	3.5	3.7	162,138	197,852	4.4	4.3
$20,000 to $100,000	115	180	45.6	55.9	273	352	24.5	29.7	4,689,023	7,731,494	16.3	24.4	564,332	1,150,910	15.2	24.9
$100,000 to $1,000,000	25	27	9.9	8.4	237	294	21.2	24.8	5,895,537	6,579,875	20.5	20.8	784,924	783,233	21.1	16.9
$1,000,000 and over	6	7	2.4	2.2	499	452	44.7	38.2	17,049,520	16,129,242	59.4	50.9	2,195,336	2,489,215	59.1	53.8

[1] Includes the group "$1,000,000 and over."

Table 16—Continued.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
	1914	1909	Per cent distribution. 1914	Per cent distribution. 1909	1914	1909	Per cent distribution. 1914	Per cent distribution. 1909	1914	1909	Per cent distribution. 1914	Per cent distribution. 1909	1914	1909	Per cent distribution. 1914	Per cent distribution. 1909
FOUNDRY AND MACHINE-SHOP PRODUCTS	494	444	100.0	100.0	26,521	24,219	100.0	100.0	$60,698,391	$54,124,000	100.0	100.0	$32,536,506	$31,590,264	100.0	100.0
Less than $5,000	119	122	24.1	27.5	142	152	0.5	0.6	273,795	311,892	0.5	0.6	185,502	209,464	0.6	0.7
$5,000 to $20,000	119	105	24.1	23.6	585	626	2.2	2.6	1,260,018	1,153,419	2.1	2.1	748,811	736,282	2.3	2.3
$20,000 to $100,000	154	135	31.2	30.4	3,291	2,962	12.4	12.2	7,554,364	6,346,733	12.4	11.7	4,131,403	3,695,261	12.7	11.7
$100,000 to $1,000,000	92	73	18.6	16.4	12,085	10,686	45.6	44.1	25,952,826	22,159,536	42.8	40.9	14,388,546	12,331,491	44.2	39.0
$1,000,000 and over	10	9	2.0	2.0	10,418	9,793	39.3	40.4	25,657,388	24,152,420	42.3	44.6	13,082,244	14,617,766	40.2	46.3
FURNITURE AND REFRIGERATORS	114	114	100.0	100.0	11,792	11,118	100.0	100.0	22,586,531	18,655,535	100.0	100.0	11,944,523	9,860,222	100.0	100.0
Less than $5,000	13	10	11.4	8.8	19	13	0.2	0.1	29,028	28,915	0.1	0.2	16,448	19,082	0.1	0.2
$5,000 to $20,000	16	17	14.0	14.9	91	145	0.8	1.3	171,134	208,549	0.8	1.1	101,241	126,600	0.8	1.3
$20,000 to $100,000	41	45	36.0	39.5	1,158	1,601	9.8	14.4	2,117,817	2,393,216	9.4	12.8	1,115,414	1,388,105	9.3	14.1
$100,000 to $1,000,000	41	41	36.0	36.0	7,150	[1] 9,359	60.6	84.2	12,242,227	[1] 16,024,855	54.2	85.9	6,736,380	[1] 8,326,435	56.4	84.4
$1,000,000 and over	3	1	2.6	0.8	3,374	.....	28.6	.....	8,026,325	.....	35.5	.....	3,975,040	.....	33.3	.....
HOSIERY AND KNIT GOODS	68	61	100.0	100.0	6,244	4,282	100.0	100.0	13,292,305	7,843,389	100.0	100.0	6,267,073	3,956,193	100.0	100.0
Less than $5,000	20	18	29.4	29.5	31	32	0.5	0.7	37,546	40,545	0.3	0.5	19,574	20,383	0.3	0.5
$5,000 to $20,000	9	10	13.2	16.4	84	84	1.3	2.0	119,485	106,123	0.9	1.4	58,662	53,118	0.9	1.3
$20,000 to $100,000	20	13	29.4	21.3	732	467	11.7	10.9	1,120,643	623,866	8.4	8.0	529,323	323,529	8.4	8.3
$100,000 to $1,000,000	15	18	22.1	29.5	2,068	[1] 3,699	33.1	86.4	4,379,865	[1] 7,072,855	32.9	90.2	1,788,732	[1] 3,559,163	28.5	90.0
$1,000,000 and over	4	2	5.9	3.3	3,329	.....	53.3	.....	7,634,766	.....	57.4	.....	3,870,782	.....	61.8	.....
LEATHER, TANNED, CURRIED, AND FINISHED	27	32	100.0	100.0	5,869	7,548	100.0	100.0	42,204,202	44,667,676	100.0	100.0	9,151,016	9,839,091	100.0	100.0
$5,000 to $20,000	3	6	11.1	18.8	21	[2] 60	0.4	0.8	30,397	[2] 171,551	0.1	0.4	14,164	[2] 46,192	0.2	0.5
$20,000 to $100,000	3	2	11.1	6.2	54	.....	0.9	.....	147,267	.....	0.3	.....	41,770	.....	0.5	.....
$100,000 to $1,000,000	14	13	51.9	40.6	858	824	14.6	10.9	7,814,375	5,577,590	18.5	12.5	1,789,554	1,128,010	19.6	11.5
$1,000,000 and over	7	11	25.9	34.4	4,936	6,664	84.1	88.3	34,212,163	38,918,535	81.1	87.1	7,305,528	8,664,889	79.8	88.1
LIQUORS, MALT	132	136	100.0	100.0	5,414	5,061	100.0	100.0	40,884,284	32,125,919	100.0	100.0	27,181,523	24,228,235	100.0	100.0
Less than $5,000	4	5	3.0	3.7	4	4	0.1	0.1	7,970	16,273	(3)	0.1	5,511	10,338	(3)	(3)
$5,000 to $20,000	28	37	21.2	27.2	88	119	1.6	2.4	357,060	430,469	0.9	1.3	231,206	299,072	0.9	1.2
$20,000 to $100,000	60	58	45.5	42.6	585	525	10.8	10.4	2,999,804	2,547,394	7.3	7.9	1,923,891	1,824,832	7.1	7.5
$100,000 to $1,000,000	33	31	25.0	22.8	1,053	1,167	19.4	23.1	7,794,636	7,928,183	19.1	24.7	5,246,476	5,812,795	19.3	24.0
$1,000,000 and over	7	5	5.3	3.7	3,684	3,246	68.0	64.1	29,724,814	21,203,600	72.7	66.0	19,774,439	16,281,198	72.7	67.2
LUMBER AND TIMBER PRODUCTS	635	1,020	100.0	100.0	32,282	34,093	100.0	100.0	55,362,511	57,969,170	100.0	100.0	29,894,018	32,381,700	100.0	100.0
Less than $5,000	203	409	32.0	40.1	344	718	1.1	2.1	455,155	901,849	0.8	1.6	304,639	636,325	1.0	2.0
$5,000 to $20,000	150	291	23.6	28.5	1,000	1,979	3.1	5.8	1,579,342	2,972,757	2.9	5.1	895,667	1,807,194	3.0	5.6
$20,000 to $100,000	156	190	24.6	18.6	4,163	5,971	12.9	17.5	7,161,766	8,562,021	12.9	14.8	3,733,965	4,881,382	12.5	15.1
$100,000 to $1,000,000	119	122	18.7	12.0	21,348	20,632	66.1	60.5	35,560,743	34,655,747	64.2	59.8	19,152,177	19,340,702	64.1	59.7
$1,000,000 and over	7	8	1.1	0.8	5,427	4,793	16.8	14.1	10,605,505	10,876,796	19.2	18.8	5,807,570	5,716,097	19.4	17.7
PRINTING AND PUBLISHING	829	833	100.0	100.0	5,653	5,360	100.0	100.0	14,455,116	11,860,644	100.0	100.0	9,607,841	8,474,588	100.0	100.0
Less than $5,000	478	493	57.7	59.2	644	705	11.4	13.2	1,216,037	1,212,110	8.4	10.2	927,770	934,731	9.7	11.0
$5,000 to $20,000	229	233	27.6	28.0	1,136	1,231	20.1	23.0	2,145,790	2,116,030	14.8	17.8	1,542,836	1,584,241	16.1	18.7
$20,000 to $100,000	86	82	10.4	9.8	1,560	1,614	27.6	30.1	3,805,512	3,553,981	26.3	30.0	2,553,173	2,563,239	26.6	30.2
$100,000 and over	36	25	4.3	3.0	2,313	1,810	40.9	33.8	7,287,777	4,978,523	50.4	42.0	4,584,062	3,392,377	47.7	40.0
SLAUGHTERING AND MEAT PACKING	46	48	100.0	100.0	2,236	1,890	100.0	100.0	34,697,955	27,216,864	100.0	100.0	4,157,115	3,813,429	100.0	100.0
Less than $5,000	7	11	15.2	22.9	5	11	0.2	0.6	19,268	32,508	0.1	0.1	7,553	9,366	0.2	0.2
$5,000 to $20,000	5	10	10.9	20.8	7	22	0.3	1.2	55,792	131,086	0.2	0.5	17,010	32,378	0.4	0.8
$20,000 to $100,000	18	11	39.1	22.9	70	43	3.1	2.3	876,517	597,963	2.5	2.2	143,825	115,264	3.5	3.0
$100,000 to $1,000,000	12	12	26.1	25.0	315	336	14.1	17.8	3,931,566	3,204,495	11.3	11.8	646,070	653,015	15.5	17.1
$1,000,000 and over	4	4	8.7	8.3	1,839	1,478	82.2	78.2	29,814,812	23,250,812	85.9	85.4	3,342,657	3,003,406	80.4	78.8

[1] Includes the group "$1,000,000 and over." [2] Includes the group "$20,000 to $100,000." [3] Less than one-tenth of 1 per cent.

The industries selected for presentation in the above table reflect the same condition as that shown for all industries combined, namely, a concentration into large establishments, those with products valued at $100,000 and over. In the leather industry 99.6 per cent of the value of products was reported by establishments in this class. The remainder of the industries, with the exception of butter, cheese, and condensed milk and printing and publishing, each reported more than 75 per cent of the total value of products as being the output of such establishments. For 1914, as compared with 1909, only one industry, foundry and machine shops, shows a decrease in the proportion which this class formed of the total value of products. Comparison of the small establishments—those with products of less than $5,000—for the same period, shows an increase in the proportion of output for 1914 in only one industry, flour-mills and gristmills. The largest proportion of manufactures produced by this class in 1914 was reported by the printing and publishing industry, 8.4 per cent of the value of products, each of the other industries reporting less than 1 per cent.

Table 17 presents, for 1914, for all industries combined in each of the 18 cities having more than 10,000 inhabitants, statistics similar to those given in Table 15 for the state as a whole.

In the cities the same condition is found that prevails throughout the state, namely, a preponderance as to number of wage earners, value of products, and

value added by manufacture for establishments having products valued at $100,000 and over. The highest percentages of total value of products reported by establishments in this class, 94.9 per cent and 92.5 per cent, appear for Kenosha and Racine, respectively; and the lowest, 68.3 per cent, is shown in Madison.

Table 17

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.
Appleton	107	2,144	100.0	$7,557,673	100.0	$2,797,179	100.0
Less than $5,000	32	35	1.6	76,258	1.0	46,645	1.7
$5,000 to $20,000	35	183	8.5	368,075	4.9	210,830	7.5
$20,000 to $100,000	22	405	18.9	1,050,352	13.9	547,657	19.6
$100,000 and over	18	1,521	70.9	6,062,988	80.2	1,992,047	71.2
Ashland	37	797	100.0	1,827,032	100.0	749,606	100.0
Less than $5,000	11	10	1.3	25,274	1.4	12,577	1.7
$5,000 to $20,000	16	66	8.3	182,000	10.0	96,338	12.9
$20,000 to $100,000	4	139	17.4	349,676	19.1	159,327	21.2
$100,000 and over	6	582	73.0	1,270,082	69.5	481,364	64.2
Beloit	50	3,527	100.0	6,927,601	100.0	3,914,600	100.0
Less than $5,000	16	10	0.3	20,699	0.3	12,921	0.3
$5,000 to $20,000	9	53	1.5	106,999	1.5	73,855	1.9
$20,000 to $100,000	13	270	7.6	690,886	10.0	351,922	9.0
$100,000 and over [1]	12	3,194	90.6	6,109,017	88.2	3,475,902	88.8
Eau Claire	94	2,315	100.0	6,773,829	100.0	2,566,270	100.0
Less than $5,000	31	33	1.4	83,260	1.2	48,835	1.9
$5,000 to $20,000	27	112	4.8	249,818	3.7	111,270	4.3
$20,000 to $100,000	21	364	15.7	931,353	13.7	456,697	17.8
$100,000 and over [1]	15	1,806	78.0	5,509,398	81.3	1,949,468	76.0
Fond du Lac	100	1,925	100.0	6,760,850	100.0	2,141,994	100.0
Less than $5,000	45	46	2.4	109,885	1.6	61,232	2.9
$5,000 to $20,000	19	72	3.7	191,361	2.8	77,014	3.6
$20,000 to $100,000	25	438	22.8	1,069,287	15.8	570,777	26.6
$100,000 and over [1]	11	1,369	71.1	5,390,317	79.7	1,422,971	66.9
Green Bay	104	2,724	100.0	6,797,505	100.0	2,737,511	100.0
Less than $5,000	32	49	1.8	95,966	1.4	57,189	2.1
$5,000 to $20,000	20	98	3.6	181,439	2.7	107,541	3.9
$20,000 to $100,000	36	662	24.3	1,794,506	26.4	762,395	27.8
$100,000 and over	16	1,915	70.3	4,725,594	69.5	1,810,386	66.1
Janesville	71	1,495	100.0	5,659,226	100.0	2,592,972	100.0
Less than $5,000	15	16	1.1	43,216	0.8	26,487	1.0
$5,000 to $20,000	24	101	6.7	231,565	4.1	141,128	5.4
$20,000 to $100,000	15	399	26.7	867,298	15.3	428,604	16.5
$100,000 and over	17	979	65.5	4,517,147	79.8	1,996,753	77.0
Kenosha	75	7,155	100.0	28,341,156	100.0	9,073,731	100.0
Less than $5,000	21	21	0.3	58,064	0.2	36,713	0.4
$5,000 to $20,000	30	94	1.3	296,623	1.0	153,030	1.7
$20,000 to $100,000	11	360	5.0	1,088,939	3.8	584,973	6.4
$100,000 to $1,000,000	8	1,256	17.6	3,147,706	11.1	1,294,551	14.3
$1,000,000 and over	5	5,424	75.8	23,749,824	83.8	7,004,464	77.2
La Crosse	167	3,340	100.0	14,739,232	100.0	6,925,106	100.0
Less than $5,000	47	52	1.6	123,054	0.8	76,687	1.1
$5,000 to $20,000	53	217	6.5	508,813	3.5	304,783	4.4
$20,000 to $100,000	45	790	23.6	2,050,023	13.9	999,703	14.4
$100,000 to $1,000,000	19	1,827	54.7	5,740,671	38.9	2,565,921	37.1
$1,000,000 and over	3	454	13.6	6,316,671	42.9	2,978,012	43.0
Madison	122	2,084	100.0	$6,206,970	100.0	$3,412,398	100.0
Less than $5,000	42	30	1.4	106,551	1.7	76,208	2.2
$5,000 to $20,000	31	116	5.6	367,691	5.9	228,170	6.7
$20,000 to $100,000	31	494	23.7	1,495,702	24.1	728,637	21.4
$100,000 and over	18	1,444	69.3	4,237,026	68.3	2,379,383	69.7
Manitowoc	77	2,012	100.0	8,460,694	100.0	3,102,778	100.0
Less than $5,000	24	20	1.0	57,112	0.7	35,800	1.1
$5,000 to $20,000	24	138	6.9	240,866	2.8	148,381	4.8
$20,000 to $100,000	17	318	15.8	930,153	11.0	397,054	12.8
$100,000 to $1,000,000	9	902	44.8	2,036,666	24.1	1,023,730	33.0
$1,000,000 and over	3	634	31.5	5,195,897	61.4	1,497,813	48.3
Marinette	51	2,112	100.0	4,674,473	100.0	2,329,662	100.0
Less than $5,000	17	22	1.0	42,322	0.9	27,616	1.2
$5,000 to $20,000	13	52	2.5	124,615	2.7	68,896	3.0
$20,000 to $100,000	8	135	6.4	359,514	7.7	153,599	6.6
$100,000 and over [1]	13	1,903	90.1	4,148,022	88.7	2,079,551	89.3
Milwaukee	1,728	61,839	100.0	223,555,142	100.0	98,679,207	100.0
Less than $5,000	559	530	0.9	1,381,139	0.6	815,842	0.8
$5,000 to $20,000	514	2,167	3.5	5,044,796	2.3	2,819,382	2.9
$20,000 to $100,000	364	6,202	10.0	15,833,833	7.1	7,959,233	8.1
$100,000 to $1,000,000	246	22,858	37.0	70,470,200	31.5	30,222,317	30.6
$1,000,000 and over	45	30,082	48.6	130,825,174	58.5	56,862,433	57.6
Oshkosh	157	5,782	100.0	13,889,936	100.0	7,082,946	100.0
Less than $5,000	36	39	0.7	96,240	0.7	61,229	0.9
$5,000 to $20,000	57	277	4.8	578,952	4.2	320,766	4.5
$20,000 to $100,000	39	672	11.6	1,787,050	12.9	793,920	11.2
$100,000 to $1,000,000	22	2,277	39.4	6,042,366	43.5	2,872,295	40.6
$1,000,000 and over	3	2,517	43.5	5,385,328	38.8	3,034,726	42.8
Racine	189	10,079	100.0	43,632,384	100.0	23,370,865	100.0
Less than $5,000	38	34	0.3	102,545	0.2	63,282	0.3
$5,000 to $20,000	55	225	2.2	570,570	1.3	332,607	1.4
$20,000 to $100,000	54	1,158	11.5	2,635,345	6.0	1,482,282	6.3
$100,000 to $1,000,000	36	4,218	41.8	11,766,710	27.0	5,828,119	24.9
$1,000,000 and over	6	4,444	44.1	28,557,214	65.4	15,664,575	67.0
Sheboygan	132	7,152	100.0	17,509,450	100.0	8,347,465	100.0
Less than $5,000	29	37	0.5	84,133	0.5	47,161	0.6
$5,000 to $20,000	41	210	2.9	469,074	2.7	266,521	3.2
$20,000 to $100,000	36	1,096	15.3	1,813,378	10.4	884,153	10.6
$100,000 to $1,000,000	22	3,865	54.0	7,667,603	43.8	3,684,439	44.1
$1,000,000 and over	4	1,944	27.2	7,475,262	42.7	3,465,191	41.5
Superior	111	2,121	100.0	11,662,566	100.0	3,216,360	100.0
Less than $5,000	40	35	1.6	89,728	0.8	51,807	1.6
$5,000 to $20,000	39	152	7.2	416,958	3.6	243,617	7.6
$20,000 to $100,000	15	272	12.8	658,842	5.6	336,953	10.5
$100,000 and over [1]	17	1,662	78.4	10,497,038	90.0	2,583,983	80.3
Wausau	85	2,492	100.0	7,325,304	100.0	2,795,325	100.0
Less than $5,000	31	52	2.1	85,583	1.2	55,578	2.0
$5,000 to $20,000	22	115	4.6	209,113	2.8	121,892	4.4
$20,000 to $100,000	13	362	14.5	653,215	8.9	353,126	12.6
$100,000 and over [1]	19	1,963	78.8	6,377,393	87.1	2,264,729	81.0

[1] Includes the group "$1,000,000 and over."

Table 18 shows the size of establishment in 1914 as measured by the number of wage earners employed, for all industries combined, for 31 of the more important industries individually, and for each of the 18 cities having more than 10,000 inhabitants.

Table 19 presents, for 1914, percentages based on the figures in Table 18, and for 1909, similar percentages for all industries and for individual industries in the state as a whole.

Of the total number of establishments for all industries in the state combined, 1,234, or 13.6 per cent, employed no wage earners in 1914. These are small establishments and for the majority of them the work is done by the proprietors, firm members, or persons classed as salaried employees. For some of them the number of wage earners employed was so small and the term of employment so short that in computing the average as described in the "Explanation of terms" the number was less than 1 person and the establishment was classed as one having "no wage earners."

The establishments employing more than 100 wage earners, although representing only 4.4 per cent of the number in the state, gave employment to 67.1 per cent of the total number of wage earners. For 1909 the establishments in this class formed 3.9 per cent of the total and gave employment to 64.5 per cent of the wage earners.

Table 18

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING—																
			No wage earners.	1 to 5 wage earners.		6 to 20 wage earners.		21 to 50 wage earners.		51 to 100 wage earners.		101 to 250 wage earners.		251 to 500 wage earners.		501 to 1,000 wage earners.		Over 1,000 wage earners.	
	Establishments.	Wage earners (average number).	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	9,104	194,310	1,234	5,369	9,732	1,234	14,168	569	18,621	295	21,420	247	39,659	93	32,139	48	32,310	15	26,261
Agricultural implements	46	3,143	3	22	41	8	91	4	148	4	277	2	327	2	678	....	.....	1	1,581
Automobiles, including bodies and parts	43	4,889	.....	16	28	12	154	5	181	1	72	4	517	3	1,333	....	.....	2	2,604
Boots and shoes, including findings	65	5,814	1	14	37	8	114	15	484	10	719	13	2,035	2	831	1	571	1	1,023
Boxes, fancy and paper	18	1,319	.....	.....	.....	10	145	2	63	1	78	3	357	2	676	....	.....	....	.....
Brass, bronze, and copper products	30	1,122	1	11	28	9	95	6	197	2	159	....	.....	....	.....	1	643	....	.....
Bread and other bakery products	704	2,197	121	519	998	53	510	7	189	2	189	2	311	....	.....	....	.....	....	.....
Butter, cheese, and condensed milk	2,431	3,717	372	1,990	2,353	51	484	13	430	4	262	1	188	....	.....	....	.....	....	.....
Canning and preserving	112	2,687	5	22	46	44	557	28	849	10	669	3	566	....	.....	....	.....	....	.....
Carriages and wagons and materials	185	2,638	25	116	241	27	303	8	275	4	269	3	574	1	424	1	552	....	.....
Cars and general shop construction and repairs by steam-railroad companies	35	9,011	.....	5	13	5	67	3	134	5	409	11	1,650	2	531	3	1,803	1	4,404
Clothing, men's, including shirts	59	3,584	1	7	23	20	246	13	495	12	844	4	829	1	298	1	849	....	.....
Confectionery	55	2,242	6	22	49	8	86	11	375	3	217	2	334	2	572	1	609	....	.....
Copper, tin, and sheet-iron products	111	3,372	6	70	172	23	245	6	185	.....	.....	2	348	1	410	3	2,012	....	.....
Electrical machinery, apparatus, and supplies	29	2,115	1	5	8	9	127	7	264	4	270	1	155	....	.....	2	1,291	....	.....
Flour-mill and gristmill products	252	1,116	40	179	335	27	282	1	40	4	286	1	173	....	.....	....	.....	....	.....
Foundry and machine-shop products	494	26,521	36	173	411	127	1,567	72	2,405	34	2,446	31	5,003	11	3,763	7	4,240	3	6,686
Furniture and refrigerators	114	11,792	3	17	41	21	228	27	833	16	1,208	19	2,819	6	2,010	4	2,889	1	1,764
Gas, illuminating and heating	47	1,240	.....	25	57	14	173	5	168	1	52	.....	.....	1	255	1	535	....	.....
Gloves and mittens, leather	24	1,711	.....	1	5	6	73	6	199	4	277	7	1,157	....	.....	....	.....	....	.....
Hosiery and knit goods	68	6,244	4	20	38	13	161	9	345	9	604	7	1,150	2	617	4	3,329	....	.....
Iron and steel, steel works and rolling mills	12	2,029	.....	.....	.....	4	48	3	121	1	86	2	345	....	.....	2	1,429	....	.....
Leather goods	111	1,490	27	61	84	8	97	7	219	4	274	3	480	1	336	....	.....	....	.....
Leather, tanned, curried, and finished	27	5,869	.....	2	6	5	78	5	171	6	415	3	433	3	1,170	2	1,295	1	2,301
Liquors, malt	132	5,414	1	45	159	59	717	13	398	7	456	3	513	1	353	1	617	2	2,201
Lumber and timber products	635	32,282	21	269	618	143	1,730	72	2,214	42	3,153	56	9,394	23	8,189	8	5,499	1	1,485
Marble and stone work	117	1,390	13	73	153	20	189	4	140	4	338	3	570	....	.....	....	.....	....	.....
Paper and wood pulp	58	8,968	.....	.....	.....	4	63	9	312	14	995	19	3,270	10	3,210	2	1,118	....	.....
Printing and publishing	829	5,653	139	509	1,181	125	1,330	31	1,109	21	1,568	4	465	....	.....	....	.....	....	.....
Rubber goods	5	1,637	.....	.....	.....	2	34	.....	.....	.....	.....	1	174	1	375	....	.....	1	1,054
Slaughtering and meat packing	46	2,236	4	25	69	6	65	6	186	2	137	1	102	....	.....	2	1,077	....	.....
Tobacco manufactures	756	2,485	251	415	958	75	708	11	310	1	94	3	415	....	.....	....	.....	....	.....
All other industries	1,454	28,383	153	736	1,580	288	3,401	160	5,182	63	4,597	33	5,005	18	6,108	2	1,352	1	1,158
Total for cities	3,457	121,095	427	1,549	3,600	717	8,525	330	10,931	190	13,650	147	23,282	54	18,574	29	19,287	14	23,246
Appleton	107	2,144	11	49	116	24	288	10	339	8	540	4	606	1	255	....	.....	....	.....
Ashland	37	797	4	20	58	6	60	3	117	2	147	1	115	1	300	....	.....	....	.....
Beloit	50	3,527	7	13	24	16	178	7	227	2	131	3	476	....	.....	1	599	1	1,892
Eau Claire	94	2,315	10	46	99	18	186	7	232	7	470	3	399	3	929	....	.....	....	.....
Fond du Lac	100	1,925	12	52	94	19	222	7	254	6	398	3	535	1	422	....	.....	....	.....
Green Bay	104	2,724	7	43	107	25	278	16	480	4	211	7	1,033	2	615	....	.....	....	.....
Janesville	71	1,495	4	31	71	15	187	10	311	9	620	2	306	....	.....	....	.....	....	.....
Kenosha	75	7,155	6	46	107	8	111	2	70	2	181	4	679	2	584	2	1,397	3	4,026
La Crosse	167	3,340	17	83	225	37	439	16	600	5	392	8	1,342	1	342	....	.....	....	.....
Madison	122	2,084	31	44	109	29	327	10	382	3	213	4	678	1	375	....	.....	....	.....
Manitowoc	77	2,012	12	29	74	21	249	6	189	4	297	3	491	2	712	....	.....	....	.....
Marinette	51	2,112	3	25	58	10	116	3	97	4	313	5	809	....	.....	1	719	....	.....
Milwaukee	1,728	61,839	256	768	1,745	333	4,092	170	5,544	88	6,467	63	9,785	24	8,318	19	12,869	7	13,019
Oshkosh	157	5,782	10	74	198	37	385	14	417	11	810	7	1,159	2	788	1	540	1	1,485
Racine	189	10,079	12	77	188	45	580	21	763	11	780	13	2,029	7	2,363	1	552	2	2,824
Sheboygan	132	7,152	9	50	122	29	306	18	562	10	679	7	1,213	6	2,171	3	2,099	....	.....
Superior	111	2,121	14	57	118	24	276	7	234	3	186	5	795	....	.....	1	512	....	.....
Wausau	85	2,492	2	42	87	21	245	3	113	11	815	5	832	1	400	....	.....	....	.....

The largest proportions of small establishments, those employing from 1 to 5 wage earners, are shown for bread and other bakery products; butter, cheese, and condensed milk; carriages and wagons and materials; copper, tin, and sheet-iron products; flour-mill and gristmill products; gas, illuminating and heating; leather goods; marble and stone work; printing and publishing; slaughtering and meat packing; and the tobacco manufacturing industry. Among the cities the highest percentages of the total number of wage earners reported by establishments employing more than 100 wage earners each, are shown for Kenosha, 93.5, and Racine, 77 per cent, respectively.

Table 19

INDUSTRY AND CITY.	Census year.	PER CENT OF TOTAL AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS EMPLOYING SPECIFIED NUMBER.							
		1 to 5	6 to 20	21 to 50	51 to 100	101 to 250	251 to 500	501 to 1,000	Over 1,000
All industries	1914	5.0	7.3	9.6	11.0	20.4	16.5	16.6	13.5
	1909	5.6	8.1	9.5	12.2	20.1	18.5	13.4	12.5
Agricultural implements	1914	1.3	2.9	4.7	8.8	10.4	21.6	.....	50.3
	1909	1.6	5.0	4.7	6.6	25.3	22.1	34.8	.....
Automobiles, including bodies and parts.	1914	0.6	3.1	3.7	1.5	10.6	27.3	.....	53.3
	1909	0.7	2.7	2.1	2.0	9.3	.....	59.3	23.9
Boots and shoes, including findings.	1914	0.6	2.0	8.3	12.4	35.0	14.3	9.8	17.6
	1909	0.5	2.5	8.0	16.9	37.0	18.2	17.0	.....
Boxes, fancy and paper	1914	.....	11.0	4.8	5.9	27.1	51.3	.....	.....
	1909	0.5	13.5	6.1	31.1	.....	48.8	.....	.....
Brass, bronze, and copper products.	1914	2.5	8.5	17.6	14.2	.....	.....	57.3	.....
	1909	2.1	8.1	15.8	6.4	.....	25.5	42.1	.....
Bread and other bakery products.	1914	45.4	23.2	8.6	8.6	14.2	.....	.....	.....
	1909	47.7	22.7	5.7	6.1	17.9	.....	.....	.....
Butter, cheese, and condensed milk.	1914	63.3	13.0	11.6	7.0	5.1	.....	.....	.....
	1909	82.4	10.0	3.6	4.0	.....	.....	.....	.....
Canning and preserving	1914	1.7	20.7	31.6	24.9	21.1	.....	.....	.....
	1909	2.3	27.3	32.8	24.8	12.8	.....	.....	.....
Carriages and wagons and materials.	1914	9.1	11.5	10.4	10.2	21.8	16.1	20.9	.....
	1909	9.9	12.0	10.3	2.0	24.1	24.9	16.8	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	0.1	0.7	1.5	4.5	18.3	5.9	20.0	48.9
	1909	0.1	0.1	0.3	4.6	9.9	10.9	13.3	60.8
Clothing, men's, including shirts.	1914	0.6	6.9	13.8	23.5	23.1	8.3	23.7	.....
	1909	0.9	13.1	11.6	17.8	15.2	20.5	20.8	.....
Confectionery	1914	2.2	3.8	16.7	9.7	14.9	25.5	27.2	.....
	1909	1.0	2.6	18.4	16.0	8.0	54.0	.....	.....
Copper, tin, and sheet-iron products.	1914	5.1	7.3	5.5	.....	10.3	12.2	59.7	.....
	1909	6.5	10.4	4.4	3.9	20.3	.....	54.6	.....
Electrical machinery, apparatus, and supplies.	1914	0.4	6.0	12.5	12.8	7.3	.....	61.0	.....
	1909	2.9	5.6	13.4	8.8	15.8	53.5	.....	.....
Flour-mill and gristmill products.	1914	30.0	25.3	3.6	25.6	15.5	.....	.....	.....
	1909	37.3	21.4	9.9	31.4	.....	.....	.....	.....
Foundry and machine-shop products.	1914	1.5	5.9	9.1	9.2	18.9	14.2	16.0	25.2
	1909	1.6	5.5	7.6	12.0	12.7	16.9	15.6	28.1
Furniture and refrigerators	1914	0.3	1.9	7.1	10.2	23.9	17.0	24.5	15.0
	1909	0.3	2.9	8.6	13.1	20.5	26.0	11.9	16.7
Gas, illuminating and heating	1914	4.6	14.0	13.5	4.2	.....	20.6	43.1	.....
	1909	4.5	15.0	13.3	18.0	.....	.....	49.3	.....
Gloves and mittens, leather	1914	0.3	4.3	11.6	16.2	67.6	.....	.....	.....
	1909	1.0	3.4	5.9	16.0	34.2	39.4	.....	.....
Hosiery and knit goods	1914	0.6	2.6	5.5	9.7	18.4	9.9	53.3	.....
	1909	0.8	3.8	7.2	12.0	32.2	25.0	19.1	.....
Iron and steel, steel works and rolling mills.	1914	.....	2.4	6.0	4.2	17.0	.....	70.4	.....
	1909	0.2	1.8	5.2	11.1	6.6	.....	26.7	48.3
Leather goods	1914	5.6	6.5	14.7	18.4	32.2	22.6	.....	.....
	1909	2.4	7.5	6.4	9.3	48.8	25.5	.....	.....
Leather, tanned, curried, and finished.	1914	0.1	1.3	2.9	7.1	7.4	19.9	22.1	39.2
	1909	0.2	0.7	2.1	5.2	9.6	19.8	25.3	37.2
Liquors, malt	1914	2.9	13.2	7.4	8.4	9.5	6.5	11.4	40.7
	1909	3.7	12.3	9.7	5.6	9.0	6.6	23.7	29.3
Lumber and timber products	1914	1.9	5.4	6.9	9.8	29.1	25.4	17.0	4.6
	1909	3.5	6.9	9.6	12.3	27.7	26.7	6.6	6.6
Marble and stone work	1914	11.0	13.6	10.1	24.3	41.0	.....	.....	.....
	1909	5.7	12.6	13.6	5.0	48.7	14.4	.....	.....
Paper and wood pulp	1914	.....	0.7	3.5	11.1	36.5	35.8	12.5	.....
	1909	.....	0.5	4.2	17.4	45.3	32.6	.....	.....
Printing and publishing	1914	20.9	23.5	19.6	27.7	8.2	.....	.....	.....
	1909	21.2	25.7	20.8	19.4	12.8	.....	.....	.....
Rubber goods	1914	.....	2.1	.....	.....	10.6	22.9	.....	64.4
	1909	2.4	.....	17.9	.....	79.7	.....	.....	.....
Slaughtering and meat packing.	1914	3.1	2.9	8.3	6.1	4.6	.....	75.0	.....
	1909	3.5	2.0	10.4	9.9	5.8	.....	68.4	.....
Tobacco manufactures	1914	38.6	28.5	12.5	3.8	16.7	.....	.....	.....
	1909	35.9	38.9	13.7	.....	11.5	.....	.....	.....
All other industries	1914	5.6	12.0	18.2	16.2	17.6	21.5	4.8	4.1
	1909	6.7	14.5	18.2	18.3	19.6	17.7	5.1	.....
Total for cities	1914	3.0	7.0	9.0	11.3	19.2	15.3	15.9	19.2
APPLETON	1914	5.4	13.4	15.8	25.2	28.3	11.9	.....	.....
ASHLAND	1914	7.3	7.5	14.7	18.4	14.4	37.6	.....	.....
BELOIT	1914	0.7	5.0	6.4	3.7	13.5	.....	17.0	53.6
EAU CLAIRE	1914	4.3	8.0	10.0	20.3	17.2	40.1	.....	.....
FOND DU LAC	1914	4.9	11.5	13.2	20.7	27.8	21.9	.....	.....
GREEN BAY	1914	3.9	10.2	17.6	7.7	37.9	22.6	.....	.....
JANESVILLE	1914	4.7	12.5	20.8	41.5	20.5	.....	.....	.....
KENOSHA	1914	1.5	1.6	1.0	2.5	9.5	8.2	19.5	56.3
LA CROSSE	1914	6.7	13.1	18.0	11.7	40.2	10.2	.....	.....
MADISON	1914	5.2	15.7	18.3	10.2	32.5	18.0	.....	.....
MANITOWOC	1914	3.7	12.4	9.4	14.8	24.4	35.4	.....	.....
MARINETTE	1914	2.7	5.5	4.6	14.8	38.3	.....	34.0	.....
MILWAUKEE	1914	2.8	6.6	9.0	10.5	15.8	13.5	20.8	21.1
OSHKOSH	1914	3.4	6.7	7.2	14.0	20.0	13.6	9.3	25.7
RACINE	1914	1.9	5.8	7.6	7.7	20.1	23.4	5.5	28.0
SHEBOYGAN	1914	1.7	4.3	7.9	9.5	17.0	30.4	20.3	.....
SUPERIOR	1914	5.6	13.0	11.0	8.8	37.5	.....	24.1	.....
WAUSAU	1914	3.5	9.8	4.5	32.7	33.4	16.1	.....	.....

Engines and power.—Table 20 shows, for 1914, 1909, and 1904, for all industries combined, the number and total horsepower of engines or motors employed in generating power (including electric motors operated by purchased current). The table also shows separately the number and horsepower of electric motors operated by current generated in the establishments reporting.

Table 20

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904
Primary power, total	18,588	11,561	6,894	682,339	554,179	440,234	100.0	100.0	100.0
Owned	7,609	7,660	6,894	596,864	527,431	429,810	87.5	95.2	97.6
Steam engines and turbines [1]	5,052	4,974	4,626	420,065	378,169	305,789	61.6	68.2	69.4
Internal-combustion engines	1,564	1,578	1,037	28,004	19,531	11,356	4.1	3.5	2.6
Water wheels, turbines, and motors	993	1,108	1,231	148,795	129,731	112,665	21.8	23.4	25.6
Rented	10,979	3,901	.....	85,475	26,748	10,424	12.5	4.8	2.4
Electric	10,979	3,901	(2)	79,984	25,459	8,558	11.7	4.6	1.9
Other	.....	.....	.....	5,491	1,289	1,866	0.8	0.2	0.4
Electric	23,920	11,402	.....	255,668	114,725	48,878	100.0	100.0	100.0
Rented	10,979	3,901	(2)	79,984	25,459	8,558	31.3	22.2	17.5
Generated by establishments reporting	12,941	7,501	2,969	175,684	89,266	40,320	68.7	77.8	82.5

[1] Figures for horsepower include for 1909 and 1904 the amount reported under the head of "other" owned power.

[2] Not reported.

This table shows an increase in primary power of 128,160 horsepower, or 23.1 per cent, from 1909 to 1914. The use of rented power, now almost wholly electric, has greatly increased since 1904, when it represented only 2.4 per cent of the total primary power reported. In 1909 the amount of rented power had increased to 4.8 per cent of the total and in 1914 to 12.5 per cent of the total. The use of electric motors run by current generated within the same establishments also shows a large increase, the horsepower of such motors having increased 96.8 per cent from 1909 to 1914.

In spite of the great increase in rented power, owned power increased by 38.9 per cent during the decade 1904–1914 and by 13.2 per cent during the last five-year period. This was due in part to the fact that some of the large factories have installed electricity as emergency power, while others are using electric power and hold the steam engines for emergency.

The use of internal-combustion engines increased rapidly during the decade, but not so rapidly as that of rented electric power. The horsepower of internal-combustion engines, however, represented only 4.1 per cent of the total primary power reported in 1914.

Fuel.—Closely related to the subject of power employed in manufactures, is that of the fuel consumed in generating this power or otherwise used in the manufacturing processes.

Table 21 shows, for 1914, the quantity of each kind of fuel used, for which data were obtained, for all industries combined and for selected industries in the state as a whole, and for all industries combined in each city.

Table 21

INDUSTRY AND CITY.	COAL. Anthracite (tons, 2,240 lbs.).	COAL. Bituminous (tons, 2,000 lbs.).	Coke (tons, 2,000 lbs.)	Oil, including gasoline (barrels.)	Gas (1,000 cubic feet).
All industries	98,331	3,537,183	340,460	236,055	383,916
Agricultural implements	96	29,342	6,340	6,403	8,854
Automobiles, including bodies and parts	1,561	41,790	1,462	16,875	33,527
Boots and shoes, including findings	3,126	10,866	115	151	2,709
Brass, bronze, and copper products	5,194	26,418	1,209	18,911	3,610
Bread and other bakery products	2,637	5,615	7,393	199	14,850
Brick, tile, pottery, and other clay products	966	29,246	2,658	182	144
Butter, cheese, and condensed milk	801	124,989	182	2,335	33
Canning and preserving	113	18,073	628	1,032	151
Carriages and wagons and materials	154	23,422	1,656	1,269	1,436
Cars and general shop construction and repairs by steam-railroad companies	.....	161,361	3,140	1,345	2,879
Clothing, men's, including shirts	135	3,158	117	22	1,432
Confectionery	505	10,094	586	.....	28,462
Copper, tin, and sheet-iron products	180	41,211	5,140	16,907	10,214
Electrical machinery, apparatus, and supplies	50	17,156	1,095	628	98,403
Flour-mill and gristmill products	2,874	45,643	157	1,612	.....
Foundry and machine-shop products	8,200	295,023	59,820	72,813	58,373
Furniture and refrigerators	491	70,061	3,436	2,624	21,911
Gas, illuminating and heating	425	242,174	12,870	41,559	.....
Iron and steel, blast furnaces	.....	10,912	212,484	.....	.....
Iron and steel, steel works and rolling mills	.....	66,701	3,110	10,869	4,977
Leather goods	834	4,776	75	14	1,052
Leather, tanned, curried, and finished	42	129,946	7	7	825
Lime	600	11,091	.....	490	.....
Liquors, malt	5,570	205,817	171	196	740
Lumber and timber products	1,515	68,192	45	1,531	4,667
Malt	23,311	78,964	2,528	277	.....
Paper and wood pulp	795	512,641	1,738	14,500	21,188
Printing and publishing	1,849	7,112	392	823	24,951
Rubber goods	100	25,660	.....	19	40
Slaughtering and meat packing	623	55,389	.....	14	751
Woolen, worsted, and felt goods, and wool hats	.....	14,895	.....	66	91
All other industries	35,584	1,149,445	11,906	22,382	37,646
Total for the cities	52,937	2,185,750	189,874	133,925	347,407
APPLETON	2,423	73,315	530	1,505	306
ASHLAND	464	14,624	258	1,669	57
BELOIT	1,014	28,940	11,149	4,426	3,413
EAU CLAIRE	255	26,907	1,242	213	1,641
FOND DU LAC	88	22,534	637	801	1,770
GREEN BAY	1,302	62,566	853	1,182	370
JANESVILLE	29	18,950	2,316	3,143	1,266
KENOSHA	4.374	110,054	4,171	31,047	23,547
LA CROSSE	468	59,759	1,246	532	3,076
MADISON	568	22,198	5,504	17,335	5,340
MANITOWOC	6,342	34,398	2,217	834	420
MARINETTE	58	16,408	4	74	497
MILWAUKEE	29,320	1,399,104	140,629	53,684	260,691
OSHKOSH	511	33,555	1,399	913	2,207
RACINE	686	145,419	9,918	16,414	18,411
SHEBOYGAN	3,296	66,246	6,292	71	22,504
SUPERIOR	1,464	35,458	547	62	1,680
WAUSAU	275	15,315	962	20	211

SPECIAL STATISTICS.

For certain industries the Census Bureau collects, by means of special schedules, details regarding the quantities and cost of materials, the quantities and values of products, and other information for which no provision is made on the general schedule. Certain data of this character for nine important industries and power laundries in Wisconsin are here presented.

Butter, cheese, and condensed milk.—The following table gives the quantity and value of the various products of the industry for 1914, 1909, and 1904:

The manufacture of dairy products in Wisconsin has increased rapidly during the past 15 years, and the industry ranked first in the gross value of products at the census of 1914. As shown in Table 2 it was outranked by 11 other industries in the number of wage earners employed and by 9 in the value added by manufacture. The number of establishments engaged primarily in the manufacture of butter decreased from 902 in 1904 to 675 in 1914, but the number of cheese factories increased from 1,454 to 1,739 and the condensed-milk establishments from 4 to 17 during the decade.

The value of the butter manufactured constituted 44.6 per cent of the total product for the combined industry in 1914, 56.2 per cent in 1909, and 62.2 per cent in 1904; that of cheese, 38.6, 39.4, and 35.1

per cent, respectively; and that of condensed and evaporated milk, 13.5, 4.1, and 1.1 per cent, respectively.

Table 22	1914	1909	1904
Total value	$72,858,592	$53,843,249	$29,994,791
Butter:			
Pounds	116,149,284	103,884,684	89,155,975
Value	$32,475,633	$29,547,135	$18,433,202
Packed solid—			
Pounds	89,745,906	77,137,253	69,166,599
Value	$24,981,447	$21,833,972	$14,145,383
Prints or rolls—			
Pounds	26,403,378	26,747,431	19,989,376
Value	$7,494,186	$7,713,163	$4,287,819
Cream sold:			
Pounds	7,449,330	4,490,508	731,721
Value	$800,226	$545,723	$61,623
Cheese:			
Pounds	205,920,915	148,065,648	109,423,856
Value	$28,124,073	$21,141,640	$10,488,853
Full cream—			
Pounds	195,520,031	147,071,501	
Value	$27,333,907	$21,070,010	
Part cream—			
Pounds	3,547,700	229,892	109,423,856
Value	$471,804	$19,405	$10,488,853
Other kinds—			
Pounds	6,853,184	764,255	
Value	$318,362	$52,225	
Condensed and evaporated milk:			
Pounds	149,682,530	30,573,886	11,514,222
Value	$9,850,522	$2,218,239	$798,239
Sweetened—			
Pounds	62,798,619	16,661,772	10,389,856
Value	$4,446,798	$1,240,398	$735,504
Unsweetened—			
Pounds	24,812,784		
Value	$1,479,486	13,912,114	1,124,366
Evaporated—		$977,841	$62,735
Pounds	62,071,127		
Value	$3,924,238		
Powdered milk:			
Pounds	3,596,145	.....	.....
Value	$159,416	.....	.....
Other butter, cheese, and condensed-milk factory products, value	$1,196,705	$287,514	$207,874
All other products, value	$252,017	$102,998	$5,000

Of the total amount of butter manufactured in 1914, 76.9 per cent was packed solid in firkins or tubs and 23.1 per cent in prints or rolls. During the decade the amount of butter packed solid increased by 20,579,307 pounds, or 29.8 per cent, and that put up in prints or rolls, by 6,414,002 pounds, or 32.1 per cent.

Of the total production of cheese, 94.9 per cent was "full cream," and during the 10 years the quantity increased by 96,497,059 pounds, or 88.2 per cent.

In the manufacture of condensed and evaporated milk there was an increase of 138,168,308 pounds during the 10 years from 1904 to 1914. Of the amount manufactured in 1914, 42 per cent was sweetened condensed milk; 16.6 per cent, unsweetened; and 41.5 per cent, evaporated. At the censuses prior to 1914 only the total for unsweetened and evaporated milk was shown, therefore comparable figures can not be given for separate products. The combined quantities show an increase of 85,759,545 pounds during the 10-year period.

The item of "other butter, cheese, and condensed-milk factory products" includes the value of skimmed milk, buttermilk, casein, and whey sold; also the value of milk which was sold as such.

Flour-mill and gristmill products.—Table 23 gives the quantities and values of the flour-mill and gristmill products for the last three census years.

Wheat flour was the product of chief value at each of the three censuses and formed 48.2 per cent of the total value of products for the industry in 1914; rye flour formed 7.8 per cent; buckwheat flour, 0.9 per cent; corn meal and corn flour, 2.1 per cent; hominy and grits, 5.3 per cent; bran and middlings, 8.3 per cent; and feed and offal, 26.6 per cent. The quantity of wheat flour decreased 12.7 per cent from 1909 to 1914.

Table 23	1914	1909	1904
Total value	$28,697,413	$31,667,434	$28,352,237
Wheat flour:			
Barrels	3,056,954	3,499,965	3,744,373
Value	$13,817,821	$17,909,089	$17,611,009
Rye flour:			
Barrels	561,475	549,359	547,097
Value	$2,248,927	$2,194,220	$1,990,327
Buckwheat flour:			
Pounds	8,506,653	9,330,781	15,980,819
Value	$262,111	$300,929	$416,517
Barley meal:			
Pounds	1,533,447	5,817,400	3,439,960
Value	$20,941	$91,494	$38,110
Corn meal and corn flour:			
Barrels	168,531	85,532	95,801
Value	$610,958	$287,740	$246,651
Hominy and grits:			
Pounds	94,955,277	12,707,800	.....
Value	$1,533,907	$179,147	.....
Oatmeal:			
Pounds	462,966	.....	.....
Value	$12,000	.....	.....
Bran and middlings:			
Tons	106,354	(1)	(1)
Value	$2,388,856	(1)	(1)
Feed and offal:			
Tons	269,465	402,784	429,152
Value	$7,622,990	$10,086,448	$7,949,623
Breakfast foods:			
Pounds	1,238,242	.....	.....
Value	$36,187	.....	.....
All other cereal products, value	$89,591	$31,667	.....
All other products, value	$53,124	$586,700	$100,000

[1] Included in "feed and offal."

In 1914 the mills of the state were equipped with 1,556 stands of rolls, 100 runs of stone, and 239 attrition mills. Four establishments manufactured barrels and one made sacks to be used as containers.

Slaughtering and meat packing.—Table 24 presents statistics of the quantity and value of the principal products of the wholesale slaughtering and meat-packing establishments of the state as reported for the census periods 1914, 1909, and 1904.

Table 24	1914	1909	1904[1]
Total value	$32,180,684	$25,702,123	$16,060,423
Fresh meat:			
Beef—			
Pounds	32,955,273	35,859,863	28,643,346
Value	$3,765,939	$2,605,870	$1,712,783
Veal—			
Pounds	8,010,982	9,615,384	2,594,829
Value	$1,123,926	$1,110,373	$201,725
Mutton and lamb—			
Pounds	2,277,872	2,060,498	2,389,517
Value	$274,853	$194,705	$172,180
Pork—			
Pounds	41,073,293	48,264,738	35,997,546
Value	$5,049,985	$4,802,343	$2,447,493
Edible offal and all other fresh meat—			
Pounds	4,632,879	1,440,143	350,000
Value	$304,196	$103,902	$26,500
Pork, pickled and other cured:			
Pounds	99,775,805	106,390,708	100,474,432
Value	$13,432,798	$11,699,374	$8,345,852
Sausage:			
Pounds	11,958,878	10,737,835	12,621,837
Value	$1,454,827	$961,725	$939,509
Lard:			
Pounds	37,014,963	19,173,185	16,859,549
Value	$3,987,217	$2,120,334	$1,193,044
Tallow, oleo stock, and stearin:			
Pounds	1,472,078	[2] 1,530,506	(3)
Value	$120,636	[2] $125,075	(3)
Soap stock:			
Pounds	4,177,384	(3)	(3)
Value	$235,282	(3)	(3)

(See footnotes on opposite page.)

Table 24—Continued.	1914	1909	1904
Sausage casings:			
Pounds	1,106,800	(3)	(3)
Value	$150,602	(3)	(3)
Fertilizers and fertilizer materials:			
Tons	4,507	5,703	3,192
Value	$149,761	$151,984	$73,795
Hides and pelts:			
Cattle—			
Number	70,900		
Pounds	4,080,857		
Value	$681,747	90,268	60,459
Calf—		4,613,282	3,556,922
Number	77,727	$590,057	$323,231
Pounds	858,228		
Value	$153,255		
Sheep—			
Number	60,092	47,917	55,846
Value	$64,708	$53,386	$57,553
All other products, value	$1,230,952	$1,182,995	$566,758

[1] Excludes figures for two establishments to avoid disclosure of individual operations.
[2] No stearin manufactured.
[3] Not reported separately.

The establishments assigned to the industry slaughtered during 1914, 70,900 beeves, 101,936 calves, 60,124 sheep and lambs, and 1,110,449 hogs. The value of the slaughtering and meat-packing products of the state increased 25.2 per cent during the five-year period 1909–1914, although the quantity of fresh meat, pickled and cured pork, sausage and lard, increased by 4,157,591 pounds, or 1.8 per cent. The item "all other products" includes the value of cured beef, dressed game, lard compounds and substitutes, oleo oil, meat puddings, scrapple, head cheese, etc., hoofs, horns, horntips, etc., and goat, kid, and other skins.

Leather, tanned, curried, and finished.—The following table shows the quantity and value of the principal materials and products reported for the leather industry at the censuses of 1914, 1909, and 1904:

Table 25	1914	1909	1904
MATERIALS.			
Total cost	$33,053,186	$34,828,585	$19,870,887
Cattle hides:			
Number	2,185,178	2,471,848	2,457,195
Cost	$17,658,109	$16,373,708	$11,027,774
Calf and kip skins:			
Number	4,650,863	6,986,673	3,633,271
Cost	$10,620,920	$12,379,806	$4,816,826
All other raw stock, cost	$1,038,745	$1,321,192	$119,029
Fuel and rent of power, cost	$378,948	$386,034	$253,840
All other materials, cost	$3,356,464	$4,367,845	$3,653,418
PRODUCTS.			
Total value	$42,204,202	$44,667,676	$25,845,123
Leather:			
Sole, value	$7,646,946	$4,414,972	$4,231,785
Hemlock—			
Sides	328,149	558,474	1,038,181
Value	$2,111,270	$2,885,899	$3,974,016
Union—			
Sides	694,474		
Value	$4,849,109	280,897	53,350
Chrome—		$1,529,073	$257,769
Sides	99,421		
Value	$686,567		
Harness—			
Sides	631,787	1,331,925	1,504,944
Value	$4,523,512	$7,987,575	$6,097,651
Cattle side upper—			
Sides	2,292,882	3,001,814	1,927,329
Value	$9,431,174	$9,765,814	$4,763,787
Calf and kip skins—			
Number	4,804,157	7,016,966	3,564,723
Value	$14,066,192	$17,306,021	$6,940,331
All other, value	$5,412,746	$4,218,633	$3,258,934
All other products, value	$1,088,234	$727,112	$537,010
Work on materials for others, value	$35,398	$247,549	$15,625

While the industry increased during the period from 1904 to 1909, there was a decrease for 1914, as compared with 1909. The total cost of the materials used decreased 5.1 per cent; the number of cattle hides treated, by 11.6 per cent; and calf and kip skins, by 33.4 per cent.

There was a decrease of 5.5 per cent in the total value of products during the five years ending with 1914. There was, however, an increase in the quantity and value of some of the products. The quantity of sole leather increased by 33.7 per cent and its value by 73.2 per cent. The increase was nearly all in union sole leather; chrome shows a small increase, while hemlock decreased, owing to a falling off in the supply of hemlock bark. There was a decrease of 52.6 per cent in the quantity and 43.3 per cent in the value of harness leather, also of 23.6 per cent in quantity and 13.4 per cent in value of cattle side upper. All other leather and all other products show an increase in 1914, as compared with 1909, of 28.3 per cent and 49.7 per cent, respectively.

Footwear.—The number of pairs of the different kinds of boots and shoes made in 1914, 1909, and 1904, is given in the following table:

Table 26	NUMBER OF PAIRS.		
KIND	1914	1909	1904
Boots and shoes	8,017,963	6,777,363	3,951,542
Men's	5,000,827	4,055,496	2,064,125
Boys' and youths'	865,138	652,109	548,867
Women's	1,336,525	1,442,341	737,567
Misses' and children's	815,473	627,417	600,983
Slippers	135,999	204,872	269,942
Men's, boys', and youths'	21,515	39,018	41,288
Women's, misses', and children's	114,484	165,854	228,654
Infants' shoes and slippers	170,332	145,319	(1)
All other	58,588	169,075	186,984

[1] Not reported separately.

The production for 1914 in each variety of footwear shown in this table was a considerable increase over the quantities reported for preceding censuses. The total output for all kinds of boots and shoes in 1914 exceeded that of 1909 by 1,240,600 pairs, or 18.3 per cent. In 1914 men's boots and shoes formed 62.4 per cent; boys' and youths', 10.8 per cent; women's, 16.7 per cent; and misses' and children's, 10.2 per cent of the total production.

Table 27 shows the number of pairs of the different kinds of footwear made in 1914 and 1909, classified according to method of manufacture.

The McKay type formed 39.3 per cent; welted, 30.5 per cent; and turned and wood or metal fastened, 30.1 per cent, of the total number manufactured in 1914.

The manufacture of welted and McKay both show increases, 38.3 per cent and 60.5 per cent, respectively, as compared with 1909, while the turned and wood or metal fastened types show a decrease of 20.6

per cent. "All other footwear" includes slippers and fiber shoes. The kinds are not segregated according to method of manufacture, as it would disclose operations of individual establishments.

Table 27		NUMBER OF PAIRS, BY METHOD OF MANUFACTURE.			
KIND.	Census year.	Total.	Welted.	McKay.	Turned and wood or metal fastened.
Boots and shoes	1914	8,017,963	2,448,789	3,152,510	2,416,664
	1909	6,777,363	1,770,558	1,963,483	3,043,322
Men's	1914	5,000,827	2,032,552	1,474,653	1,493,622
	1909	4,055,496	1,353,362	433,309	2,268,825
Boys' and youths'	1914	865,138	128,627	387,357	349,154
	1909	652,109	79,093	249,697	323,319
Women's	1914	1,336,525	227,113	573,427	535,985
	1909	1,442,341	320,383	750,338	371,620
Misses' and children's	1914	815,473	60,497	717,073	37,903
	1909	627,417	17,720	530,139	79,558
All other footwear	1914	364,919	51,635	151,815	161,469
	1909	519,266	55,395	159,953	303,918

Paper and wood pulp.—Wisconsin is one of the leading states in this industry, ranking fourth in 1914 in the value of paper and pulp manufactured. The following table shows the quantity and cost of materials used, the quantity and value of the products, and the number and capacity of the principal machines used, for the censuses of 1914, 1909, and 1904:

Table 28	1914	1909	1904
MATERIALS.			
Total cost	$20,568,088	$16,692,565	$10,692,290
Pulp wood, cost	$5,586,791	$4,325,839	$2,502,892
Wood pulp, purchased:			
Tons	164,083	157,416	107,479
Cost	$5,830,271	$5,511,750	$3,385,155
Ground—			
Tons	53,827	64,959	43,814
Cost	$1,188,212	$1,457,025	$876,180
Soda fiber—			
Tons	11,184	7,573	5,154
Cost	$474,198	$338,621	$218,608
Sulphite fiber—			
Tons	89,952	84,884	58,511
Cost	$3,796,335	$3,716,104	$2,290,367
Sulphate fiber—			
Tons	8,446	(1)	(1)
Cost	$354,899	(1)	(1)
Screenings, chemical—			
Tons	674	(1)	(1)
Cost	$16,627	(1)	(1)
Rags, including cotton and flax waste and sweepings:			
Tons	17,222	19,741	24,615
Cost	$624,700	$595,554	$692,331
Old and waste paper:			
Tons	39,947	29,607	8,412
Cost	$872,869	$591,019	$169,626
All other paper stock, cost	$535,734	$136,496	$314,253
All other materials, including fuel, cost	$7,117,723	$5,531,907	$3,628,033
PRODUCTS.			
Total value	$31,205,395	$25,962,099	$17,844,174
News paper:			
Tons	135,336	169,151	121,749
Value	$5,551,537	$7,201,706	$5,187,635
Poster paper:			
Tons	2,766		
Value	$218,998		
Book, cover, plate, and coated paper:			
Tons	75,183	58,705	52,283
Value	$5,164,705	$3,881,708	$2,839,787
Writing and other fine paper:			
Tons	31,694	27,379	17,333
Value	$3,769,713	$3,271,402	$2,066,243
Wrapping paper:			
Tons	145,584	98,083	94,454
Value	$7,766,319	$5,083,757	$4,200,058
Tissues:			
Tons	15,355	10,835	5,989
Value	$1,515,482	$988,516	$571,378

Table 28—Continued.	1914	1909	1904
PRODUCTS—continued.			
Other paper products:			
Tons	66,107	24,506	4,796
Value	$2,830,453	$914,835	$205,656
Wood pulp made for sale or for consumption in mills other than where produced:			
Tons	130,857	111,683	89,277
Value	$4,154,159	$3,711,517	$2,754,203
All other products, value	$234,029	$908,658	$19,214
Wood pulp produced (including that used in mills where manufactured), total tons	404,766	321,213	241,537
Ground, tons	189,221	166,822	[2] 124,746
Sulphite fiber, tons	188,797	154,391	116,791
Sulphate fiber, tons	24,633	(1)	(1)
Screenings, mechanical and chemical, tons	2,115	(1)	(1)
EQUIPMENT.			
Paper machines:			
Total number	117	99	93
Capacity, yearly, tons	537,857	431,763	345,879
Fourdrinier—			
Number	106	91	88
Capacity per 24 hours, tons	1,564	1,315	1,112
Cylinder—			
Number	11	8	5
Capacity per 24 hours, tons	257	108	36
Pulp equipment:			
Grinders—			
Number	252	233	197
Capacity, yearly, tons	202,483	270,561	193,720
Digesters—			
Number	65	53	50
Capacity, yearly, tons	247,762	167,121	141,325

[1] Not reported separately. [2] Includes 3,744 tons of soda fiber.

The total cost of all materials increased 23.2 per cent from 1909 to 1914 and 56.1 per cent from 1904 to 1909. Of the 714,094 cords of pulp wood used in 1914, 343,250 cords, or 48.1 per cent, were hemlock; 291,332 cords, or 40.8 per cent, spruce; 32,483 cords, or 4.5 per cent, balsam fir; and 47,029 cords, or 6.6 per cent miscellaneous.

During the decade there was an increase in both quantity and value for all of the products for which separate totals are given. There was, however, a decrease in the production of news paper and poster paper during the five-year period ending with 1914. Of the total value of products in 1914 news paper represented 17.8 per cent; poster paper, 0.7 per cent; book paper, 16.6 per cent; writing and other fine paper, 12.1 per cent; wrapping paper, 24.9 per cent; tissues, 4.9 per cent; and other paper products, 9.1 per cent; wood pulp made for sale, 13.3 per cent; and "all other products," 0.7 per cent. The number and capacity of the paper machines in use in the state show a steady increase from census to census.

Printing and publishing.—The following table shows the number and aggregate circulation of the various classes of newspapers and periodicals published in Wisconsin in 1914, 1909, and 1904.

Table 29	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
PERIOD OF ISSUE.	1914	1909	1904	1914	1909	1904
Total	648	677	711	2,150,934	2,121,662	2,077,826
Daily	66	65	65	515,219	401,886	307,118
Sunday	8	8	9	207,722	130,778	126,238
Semiweekly	19	23	37	130,414	42,708	194,230
Weekly	486	512	538	973,948	1,012,502	902,467
Monthly	56	56	52	267,130	468,088	500,046
Quarterly	5	5	5	6,350	14,800	23,380
All other classes	8	8	5	50,151	50,900	24,347

During each of the five-year periods covered by this table, there was a decrease in the total number of publications in the state but a slight increase in aggregate circulation.

The dailies show the largest increase in circulation, 113,333, or 28.2 per cent; the largest per cent, 58.8, of increase is shown by the Sunday editions. The weeklies, which constitute the largest class both in number and in circulation, decreased in both respects from 1909 to 1914, although from 1904 to 1909 there was an increase in circulation.

In 1914, 12 of the 66 daily papers, with an aggregate circulation of 105,550, were issued as morning editions. Of the 648 publications reported, 86 were printed in foreign languages. These included 6 dailies of which 2 were printed in Polish, 1 in Finnish, and 3 in German; 2 Sunday editions, 1 in German and 1 in Polish; 12 semiweeklies, 11 of which were printed in German and 1 in Swedish; 53 weeklies, of which 37 were in German, 4 each in Bohemian, Norwegian, and Polish, and 1 each in Dutch, Swedish, English and German, and English and Italian; 11 monthlies, 7 of which were in German, 1 in Danish, 1 in Finnish, 1 in Norwegian, and 1 in English and German; and 2 belonging to "all other classes," 1 semimonthly in Finnish and 1 bimonthly in German. These publications in foreign languages reported an aggregate circulation per issue of 563,136, representing 26.2 per cent of the total for the state.

Automobiles, including bodies and parts.—Table 30 shows the number and value of the different kinds of machines manufactured in the state during 1914, 1909, and 1904.

Table 30	1914		1909		1904	
	Number.	Value.	Number.	Value.	Number.	Value.
Total value	.....	[1] $18,478,196	.....	$11,440,242	.....	[2] $1,875,259
Automobiles (gasoline)	10,030	12,751,616	5,591	7,085,562	[3] 2,390	1,856,694
Passenger vehicles	9,293	11,511,693	5,559	7,050,862	2,378	1,846,294
Touring cars	8,825	10,831,327	(4)	(4)	(4)	(4)
All other	468	680,366	(4)	(4)	(4)	(4)
Business vehicles (delivery wagons and trucks)	737	1,239,923	32	34,700	12	10,400
All other products, including bodies and parts and repair work	.....	5,726,580	.....	4,354,680	.....	18,565

[1] In addition, one establishment, engaged primarily in the manufacture of agricultural implements, manufactured a large number of automobiles, valued at several million dollars.
[2] Excludes the statistics for two establishments, engaged in the manufacture of automobile bodies and parts, to avoid disclosure of individual operations.
[3] Electric machines included, to avoid disclosure of individual operations.
[4] Not shown separately.

The automobile industry in the state developed rapidly during the period 1909 to 1914. The table, however, does not show the magnitude of the industry in 1914, because a large production was reported by an establishment engaged primarily in the manufacture of agricultural implements, and the totals can not be shown without disclosing its operations. (See Table 30, note 1.)

Carriages and wagons and materials.—Table 31 shows the number and value of the different kinds of carriages and wagons manufactured in 1914, 1909, and 1904.

Table 31	1914	1909	1904
Total value	$7,544,321	$8,899,171	$8,089,491
Carriages (family and pleasure):			
Number	5,314	24,726	23,466
Value	$450,882	$1,519,096	$1,520,841
Wagons (business, farm, etc.):			
Number	81,238	92,011	83,916
Value	$4,276,339	$4,853,561	$4,396,693
Public conveyances:			
Number	35	90	103
Value	$11,636	$33,390	$39,720
Sleighs and sleds:			
Number	11,221	17,720	15,365
Value	$252,311	$399,310	$343,509
All other products, including parts and repair work, value	$2,553,153	$2,093,814	$1,788,728

The industry has declined constantly since 1904; the decrease in the number of establishments amounted to 54.6 per cent and in the value of products, 15.2 per cent.

Laundries.—Statistics for power laundries are not included in the general tables or in the totals for all manufacturing industries. Table 32, however, summarizes this data for Wisconsin for 1914 and 1909.

Table 32	POWER LAUNDRIES.		
	Number or amount.		Per cent of increase, 1909-1914
	1914	1909	
Number of establishments	150	147	2.0
Persons engaged	2,645	2,332	13.4
Proprietors and firm members	161	159	1.3
Salaried employees	219	159	37.7
Wage earners (average number)	2,265	2,014	12.5
Primary horsepower	3,175	2,373	33.8
Capital	$1,794,553	$1,379,730	30.1
Salaries and wages	1,140,965	863,595	32.1
Salaries	201,026	127,038	58.2
Wages	939,939	736,557	27.6
Paid for contract work	3,002	.....	.....
Rent and taxes	83,481	55,426	50.6
Cost of materials	526,486	331,907	58.6
Amount received for work done	2,353,183	1,840,327	27.9

In 1914 Wisconsin ranked fifteenth among the states in amount received for work done and sixteenth in number of persons engaged in the industry. There was an increase of 27.9 per cent in the amount received for work done and 12.5 per cent in the average number of wage earners. Establishments owned by individuals reported 21.3 per cent of the amount received for work done; those owned by corporations, 60.6 per cent; and those under other forms of ownership, 18.1 per cent.

Table 33 shows, for 1914 and 1909, the number of wage earners employed in the laundries on the 15th of each month, or the nearest representative day, and the percentage which this number represents of the greatest number employed in any month of the same year.

Table 33

MONTH.	WAGE EARNERS			
	Number.		Per cent of maximum.	
	1914	1909	1914	1909
January	2,187	1,921	93.0	89.9
February	2,184	1,917	92.9	89.7
March	2,199	1,936	93.5	90.6
April	2,190	1,937	93.1	90.6
May	2,253	1,987	95.8	92.9
June	2,302	2,035	97.9	95.2
July	2,352	2,136	100.0	99.9
August	2,349	2,138	99.9	100.0
September	2,311	2,105	98.3	98.5
October	2,279	2,030	96.9	94.9
November	2,285	2,009	97.2	94.0
December	2,296	2,018	97.6	94.4

Table 34 gives statistics as to kinds and amounts of power used in the laundries of the state in 1914 and 1909, together with increase for the five-year period.

Table 35 shows the kinds and quantities of fuel used in the laundries, as reported at the censuses of 1914 and 1909, with percentages of increase.

Table 34

KIND.	NUMBER OF ENGINES OR MOTORS.		HORSEPOWER.		
			Amount.		Per cent of increase,[1] 1909–1914.
	1914	1909	1914	1909	
Primary power, total	251	179	3,175	2,373	33.8
Owned	120	130	2,696	2,137	26.2
Steam	118	123	2,690	2,104	27.9
Internal combustion	2	7	6	33	.....
Rented	131	49	479	236	103.0
Electric	131	49	439	220	99.5
Other	.....	.....	40	16	.....
Electric—generated in establishments reporting	148	35	472	102	362.7

[1] Percentages are omitted where base is less than 100.

Table 35

KIND.	Unit.	QUANTITY.		Per cent of increase,[1] 1909–1914.
		1914	1909	
Anthracite coal	Ton, 2,240 pounds	1,951	170	1,047.6
Bituminous coal	Ton 2,000 pounds	28,799	25,349	13.6
Coke	Ton, 2,000 pounds	4	214	−98.1
Oil	Barrels	296	18,316	−98.4
Gas	1,000 cubic feet	29,729	9,973	198.1

[1] A minus sign (−) denotes decrease.

GENERAL TABLES.

Table 36 gives, for 1914, 1909, and 1904, 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 city having 50,000 inhabitants or more; and for the cities having from 10,000 to 50,000 inhabitants, similar data for all industries combined.

Table 37 presents, for 1914, in the state as a whole and in the city with 50,000 inhabitants or more, statistics in detail for each industry that can be shown without the disclosure of 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 36.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.							
All industries	1914	9,104	194,310	682,339	$112,193	$417,415	$695,172
	1909	9,721	182,583	554,179	93,905	346,357	590,306
	1904	8,558	151,391	440,234	71,472	227,255	411,140
Agricultural implements	1914	46	3,143	9,196	2,198	8,676	20,119
	1909	45	2,704	7,301	1,506	3,937	11,411
	1904	52	3,569	6,966	1,886	3,520	10,077
Artificial stone products	1914	130	404	736	245	278	714
	1909	119	377	669	189	235	624
	1904	20	48	92	25	42	112
Automobiles, including bodies and parts.	1914	43	4,889	9,827	3,908	10,465	18,478
	1909	30	4,298	3,153	2,733	5,340	11,440
	1904	6	520	645	300	845	1,875
Awnings, tents, and sails	1914	23	84	36	37	130	228
	1909	16	66	26	31	93	179
	1904	4	32	9	16	39	70
Boots and shoes, including findings.	1914	65	5,814	3,932	2,716	12,122	17,832
	1909	68	5,431	2,923	2,243	8,753	13,602
	1904	62	3,494	1,686	1,326	4,417	6,844
Boxes, cigar	1914	8	166	231	46	118	266
	1909	7	186	261	56	139	283
	1904	6	193	214	48	131	247
Boxes, fancy and paper	1914	18	1,319	1,554	$535	$1,119	$2,327
	1909	15	824	331	262	639	1,317
	1904	12	490	332	128	214	498
Brass, bronze, and copper products.	1914	30	1,122	7,053	674	4,395	5,409
	1909	33	1,289	6,102	751	3,514	5,387
	1904	19	765	(1)	406	1,423	2,215
Bread and other bakery products.	1914	704	2,197	1,276	1,248	4,536	8,058
	1909	667	1,751	944	929	4,023	6,872
	1904	532	1,714	626	765	3,151	5,381
Brick, tile, pottery, and other clay products.	1914	[2] 78	875	4,293	452	342	1,230
	1909	108	1,027	5,640	510	282	1,191
	1904	141	1,638	5,951	686	553	1,848
Brooms, from broom corn.	1914	26	96	58	51	160	266
	1909	30	101	75	53	190	313
	1904	(3)	.....	.....	.....	.....	.....
Brushes, exclusive of paint and varnish.	1914	11	129	155	62	93	270
	1909	14	142	169	52	80	249
	1904	(3)	.....	.....	.....	.....	.....
Butter, cheese, and condensed milk.	1914	2,431	3,717	23,365	2,712	65,326	72,859
	1909	2,630	2,863	16,467	1,877	48,006	53,843
	1904	2,360	2,298	15,276	1,328	26,406	29,995

[1] Figures not comparable. [2] Includes "sand-lime brick." [3] Figures not available.

TABLE 36.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

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

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages. (Expressed in thousands.)	Cost of materials. (Expressed in thousands.)	Value of products. (Expressed in thousands.)
Canning and preserving	1914	[1] 112	2,687	8,730	$1,064	$4,570	$7,335
	1909	83	1,776	4,915	639	2,967	4,807
	1904	59	1,311	2,962	426	2,012	3,291
Carriages and sleds, children's.	1914	4	454	392	191	309	648
	1909	6	357	458	129	213	454
	1904	3	271	340	90	181	328
Carriages and wagons and materials.	1914	185	2,638	5,502	1,827	4,259	7,544
	1909	286	3,437	6,426	1,930	5,163	8,899
	1904	330	3,682	5,374	1,811	4,092	8,089
Cars and general shop construction and repairs by electric-railroad companies.	1914	16	401	2,110	270	375	649
	1909	9	215	711	151	115	205
	1904	(2)	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	35	9,011	7,283	5,718	4,540	10,921
	1909	22	8,994	4,196	5,234	8,676	14,332
	1904	30	5,444	3,601	3,128	3,071	6,512
Chemicals	1914	7	60	362	36	230	436
	1909	5	76	495	41	242	513
	1904	5	65	243	29	137	265
Clothing, horse	1914	6	557	435	227	1,135	1,658
	1909	5	494	318	145	870	1,276
	1904	6	430	(3)	112	529	798
Clothing, men's, including shirts.	1914	59	3,584	858	1,457	4,994	8,688
	1909	94	4,252	691	1,463	5,448	9,405
	1904	104	2,923	513	983	3,548	6,709
Clothing, women's	1914	21	521	92	187	551	980
	1909	19	565	64	186	503	928
	1904	17	498	75	157	453	840
Coffee and spice, roasting and grinding.	1914	8	70	356	37	609	809
	1909	9	74	462	33	601	780
	1904	7	50	305	20	368	502
Coffins, burial cases, and undertakers' goods.	1914	5	356	685	201	415	905
	1909	8	349	622	159	384	754
	1904	6	133	379	60	151	326
Confectionery	1914	55	2,242	1,837	810	3,880	6,229
	1909	38	1,780	1,327	513	2,667	4,414
	1904	33	1,196	652	307	1,439	2,348
Cooperage and wooden goods, not elsewhere specified.	1914	35	638	2,227	344	690	1,213
	1909	48	1,208	3,658	618	1,119	2,393
	1904	82	1,962	3,804	858	1,702	3,074
Copper, tin, and sheet-iron products.	1914	[4] 111	3,372	3,947	1,930	5,583	10,202
	1909	105	2,780	2,325	1,188	4,656	7,136
	1904	[5] 53	2,503	1,690	941	2,848	4,958
Cutlery and tools, not elsewhere specified.	1914	19	208	583	113	151	382
	1909	16	118	516	64	123	285
	1904	11	85	163	44	79	158
Dairymen's, poultrymen's and apiarists' supplies.	1914	28	345	800	213	831	1,666
	1909	22	526	964	279	711	1,329
	1904	14	204	396	77	170	365
Electrical machinery, apparatus, and supplies.	1914	29	2,115	3,616	1,340	2,064	5,397
	1909	30	1,409	2,333	820	1,451	3,836
	1904	23	1,204	2,173	673	1,020	3,194
Fancy articles, not elsewhere specified.	1914	5	165	264	55	126	231
	1909	6	343	312	113	225	477
	1904	10	329	311	96	200	439
Flour-mill and gristmill products.	1914	252	1,116	26,350	737	24,980	28,697
	1909	322	1,184	31,903	695	27,038	31,607
	1904	389	1,351	42,211	720	24,756	28,352
Food preparations	1914	30	478	3,400	267	1,384	4,353
	1909	28	526	2,738	243	2,844	5,535
	1904	16	362	765	156	1,020	2,211
Foundry and machine-shop products.	1914	[6] 494	26,521	46,622	18,061	28,162	60,698
	1909	444	24,219	33,709	14,601	22,534	54,124
	1904	[7] 362	15,330	22,160	8,589	13,623	31,370
Fur goods	1914	36	225	140	129	368	711
	1909	40	413	197	219	927	1,524
	1904	24	356	157	155	452	909
Furniture and refrigerators.	1914	114	11,792	20,770	$5,925	$10,642	$22,587
	1909	114	11,118	18,667	5,136	8,795	18,656
	1904	107	9,702	13,813	3,750	5,765	12,370
Gas, illuminating and heating.	1914	47	1,240	11,159	722	1,816	5,295
	1909	49	1,053	3,278	583	1,389	4,001
	1904	33	911	2,859	464	819	2,911
Gloves and mittens, leather.	1914	24	1,711	670	589	1,746	2,922
	1909	23	1,642	301	573	1,637	2,799
	1904	21	1,396	226	437	1,339	2,209
Grease and tallow	1914	10	50	225	40	251	326
	1909	11	36	126	24	197	280
	1904	9	30	87	19	129	170
Hosiery and knit goods	1914	68	6,244	3,629	2,448	7,025	13,292
	1909	61	4,282	2,312	1,579	3,887	7,843
	1904	50	4,253	2,112	1,187	2,298	4,979
Iron and steel, blast furnaces.	1914	5	482	12,742	398	3,252	3,793
	1909	5	758	12,975	497	3,918	4,794
	1904	4	482	5,875	257	2,251	3,075
Iron and steel, steel works, and rolling mills.	1914	12	2,029	15,215	1,293	3,555	6,009
	1909	14	2,124	10,064	1,409	7,906	10,733
	1904	10	1,915	11,126	1,125	4,501	7,379
Jewelry	1914	14	74	35	47	73	155
	1909	13	78	23	42	87	240
	1904	12	77	41	41	38	126
Leather goods	1914	[8] 111	1,490	1,397	753	3,234	5,323
	1909	48	2,099	1,442	922	3,010	5,382
	1904	39	1,824	1,165	737	2,433	4,056
Leather, tanned, curried, and finished.	1914	27	5,869	20,142	3,404	33,053	42,204
	1909	32	7,548	17,112	3,988	34,829	44,668
	1904	33	5,556	9,816	2,687	19,871	25,845
Lime	1914	30	828	4,032	450	827	1,570
	1909	43	776	1,984	412	507	1,272
	1904	35	544	1,200	256	327	781
Liquors, malt	1914	132	5,414	28,326	3,913	13,703	40,884
	1909	136	5,061	23,248	3,045	7,898	32,126
	1904	139	4,872	15,564	2,860	5,185	28,692
Lumber and timber products.	1914	[9] 635	32,282	107,257	16,545	25,468	55,363
	1909	1,020	34,093	124,286	16,059	25,587	57,969
	1904	777	34,457	101,881	16,674	24,583	58,531
Malt	1914	25	637	10,545	536	12,489	15,533
	1909	25	456	7,642	318	7,823	9,597
	1904	29	535	5,043	355	6,937	8,740
Marble and stone work	1914	117	1,390	3,416	996	1,168	2,914
	1909	136	2,593	4,847	1,827	1,217	4,114
	1904	74	1,107	2,605	699	706	1,999
Mattresses and spring beds	1914	18	384	771	214	648	1,089
	1909	21	504	917	241	858	1,444
	1904	20	1,415	2,181	785	1,508	3,528
Millinery and lace goods	1914	10	656	311	322	1,198	2,155
	1909	7	307	163	147	338	556
	1904	4	344	93	123	317	555
Mineral and soda water	1914	176	375	739	216	845	1,869
	1909	169	346	543	175	683	1,579
	1904	156	357	402	161	654	1,735
Mirrors, framed and unframed.	1914	4	81	300	56	168	274
	1909	5	87	190	49	199	316
	1904	3	57	100	26	120	167
Models and patterns	1914	24	117	199	76	41	186
	1909	20	112	190	65	46	185
	1904	18	82	166	45	21	111
Paint	1914	9	192	985	104	1,127	1,586
	1909	11	193	935	99	1,026	1,492
	1904	[10] 9	152	731	70	764	1,048
Paper and wood pulp	1914	58	8,968	191,693	5,339	20,568	31,205
	1909	57	7,467	136,903	3,891	16,693	25,962
	1904	52	6,338	105,940	2,988	10,692	17,844
Paper goods, not elsewhere specified.	1914	7	188	860	97	392	743
	1909	11	329	744	122	595	988
	1904	[11] 4	140	377	43	155	342

[1] Includes "canning and preserving, fish," "canning vegetables," and "pickles and sauces."
[2] Figures not available.
[3] Figures not comparable.
[4] Include "stamped and enameled ware," and "tinware, not elsewhere specified."
[5] Includes three establishments for enameling and enameled goods and excludes statistics for two establishments to avoid disclosure of individual operations.
[6] Includes "automobile repairing;" "engines, steam, gas, and water;" "gas machines and gas and water meters;" "hardware;" "hardware, saddlery;" "plumber's supplies;" "steam fittings and steam and hot-water heating apparatus;" and "structural ironwork, not made in steel works or rolling mills."
[7] Excludes statistics for two establishments, to avoid disclosure of individual operations.
[8] Includes "saddlery and harness;" and "trunks and valises."
[9] Includes "boxes, wooden packing;" and "lumber, planing-mill products, not including planing mills connected with sawmills."
[10] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[11] Excludes statistics for three establishments, to avoid disclosure of individual operations.

TABLE 36.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

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

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages. (Expressed in thousands.)	Cost of materials. (Expressed in thousands.)	Value of products. (Expressed in thousands.)
Patent medicines and compounds and druggists' preparations.	1914	[1] 62	278	275	$131	$510	$1,442
	1909	62	269	219	118	445	1,707
	1904	58	262	113	77	362	1,233
Photo-engraving	1914	9	134	49	117	93	308
	1909	10	171	66	130	46	312
	1904	5	103	35	76	20	166
Printing and publishing	1914	[2] 829	5,653	6,527	3,473	4,847	14,455
	1909	833	5,360	5,293	2,913	3,386	11,861
	1904	767	5,099	5,064	2,435	2,642	9,252
Shipbuilding, including boat building.	1914	34	695	3,875	421	451	1,254
	1909	52	906	3,506	540	819	1,081
	1904	[3] 32	459	934	255	174	600
Signs and advertising novelties.	1914	6	313	105	127	204	445
	1909	3	36	52	14	27	50
	1904	([4])	.....	.....	.....	.....	.....
Slaughtering and meat packing.	1914	[5] 46	2,236	4,874	1,381	30,541	34,698
	1909	48	1,890	3,283	1,042	23,403	27,217
	1904	[6] 23	1,580	2,457	782	14,072	16,569
Soap	1914	11	272	339	$132	$1,369	$2,894
	1909	16	213	487	89	910	1,611
	1904	16	187	313	73	633	1,002
Tobacco manufactures	1914	756	2,485	358	1,322	2,626	6,779
	1909	775	2,391	286	1,106	2,507	6,142
	1904	767	2,810	457	1,196	2,186	6,346
Upholstering materials	1914	15	339	1,769	172	629	994
	1909	14	201	1,550	90	272	472
	1904	15	134	([7])	74	207	379
Wirework, including wire rope and cable.	1914	18	327	742	198	811	1,299
	1909	18	226	405	143	545	892
	1904	16	306	363	143	361	653
All other industries	1914	476	17,366	50,101	10,138	34,079	64,419
	1909	432	11,694	26,739	5,862	20,164	40,181
	1904	423	9,455	27,024	4,226	12,593	23,547

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

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages. (Expressed in thousands.)	Cost of materials. (Expressed in thousands.)	Value of products. (Expressed in thousands.)
MILWAUKEE—All industries.	1914	1,728	61,839	122,178	$36,270	$124,876	$223,555
	1909	1,764	59,502	94,254	31,437	120,621	208,324
	1904	1,527	43,366	.....	20,809	71,103	137,995
Artificial stone products	1914	9	60	104	36	68	145
	1909	9	80	238	47	60	161
	1904	4	23	.....	13	24	72
Boots and shoes, including cut stock and findings.	1914	27	3,955	2,854	1,852	8,387	12,133
	1909	26	2,973	1,481	1,235	4,950	7,800
	1904	27	1,669	.....	632	2,040	3,182
Bread and other bakery products.	1914	324	1,270	696	683	2,547	4,571
	1909	318	975	509	528	2,213	3,824
	1904	256	1,167	.....	492	2,100	3,510
Brooms, from broom corn.	1914	12	41	23	24	77	121
	1909	11	52	24	30	97	144
	1904	([4])	.....	.....	.....	.....	.....
Brushes, exclusive of paint and varnish.	1914	7	102	104	49	80	237
	1909	10	96	72	37	61	195
	1904	([4])	.....	.....	.....	.....	.....
Clothing, women's	1914	16	434	71	167	486	863
	1909	14	391	45	139	352	669
	1904	9	216	.....	80	149	334
Confectionery	1914	18	1,435	1,213	541	2,738	4,365
	1909	14	1,214	910	356	1,836	3,063
	1904	12	682	.....	184	871	1,380
Copper, tin, and sheet-iron products.	1914	[8] 38	1,606	1,403	885	2,309	4,304
	1909	39	2,019	1,910	860	3,514	5,330
	1904	23	838	.....	362	1,314	2,097
Electrical machinery, apparatus, and supplies.	1914	13	1,632	2,647	1,040	1,397	3,995
	1909	18	998	1,537	598	928	2,749
	1904	12	815	.....	491	655	2,257
Food preparations	1914	14	118	873	66	599	843
	1909	18	145	680	78	1,589	1,949
	1904	10	103	.....	50	605	903
Foundry and machine-shop products.	1914	[9] 136	8,462	11,735	5,923	9,536	20,312
	1909	125	7,881	9,305	4,762	7,000	18,146
	1904	105	5,650	.....	3,128	4,970	11,421
Fur goods	1914	21	162	56	99	273	540
	1909	27	349	141	201	833	1,360
	1904	14	278	.....	128	336	734
Gloves and mittens, leather.	1914	10	681	441	252	858	1,339
	1909	8	757	190	304	944	1,503
	1904	6	598	.....	210	801	1,208
Hats and caps, other than felt, straw, and wool.	1914	5	70	13	43	73	153
	1909	8	67	10	35	62	139
	1904	5	56	.....	23	53	101
Hosiery and knit goods	1914	36	2,871	1,464	1,170	3,347	7,185
	1909	29	1,925	877	631	1,689	3,417
	1904	23	1,711	.....	407	690	1,560
Leather goods	1914	[10] 31	890	472	$428	$2,135	$3,372
	1909	23	1,267	529	577	1,743	3,169
	1904	14	1,049	.....	439	1,514	2,523
Leather, tanned, curried, and finished.	1914	10	3,650	11,295	2,106	17,666	22,893
	1909	12	4,903	9,931	2,637	21,468	27,484
	1904	10	3,111	.....	1,600	10,549	14,074
Liquors, malt	1914	11	3,610	15,579	2,646	8,929	27,682
	1909	10	3,071	12,890	1,818	4,373	19,643
	1904	8	3,521	.....	2,127	3,397	22,135
Lumber and timber products.	1914	[11] 22	2,119	5,349	1,205	2,779	4,933
	1909	30	2,383	7,525	1,207	3,791	6,053
	1904	25	1,836	.....	807	2,764	4,286
Malt	1914	6	168	2,615	189	3,837	4,754
	1909	6	146	2,475	106	2,724	3,483
	1904	7	215	.....	147	2,846	3,624
Marble and stone work	1914	24	465	1,374	395	440	1,014
	1909	26	347	983	291	317	862
	1904	14	301	.....	180	257	629
Mattresses and spring beds	1914	8	212	443	122	374	665
	1909	9	246	398	113	457	760
	1904	9	211	.....	95	313	635
Millinery and lace goods	1914	10	656	311	322	1,198	2,155
	1909	7	307	163	147	338	556
	1904	4	344	.....	123	317	555
Models and patterns, not including paper patterns.	1914	17	100	127	64	35	156
	1909	17	96	148	54	42	164
	1904	15	78	.....	40	20	101
Paints	1914	5	178	820	97	1,095	1,532
	1909	6	169	775	85	975	1,395
	1904	[6] 6	141	.....	65	742	1,016
Patent medicines, and compounds, and druggists' preparations.	1914	[1] 29	155	99	69	251	727
	1909	25	155	54	70	234	901
	1904	[3] 21	28	.....	11	68	171
Photo-engraving	1914	6	120	34	107	87	279
	1909	7	163	55	125	42	291
	1904	5	103	.....	76	20	166
Printing and publishing	1914	[2] 182	2,943	3,369	1,935	3,023	8,315
	1909	188	2,949	2,956	1,739	2,165	7,119
	1904	[6] 149	2,827	.....	1,465	1,774	5,680
Tobacco manufactures	1914	238	1,098	304	594	1,507	3,989
	1909	234	894	262	426	1,479	3,339
	1904	259	1,103	.....	478	1,155	3,507
All other industries	1914	443	22,576	56,290	13,161	48,745	79,983
	1909	490	22,484	37,181	12,201	54,345	82,656
	1904	475	14,692	.....	6,956	30,759	50,134

[1] Includes "perfumery and cosmetics."
[2] Includes "bookbinding and blank-book making;" and "lithographing".
[3] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[4] Figures not available.
[5] Includes "sausage."
[6] Excludes statistics for two establishments, to avoid disclosure of individual operations.
[7] Figures not comparable.
[8] Includes "stamped and enameled ware;" and "tinware, not elsewhere specified."
[9] Includes "automobile repairing;" "engines, steam, gas, and water;" "gas machines and gas and water meters;" "hardware;" "plumbers' supplies;" "steam fittings and steam and hot-water heating apparatus;" and "structural ironwork, not made in steel works or rolling mills."
[10] Includes "saddlery and harness;" and "trunks and valises."
[11] Includes "boxes, wooden and packing;" and "lumber, planing-mill products, not including planing mills connected with sawmills."

TABLE 36.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.							
APPLETON	1914	107	2,144	15,633	$1,231	$4,760	$7,558
	1909	97	2,125	14,295	1,088	4,257	6,734
	1904	108	2,486	.....	1,217	4,026	6,672
ASHLAND	1914	37	797	4,835	510	1,077	1,827
	1909	38	1,116	4,912	611	1,486	2,748
	1904	37	1,361	.....	738	2,192	4,210
BELOIT	1914	50	3,527	6,861	2,346	3,013	6,928
	1909	51	2,986	4,992	1,840	2,439	5,886
	1904	44	2,471	.....	1,439	1,835	4,485
EAU CLAIRE	1914	94	2,315	16,356	1,246	4,208	6,774
	1909	75	2,524	13,695	1,198	2,974	5,855
	1904	73	1,985	.....	851	1,799	3,602
FOND DU LAC	1914	100	1,925	7,346	1,000	4,619	6,761
	1909	97	2,707	4,393	1,297	5,074	8,227
	1904	85	2,566	.....	1,055	3,311	5,600
GREEN BAY	1914	104	2,724	8,809	1,465	4,060	6,798
	1909	102	2,579	5,637	1,107	3,893	6,235
	1904	103	2,111	.....	879	2,696	4,873
JANESVILLE	1914	71	1,495	3,568	865	3,066	5,659
	1909	78	1,451	3,358	676	2,877	5,156
	1904	73	1,348	.....	600	2,056	3,846
KENOSHA	1914	75	7,155	20,736	4,653	19,267	28,341
	1909	62	6,449	14,484	3,838	14,773	23,182
	1904	45	4,354	.....	2,244	7,392	12,363
LA CROSSE	1914	167	3,340	9,869	1,879	7,814	14,739
	1909	151	3,329	6,956	1,539	7,797	14,103
	1904	150	2,644	.....	1,065	4,725	8,139
MADISON	1914	122	2,084	2,933	$1,346	$2,795	$6,207
	1909	116	1,792	2,551	1,059	2,337	5,467
	1904	84	1,476	.....	813	1,293	3,291
MANITOWOC	1914	77	2,012	5,079	1,046	5,358	8,461
	1909	80	1,525	4,371	767	3,963	5,939
	1904	76	1,321	.....	533	2,940	4,428
MARINETTE	1914	51	2,112	6,320	1,085	2,345	4,674
	1909	43	1,491	6,470	701	1,703	3,309
	1904	37	1,645	.....	862	1,581	3,633
OSHKOSH	1914	157	5,782	13,648	2,804	6,807	13,890
	1909	159	5,778	10,890	2,570	7,081	14,739
	1904	134	4,840	.....	2,097	4,432	8,652
RACINE	1914	189	10,079	21,292	6,765	20,262	43,632
	1909	142	8,381	12,905	4,562	11,512	24,673
	1904	148	6,504	.....	3,155	7,143	16,459
SHEBOYGAN	1914	132	7,152	13,785	3,370	9,162	17,509
	1909	109	5,988	8,717	2,339	6,089	11,299
	1904	96	5,903	.....	2,095	5,553	9,751
SUPERIOR	1914	111	2,121	7,678	1,382	8,446	11,663
	1909	99	1,847	6,536	1,087	4,272	6,574
	1904	72	1,343	.....	746	4,648	6,357
WAUSAU	1914	85	2,492	7,408	1,354	4,530	7,325
	1909	67	2,092	6,786	990	3,325	6,287
	1904	58	1,945	.....	807	2,549	4,644

TABLE 37.—DETAIL STATEMENT FOR THE STATE AND FOR CITIES OF 50,000 INHABITANTS

	INDUSTRY AND CITY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Capital.
	THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.															
1	All industries	9,104	230,273	7,425	7,596	16,100	4,842	194,310	Mh 205,512	De 182,055	(3)	(3)	(3)	(3)	(3)	$754,287,116
2	Agricultural implements	46	4,885	37	275	1,320	110	3,143	Ja 4,643	Se 1,918	3,295	3,199	93	3	.....	48,077,980
3	Artificial limbs	4	14	3	4	.....	1	6	(4) 6	(4) 6	6	5	1	.....	.....	16,423
4	Artificial stone products	130	570	130	27	4	5	404	Au 517	De 243	511	511	.....	.....	.....	569,900
5	Automobile bodies and parts	31	2,023	10	83	159	49	1,722	Je 1,990	No 1,197	1,868	1,807	53	8	.....	5,837,450
6	Automobiles	12	3,794	4	177	354	92	3,167	Ap 3,837	Jy 2,640	3,005	3,000	4	1	.....	12,449,823
7	Automobile repairing	26	146	26	2	8	6	104	.....	.....	99	96	3	.....	.....	222,548
8	Repair work	22	131	22	1	4	6	98	My 108	Oc 90	92	89	3	.....	.....	186,410
9	Vulcanizing tires	4	15	4	1	4	.....	6	My 5 7	Oc 5 5	7	7	.....	.....	.....	36,120
10	Awnings, tents, and sails	23	131	24	12	9	2	84	Je 125	Ja 50	91	53	36	2	.....	129,068
11	Baskets, and rattan and willow ware	6	203	6	6	4	1	186	Mh 205	No 142	151	115	28	8	.....	202,409
12	Bookbinding and blank-book making.	30	728	28	25	49	14	612	De 688	Jy 543	689	321	309	28	31	676,932
13	Boot and shoe findings	4	54	3	5	2	2	42	Ja 48	Mh 36	45	30	15	.....	.....	116,922
14	Boots and shoes, not including rubber boots and shoes.	61	6,507	21	156	374	184	5,772	.....	.....	5,853	3,670	1,969	118	96	12,545,864
15	Boots and shoes	58	6,473	19	155	374	181	5,744	Ja 6,037	Je 5,451	5,821	3,644	1,963	118	96	12,504,233
16	Footwear, other than boots and shoes	3	34	2	1	.....	3	28	Oc 37	Mh 24	32	26	6	.....	.....	41,631
17	Boxes, cigar	8	198	6	11	11	4	166	De 170	Au 161	173	52	120	.....	1	265,654
18	Boxes, fancy and paper	18	1,455	8	38	51	39	1,319	Oc 1,378	Fe 1,277	1,305	517	651	40	97	2,286,123
19	Boxes, wooden packing	56	2,543	33	75	51	15	2,369	Jy 2,667	No 2,042	2,489	2,278	136	69	6	3,821,322
20	Brass, bronze, and copper products.	30	1,254	15	39	59	19	1,122	.....	.....	1,087	1,079	7	1	.....	4,076,671
21	Brass and bronze	23	1,100	13	28	52	16	991	Ap 1,072	Ja 897	978	973	4	1	.....	3,671,947
22	Other than brass, bronze, and copper.	7	154	2	11	7	3	131	Mh 163	Se 108	109	106	3	.....	.....	404,724
23	Bread and other bakery products	704	3,313	755	64	189	108	2,197	Jy 2,277	Ja 2,074	2,237	1,711	498	18	10	5,246,826
24	Brick and tile, terra cotta, and fire-clay products.	72	983	76	55	19	5	828	.....	.....	1,223	1,212	.....	11	.....	1,783,586
25	Building brick	63	888	62	48	14	5	759	Jy 1,326	Fe 268	1,137	1,128	.....	9	.....	1,526,283
26	Miscellaneous	9	95	14	7	5	.....	69	Je 109	Fe 31	86	84	.....	2	.....	257,303
27	Brooms, from broom corn	26	141	29	4	9	3	96	Se 5 100	My 88	97	91	5	1	.....	115,304
28	Brushes, exclusive of paint and varnish.	11	169	7	11	13	9	129	Je 148	De 109	132	96	15	21	.....	244,222
29	Butter	675	2,254	358	158	70	62	1,606	Jy 1,749	Ja 1,458	1,643	1,624	13	6	.....	4,762,389
30	Canning and preserving, fish	10	51	9	5	2	2	33	No 176	Mh 5 1	166	166	.....	.....	.....	133,613
31	Canning, vegetables	81	2,858	4	241	65	27	2,521	Jy 8,997	Fe 568	7,170	4,998	1,831	259	82	7,972,388
32	Carpets, rag	16	111	18	1	3	3	86	My 104	Ja 61	88	39	44	4	1	44,805
33	Carriage and wagon materials	6	117	7	4	13	3	90	Ja 107	No 81	84	84	.....	.....	.....	216,056
34	Carriages and sleds, children's	4	483	1	11	7	10	454	Oc 492	My 413	468	436	5	24	3	518,697
35	Carriages, wagons, and repairs	179	3,016	215	76	145	32	2,548	.....	.....	2,534	2,495	35	4	.....	11,483,961
36	Carriages and wagons	175	3,009	210	76	145	32	2,546	Mh 2,890	Ja 1,934	2,532	2,493	35	4	.....	11,472,523
37	Repair work only	4	7	5	.....	.....	.....	2	(4) 2	(4) 2	2	2	.....	.....	.....	11,438
38	Cars and general shop construction and repairs by electric-railroad companies.	16	413	.....	9	2	1	401	Ap 462	Oc 5 334	398	393	5	.....	.....	1,146,523
39	Cars and general shop construction and repairs by steam-railroad companies.	35	9,627	.....	63	540	13	9,011	Ja 9,299	De 8,649	9,155	9,149	6	.....	.....	6,722,008
40	Cheese	1,739	2,689	1,253	45	51	10	1,330	Jy 1,697	Ja 780	1,622	1,587	26	9	.....	5,411,082
41	Chemicals	7	103	3	14	23	3	60	Mh 65	Jy 56	61	54	7	.....	.....	373,962
42	Cleansing and polishing preparations	11	187	9	6	23	46	103	.....	.....	106	86	17	2	1	435,874
43	Cleansing	5	34	3	2	6	3	20	Jy 24	My 16	18	15	3	.....	.....	17,946
44	Polishing	6	153	6	4	17	43	83	Mh 105	Au 5 71	88	71	14	2	1	417,928
45	Clothing, horse	6	647	5	13	60	12	557	Ja 697	Au 394	502	123	330	12	37	1,615,904
46	Clothing, men's	55	3,759	44	103	317	91	3,204	.....	.....	3,178	774	2,327	15	62	5,708,018
47	Men's and youths', including boys.	40	3,421	29	101	314	89	2,888	Fe 3,054	Oc 2,622	2,842	718	2,049	15	60	5,640,489
48	Contract work, men's and youths'.	15	338	15	2	3	2	316	Ap 334	Oc 292	336	56	278	.....	2	67,529
49	Clothing, women's	21	639	23	23	31	41	521	.....	.....	522	101	412	.....	9	472,276
50	Suits, skirts, cloaks, etc.	6	211	7	10	14	7	173	Se 209	My 148	167	70	95	.....	2	172,274
51	All other, including contract work.	15	428	16	13	17	34	348	My 393	Fe 314	355	31	317	.....	7	300,002
52	Coffee and spice, roasting and grinding.	8	134	3	14	34	13	70	Oc 74	De 64	64	33	31	.....	.....	361,525
53	Coffins, burial cases, and undertakers' goods.	5	431	.....	21	48	6	356	Mh 375	Jy 337	356	297	55	4	.....	997,087
54	Condensed milk	17	967	.....	32	132	22	781	Je 1,036	Ja 592	726	565	158	3	.....	5,560,881
55	Confectionery and ice cream	100	2,969	82	113	282	63	2,429	.....	.....	2,669	911	1,438	71	249	4,085,846
56	Confectionery	55	2,686	35	94	263	52	2,242	No 2,619	Jy 1,928	2,472	736	1,417	70	249	3,211,532
57	Ice cream	45	283	47	19	19	11	187	Je 253	Ja 137	197	175	21	1	.....	874,314
58	Cooperage	27	509	23	11	8	3	464	.....	.....	535	530	.....	5	.....	935,796
59	Hogsheads and barrels	19	355	16	9	7	3	320	Je 406	Fe 259	379	378	.....	1	.....	834,346
60	All other	8	154	7	2	1	.....	144	Ja 5 163	My 127	156	152	.....	4	.....	101,450
61	Copper, tin, and sheet-iron products.	99	1,036	101	57	92	34	752	Se 845	De 649	705	703	1	1	.....	2,181,200
62	Cutlery and edge tools	4	76	6	5	2	4	59	Oc 5 65	My 53	65	56	6	1	2	110,871

[1] Owned power only. [2] Includes rented power, other than electric. [3] No figures given for reasons stated under "Explanation of terms."

OR MORE, BY INDUSTRIES, AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914.

EXPENSES.										POWER.						
Salaries and wages.				Rent and taxes.		For materials.				Primary horsepower.						
Officials.	Clerks, etc.	Wage earners.	For contract work.	Rent of factory.	Taxes, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.	Value of products	Value added by manufacture.	Total.	Steam engines.[1]	Internal combustion engines.[2]	Water wheels and motors.[1]	Electric (rented).	Electric horsepower generated in establishments reporting.	
THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
$16,793,770	$20,775,099	$112,193,163	$3,453,920	$1,797,041	$15,545,998	$401,237,307	$16,177,767	$695,172,002	$277,756,928	682,339	420,065	33,495	148,795	79,984	175,684	1
656,901	1,851,546	2,198,371	.....	6,697	217,549	8,510,229	165,405	20,119,058	11,443,424	9,196	8,120	334	.....	742	4,843	2
5,480	468	4,640	.....	3,578	102	5,167	319	23,392	17,906	3	.....	.....	.....	3	.....	3
25,495	2,627	245,118	5,216	5,992	3,912	267,705	10,245	714,122	436,172	736	75	386	.....	275	.....	4
215,235	175,905	1,278,702	11,852	28,368	48,994	1,642,176	88,676	4,325,764	2,594,912	3,024	681	1,617	.....	726	1,269	5
467,708	415,410	2,629,310	1,507	13,124	74,580	8,609,246	125,145	14,152,432	5,418,041	6,803	4,878	737	.....	1,188	2,402	6
1,880	9,878	77,027	.....	7,759	2,263	62,645	4,430	207,096	140,021	157	.....	50	.....	107	.....	7
300	5,438	74,763	.....	6,599	2,159	59,243	3,867	186,237	123,127	151	.....	50	.....	101	.....	8
1,580	4,440	2,264	.....	1,160	104	3,402	563	20,859	16,894	6	.....	.....	.....	6	.....	9
11,936	5,908	37,299	.....	4,662	1,148	128,694	1,794	227,856	97,368	36	.....	4	.....	32	.....	10
10,113	2,743	73,852	.....	489	1,546	49,791	2,244	162,003	109,968	207	205	.....	.....	2	.....	11
42,943	52,851	282,202	22,936	27,080	4,384	416,442	8,770	1,014,070	588,858	221	.....	3	.....	218	.....	12
6,140	2,083	21,249	.....	2,270	306	130,803	2,858	188,843	55,182	44	.....	.....	.....	44	3	13
319,109	692,900	2,695,107	23,767	47,855	92,166	11,907,793	80,979	17,643,350	5,654,578	3,888	2,777	73	10	1,028	1,258	14
317,609	683,724	2,678,772	23,467	47,699	91,955	11,862,662	79,992	17,563,749	5,621,095	3,871	2,777	63	10	1,021	1,258	15
1,500	9,176	16,335	300	156	211	45,131	987	79,601	33,483	17	.....	10	.....	7	.....	16
13,660	10,760	45,501	2,810	432	3,248	115,151	2,825	266,016	148,040	231	146	6	.....	79	.....	17
93,004	75,715	535,198	.....	29,600	23,413	1,057,676	60,829	2,326,767	1,208,262	1,554	1,283	14	.....	257	759	18
145,539	86,473	1,064,952	2,040	5,030	36,639	2,795,861	24,276	4,947,466	2,127,329	7,990	7,124	229	.....	637	1,349	19
108,326	84,818	674,430	173	7,921	36,050	4,230,577	164,411	5,409,260	1,014,272	7,053	6,475	136	.....	442	2,602	20
83,588	74,585	592,677	173	6,393	32,919	4,005,002	154,866	5,005,281	845,413	6,843	6,455	46	.....	342	2,602	21
24,738	10,233	81,753	.....	1,528	3,131	225,575	9,545	403,979	168,859	210	20	90	.....	100	.....	22
112,894	208,442	1,247,623	1,675	143,843	59,589	4,339,018	196,923	8,057,702	3,521,761	1,276	103	86	1	1,086	9	23
69,815	21,466	416,840	2,090	1,670	16,418	103,959	197,132	1,114,340	813,249	3,821	2,942	237	.....	642	15	24
60,915	16,158	374,455	2,090	1,500	15,222	94,899	184,112	1,006,245	727,234	3,497	2,618	237	.....	642	15	25
8,900	5,308	42,385	.....	170	1,196	9,060	13,020	108,095	86,015	324	324	.....	.....	.....	.....	26
3,300	8,211	50,628	63	1,908	1,248	157,925	1,594	266,305	106,786	58	1	10	.....	47	.....	27
19,927	23,100	61,818	532	6,002	1,696	85,433	7,991	270,479	177,055	155	35	32	.....	88	.....	28
130,869	59,813	1,206,701	73,720	19,515	39,410	30,675,533	237,930	34,075,821	3,162,358	9,900	8,414	668	56	762	118	29
5,967	665	22,032	.....	60	1,802	42,178	839	108,411	65,394	127	42	72	.....	13	.....	30
282,256	64,558	989,417	9,306	47,449	66,984	4,252,369	77,769	6,898,667	2,568,529	8,462	6,650	789	5	1,018	160	31
1,000	37,927	72,310	.....	3,213	428	11,716	2,250	87,030	73,064	74	.....	42	.....	32	8	32
5,180	9,415	56,430	890	1,060	2,528	141,044	11,340	270,533	118,149	458	364	.....	50	44	133	33
21,962	13,482	191,020	.....	308	4,658	306,177	2,486	648,030	339,367	392	385	.....	.....	7	.....	34
138,344	196,481	1,770,547	3,878	11,052	81,851	4,017,313	89,459	7,273,788	3,167,016	5,044	3,923	444	30	647	2,123	35
138,344	196,481	1,769,347	3,878	10,967	81,694	4,015,318	89,244	7,267,823	3,163,261	5,034	3,923	435	30	646	2,123	36
.....	.....	1,200	.....	85	157	1,995	215	5,965	3,755	10	.....	9	.....	1	.....	37
8,750	705	269,862	.....	.....	22,540	361,133	14,009	648,545	273,403	2,110	359	.....	210	1,541	.....	38
94,323	501,451	5,718,224	.....	510	18,980	4,175,772	364,669	10,920,886	6,380,445	7,283	6,834	45	.....	404	1,555	39
29,245	15,538	1,051,839	17,322	25,021	29,353	25,415,278	233,805	28,075,795	2,426,712	10,889	9,929	943	.....	17	5	40
15,614	27,913	36,090	.....	10,620	2,715	220,531	9,303	436,222	206,388	362	106	65	.....	191	3	41
14,530	57,825	69,442	.....	1,188	4,859	300,265	5,225	703,338	397,848	217	150	20	.....	47	.....	42
4,900	9,591	12,750	.....	660	434	43,129	805	88,494	44,560	39	.....	20	.....	19	.....	43
9,630	48,234	56,692	.....	528	4,425	257,136	4,420	614,844	353,288	178	150	.....	.....	28	.....	44
22,983	45,337	227,361	4,572	7,500	9,677	1,122,805	12,606	1,657,784	522,373	435	395	9	.....	31	352	45
291,293	498,094	1,288,726	137,610	65,802	43,377	4,593,928	30,782	7,985,697	3,360,987	694	65	23	.....	606	34	46
287,693	496,456	1,196,473	137,564	64,014	42,394	4,588,313	27,209	7,846,154	3,230,632	648	65	23	.....	560	34	47
3,600	1,638	92,253	46	1,788	983	5,615	3,573	139,543	130,355	46	.....	.....	.....	46	.....	48
46,554	47,961	186,570	500	22,808	1,987	546,823	4,253	979,806	428,730	92	.....	.....	.....	92	.....	49
23,960	11,995	88,074	.....	10,783	891	207,764	1,336	386,529	177,429	21	.....	.....	.....	21	.....	50
22,594	35,966	98,496	500	12,025	1,096	339,059	2,917	593,277	251,301	71	.....	.....	.....	71	.....	51
14,580	20,334	36,877	.....	7,440	4,454	601,123	7,663	809,186	200,400	356	95	.....	.....	261	.....	52
35,392	45,244	201,270	2,793	120	8,880	402,575	12,167	904,891	490,149	685	540	.....	.....	145	82	53
103,790	147,353	453,503	.....	.....	45,359	8,564,110	198,882	10,706,976	1,943,984	2,576	2,494	.....	.....	82	506	54
257,980	332,355	935,803	7,874	38,139	52,189	4,418,242	82,747	7,243,167	2,742,178	2,990	1,724	63	.....	1,203	685	55
216,557	311,067	810,382	6,331	28,018	44,150	3,826,767	53,566	6,228,736	2,348,403	1,837	1,335	52	.....	450	605	56
41,423	21,288	125,421	1,543	10,121	8,039	591,475	29,181	1,014,431	393,775	1,153	389	11	.....	753	80	57
31,423	9,612	262,217	3,959	5,479	6,657	584,522	12,343	984,970	388,105	1,610	1,178	14	258	160	5	58
27,831	8,292	195,236	3,959	5,219	5,096	449,191	10,089	746,172	286,892	981	568	8	258	147	5	59
3,592	1,320	66,981	.....	260	1,561	135,331	2,254	238,798	101,213	629	610	6	.....	13	.....	60
93,269	117,296	484,873	5,918	21,071	18,483	2,489,907	20,174	3,811,633	1,301,552	442	260	48	.....	134	317	61
6,770	3,214	26,881	400	420	780	22,329	2,299	86,504	61,876	87	.....	67	.....	20	75	62

[1] Same number reported throughout the year.

[2] Same number reported for one or more other months.

TABLE 37.—DETAIL STATEMENT FOR THE STATE AND FOR CITIES OF 50,000 INHABITANTS

	INDUSTRY AND CITY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Capital.
	THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.															
1	Dairymen's, poultrymen's, and apiarists' supplies.	28	463	21	31	35	31	345	.....	.....	343	315	25	3	.....	$1,239,834
2	Incubators and brooders	5	74	6	3	1	14	50	Fe 71	Jy 30	69	67	2	.....	.....	94,753
3	Cream separators and other dairymen's supplies.	18	249	11	21	29	13	175	Mh 212	No 141	149	138	9	2	.....	800,467
4	Apiarists' supplies	5	140	4	7	5	4	120	Je 147	Au 104	125	110	14	1	.....	344,614
5	Dental goods	5	38	4	.....	.....	1	33	(3) 33	(3) 33	33	30	1	2	.....	35,391
6	Druggists' preparations	7	68	3	3	18	4	40	(3) 40	(3) 40	40	32	8	.....	.....	154,714
7	Electrical machinery, apparatus, and supplies.	29	2,883	6	159	480	123	2,115	Fe 2,332	Se 1,987	2,289	2,100	166	21	2	7,005,779
8	Electroplating	10	74	11	3	3	4	53	Ap 63	Au 48	51	50	.....	1	.....	56,101
9	Engines, steam, gas, and water	40	6,634	21	135	395	73	6,010	Ja 7,186	No 5,059	6,134	6,106	23	5	.....	24,080,988
10	Fancy articles, not elsewhere specified.	5	183	4	4	4	6	165	Oc 199	Ja 83	178	89	89	.....	.....	308,402
11	Flavoring extracts	7	47	4	8	13	1	21	Au[4] 24	Ja[4] 20	20	12	4	4	.....	170,515
12	Flour-mill and gristmill products	252	1,804	294	118	207	69	1,116	De 1,216	Jy 1,045	1,243	1,234	4	5	.....	10,789,136
13	Food preparations	30	785	25	45	98	139	478	.....	.....	531	391	140	.....	.....	2,565,042
14	Cereals, table foods, and macaroni.	6	84	3	6	13	4	58	Oc 87	De 42	81	55	26	.....	.....	263,659
15	Meat products and sirups	5	14	5	.....	.....	.....	9	(3) 9	(3) 9	10	10	.....	.....	.....	40,260
16	Other food products, including those for animals and fowls.	19	687	17	39	85	135	411	Oc 476	Ja 382	440	326	114	.....	.....	2,261,123
17	Foundry and machine-shop products.	364	20,201	228	771	1,883	477	16,842	.....	.....	15,969	15,792	137	39	1	83,313,547
18	Boiler shops	11	495	4	29	36	6	420	Ja 471	De 394	391	390	.....	1	.....	1,028,599
19	Foundries	51	3,459	23	110	102	25	3,199	Fe 3,492	Je 2,972	2,917	2,869	32	16	.....	4,982,987
20	Machine shops	302	16,247	201	632	1,745	446	13,223	Mh 14,598	No 11,540	12,661	12,533	105	22	1	77,301,961
21	Fuel, manufactured	3	65	1	4	3	.....	57	De 69	Je 43	71	71	.....	.....	.....	706,857
22	Fur goods	36	322	31	26	26	14	225	De 295	Ap[4] 185	286	103	176	6	1	1,075,121
23	Furnishing goods, men's	4	116	2	5	7	6	96	Mh 109	De 74	95	19	73	.....	3	141,301
24	Furniture	107	12,357	42	328	772	200	11,015	.....	.....	10,499	9,927	342	200	30	24,791,239
25	Wood, including rattan and willow.	80	8,796	30	227	469	134	7,936	Mh 8,555	De 7,288	7,484	7,017	267	171	29	16,664,333
26	Metal, including store and office fixtures.	27	3,561	12	101	303	66	3,079	Mh 3,332	No 2,568	3,015	2,910	75	29	1	8,126,906
27	Gas and electric fixtures	7	310	5	17	50	16	222	Oc 244	Je[4] 210	205	171	25	9	.....	538,196
28	Gas, illuminating and heating	47	1,769	.....	90	298	141	1,240	Jy 1,455	De 1,036	1,243	1,243	.....	.....	.....	29,539,492
29	Glass, cutting, staining, and ornamenting.	15	124	24	6	6	2	86	No 92	Ja[4] 82	86	86	.....	.....	.....	92,749
30	Gloves and mittens, leather	24	1,925	8	62	109	35	1,711	Ja 1,953	De 1,455	1,553	519	973	13	48	2,621,179
31	Grease and tallow	10	68	12	3	2	1	50	No 55	Mh 46	52	52	.....	.....	.....	169,543
32	Hardware	13	489	9	26	20	17	417	.....	.....	424	395	27	2	.....	854,868
33	Hinges and other builders' hardware.	5	37	5	9	2	2	19	Je 23	Oc[4] 16	17	14	3	.....	.....	63,644
34	All other, exclusive of locks	8	452	4	17	18	15	398	Ap 431	De 289	407	381	24	2	.....	791,224
35	Hats and caps, other than felt, straw, and wool.	5	80	7	2	1	.....	70	Je[4] 72	Mh 66	71	50	21	.....	.....	57,760
36	Hosiery and knit goods	68	6,985	34	166	291	250	6,244	Fe 6,523	No 6,016	6,139	1,338	4,456	65	280	10,953,219
37	House-furnishing goods	7	111	8	6	15	3	79	.....	.....	75	50	21	4	.....	243,714
38	Comforts, quilts, and feather pillows.	3	53	4	3	4	2	40	Au 45	Ja 32	38	19	15	4	.....	121,094
39	Other products, including cotton batting.	4	58	4	3	11	1	39	Ap 41	No[4] 37	37	31	6	.....	.....	122,620
40	Iron and steel, blast furnaces	5	554	.....	11	58	3	482	Mh 702	De 266	408	408	.....	.....	.....	7,524,758
41	Iron and steel, steel works and rolling mills.	12	2,256	.....	63	147	17	2,029	My 2,226	No 1,815	2,035	2,031	.....	4	.....	6,171,815
42	Jewelry	14	100	16	3	2	5	74	De 75	No 73	74	67	1	6	.....	97,013
43	Leather goods, not elsewhere specified.	4	17	3	1	4	1	8	Ap[4] 10	De[4] 7	7	3	4	.....	.....	15,151
44	Leather, tanned, curried, and finished.	27	6,410	20	87	387	47	5,869	Mh 6,530	Se 5,339	6,067	5,741	324	2	.....	42,769,623
45	Lime	30	917	7	47	25	10	828	Jy 1,024	De 551	936	933	1	2	.....	2,700,120
46	Liquors, malt	132	6,587	61	366	693	53	5,414	Jy 6,020	De 5,016	5,500	5,346	152	2	.....	77,290,896
47	Lithographing	10	508	2	23	37	18	428	My 453	De 390	442	369	61	10	2	1,093,903
48	Looking-glass and picture frames	4	13	8	2	.....	1	2	(3) 2	(3) 2	3	3	.....	.....	.....	14,779
49	Lumber and timber products	433	26,518	444	511	529	93	24,941	Fe 30,636	Au 22,198	28,267	27,984	165	113	5	49,154,458
50	Lumber, planing-mill products, not including planing mills connected with sawmills.	146	5,688	109	214	299	94	4,972	Au 5,164	De 4,752	4,946	4,846	69	31	.....	12,407,697
51	Malt	25	805	19	66	69	14	637	Ja 742	Au[4] 540	735	734	1	.....	.....	15,301,245
52	Marble and stone work	117	1,730	148	71	91	30	1,390	Se 1,521	Fe 1,216	1,354	1,349	1	4	.....	3,391,023
53	Mats and mattings, from cocoa fiber and grass.	4	495	.....	23	10	7	455	Ja 738	Se 121	541	339	201	1	.....	1,517,855
54	Mattresses and spring beds	18	483	12	30	45	12	384	Je 408	De 355	379	309	53	17	.....	1,070,988
55	Millinery and lace goods	10	791	6	20	89	20	656	Fe 1,073	No 282	734	160	558	3	13	955,408
56	Mineral and soda waters	176	698	200	55	54	14	375	Au 454	Ja 321	388	353	28	7	.....	6,598,038
57	Mirrors, framed and unframed	4	96	.....	9	5	1	81	Jy 84	De[4] 80	80	79	.....	1	.....	196,549
58	Models and patterns, not including paper patterns.	24	174	28	18	8	3	117	Je 143	Se 97	129	119	7	2	1	123,712
59	Musical instruments, pianos	6	546	.....	18	16	17	495	Ja 534	No 454	464	450	2	12	.....	1,253,851
60	Paint	9	299	5	18	59	25	192	Ap 197	Ja 178	197	167	30	.....	.....	1,356,714
61	Paper and wood pulp	58	9,625	5	222	369	61	8,968	.....	.....	8,846	7,943	896	3	4	48,812,033
62	Paper exclusively	21	2,805	5	67	136	16	2,581	Oc 2,651	Se 2,472	2,523	1,913	605	1	4	9,355,350
63	Pulp exclusively	11	613	.....	27	11	5	570	Mh 606	Ja 522	576	574	2	.....	.....	2,776,323
64	Both paper and pulp	26	6,207	.....	128	222	40	5,817	Mh 6,101	Ja 5,592	5,747	5,456	289	2	.....	36,680,360

[1] Owned power only.

[2] Includes rented power, other than electric.

OR MORE, BY INDUSTRIES, AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914—Continued.

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

EXPENSES.										POWER.						
Salaries and wages.				Rent and taxes.		For materials.				Primary horsepower.						
Officials.	Clerks, etc.	Wage earners.	For contract work.	Rent of factory.	Taxes, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.	Value of products.	Value added by manufacture.	Total.	Steam engines.[1]	Internal combustion engines.[2]	Water wheels and motors.[1]	Electric (rented).	Electric horsepower generated in establishments reporting.	
$54,945	$66,544	$213,341	$527	$7,306	$7,954	$811,375	$19,204	$1,665,700	$835,121	800	255	64	.....	481	.....	1
3,229	9,359	32,979	527	410	1,517	112,959	2,797	363,416	247,660	95	15	12	.....	68	.....	2
34,562	48,520	116,971	.....	6,896	4,073	448,392	8,570	878,279	421,317	325	40	47	.....	238	.....	3
17,154	8,665	63,391	.....	.....	2,364	250,024	7,837	424,005	166,144	380	200	5	.....	175	.....	4
.....	649	27,947	.....	1,727	652	46,172	541	101,064	54,351	11	.....	.....	.....	11	.....	5
7,600	17,201	27,360	.....	4,178	682	95,035	1,647	209,434	112,752	48	.....	.....	.....	48	.....	6
325,296	647,653	1,339,587	29,230	36,663	60,599	1,949,824	113,896	5,396,802	3,333,082	3,616	1,785	56	.....	1,775	5,746	7
3,673	3,680	33,923	481	3,695	422	20,174	4,791	91,510	66,545	141	80	5	.....	56	.....	8
373,671	518,943	4,517,370	3,209	14,098	167,613	5,612,930	261,950	13,063,336	7,188,456	7,596	4,446	2,515	.....	635	9,671	9
3,493	3,758	55,350	325	575	1,760	123,157	3,258	231,301	104,886	264	250	.....	.....	14	.....	10
20,500	12,230	10,652	.....	4,090	894	132,154	808	217,319	84,357	4	.....	.....	.....	4	.....	11
229,028	286,362	736,575	4,802	25,830	93,061	24,741,972	237,929	28,697,413	3,717,512	26,350	10,386	1,460	10,774	3,730	633	12
158,792	186,532	266,647	700	23,019	71,856	1,320,927	62,905	4,852,863	3,469,031	3,400	2,915	29	.....	456	592	13
11,004	15,554	28,671	600	1,990	4,169	251,319	7,691	353,716	94,706	585	500	.....	.....	85	4	14
.....	.....	6,929	.....	.....	441	159,852	312	173,405	13,241	10	.....	10	.....	.....	.....	15
147,788	170,978	231,047	100	21,029	67,246	909,756	54,902	4,325,742	3,361,084	2,805	2,415	19	.....	371	588	16
1,866,627	2,332,328	11,016,503	48,320	87,978	417,176	16,121,041	922,609	37,199,865	20,156,215	32,176	23,137	1,553	417	7,069	30,603	17
63,588	32,104	260,701	.....	4,150	9,462	452,409	24,389	933,666	456,868	704	575	52	.....	77	264	18
240,026	128,489	1,855,633	5,156	7,095	49,494	1,554,782	275,819	4,727,986	2,897,385	4,383	2,385	135	25	1,838	1,651	19
1,563,013	2,171,735	8,900,169	43,164	76,733	358,220	14,113,850	622,401	31,538,213	16,801,962	27,089	20,177	1,366	392	5,154	28,688	20
6,530	1,790	54,856	.....	.....	5,726	273,526	69,331	474,606	131,749	1,140	.....	.....	.....	1,140	.....	21
39,442	36,200	128,878	1,908	25,982	7,816	362,574	5,242	710,526	342,710	140	40	35	.....	65	13	22
5,330	8,331	29,921	.....	1,482	721	113,228	1,071	169,997	55,698	25	.....	.....	.....	25	.....	23
775,714	1,046,066	5,532,809	7,158	31,137	211,451	9,504,916	244,062	20,773,768	11,024,790	19,367	17,451	594	25	1,297	6,202	24
513,335	615,715	3,656,803	6,708	15,987	140,701	5,475,295	164,905	13,109,001	7,468,801	13,567	12,426	350	25	766	1,848	25
262,379	430,351	1,876,006	450	15,150	70,750	4,029,621	79,157	7,664,767	3,555,989	5,800	5,025	244	.....	531	4,354	26
27,280	49,947	131,915	665	14,541	3,589	279,388	6,520	647,999	362,091	104	.....	.....	.....	104	.....	27
171,573	302,045	721,898	27,157	300	360,181	855,237	960,410	5,294,983	3,479,336	11,159	9,242	869	3	1,045	797	28
6,164	5,375	43,705	2,311	5,650	499	66,425	2,584	167,146	98,137	103	.....	30	.....	73	.....	29
124,595	116,858	589,458	7,371	25,338	17,056	1,729,661	16,362	2,921,587	1,175,564	670	328	6	.....	336	157	30
5,640	2,600	40,497	1,333	1,987	1,135	239,640	10,910	326,250	75,700	225	179	.....	.....	46	15	31
49,519	28,746	223,918	50	2,690	9,278	265,155	9,158	793,129	518,816	647	525	63	.....	59	100	32
8,395	2,252	9,383	.....	915	323	20,083	945	52,936	31,908	46	.....	26	.....	20	.....	33
41,124	26,494	214,535	50	1,775	8,955	245,072	8,213	740,193	486,908	601	525	37	.....	39	100	34
2,850	560	42,970	.....	2,820	317	71,842	1,233	152,858	79,783	13	.....	.....	.....	13	.....	35
364,109	558,993	2,448,347	19,210	50,306	84,336	6,929,905	95,327	13,292,305	6,267,073	3,629	2,625	140	.....	864	919	36
7,240	12,801	40,386	359	6,249	979	237,432	6,520	363,040	119,088	381	250	12	.....	119	.....	37
4,000	6,068	20,036	.....	4,318	452	146,318	2,085	200,334	51,931	72	.....	.....	.....	72	.....	38
3,240	6,733	20,350	359	1,931	527	91,114	4,435	162,706	67,157	309	250	12	.....	47	.....	39
60,264	42,087	398,374	.....	100	76,558	1,799,720	1,452,090	3,793,442	541,632	12,742	10,255	2,487	.....	.....	2,206	40
210,522	186,762	1,293,116	10,150	7,780	81,153	3,236,055	319,085	6,008,549	2,453,409	15,215	12,675	720	.....	1,820	7,606	41
3,440	3,496	47,305	.....	4,088	327	72,084	1,178	155,048	81,786	35	.....	.....	.....	35	.....	42
780	4,619	3,437	.....	616	67	11,138	207	25,071	13,726	12	.....	10	.....	2	.....	43
359,692	471,023	3,403,592	.....	35,107	285,126	32,674,238	378,948	42,204,202	9,151,016	20,142	17,503	350	.....	2,289	12,427	44
78,945	41,093	449,831	31,101	920	13,099	410,761	416,310	1,570,310	743,239	4,032	1,989	473	150	1,420	.....	45
894,232	886,299	3,913,037	197,466	19,928	6,139,298	12,937,719	765,042	40,884,284	27,181,523	28,326	24,132	190	32	3,972	5,970	46
75,645	63,029	307,031	4,118	10,281	13,426	382,017	11,291	1,102,271	708,963	463	145	.....	.....	318	117	47
3,120	264	1,486	.....	756	100	4,840	203	16,659	11,616	7	.....	7	.....	.....	.....	48
1,063,635	663,276	12,551,955	2,101,343	10,976	1,120,761	14,823,236	239,769	37,494,041	22,431,036	84,523	80,717	945	1,555	1,306	8,963	49
395,475	399,295	2,928,572	13,132	21,383	108,805	7,475,780	109,571	12,921,004	5,335,653	14,744	12,751	409	135	1,449	1,657	50
233,967	146,243	536,215	23,719	4,000	116,736	12,115,060	373,817	15,533,339	3,044,462	10,545	10,420	.....	100	25	6,533	51
122,720	99,214	995,864	21,473	7,739	25,152	1,105,311	62,454	2,913,921	1,746,156	3,416	1,236	361	400	1,419	1,034	52
42,870	16,976	211,997	.....	.....	13,128	513,648[3]	11,181	1,029,996	505,167	594	410	.....	.....	184	216	53
49,541	31,299	213,777	.....	8,616	8,711	635,290	12,827	1,089,425	441,308	771	615	12	.....	144	308	54
64,295	118,231	321,507	3,754	16,883	17,580	1,186,696	11,128	2,154,658	956,834	311	300	.....	.....	11	108	55
91,087	104,888	215,911	3,300	12,003	26,622	821,783	23,104	1,869,237	1,024,350	739	331	178	1	229	52	56
18,226	6,001	55,973	.....	3,476	994	163,392	4,138	274,091	106,561	300	225	30	.....	45	8	57
21,586	7,139	75,622	879	6,005	687	37,431	3,391	185,756	144,934	199	.....	29	.....	170	.....	58
39,966	24,333	306,754	978	9,680	10,002	851,608	14,555	1,469,585	603,422	553	410	.....	.....	143	27	59
42,760	60,639	103,982	.....	5,037	16,642	1,112,277	14,872	1,586,156	459,007	985	685	2	30	268	125	60
702,620	451,813	5,338,816	64,129	6,299	518,728	18,365,949	2,202,139	31,205,395	10,637,307	191,693	41,173	9,615	132,290	8,615	26,565	61
257,643	151,026	1,333,192	16	222	106,514	5,486,102	583,228	8,846,769	2,777,439	31,565	17,698	950	9,835	3,082	3,692	62
48,074	11,312	347,035	39,876	2,525	38,884	1,147,438	105,596	1,831,204	578,170	20,599	1,410	1,650	17,524	15	1,288	63
396,903	289,475	3,658,589	24,237	3,552	373,330	11,732,409	1,513,315	20,527,422	7,281,698	139,529	22,065	7,015	104,931	5,518	21,585	64

[3] Same number reported throughout the year.

[4] Same number reported for one or more other months.

TABLE 37.—DETAIL STATEMENT FOR THE STATE AND FOR CITIES OF 50,000 INHABITANTS

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

	Industry and city.	Number of establishments.	Persons engaged in the industry. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	Wage earners Dec. 15, or nearest representative day. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Capital.
1	Paper goods, not elsewhere specified	7	239	.....	11	26	14	188	Au 201	Fe 170	185	100	85	.....	.....	$589,823
2	Patent medicines and compounds	51	365	47	25	49	50	194	Fe 215	Au 174	191	73	117	1	.....	601,372
3	Paving materials	16	928	16	24	12	4	872	Jy 1,136	Ja 484	899	899	.....	.....	.....	1,759,652
4	Perfumery and cosmetics	4	90	2	8	13	23	44	Oc 56	Je 37	50	13	30	1	6	372,774
5	Photo-engraving	9	181	7	15	14	11	134	De [3] 138	Se 130	140	132	.....	8	.....	112,137
6	Pickles and sauces	21	182	26	14	6	3	133	Au 202	Ja 100	190	83	105	.....	2	358,009
7	Plumbers' supplies, not elsewhere specified.	9	1,533	.....	58	90	18	1,367	Se 1,456	De 1,281	1,413	1,381	26	4	2	3,703,906
8	Pottery	3	11	2	1	.....	.....	8	([4]) 8	([4]) 8	8	8	.....	.....	.....	20,440
9	Printing and publishing	217	2,416	202	166	174	109	1,765	.....	.....	1,804	1,334	391	67	12	3,745,300
10	Job printing	201	2,287	195	153	146	94	1,699	Fe 1,747	Jy 1,660	1,747	1,285	386	64	12	3,478,550
11	Book publishing without printing and linotype work.	16	129	7	13	28	15	66	My 127	De 51	57	49	5	3	.....	266,750
12	Printing and publishing, newspapers and periodicals.	572	4,951	575	308	783	437	2,848	.....	.....	2,979	2,099	692	182	6	6,948,683
13	Printing and publishing	28	987	14	58	378	104	433	My 445	Jy 412	435	403	29	3	.....	1,408,271
14	Printing and publishing and job printing.	491	3,781	532	205	376	261	2,407	De 2,485	Jy 2,355	2,536	1,691	660	179	6	5,428,116
15	Publishing without printing	53	183	29	45	29	72	8	([4]) 8	([4]) 8	8	5	3	.....	.....	112,296
16	Refrigerators	7	834	2	13	34	8	777	Ap 911	Jy 630	753	736	.....	17	.....	1,442,705
17	Rubber goods	5	1,951	4	25	202	83	1,637	My 1,920	Ja 1,356	1,462	1,316	142	1	3	4,961,211
18	Saddlery and harness	89	858	91	23	65	17	662	De 731	Au 594	737	626	108	.....	3	1,689,179
19	Sand-lime brick	3	47	.....	6	1	1	39	Oc 55	Ja 6	41	41	.....	.....	.....	170,463
20	Sausage	24	324	28	12	31	28	225	Fe 242	Se 212	233	229	1	3	.....	748,329
21	Shipbuilding, iron and steel	3	545	.....	15	23	3	504	My 822	Se 195	480	479	.....	1	.....	3,760,779
22	Shipbuilding, wooden, including boat building.	31	244	33	12	5	3	191	.....	.....	189	188	1	.....	.....	348,576
23	New vessels	6	112	14	2	.....	1	95	Mh 119	De [3] 79	87	87	.....	.....	.....	148,785
24	Small boats	25	132	19	10	5	2	96	Je 144	Oc 69	102	101	1	.....	.....	199,791
25	Shirts	4	410	1	11	15	3	380	Ja 423	Jy 343	363	29	334	.....	.....	623,282
26	Signs and advertising novelties	6	341	4	13	6	5	313	Au [3] 325	De 293	293	148	137	5	3	264,374
27	Slaughtering and meat packing	22	2,376	21	35	257	52	2,011	De 2,736	Au 1,645	2,143	2,018	90	35	.....	10,380,426
28	Soap	11	430	5	14	102	37	272	Ap 304	Ja 225	241	166	75	.....	.....	1,143,593
29	Stamped and enameled ware	5	2,895	.....	55	178	64	2,598	My 2,749	De 2,378	2,646	2,243	385	7	11	7,505,886
30	Stationery goods	6	51	5	1	11	6	28	Oc 45	My 21	31	16	14	1	.....	88,660
31	Statuary and art goods	6	75	6	6	1	1	61	Mh 77	Ja 49	61	61	.....	.....	.....	163,858
32	Steam fittings and steam and hot-water heating apparatus.	9	384	4	17	26	10	327	Se 344	Je 301	316	313	1	2	.....	1,375,397
33	Stoves, hot-air furnaces, and fireless cookers.	9	1,049	11	28	119	32	859	Mh 909	De 816	815	812	.....	3	.....	2,477,548
34	Structural ironwork, not made in steel works or rolling mills.	27	1,709	18	61	200	30	1,400	Jy 1,609	De 1,065	1,210	1,207	.....	3	.....	3,734,319
35	Tinware	7	33	8	2	1	.....	22	Ap 29	No 15	26	16	9	1	.....	75,806
36	Tobacco, chewing, smoking, and snuff.	9	279	7	10	51	15	196	Jy 210	Au 176	180	97	83	.....	.....	1,818,361
37	Tobacco, cigars	747	3,247	801	58	75	24	2,289	Mh 2,351	Ap 2,184	2,476	1,804	657	13	2	2,360,950
38	Tools, carpenters' and miscellaneous	15	186	6	15	9	7	149	My 187	De 120	141	126	12	3	.....	570,540
39	Trunks and valises	18	1,007	13	52	95	27	820	Ap 859	De 760	800	611	157	24	8	2,200,386
40	Umbrellas and canes	6	35	5	5	5	2	18	Ap [3] 19	No [3] 17	19	8	10	1	.....	53,702
41	Upholstering materials	15	378	5	24	6	4	339	Se 369	De 284	326	280	46	.....	.....	1,139,803
42	Vinegar and cider	5	32	8	7	3	1	13	Au [3] 14	Ja [3] 12	14	12	2	.....	.....	33,621
43	Waste, cotton	3	42	4	3	1	1	33	No 42	Jy [3] 28	40	11	23	.....	6	40,000
44	Wirework, including wire rope and cable.	18	380	14	14	21	4	327	Je 348	Oc 309	335	300	26	4	5	983,079
45	Wood, turned and carved	19	153	22	6	3	1	121	Fe 138	Se 93	132	129	1	2	.....	196,148
46	Wooden goods, not elsewhere specified.	8	190	4	8	3	1	174	Fe 197	Au 155	181	177	4	.....	.....	216,041
47	Woolen and worsted goods	22	891	16	36	32	12	795	Mh [3] 863	De 667	777	367	369	11	30	1,809,092
48	All other industries*	226	12,603	120	389	985	363	10,746	.....	.....	.....	.....	.....	.....	.....	42,434,801

[1] Owned power only.

[2] Includes rented power, other than electric.

* All other industries embrace—

Aluminum ware	3
Artificial flowers	1
Asbestos products	1
Babbitt metal and solder	3
Bags, other than paper	3
Bags, paper	4
Baking powder and yeast	2
Belting, leather	2
Billiard tables and materials	1
Blacking, stains, and dressings	3
Bluing	2
Boot and shoe cut stock	2
Boots and shoes, rubber	1
Butter, reworking	1
Buttons	2
Cars, steam-railroad, not including operations of railroad companies	2
Cash registers	1
Charcoal	1
Chocolate and cocoa products	1
Clocks	1
Clothing, men's, buttonholes	1
Coke, not including gas-house coke	2
Cordage and twine	3
Cordials and flavoring sirups	4
Cotton goods	2
Drug grinding	1
Dyeing and finishing textiles	2
Dyestuffs and extracts	2
Engraving and diesinking	1
Engraving, steel and copper plate, including plate printing	2
Envelopes	2
Explosives	2
Felt-goods	2
Fertilizers	1
Files	1
Flags and banners	2
Furs, dressed	5
Galvanizing	1
Gas machines and gas and water meters	3
Glass	1
Glucose and starch	1
Glue	2
Gold and silver, reducing and refining, not from the ore	1
Graphite, ground and refined	1
Hair work	2
Hammocks	3
Hand stamps	4
Hardware, saddlery	3
Hats, fur-felt	1
Hats, straw	2
Horseshoes, not made in steel works or rolling mills	2
Ice, manufactured	2
Ink, writing	2
Instruments, professional and scientific	8

OR MORE, BY INDUSTRIES, AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914—Continued.

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—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, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.			Total.	Steam engines.[1]	Internal combustion engines.[2]	Water wheels and motors.[1]	Electric (rented).		
$27,763	$35,369	$96,880	$2,095	$1,785	$7,030	$377,762	$13,966	$743,426	$351,698	860	565	.....	.....	295	556	1
37,023	84,588	85,788	210	16,207	6,074	336,641	5,486	973,084	630,957	94	25	.....	.....	69	.....	2
38,524	15,852	550,775	.....	617	7,735	243,861	75,106	1,115,862	796,895	4,161	455	63	.....	3,643	.....	3
23,115	24,217	17,574	.....	2,370	3,183	68,757	2,442	259,824	188,625	133	.....	120	.....	13	120	4
27,914	17,615	116,785	.....	8,829	657	87,422	5,396	307,617	214,799	49	.....	.....	.....	49	.....	5
19,171	5,205	52,258	1,123	2,445	1,703	194,589	2,543	328,260	131,128	141	60	63	1	17	10	6
140,431	76,130	925,850	600	190	29,170	1,368,578	147,707	3,538,437	2,022,152	2,685	2,135	8	.....	542	1,383	7
1,040	.....	4,200	.....	.....	350	1,650	1,550	9,625	6,425	37	25	12	.....	.....	.....	8
298,381	234,883	1,096,256	71,230	113,957	30,682	1,601,616	51,670	4,239,861	2,586,575	1,674	58	129	1	1,486	7	9
275,452	198,958	1,062,071	14,620	107,837	28,741	1,536,928	50,381	3,898,918	2,311,609	1,667	58	129	1	1,479	7	10
22,929	35,925	34,185	56,610	6,120	1,941	64,688	1,289	340,943	274,966	7	.....	.....	.....	7	.....	11
510,080	851,624	1,787,828	245,180	125,101	63,731	2,262,740	112,729	8,098,914	5,723,445	4,169	417	542	30	3,180	55	12
136,435	337,129	387,478	64,018	11,796	16,440	559,757	25,274	2,210,732	1,625,701	858	.....	23	2	833	38	13
415,331	438,105	1,395,772	18,895	105,380	46,654	1,646,448	87,305	5,413,908	3,680,155	3,311	417	519	28	2,347	17	14
58,314	76,390	4,578	162,267	7,925	637	56,535	150	474,274	417,589	.....	.....	.....	.....	.....	.....	15
46,921	83,281	392,636	.....	50	14,787	874,795	18,235	1,812,763	919,733	1,403	998	4	.....	401	54	16
93,450	261,524	1,005,389	10,928	660	29,110	4,016,384	78,670	7,382,108	3,287,054	4,107	2,845	.....	.....	1,262	1,288	17
34,287	59,007	354,193	9,319	37,706	18,582	2,032,184	11,085	3,057,179	1,013,910	298	103	10	.....	185	96	18
5,100	1,018	30,625	.....	1,600	464	30,681	7,446	105,969	67,842	435	435	.....	.....	.....	.....	19
45,380	58,240	153,687	80	3,200	12,222	1,982,129	21,144	2,517,271	513,998	719	504	15	.....	200	80	20
34,883	26,917	298,915	.....	.....	27,686	230,524	21,999	851,281	598,758	3,397	2,920	.....	.....	477	714	21
16,781	4,784	121,678	.....	5,166	2,931	193,477	5,155	402,807	204,175	478	188	189	.....	101	3	22
2,160	540	63,724	.....	260	1,052	103,770	2,344	195,440	89,326	208	115	90	.....	3	3	23
14,621	4,244	57,954	.....	4,906	1,879	89,707	2,811	207,367	114,849	270	73	99	.....	98	.....	24
39,962	9,661	168,139	.....	1,860	4,476	366,334	2,797	702,765	333,634	164	150	.....	.....	14	76	25
51,028	7,448	127,340	182	5,744	1,612	200,581	3,462	445,338	241,295	105	25	.....	.....	80	.....	26
100,545	238,874	1,227,444	1,500	24,699	64,558	28,388,714	148,853	32,180,684	3,643,117	3,759	3,430	20	.....	309	1,405	27
48,063	191,010	132,259	.....	3,061	14,533	1,355,388	13,857	2,894,103	1,524,858	339	317	.....	.....	22	251	28
184,282	258,705	1,433,858	12,364	.....	57,663	2,877,884	177,547	6,352,879	3,297,448	3,481	3,070	.....	.....	411	2,301	29
2,000	20,356	13,739	15	3,481	896	98,514	465	158,173	59,194	18	.....	.....	.....	18	.....	30
9,076	708	44,580	.....	4,144	980	19,888	1,040	96,208	75,280	16	.....	.....	.....	16	.....	31
57,103	29,673	206,397	61,457	5,032	10,859	361,177	12,633	879,730	505,920	493	150	259	.....	84	221	32
136,974	173,540	515,733	.....	2,175	28,735	1,261,803	46,014	2,851,483	1,543,666	1,408	677	.....	.....	731	300	33
136,401	263,234	1,059,144	25,784	10,048	25,807	2,825,090	51,231	4,779,453	1,903,132	2,730	1,937	24	.....	769	1,753	34
2,684	372	10,862	100	2,335	688	16,210	1,607	37,843	20,026	24	.....	24	.....	.....	.....	35
34,422	74,175	89,498	.....	12,853	527,171	798,838	5,985	2,090,189	1,285,366	291	250	6	.....	35	.....	36
88,365	86,279	1,232,491	2,775	62,931	368,797	1,803,520	17,896	4,688,800	2,867,384	67	.....	20	.....	47	.....	37
22,586	9,208	86,204	26,721	4,039	3,459	116,511	9,467	295,675	169,697	496	42	18	15	421	10	38
118,918	176,373	395,387	.....	8,829	22,159	1,163,461	16,178	2,240,996	1,061,357	1,087	1,039	.....	.....	48	880	39
5,400	9,356	9,152	.....	1,744	301	64,486	695	95,508	30,327	20	.....	.....	.....	20	.....	40
58,354	8,676	171,552	316	2,644	11,325	612,425	16,219	994,070	365,426	1,769	1,525	4	120	120	54	41
5,600	3,012	7,751	.....	600	848	55,735	1,221	102,763	45,807	78	51	.....	22	5	.....	42
3,075	1,100	9,700	.....	360	743	33,200	1,645	73,530	38,685	71	.....	27	.....	44	.....	43
25,939	24,933	198,244	.....	2,284	11,187	786,193	24,505	1,298,855	488,157	742	374	60	2	306	40	44
7,980	2,408	62,576	.....	1,941	1,263	90,109	2,380	215,683	123,194	594	460	93	.....	41	15	45
11,099	3,378	81,629	265	272	2,308	83,545	9,409	227,861	134,907	617	536	8	.....	73	.....	46
64,973	31,009	374,081	100	4,020	16,484	1,223,317	36,159	1,955,742	696,266	2,103	1,012	72	980	39	102	47
992,219	1,253,264	6,297,257	7,515	109,693	2,900,392	20,208,907	2,928,759	43,714,141	20,576,475	32,933	24,669	1,147	1,092	5,982	13,870	48

[3] Same number reported for one or more other months.

[4] Same number reported throughout the year.

Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills 1
Iron and steel forgings, not made in steel works or rolling mills 2
Iron and steel, nails and spikes, cut and wrought, including wire nails, not made in steel works or rolling mills. 2
Lamps and reflectors 2
Lead bar, pipe, and sheet 1
Linen goods 1
Liquors, distilled 2
Liquors, vinous 1
Lubricating greases 1
Matches 1
Minerals and earths, ground 3
Motorcycles, bicycles, and parts 6
Mucilage and paste 4
Musical instruments and materials, not specified 3
Musical instruments, organs 3
Oil, essential 1
Oil, linseed 2
Oil, not elsewhere specified 3
Optical goods 5
Pens, fountain and stylographic 2
Pocketbooks 3
Printing materials 2
Pumps, not including power pumps . 4
Roofing materials 3
Safes and vaults 1
Sand and emery paper and cloth 1
Scales and balances 1
Screws, machine 1
Show cases 2
Silk goods, including throwsters 1
Smelting and refining, zinc 1
Smelting and refining, not from the ore 1
Soda-water apparatus 1
Sporting and athletic goods 4
Springs, steel, car and carriage 1
Steam packing 1
Stereotyping and electrotyping 2
Stoves, gas and oil 1
Sugar, beet 3
Surgical appliances 5
Suspenders, garters, and elastic woven goods 4
Toys and games 3
Vault lights and ventilators 1
Wall plaster 4
Washing machines and clothes wringers 3
Wheelbarrows 1
Windmills 5
Window and door screens and weather strips 2
Window shades and fixtures 2
Wire 1
Wood distillation 3
Wool shoddy 1

TABLE 37.—DETAIL STATEMENT FOR THE STATE AND FOR CITIES OF 50,000 INHABITANTS

	INDUSTRY AND CITY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Capital.
	CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.															
1	**MILWAUKEE**—All industries.	1,728	73,370	1,378	2,171	6,152	1,830	61,839	Mh 65,297	No 57,049	62,555	49,124	11,858	754	819	$240,780,283
2	Agricultural implements	3	19	12	.....	.....	.....	7	Au 11	Se [3] 6	7	7	.....	.....	.....	46,709
3	Artificial limbs	4	14	3	4	.....	1	6	(4) 6	(4) 6	6	5	1	.....	.....	16,423
4	Artificial stone products	9	73	4	7	2	.....	60	Se 87	Fe 20	49	49	.....	.....	.....	81,984
5	Automobile bodies and parts	13	623	1	36	40	24	522	My 613	Au 474	535	517	14	4	.....	1,094,791
6	Automobile repairing	7	63	11	1	6	2	43	My [3] 46	Oc 40	42	39	3	.....	.....	83,876
7	Awnings, tents, and sails	8	60	9	4	6	.....	41	Je 64	Ja [3] 29	37	25	12	.....	.....	59,782
8	Bookbinding and blank-book making.	16	660	10	21	49	13	567	De 640	Jy 502	640	302	283	27	28	571,141
9	Boots and shoes	23	4,168	12	81	249	115	3,711	Ja 3,934	No 3,451	3,708	2,313	1,225	90	80	8,956,350
10	Boxes, fancy and paper	6	1,116	.....	21	46	36	1,013	Oc 1,061	Fe 968	990	418	455	38	79	1,949,709
11	Boxes, wooden packing	6	890	1	13	26	3	847	Jy 966	No 724	879	749	112	18	.....	1,752,468
12	Brass, bronze, and copper products.	19	453	7	27	20	5	394	Mh 413	De 355	359	352	7	.....	.....	1,196,871
13	Bread and other bakery products	324	1,837	328	32	147	60	1,270	Jy 1,326	Ja 1,194	1,260	937	304	14	5	3,518,221
14	Brooms, from broom corn	12	56	15	.....	.....	.....	41	Ja [3] 43	Au 38	40	40	.....	.....	.....	27,269
15	Brushes, exclusive of paint and varnish.	7	134	3	9	12	8	102	Ja 108	De 93	90	61	10	19	.....	189,308
16	Carriages and wagons	21	185	26	4	5	3	147	Je 165	No 133	140	139	1	.....	.....	310,305
17	Clothing, men's	30	2,412	27	61	213	62	2,049	Fe [3] 2,195	Oc 1,746	1,989	677	1,248	12	52	4,103,956
18	Clothing, women's	16	525	18	17	23	33	434	Se 478	De 402	425	93	323	.....	9	366,993
19	Confectionery and ice cream	23	1,825	10	68	190	25	1,532	.....	.....	1,648	565	802	57	224	2,379,922
20	Confectionery	18	1,689	9	55	174	16	1,435	No 1,658	Jy 1,240	1,552	476	795	57	224	1,771,327
21	Ice cream	5	136	1	13	16	9	97	Je 149	Ja 65	96	89	7	.....	.....	608,595
22	Cooperage	7	171	4	6	4	2	155	Je 240	Fe 113	147	146	.....	1	.....	383,309
23	Copper, tin, and sheet-iron products.	34	329	38	20	9	4	258	Se 297	De [3] 227	247	247	.....	.....	.....	426,267
24	Electrical machinery, apparatus, and supplies.	13	2,195	.....	118	373	72	1,632	Fe 1,880	De 1,447	1,720	1,628	71	20	1	5,627,395
25	Electroplating	5	41	7	.....	1	2	31	Ap 36	Se [3] 29	30	30	.....	.....	.....	25,407
26	Engines, steam, gas, and water	8	2,658	2	43	128	35	2,450	Ja 3,276	Oc 1,937	2,672	2,670	2	.....	.....	14,058,014
27	Food preparations	14	165	9	14	16	8	118	Au 147	Ja 89	145	104	37	.....	4	483,109
28	Foundry and machine-shop products.	89	5,365	36	221	424	103	4,581	.....	.....	4,592	4,530	48	14	.....	11,362,940
29	Boiler shops	4	113	2	8	8	.....	95	Ja 107	Je 85	87	87	.....	.....	.....	217,473
30	Foundries	11	953	1	26	38	7	881	Mh 1,093	Oc 728	876	853	20	3	.....	1,512,638
31	Machine shops	74	4,299	33	187	378	96	3,605	My 4,159	No 2,851	3,629	3,590	28	11	.....	9,632,829
32	Fur goods	21	223	14	20	20	7	162	De 204	Ap 130	192	69	116	6	1	924,116
33	Furniture	26	1,445	18	59	117	23	1,228	Mh 1,347	De 1,111	1,132	1,073	16	43	.....	3,013,732
34	Glass, cutting, staining, and ornamenting.	10	94	18	4	5	2	65	Oc 68	Ja 62	66	66	.....	.....	.....	72,303
35	Gloves and mittens, leather	10	779	.....	35	50	13	681	Fe 775	De 594	634	262	343	11	18	1,276,740
36	Hats and caps, other than felt, straw, and wool.	5	80	7	2	1	.....	70	Je [3] 72	Mh 66	71	50	21	.....	.....	57,760
37	Hosiery and knit goods	36	3,245	23	49	163	139	2,871	Fe 2,949	Se 2,834	2,848	321	2,322	29	176	4,923,312
38	Iron and steel, steel works and rolling mills.	8	2,066	.....	52	139	17	1,858	Mh 2,055	De 1,656	1,870	1,866	.....	4	.....	5,860,922
39	Jewelry	10	73	10	3	1	3	56	(4) 56	(4) 56	56	50	1	5	.....	81,899
40	Leather, tanned, curried, and finished.	10	3,972	8	40	246	28	3,650	Mh 4,111	Se 3,312	3,753	3,450	302	1	.....	22,103,316
41	Liquors, malt	11	4,036	.....	70	341	15	3,610	Jy 3,984	De 3,310	3,780	3,659	121	.....	.....	54,938,633
42	Lithographing	10	508	2	23	37	18	428	My 453	De 389	442	369	61	10	2	1,093,903
43	Lumber, planing-mill products, not including planing mills connected with sawmills.	16	1,442	5	48	94	23	1,272	Ap 1,312	Se 1,185	1,233	1,227	.....	6	.....	3,104,628
44	Malt	6	223	13	16	23	3	168	Ja 229	Au 105	214	214	.....	.....	.....	5,036,854
45	Marble and stone work, other than slate.	24	557	31	31	21	9	465	Se [3] 495	De 413	425	422	1	2	.....	1,310,545
46	Mattresses and spring beds	8	280	5	18	38	7	212	Je 232	De 192	207	167	24	16	.....	695,678
47	Millinery and lace goods	10	791	6	20	89	20	656	Fe 1,073	No 282	734	160	558	3	13	955,408
48	Mineral and soda waters	13	60	17	3	4	.....	36	Au [3] 38	Ja [3] 34	34	34	.....	.....	.....	69,252
49	Models and patterns, not including paper patterns.	17	144	18	15	8	3	100	Je 121	Se 83	110	102	7	1	.....	92,458
50	Paints	5	279	3	15	59	24	178	Je 183	Ja 169	179	150	29	.....	.....	1,286,069
51	Patent medicines and compounds	23	176	16	13	22	14	111	Fe 125	Au 96	113	31	82	.....	.....	129,901
52	Photo-engraving	6	159	3	12	14	10	120	De [3] 124	Se 116	126	118	.....	8	.....	91,077
53	Plumbers' supplies, not elsewhere specified.	3	338	.....	9	24	.....	305	Fe 337	De 252	310	288	18	2	2	1,029,684
54	Printing and publishing	110	1,668	96	113	148	81	1,230	.....	.....	1,269	919	286	55	9	2,779,112
55	Job printing	98	1,544	91	101	120	66	1,166	Fe 1,214	Jy 1,130	1,217	875	281	52	9	2,520,903
56	Book publishing without printing, and linotype work.	12	124	5	12	28	15	64	My 128	De 50	52	44	5	3	.....	258,209
57	Printing and publishing, newspapers and periodicals.	46	1,504	16	91	496	183	718	.....	.....	785	631	82	71	1	2,295,564
58	Printing and publishing	9	778	1	40	330	84	323	My 334	Jy 307	326	305	20	1	.....	1,034,966
59	Printing and publishing and job printing.	14	637	5	29	152	60	391	Ja 407	No 374	455	322	62	70	1	1,209,602
60	Publishing without printing	23	89	10	22	14	39	4	(4) 4	(4) 4	4	4	.....	.....	.....	50,996
61	Saddlery and harness	23	563	24	12	48	7	472	De 509	Au 424	510	406	101	.....	3	1,057,653

[1] Owned power only.

[2] Includes rented power, other than electric.

OR MORE, BY INDUSTRIES, AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914—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, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.			Total.	Steam engines.[1]	Internal combustion engines.[2]	Water wheels and motors.[1]	Electric (rented).		
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
$5,371,093	$8,101,517	$36,270,148	$773,286	$1,083,406	$7,803,154	$119,526,470	$5,349,465	$223,555,142	$98,679,207	122,178	93,138	3,696	.....	25,344	50,475	1
.....	.....	5,526	.....	690	50	9,199	482	24,158	14,477	24	7	12	.....	5	.....	2
5,480	468	4,640	.....	3,578	102	5,167	319	23,392	17,906	3	.....	.....	.....	3	.....	3
8,734	1,225	36,227	491	1,397	482	66,408	1,819	144,878	76,651	104	.....	29	.....	75	.....	4
69,081	41,219	386,714	9,917	19,061	8,859	491,691	18,714	1,194,908	684,503	558	331	75	.....	152	35	5
1,580	7,916	32,282	.....	4,809	1,012	33,066	1,254	106,040	71,720	35	.....	.....	.....	35	.....	6
3,700	2,500	22,082	.....	2,087	622	59,348	779	107,977	47,850	12	.....	.....	.....	12	.....	7
38,383	52,799	263,334	20,701	24,694	3,570	391,138	7,332	933,693	535,223	192	.....	3	.....	189	.....	8
191,718	458,525	1,763,018	23,767	25,994	65,825	8,059,716	45,316	11,665,824	3,560,792	2,574	2,252	35	.....	287	1,163	9
67,082	70,313	434,018	.....	26,671	21,257	877,450	54,504	1,959,199	1,027,245	1,382	1,277	.....	.....	105	759	10
39,671	59,945	386,141	.....	3,316	14,559	1,187,104	6,231	2,084,421	891,086	2,335	2,215	.....	.....	120	1,294	11
53,648	23,775	232,721	.....	7,496	15,401	675,545	27,065	1,175,107	472,497	631	210	66	.....	355	25	12
72,270	170,390	682,956	400	69,821	38,953	2,445,738	101,405	4,571,057	2,023,914	696	84	45	.....	567	5	13
.....	.....	24,157	63	1,152	328	76,214	538	121,120	44,368	23	.....	7	.....	16	.....	14
18,327	22,234	49,006	532	5,722	1,457	77,024	3,296	236,563	156,243	104	.....	32	.....	72	.....	15
9,860	4,902	103,144	1,120	4,521	3,313	111,946	6,079	309,741	191,716	223	101	42	.....	80	2	16
192,490	340,698	869,920	132,805	57,631	27,833	2,931,500	15,241	5,229,460	2,282,719	278	65	10	.....	203	33	17
38,484	38,115	166,646	500	19,733	1,615	482,190	3,514	862,797	377,093	71	.....	.....	.....	71	.....	18
136,140	220,731	615,517	7,304	19,717	37,251	3,043,772	53,143	4,943,459	1,846,544	2,073	1,400	18	.....	655	673	19
99,842	201,920	541,262	5,861	15,462	31,943	2,706,016	32,285	4,364,647	1,626,346	1,213	1,050	18	.....	145	593	20
36,298	18,811	74,255	1,443	4,255	5,308	337,756	20,858	578,812	220,198	860	350	.....	.....	510	80	21
18,531	5,424	95,086	3,404	3,390	2,076	241,417	2,232	391,579	147,930	248	205	.....	.....	43	.....	22
26,616	10,103	178,057	5,264	10,587	3,131	291,999	7,251	635,662	336,412	90	.....	38	.....	52	1	23
248,678	509,279	1,040,454	25,000	22,871	54,333	1,300,369	96,644	3,994,646	2,597,633	2,647	1,185	8	.....	1,454	2,516	24
.....	1,404	21,026	37	2,873	245	9,912	1,988	48,873	36,973	56	.....	5	.....	51	.....	25
108,236	201,321	2,154,395	3,153	9,390	103,550	2,832,124	135,481	6,197,813	3,230,208	2,270	1,975	140	.....	155	3,837	26
42,198	18,885	65,741	600	21,985	5,074	576,449	22,678	843,326	244,199	873	500	.....	.....	373	4	27
543,320	482,150	2,797,353	26,365	53,844	129,325	4,088,612	239,487	9,902,102	5,574,003	7,336	4,855	214	.....	2,267	4,387	28
18,864	5,770	65,918	.....	2,310	2,612	117,402	4,772	224,433	102,259	186	125	.....	.....	61	60	29
78,111	44,803	447,837	.....	5,407	17,230	303,823	68,159	1,040,644	668,662	992	500	25	.....	467	470	30
446,345	431,577	2,283,598	26,365	46,127	109,483	3,667,387	166,556	8,637,025	4,803,082	6,158	4,230	189	.....	1,739	3,857	31
30,842	29,616	99,177	715	20,811	6,696	270,084	2,981	540,315	267,250	56	.....	20	.....	36	13	32
124,191	147,471	681,306	100	20,714	29,552	959,704	30,315	2,396,501	1,406,482	1,952	1,815	28	.....	109	494	33
5,132	5,011	34,337	1,434	4,890	401	48,819	1,685	127,248	76,744	60	.....	8	.....	52	.....	34
68,092	47,876	252,372	.....	18,341	10,318	850,100	7,668	1,339,292	481,524	441	278	.....	.....	163	157	35
2,850	560	42,970	.....	2,820	317	71,842	1,233	152,858	79,783	13	.....	.....	.....	13	.....	36
145,993	340,520	1,170,113	18,386	44,762	46,969	3,306,828	40,393	7,184,755	3,837,534	1,462	1,145	.....	.....	317	761	37
187,798	179,937	1,178,440	10,000	7,780	78,711	3,142,869	295,564	5,645,308	2,206,875	14,755	12,635	700	.....	1,420	7,605	38
3,440	2,132	39,029	.....	3,410	102	48,445	624	106,930	57,861	25	.....	.....	.....	25	.....	39
169,915	285,423	2,105,995	.....	27,333	154,927	17,481,890	183,865	22,893,306	5,227,551	11,295	9,717	350	.....	1,228	8,945	40
333,494	549,791	2,646,384	143,358	2,260	4,149,050	8,518,836	410,198	27,681,810	18,752,776	15,579	12,528	.....	.....	3,051	3,232	41
75,645	63,029	307,031	4,118	10,281	13,426	382,017	11,291	1,102,271	708,963	463	145	.....	.....	318	117	42
108,733	135,122	819,305	.....	10,094	30,432	1,557,244	28,789	2,848,626	1,262,593	3,014	2,852	55	.....	107	403	43
78,676	47,020	189,164	.....	.....	38,741	3,729,051	108,045	4,753,945	916,849	2,615	2,615	.....	.....	.....	557	44
55,649	31,690	395,406	1,934	1,642	10,325	418,161	21,369	1,014,498	574,968	1,374	680	162	.....	532	860	45
24,141	23,501	121,595	.....	6,263	5,371	368,627	5,399	664,904	290,878	443	370	.....	.....	73	208	46
64,295	118,231	321,507	3,754	16,883	17,580	1,186,696	11,128	2,154,658	956,834	311	300	.....	.....	11	108	47
3,600	.....	30,102	.....	3,170	1,229	28,764	969	100,450	70,717	32	.....	8	.....	24	.....	48
18,620	7,139	63,793	879	5,186	507	32,885	2,430	156,100	120,785	127	.....	5	.....	122	.....	49
38,660	60,039	96,502	.....	4,907	16,336	1,081,614	13,620	1,531,546	436,312	820	585	.....	.....	235	125	50
18,036	36,690	48,935	210	11,451	1,366	139,432	1,970	497,611	356,209	40	10	.....	.....	30	.....	51
23,754	17,227	107,467	.....	7,979	576	82,001	4,742	279,442	192,699	34	.....	.....	.....	34	.....	52
28,700	12,156	164,402	.....	.....	7,756	314,241	8,822	587,963	264,900	275	275	.....	.....	.....	2	53
203,401	205,540	798,738	60,776	82,373	19,156	988,206	32,384	2,894,976	1,874,386	1,159	48	111	.....	1,000	6	54
181,134	169,615	765,942	7,849	76,253	17,231	923,520	31,222	2,563,027	1,608,285	1,153	48	111	.....	994	6	55
22,267	35,925	32,796	52,927	6,120	1,925	64,686	1,162	331,949	266,101	6	.....	.....	.....	6	.....	56
188,717	507,147	566,221	140,061	45,973	23,098	1,178,100	32,128	3,384,512	2,174,284	1,555	220	.....	.....	1,335	17	57
94,914	280,815	290,841	62,700	8,486	14,002	443,776	18,956	1,735,807	1,273,075	660	.....	.....	.....	660	.....	58
57,343	186,910	272,273	7,344	32,648	8,862	685,361	13,153	1,403,975	705,461	895	220	.....	.....	675	17	59
36,460	39,422	3,107	70,017	4,839	234	48,963	19	244,730	195,748	.....	.....	.....	.....	.....	.....	60
20,136	39,100	238,606	840	21,520	13,210	1,536,622	6,117	2,220,088	677,349	189	100	2	.....	87	96	61

[3] Same number reported for one or more other months.

[4] Same number reported throughout the year.

TABLE 37.—DETAIL STATEMENT FOR THE STATE AND FOR CITIES OF 50,000 INHABITANTS

	INDUSTRY AND CITY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Number, 15th day of— Maximum month.	Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Capital.
	CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.															
	MILWAUKEE—Continued.															
1	Sausage	11	285	12	10	31	27	205	Fe 223	Se 194	215	211	1	3	.....	$685,455
2	Slaughtering and meat packing	11	1,160	12	14	124	16	994	De 1,329	Au 766	987	942	45	.....	.....	6,164,623
3	Steam fittings and steam and hot-water heating apparatus.	5	338	1	13	23	8	293	Se 309	Je 264	286	284	1	1	.....	1,269,611
4	Structural ironwork, not made in steel works or rolling mills.	18	934	14	34	113	15	758	Se 859	De 560	590	587	.....	3	.....	2,065,108
5	Tobacco, chewing and smoking, and snuff.	6	274	4	10	51	15	194	Je [3] 204	Au 174	178	95	83	.....	.....	1,815,592
6	Tobacco, cigars	232	1,220	234	35	35	12	904	Mh 982	Ap 844	1,025	677	344	3	1	893,178
7	Trunks and valises	8	510	5	17	62	8	418	Ap 443	De 385	415	313	83	13	6	974,842
8	Wirework, including wire rope and cable.	7	26	7	2	1	.....	16	Je 21	De 13	13	13	.....	.....	.....	27,918
9	Wood, turned and carved	4	11	8	.....	.....	.....	3	Jy 5	De [3] 2	5	5	.....	.....	.....	10,773
10	All other industries*	242	17,870	135	435	1,515	464	15,321	.....	.....	15,351	13,250	1,852	144	105	53,520,145

*All other industries embrace—

Artificial flowers	1
Automobiles	1
Babbitt metal and solder	2
Bags, other than paper	2
Bags, paper	1
Baking powder and yeast	1
Baskets, and rattan and willow ware.	1
Belting, leather	2
Billiard tables and materials	1
Blacking, stains, and dressings	3
Bluing	1
Boots and shoes, cut stock	1
Boot and shoe findings	3
Boxes, cigar	1
Brick and tile	3
Carpets, rag	2
Carriage and wagon materials	1
Carriages and sleds, children's	1
Cars and general shop construction and repairs by electric-railroad companies	1
Cars and general shop construction and repairs by steam-railroad companies	2
Cheese	1
Chemicals	2
Chocolate and cocoa products	1
Cleansing and polishing preparations	5
Clocks	1
Clothing, horse	3
Clothing, men's, buttonholes	1
Coffee and spice, roasting and grinding	4
Coffins, burial cases, and undertakers' goods	2
Coke	1
Cordage and twine	3
Cordials and flavoring sirups	2
Dairymen's, poultrymen's, and apiarists' supplies	3
Dental goods	4
Druggists' preparations	5
Dyeing and finishing textiles	1
Engraving and diesinking	1
Engraving, steel and copper plate	2
Envelopes	2
Fancy articles, not elsewhere specified	1
Felt goods	1
Files	1
Flags and banners	1
Flavoring extracts	4
Flour-mill and gristmill products	3
Furnishing goods, men's	2
Furs, dressed	2
Galvanizing	1
Gas and electric fixtures	5
Gas, illuminating and heating	2
Gas machines and gas and water meters	2
Glass	1
Gold and silver, reducing and refining, not from the ore	1
Grease and tallow	3
Hair work	2
Hammocks	1
Hand stamps	3
Hardware	4
Hats, straw	2
House-furnishing goods	4
Ice, manufactured	1
Ink, writing	1
Instruments, professional and scientific	2
Iron and steel, blast furnaces	2

	CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.															
1	APPLETON	107	2,494	97	98	109	46	2,144	Ap 2,255	De 2,017	2,070	1,723	332	13	2	$9,055,235
2	ASHLAND	37	924	35	38	39	15	797	Fe 844	De 663	780	749	27	4	.....	3,467,728
3	BELOIT	50	3,826	43	69	143	44	3,527	Fe 3,926	De 3,192	3,598	3,314	276	5	3	9,646,910
4	EAU CLAIRE	94	2,661	61	95	123	67	2,315	Mh 2,578	Je 2,153	2,517	2,299	189	29	.....	7,692,995
5	FOND DU LAC	100	2,292	86	79	149	53	1,925	Oc 2,092	Ja 1,739	2,058	1,704	335	12	7	6,353,010
6	GREEN BAY	104	3,103	75	126	125	53	2,724	Jy 2,836	De 2,610	2,726	2,320	390	6	10	6,852,673
7	JANESVILLE	71	1,974	60	103	241	75	1,495	Ap 1,617	De 1,379	1,515	1,103	391	8	13	5,219,688
8	KENOSHA	75	8,056	64	190	490	157	7,155	Mh 7,997	De 6,098	7,053	6,148	846	37	22	26,530,320
9	LA CROSSE	167	4,364	143	230	514	137	3,340	Je 3,404	De 3,245	3,407	2,524	822	27	34	15,891,734
10	MADISON	122	2,780	99	161	294	142	2,084	Ap 2,188	Oc 1,960	2,096	1,757	325	10	4	8,081,624
11	MANITOWOC	77	2,378	78	88	150	50	2,012	Se 2,268	No 1,644	2,258	1,863	330	31	34	9,723,120
12	MARINETTE	51	2,335	53	62	63	45	2,112	Mh 2,417	Au 1,886	2,234	1,953	263	10	8	4,652,289
13	OSHKOSH	157	6,582	122	199	380	99	5,782	Mh 6,316	Ja 4,934	5,826	4,733	1,009	40	44	15,513,283
14	RACINE	189	13,184	126	601	1,880	498	10,079	Mh 11,360	Oc 8,713	10,149	8,707	1,209	206	27	67,634,525
15	SHEBOYGAN	132	7,997	80	203	436	126	7,152	Au 7,573	De 6,810	7,367	6,497	651	154	65	21,481,364
16	SUPERIOR	111	2,482	98	95	128	40	2,121	Je 2,267	De 1,926	2,121	1,992	128	1	.....	7,049,753
17	WAUSAU	85	2,785	54	89	121	29	2,492	Jy 2,816	No 2,108	2,865	2,492	352	21	.....	6,986,922

[1] Owned power only.

[2] Includes rented power, other than electric.

OR MORE, BY INDUSTRIES, AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914—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, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.			Total.	Steam engines.[1]	Internal combustion engines.[2]	Water wheels and motors.[1]	Electric (rented).		
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.																
$43,144	$57,890	$135,747	$80	$1,560	$11,805	$1,896,276	$18,215	$2,384,417	$469,926	633	490	15	.....	128	80	1
29,995	105,679	621,114	1,500	22,909	27,785	13,590,999	72,021	15,546,207	1,883,187	2,213	1,405	.....	.....	808	.....	2
51,553	26,430	186,762	61,457	1,867	10,467	311,243	10,242	783,193	461,708	432	150	249	.....	33	221	3
72,175	134,825	566,865	12,764	10,033	15,474	1,484,880	24,955	2,631,552	1,121,717	1,326	980	22	.....	324	1,002	4
34,422	74,175	88,940	.....	12,853	526,189	797,413	5,917	2,085,177	1,281,847	284	250	2	.....	32	.....	5
60,936	41,889	505,533	50	27,770	119,184	699,556	4,407	1,904,035	1,200,072	20	.....	16	.....	4	.....	6
39,905	94,246	189,619	.....	7,249	10,873	586,456	5,771	1,152,137	559,910	283	264	.....	.....	19	600	7
1,859	1,070	14,715	.....	1,944	57	13,821	544	33,079	18,714	26	.....	21	.....	5	.....	8
.....	.....	2,185	.....	249	125	4,390	595	15,657	10,672	20	.....	.....	.....	20	.....	9
1,080,367	1,929,024	9,009,610	49,447	193,099	1,864,820	22,053,260	3,090,277	47,051,980	21,908,443	34,014	26,619	1,143	.....	6,252	10,132	10

Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills 1
Iron and steel, nails and spikes, cut and wrought, including wire nails, not made in steel works or rolling mills 1
Lamps and reflectors 1
Lead, bar, pipe, and sheet 1
Leather goods, not elsewhere specified 1
Liquors, distilled 1
Liquors, vinous 1
Looking-glass and picture frames 3
Minerals and earths, ground 2
Mirrors, framed and unframed 3
Motorcycles, bicycles, and parts 4
Mucilage and paste 3
Musical instruments and materials 1
Musical instruments, organs 2
Musical instruments, pianos 2
Oil, not elsewhere specified 3
Optical goods 4
Paper goods, not elsewhere specified 3
Perfumery and cosmetics 1
Pickles, preserves, and sauces 2
Pocketbooks 1
Pottery 2
Printing materials 2
Pumps, not including power pumps 1
Refrigerators 1
Roofing materials 1
Rubber goods, not elsewhere specified 1
Safes and vaults 1
Sand-lime brick 1
Screws, machine 1
Shipbuilding, iron and steel 1
Shipbuilding, wooden, including boat building 2
Shirts 1
Signs and advertising novelties 4
Smelting and refining, not from the ore 1
Soap 6
Soda-water apparatus 1
Sporting and athletic goods 2
Stamped and enameled ware 2
Stationery goods, not elsewhere specified 1
Statuary and art goods 5
Steam packing 1
Stereotyping and electrotyping 2
Stoves and hot-air furnaces 2
Stoves, gas and oil 1
Surgical appliances 2
Suspenders, garters, and elastic woven goods 3
Tinware, not elsewhere specified 2
Tools, not elsewhere specified 3
Toys and games 2
Umbrellas and canes 5
Upholstering materials 1
Vinegar and cider 2
Wall plaster 2
Waste 1
Window and door screens and weather strips 2
Wire 1
Wooden goods, not elsewhere specified 1
Woolen goods 1
Wool shoddy 1
Worsted goods 2

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

$200,993	$107,720	$1,231,127	$44,976	$26,846	$170,424	$4,444,564	$315,930	$7,557,673	$2,797,179	15,633	7,382	1,997	5,125	1,129	3,101	1
79,040	52,733	509,741	6,496	2,867	70,327	945,983	131,443	1,827,032	749,606	4,835	3,912	115	.....	808	504	2
165,989	223,812	2,346,020	4,260	14,843	56,476	2,861,970	151,031	6,927,601	3,914,600	6,861	2,652	1,975	1,112	1,122	5,448	3
181,125	158,844	1,245,727	8,709	14,061	112,451	4,011,022	196,537	6,773,829	2,566,270	16,356	3,821	101	9,150	3,284	157	4
172,425	171,807	999,543	38,377	11,159	78,945	4,518,271	100,585	6,760,850	2,141,994	7,346	6,646	113	.....	587	1,507	5
199,296	135,359	1,464,776	6,572	12,899	133,421	3,807,493	252,501	6,797,505	2,737,511	8,809	4,788	852	261	2,908	104	6
205,403	307,158	865,242	12,172	17,982	58,463	2,972,969	93,285	5,659,226	2,592,972	3,568	2,345	7	430	786	734	7
605,329	721,082	4,652,708	1,933	12,549	200,437	18,894,472	372,953	28,341,156	9,073,731	20,736	19,341	27	.....	1,368	10,751	8
451,140	513,525	1,879,252	7,492	37,733	602,690	7,587,173	226,953	14,739,232	6,925,106	9,869	7,944	30	.....	1,895	1,289	9
348,161	434,668	1,345,971	100,032	35,518	122,208	2,633,536	161,036	6,206,970	3,412,398	2,933	1,757	116	.....	1,060	3,836	10
182,644	219,548	1,045,545	21,820	11,240	131,713	5,186,363	171,553	8,460,694	3,102,778	5,079	4,522	286	.....	271	4,357	11
140,296	90,219	1,085,357	183,089	7,183	119,801	2,272,851	71,960	4,674,473	2,329,662	6,320	3,915	66	1,590	749	154	12
438,383	503,935	2,803,690	9,006	25,684	206,027	6,632,681	174,309	13,889,936	7,082,946	13,648	12,062	298	.....	1,288	2,957	13
1,515,983	2,650,104	6,765,404	23,364	92,492	467,468	19,572,507	689,012	43,632,384	23,370,865	21,292	15,271	1,397	.....	4,624	7,604	14
498,181	489,938	3,369,880	3,311	25,167	223,592	8,861,293	300,692	17,509,450	8,347,465	13,785	10,603	139	.....	3,043	2,502	15
168,840	172,372	1,382,305	51,214	39,099	78,090	8,289,465	156,741	11,662,566	3,216,360	7,678	5,342	77	.....	2,259	326	16
180,494	143,592	1,353,632	84,979	7,661	143,689	4,416,542	113,437	7,325,304	2,795,325	7,408	4,666	82	300	2,360	732	17

[3] Same number reported for one or more other months.

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

SAM. L. ROGERS, DIRECTOR

CENSUS OF MANUFACTURES 1914

WYOMING

Prepared under the supervision of W. M. STEUART, Chief Statistician for Manufactures

CONTENTS

	Page
Explanation of terms	2
General statistics	3
General character of the state	3
Importance and growth of manufactuers	3
Cars and general shop construction and repairs by steam-railroad companies	4
Flour-mill and gristmill products	4
Lumber and timber products	4
Printing and publishing	4
Butter	4
Persons engaged in manufacturing industries	4
Wage earners employed, by months	6
Prevailing hours of labor	6
General statistics—Continued.	Page
Character of ownership	7
Size of establishments	8
Engines and power	9
Fuel	10
Special statistics	10
Flour-mill and gristmill products	10
Butter	10
Laundries	11
General tables:	
Table 18.—Comparative summary for 1914, 1909, and 1904	11
Table 19.—Detailed statement for the state, by industries, and for cities of 10,000 to 50,000 inhabitants: 1914	12

WASHINGTON

GOVERNMENT PRINTING OFFICE

1917

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 should 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 whose products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1914, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city 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 very different from those covered by the class designation, and, on the other hand, may not include the total product covered by this designation, because some part of this 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 the leading industries of the state for more detailed consideration. Sometimes an industry of greater importance than some of those selected is omitted because it comprises so few establishments that these detailed presentations would reveal the operations of individual concerns.

Comparisons with previous censuses.—Owing to changes in industrial conditions it is not always possible to classify establishments by industries in such a way as to permit accurate comparison with preceding censuses. At the census of 1909 the figures for kindred industries were combined. This practice, as a rule, has been followed in compiling the statistics of 1914 when placed in comparison with those for 1909 and prior years. The comparative summary for 1914, 1909, and 1904, therefore, does not show separately all the industries given for 1914 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 1914 and 1909 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, without distinction of sex or 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 average thus obtained approximates the number of wage earners that would be required to perform the work done if all were constantly employed during the entire year. Accordingly, 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 believed not to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation. 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 particular, totals by sex and age for the wage earners reported for the representative day for all industries combined would be misleading because of the undue weight given to seasonal industries, in some of which, such as canning and preserving, the distribution of the wage earners by sex and age is materially different from that in most industries of more regular operation. In order to determine as nearly as possible the sex and age distribution of the average number of wage earners for a given state as a whole, the per cent distribution by sex and 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 number of men, women, and children 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 represent the approximate number who would be required to perform the work in any industry if all were continuously employed during the year, whereas the actual number to whom the total wages were paid would be larger.

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, all or practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

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

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

These instructions were identical with those employed at the census of 1909. The data compiled in respect to capital, however, at 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 internal revenue, corporation income tax, and state, county, and local taxes. In some instances the amount of the corporation tax for 1914 had not been ascertained when the report was prepared and the amount paid for 1913 was therefore given.

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 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 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 interest or depreciation, 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, since in most cases an engine or motor is not required to deliver continuously its full rated horsepower.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, oil, and gas. They relate to the quantity used during the year, which may be more or less than the quantity purchased. As only the principal varieties of fuel are shown, no comparison can be made with the total cost of all fuel.

WYOMING.

By Walter H. Booth.

GENERAL STATISTICS.

General character of the state.—Wyoming was admitted to the Union as a state in 1890. With a gross area of 97,914 square miles, of which 97,594 represent land surface, it ranks eighth in size among the states. It is traversed by the Rocky Mountains, and the average elevation is between 5,000 and 7,000 feet above sea level. In 1914 there were in Wyoming 49,302 square miles in unappropriated and unreserved public lands of the United States, 13,490 square miles in national forests, 3,128 square miles in the Yellowstone National Park, and 951 square miles in Indian reservations. The inhabitants of the state in 1900 numbered 92,531, and in 1910, 145,965; and its estimated population in 1914 was 168,736. In both total population and density of population Wyoming ranked forty-seventh in 1910, only one state, Nevada, falling below it in these respects. The number of inhabitants per square mile in that year was 1.5, the corresponding figure for 1900 being nine-tenths of 1 per cent.

The urban population in 1910—that is, the population residing in cities and other incorporated places of 2,500 or more—was 43,221, or 29.6 per cent of the total population of the state, as against 28.8 per cent in 1900. There were in the state in 1914 only two cities estimated to have more than 10,000 inhabitants, namely, Cheyenne and Sheridan. These two cities, whose combined population in that year was estimated at 22,645, formed 13.4 per cent of the estimated total for Wyoming and reported 21.9 per cent of the value of the state's manufactured products.

Stock raising is the leading industry, the agricultural lands of the state, through lack of water rather than poverty of soil, being fitted mainly for grazing. Irrigation is, however, practiced to some extent in every county. The total value of domestic animals sold or slaughtered on farms and ranges in 1909 amounted to $13,224,680, and the value of all farm crops grown during the same year was $10,022,961, of which about three-fifths represented hay and forage. In sheep raising the state outranks all others. In 1910 the number of sheep and lambs in Wyoming was approximately 5,408,000, or about one-tenth of the total for the United States. The production of wool in 1909 was 42,800,000 pounds, valued at $8,900,000, or nearly one-seventh of the total for the country.

The value of the state's mineral products in 1914, according to the annual report of the United States Geological Survey, was $12,417,752, the principal item being bituminous coal, $10,033,747.

Importance and growth of manufactures.—The manufactures of the state are of comparatively little importance. In 1914 the manufactured products of the state were valued at $11,223,415, and these industries gave employment to an average of 2,989 wage earners during the year.

Table 1 summarizes the more important data relative to all classes of manufactures combined in the state, for the censuses of 1914, 1909, 1904, and 1899, and gives the percentages of increase.

Table 1

	Manufacturing industries.				Per cent of increase.[1]		
	1914	1909	1904	1899	1909–1914	1904–1909	1899–1904
Number of establishments	337	268	169	139	25.7	58.6	21.6
Persons engaged	3,696	3,393	2,163	(2)	8.9	56.9	.....
Proprietors and firm members	293	263	150	(2)	11.4	75.3	.....
Salaried employees	414	263	179	87	57.4	46.9	.....
Wage earners (average number)	2,989	2,867	1,834	2,060	4.3	56.3	−11.0
Primary horsepower	10,004	7,628	3,604	3,820	31.1	111.7	−5.7
Capital	$29,270,117	$6,195,109	$2,695,889	$2,047,883	372.5	129.8	31.6
Salaries and wages	2,842,738	2,391,436	1,467,428	1,299,770	18.9	63.0	12.9
Salaries	530,984	310,673	206,306	90,647	70.9	50.6	127.6
Wages	2,311,754	2,080,763	1,261,122	1,209,123	11.1	65.0	4.3
Paid for contract work	39,199	19,655	103,589	(2)	99.4	−81.0	.....
Rent and taxes (including internal revenue)	209,632	89,414	[3] 34,474	(2)	134.4	.....	.....
Cost of materials	5,559,387	2,608,189	1,300,773	1,369,730	113.2	100.5	−5.0
Value of products	11,223,415	6,249,078	3,523,260	3,268,555	79.6	77.4	7.8
Value added by manufacture (value of products less cost of materials)	5,664,028	3,640,889	2,222,487	1,898,825	55.6	63.9	17.0

[1] A minus sign (−) denotes decrease; percentages are omitted when base is less than 100 or when comparable figures can not be given.
[2] Figures not available. [3] Exclusive of internal revenue.

All the items in this table show increases from 1909 to 1914. The large increase in capital, 372.5 per cent, was due chiefly to the establishment of the petroleum-refining industry on a large scale since the 1909 census.

Table 2 shows the relative importance of the leading manufacturing industries in 1914 and gives percentages of increase for the three five-year periods from 1899 to 1914.

Separate statistics are presented for six industries or industry groups, for each of which products valued at more than $300,000 were reported for 1914. These industries include one with products exceeding $2,000,000 in value, four with products between $500,000 and $1,000,000, and one with products between $300,000 and $500,000. Among the industries which are included under the head of "all other industries," the statistics for which can not be shown separately without the possibility of disclosing the operations of individual establishments, are petroleum refining—the largest industry in the state, measured by value of products—and wood preserving, for which a greater value of products was reported than for some of the industries for which figures are shown in the table.

Table 2

INDUSTRY.	CENSUS OF 1914.							PER CENT OF INCREASE.[1]								
	Number of establishments.	Wage earners.		Value of products.		Value added by manufacture.		Wage earners (average number).			Value of products.			Value added by manufacture.		
		Average number.	Per cent distribution.	Amount.	Per cent distribution.	Amount.	Per cent distribution.	1909–1914	1904–1909	1899–1904	1909–1914	1904–1909	1899–1904	1909–1914	1904–1909	1899–1904
All industries	337	2,989	100.0	$11,223,415	100.0	$5,664,028	100.0	4.3	56.3	−11.0	79.6	77.4	7.8	55.6	63.9	17.0
Cars and general shop construction and repairs by steam-railroad companies	12	1,722	57.6	2,469,129	22.0	1,468,228	25.9	1.9	39.4	42.1	5.6	42.5	40.2	−9.9	47.2	60.4
Flour-mill and gristmill products	16	33	1.1	721,818	6.4	167,097	3.0	.....	.....	.....	−3.2	162.7	34.6	2.4	150.8	16.1
Lumber and timber products	69	364	12.2	717,684	6.4	577,632	10.2	−43.8	112.5	−55.9	−4.4	61.5	−38.5	4.5	37.9	−25.6
Printing and publishing	81	183	6.1	545,718	4.9	444,444	7.8	13.0	36.1	26.6	11.4	56.5	86.3	11.0	53.3	94.8
Butter	14	42	1.4	543,499	4.8	143,524	2.5	.....	.....	.....	101.9	136.0	.....	148.3	205.3	.....
Bread and other bakery products	47	57	1.9	313,225	2.8	126,726	2.2	.....	.....	.....	31.0	162.6	435.3	18.7	174.4	387.5
All other industries	98	588	19.7	5,912,342	52.7	2,736,377	48.3	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Percentages are based on figures in Table 18; a minus sign (−) denotes decrease; percentages are omitted when base is less than 100 or when comparable figures can not be given.

The industries in this table are arranged in the order of their importance as shown by value of products, but the arrangement would vary considerably if based on average number of wage earners or value added by manufacture. The operations of steam-railroad repair shops and the manufacture of butter are the only industries which hold the same rank in all three respects. The flour-mill and gristmill industry, second in value of products, was sixth in number of wage earners and fourth in value added by manufacture; the lumber and timber industry, third in value of products, was second in number of wage earners and in value added by manufacture; printing and publishing, fourth in value of products, was third in number of wage earners and in value added by manufacture; and the bakery industry, sixth in value of products and in value added by manufacture, was fourth in number of wage earners.

Cars and general shop construction and repairs by steam-railroad companies.—This is the most important industry in Wyoming when measured by number of wage earners employed, and ranks second to petroleum refining when measured by value of products. In 1914 it gave employment to 57.6 per cent of the total number of wage earners in manufacturing industries in the state, and the value of products reported for it formed 22 per cent of the total. The operations of this industry consist almost wholly of repairs to the rolling stock and equipment of the companies reporting.

Flour-mill and gristmill products.—This industry, which excludes custom mills grinding for toll or local consumption, although third in importance in the state as measured by value of products, ranked only sixth in average number of wage earners in 1914. There was a slight decrease in value of products during the five-year period 1909–1914, together with a small increase in number of establishments and in the average number of wage earners.

Lumber and timber products.—This industry embraces 66 establishments operating sawmills and the logging operations connected therewith, 2 planing mills not connected with sawmills, and 1 wooden-box factory. For the period 1909 to 1914 it shows decreases in average number of wage earners and in value of products, together with a small increase in value added by manufacture. For the decade 1904 to 1914, however, increases appear in all these items.

Printing and publishing.—This industry embraces 5 establishments doing book and job printing and 76 printing and publishing newspapers or periodicals. There were consistent increases from 1909 to 1914 in average number of wage earners, value of products, and value added by manufacture.

Butter.—This industry shows, for the period 1909 to 1914, the largest percentage of increase in value of products of any industry in the state, namely, 101.9 per cent. There was also a large gain, 136 per cent, for the period 1904 to 1909.

Persons engaged in manufacturing industries.—Table 3 shows, for 1914 and 1909, the number of persons engaged in manufactures, distributed by sex, the average number of wage earners being distributed

also by age. The sex and 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."

Table 3

CLASS.	Census year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES. Total.	Male.	Female.	Per cent of total. Male.	Female.
All classes	1914	3,696	3,578	118	96.8	3.2
	1909	3,393	3,313	80	97.6	2.4
Proprietors and officials	1914	432	417	15	96.5	3.5
	1909	370	361	9	97.6	2.4
Proprietors and firm members	1914	293	278	15	94.9	5.1
	1909	263	257	6	97.7	2.3
Salaried officers of corporations	1914	31	31	.....	100.0	.....
	1909	19	19	.....	100.0	.....
Superintendents and managers	1914	108	108	.....	100.0	.....
	1909	88	85	3	96.6	3.4
Clerks and other subordinate salaried employees.	1914	275	228	47	82.9	17.1
	1909	156	131	25	84.0	16.0
Wage earners (average number)	1914	2,989	2,933	56	98.1	1.9
	1909	2,867	2,821	46	98.4	1.6
16 years of age and over	1914	2,981	2,927	54	98.2	1.8
	1909	2,855	2,810	45	98.4	1.6
Under 16 years of age	1914	8	6	2	75.0	25.0
	1909	12	11	1	91.7	8.3

In 1914 the number of persons engaged in manufactures was 3,696, of whom 2,989, or four-fifths, were wage earners, 432 were proprietors and officials, and 275 were clerks. Of the wage earners 16 years of age and over, 2,933, or 98.1 per cent, were males and 56, or only 1.9 per cent, were females. Figures for the sex and age distribution of wage earners for individual industries will be found in Table 19.

Table 4 shows, for the several classes of persons engaged in manufactures, the percentage of increase from 1909 to 1914 and the per cent distribution.

This table shows increases for the five-year period in the total numbers of the several classes of employees with the exception of wage earners under 16 years of age. The largest percentage of increase for both sexes combined, 76.3, is shown for clerks and other subordinate salaried employees, but the proportion which this class formed of all persons engaged in manufactures was only 7.4 per cent. Wage earners 16 years of age and over represented 80.7 per cent of the total number of persons engaged in manufacturing industries in the state in 1914 and 84.5 per cent in 1909. Only 8 children under 16 years of age were reported for 1914, as against 12 for 1909.

Table 4

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES. Per cent of increase,[1] 1909–1914. Total.	Male.	Female.	Per cent distribution. Total. 1914	Total. 1909	Male. 1914	Male. 1909	Female. 1914	Female. 1909
All classes	8.9	8.0	.....	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials	16.8	15.5	.....	11.7	11.0	11.7	11.0	12.7	11.3
Proprietors and firm members	11.4	8.2	.....	7.9	7.8	7.8	7.8	12.7	7.5
Salaried officers of corporations	.....	.....	.....	0.9	0.6	0.9	0.6	.....	.....
Superintendents and managers	.....	.....	.....	2.9	2.6	3.0	2.6	.....	3.8
Clerks and other subordinate salaried employees	76.3	74.0	.....	7.4	4.6	6.3	4.0	39.8	31.2
Wage earners (average number)	4.3	4.0	.....	80.9	84.5	82.0	85.1	47.5	57.5
16 years of age and over	4.4	4.2	.....	80.7	84.1	81.8	84.8	45.8	56.3
Under 16 years of age	.....	.....	.....	0.2	0.4	0.2	0.3	1.7	1.2

[1] Percentages are omitted when base is less than 100.

The average number of wage earners employed and their per cent distribution as males 16 years of age and over, females 16 years of age and over, and children under 16 years of age, is given in Table 5, for 1914, 1909, and 1904. This table also shows, for some of the important industries separately, a similar distribution of wage earners for 1914 and 1909.

For all industries combined, the table shows a small increase from 1909 to 1914 in the total average number of wage earners, following a much larger increase during the preceding five-year period. The changes from census to census in the proportions which men, women, and children represented of the total number of wage earners were very slight. In 1914, of the four industries shown in the table, but one, printing and publishing, reported either females 16 years of age and over or children under 16 years of age, the proportions of the total wage earners in the industry being 15.3 per cent and 3.8 per cent, respectively.

Table 5

INDUSTRY.	Census year.	WAGE EARNERS. Average number.[1]	Per cent of total. 16 years of age and over. Male.	Female.	Under 16 years of age.
All industries	1914	2,989	97.9	1.8	0.3
	1909	2,867	98.0	1.6	0.4
	1904	1,834	97.8	1.8	0.4
Cars and general shop construction and repairs by steam-railroad companies.	1914	1,722	100.0	.....	.....
	1909	1,690	100.0	.....	.....
Flour-mill and gristmill products	1914	33	100.0	.....	.....
	1909	29	100.0	.....	.....
Lumber and timber products	1914	364	100.0	.....	.....
	1909	648	99.4	0.2	0.5
Printing and publishing	1914	183	80.9	15.3	3.8
	1909	162	74.1	21.0	4.9
All other industries	1914	687	96.1	3.8	0.1
	1909	338	96.7	3.0	0.3

[1] For method of estimating the distribution, by sex and age periods, of the average number for all industries combined, see "Explanation of terms."

Wage earners employed, by months.—Table 6 gives, for all industries combined, the total number of wage earners employed on the 15th of each month, or the nearest representative day, for 1914 and 1909, and the average number employed during each month in 1904, together with the percentage which the number reported for each month forms of the greatest number reported for any month.

For 1914 and 1909 the summer and fall months show the greatest activity in the combined industries of the state, the maximum number of wage earners appearing for August in 1914 and for November in 1909. The minimum number of wage earners appears for February in both years. In 1904 the maximum number was in December and the minimum in June. The greatest difference, both numerical and proportional, between the maximum and minimum months in any one of the three census years was 711, or 21.2 per cent of the maximum, in 1914.

The average monthly employment of wage earners in 1914 was 2,989, and in 1909 the average monthly employment was 2,867.

Table 6

MONTH.	WAGE EARNERS IN MANUFACTURING INDUSTRIES.					
	Number.[1]			Per cent of maximum.		
	1914	1909	1904	1914	1909	1904
January	2,663	2,496	1,992	79.4	79.6	98.8
February	2,641	2,481	1,913	78.8	79.1	94.8
March	2,815	2,642	1,794	84.0	84.2	88.9
April	2,736	2,642	1,722	81.6	84.2	85.4
May	2,646	2,783	1,661	78.9	88.7	82.4
June	2,882	2,983	1,640	86.0	95.1	81.3
July	3,230	2,957	1,677	96.4	94.3	83.1
August	3,352	3,042	1,746	100.0	97.0	86.6
September	3,347	3,132	1,905	99.9	99.8	94.4
October	3,279	3,031	1,946	97.8	96.6	96.5
November	3,207	3,137	1,995	95.7	100.0	98.9
December	3,070	3,065	2,017	91.6	97.7	100.0

[1] The figures for 1914 and 1909 represent the number employed on the 15th of each month, or the nearest representative day; those for 1904, the average number employed during the month.

Table 7 gives the total average number of wage earners employed during 1914, together with the total number employed on the 15th of each month, or the nearest representative day, for the combined industries of the state, for a number of selected industries, and for the total industries of each of the two cities having more than 10,000 inhabitants.

Table 7

WAGE EARNERS: 1914.
[Month of maximum employment for each industry is indicated by **boldface** figures and that of minimum 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	2,989	2,663	*2,641*	2,815	2,736	2,646	2,882	3,230	**3,352**	3,347	3,279	3,207	3,070	78.8
Bread and other bakery products	57	*56*	*56*	*56*	*56*	58	**59**	58	58	*56*	57	57	57	94.9
Butter	42	*35*	*35*	*35*	39	40	46	**50**	49	46	42	42	45	70.0
Cars and general shop construction and repairs by steam-railroad companies	1,722	1,781	1,771	1,744	1,753	*1,616*	1,652	1,679	1,722	1,746	**1,784**	1,746	1,670	90.6
Flour-mill and gristmill products	33	*28*	32	32	31	31	32	32	36	**38**	37	36	31	73.7
Lumber and timber products	364	271	260	224	*130*	178	210	450	491	561	**564**	525	504	23.0
Printing and publishing	183	185	186	181	182	181	179	*174*	182	185	184	**193**	184	90.2
All other industries	588	307	*301*	543	545	542	704	787	**814**	715	611	608	579	37.0
Total for cities	938	*907*	915	913	932	910	934	945	959	961	**975**	965	934	93.0
CHEYENNE	821	809	817	804	816	*794*	806	818	832	839	**855**	849	820	92.9
SHERIDAN	117	*98*	*98*	109	116	116	**128**	127	127	122	120	116	114	76.6

Of the selected industries, the lumber and timber industry, one of the largest in the state, shows the greatest degree of fluctuation, the number of wage earners in April being but 23 per cent of the number in October. The greatest stability in number of wage earners employed appears for the bakery industry, for which the proportion which the minimum formed of the maximum was 94.9 per cent. Steam-railroad repair shops and printing and publishing show but little fluctuation. For Cheyenne a much smaller degree of fluctuation appears than for the state as a whole.

Prevailing hours of labor.—In Table 8 the average number of wage earners reported, for all industries combined and for selected industries throughout the state, have been classified according to the number of hours of labor per week prevailing in the establishments in which they were employed. A similar classification is given, for 1914 only, for all industries combined, in each of the two cities having more than 10,000 inhabitants. The number employed in each establishment is classified as a total, even though a few employees worked a greater or a smaller number of hours.

The figures in this table, for the state as a whole and for most of the individual industries, emphasize the tendency toward a shortening of the working-day of wage earners. In 1909, 2,383, or more than eight-tenths of the total average number of wage earners for all industries combined were employed in establishments where the prevailing hours of labor were 60 or more per week, whereas but 859, or less than three-tenths, were so employed in 1914. On the other hand, for all industries combined, the number of wage earners in establishments whose working hours were fewer than 60 per week increased from 484, or 16.9 per cent of the total, in 1909 to 2,130, or 71.3 per cent, in 1914. For the state as a whole a very great increase took

place during the five-year period in the proportion of wage earners in establishments in which the prevailing hours per week were 48 and under, together with a marked increase in the proportion in establishments which were in operation 54 hours weekly.

Among the separate industries, cars and general shop construction and repairs by steam-railroad companies shows the most pronounced decrease in hours of labor. In 1909, 8.8 per cent of the wage earners in this industry were employed in establishments where the hours of labor were 54 or fewer per week, but in 1914 the proportion thus employed had increased to 99.4 per cent.

In 1914 the great majority of the wage earners, 91.4 per cent, reported for Cheyenne were employed in establishments in which the prevailing hours were 48 and under per week, but in Sheridan the number thus employed formed only 36.8 per cent of the total.

Table 8

INDUSTRY AND CITY.	Census year.	AVERAGE NUMBER OF WAGE EARNERS.								
		Total.	In establishments where the prevailing hours of labor per week were—							
			48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
All industries	1914	2,989	1,622	35	447	26	644	192	13	10
	1909	2,867	228	34	203	19	782	1,566	35	.....
Bread and other bakery products	1914	57	19	.....	11	3	17	4	3	.....
	1909	38	8	.....	9	2	12	6	1	.....
Butter	1914	42	5	.....	21	.....	11	5	.....	.....
	1909	20	.....	.....	.....	.....	19	1	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	1914	1,722	1,406	.....	305	.....	11	.....	.....	.....
	1909	1,690	.....	13	136	.....	.....	1,541	.....	.....
Flour-mill and gristmill products	1914	33	2	.....	3	.....	28	.....	.....	.....
	1909	29	3	.....	.....	.....	26	.....	.....	.....
Lumber and timber products	1914	364	9	.....	11	1	343	.....	.....	.....
	1909	648	8	10	6	4	611	9	.....	.....
Printing and publishing	1914	183	123	25	27	1	7	.....	.....	.....
	1909	162	94	11	35	6	16	.....	.....	.....
All other industries	1914	588	58	10	69	21	227	183	10	10
	1909	280	115	.....	17	7	98	9	34	.....
Total for cities	1914	938	793	22	61	25	28	9	.....	.....
CHEYENNE	1914	821	750	.....	35	25	7	4	.....	.....
SHERIDAN	1914	117	43	22	26	.....	21	5	.....	.....

Character of ownership.—Table 9 presents statistics concerning the character of ownership, or legal organization, of manufacturing enterprises. For all industries combined, for the state, comparative figures are given for 1914, 1909, and 1904, but for the cities, the figures relate only to 1914.

During the decade 1904–1914 the number of establishments under each kind of ownership increased greatly, those under individual ownership forming a somewhat larger proportion of the total in the later year than in the earlier. Most of the large establishments, however, are under corporate ownership, as will be seen from the fact that, although only 30.3 per cent of the total number of establishments in the state in 1914 was under this form of ownership, these establishments reported 85.1 per cent of the total value of products and 89.1 per cent of the total average number of wage earners. The corresponding percentages in 1909 were 25, 74.6, and 84, respectively.

The number of establishments under individual ownership in each of the three years for which figures are given was greater than the number under corporate and "all other" forms combined; and the proportions which the value of products and average number of wage earners reported for individual ownership formed of the respective totals in each year were greater than the corresponding proportions for establishments under "all other" ownership.

Table 9

CHARACTER OF OWNERSHIP AND CITY.	Census year.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.	
			Average number.	Per cent of total.	Amount.	Per cent of total.
All classes	1914	337	2,989	100.0	$11,223,415	100.0
	1909	268	2,867	100.0	6,249,078	100.0
	1904	169	1,834	100.0	3,523,260	100.0
Individuals	1914	186	265	8.9	1,047,357	9.3
	1909	151	378	13.2	924,993	14.8
	1904	86	146	8.0	555,377	15.8
Corporations	1914	102	2,664	89.1	9,553,365	85.1
	1909	67	2,409	84.0	4,664,220	74.6
	1904	55	1,641	89.5	2,751,358	78.1
All others	1914	49	60	2.0	622,693	5.5
	1909	50	80	2.8	659,865	10.6
	1904	28	47	2.6	216,525	6.1
CHEYENNE	1914	32	821	100.0	1,607,638	100.0
Individuals[1]	1914	14	25	3.0	74,408	4.6
Corporations	1914	18	796	97.0	1,533,230	95.4
SHERIDAN	1914	30	117	100.0	855,575	100.0
Individuals	1914	14	25	21.4	108,569	12.7
Corporations	1914	11	79	67.5	391,396	45.7
All others	1914	5	13	11.1	355,610	41.6

[1] Includes the group "all others."

For Cheyenne the proportions which the average number of wage earners and the value of products reported for establishments under corporate ownership formed of the respective totals were considerably greater than the proportions for the state as a whole, but for Sheridan the reverse was the case.

Size of establishments.—The tendency for manufacturing to become concentrated in large establishments, or the reverse, is indicated by the statistics given in Table 10.

For 1914, 18 establishments, or 5.3 per cent of the total number in the state, each reported products exceeding $100,000 in value, as compared with 17, or 6.3 per cent of the total for 1909, and 8, or 4.7 per cent, for 1904. For 1914 these establishments reported 75.3 per cent of the total average number of wage earners for the state, 76.8 per cent of the total value of products, and 75.7 per cent of the total value added by manufacture. For the same year the smaller establishments—those having products valued at less than $100,000—although representing 94.7 per cent of the total number of establishments, reported only 23.2 per cent of the total value of products. For the establishments having products valued at $100,000 and over, the proportion of the total value of products has shown an increase at each successive census, from 51.9 per cent in 1904 to 67.5 per cent in 1909 and to 76.8 per cent in 1914.

Table 10

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904
All classes	337	268	169	2,989	2,867	1,834	$11,223,415	$6,249,078	$3,523,260	$5,664,028	$3,640,889	$2,222,487
Less than $5,000	199	141	74	200	161	72	467,996	343,444	180,100	318,503	242,297	130,811
$5,000 to $20,000	88	86	64	239	231	202	811,213	771,778	562,958	463,398	489,792	359,213
$20,000 to $100,000	32	24	23	300	260	229	1,326,473	913,075	950,524	593,063	494,471	427,925
$100,000 and over	18	17	8	2,250	2,215	1,331	8,617,733	4,220,781	1,829,678	4,289,064	2,414,329	1,304,480
	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	59.1	52.6	43.8	6.7	5.6	3.9	4.2	5.5	5.1	5.6	6.7	5.9
$5,000 to $20,000	26.1	32.1	37.9	8.0	8.1	11.0	7.2	12.4	16.0	8.2	13.5	16.2
$20,000 to $100,000	9.5	9.0	13.6	10.0	9.1	12.5	11.8	14.6	27.0	10.5	13.6	19.3
$100,000 and over	5.3	6.3	4.7	75.3	77.3	72.6	76.8	67.5	51.9	75.7	66.3	58.7

Table 11 shows the size of establishments in 1914 as measured by the number of wage earners employed. The figures given are for all industries combined, for six of the more important industries, and for each of the two cities in the state having more than 10,000 inhabitants.

Table 11

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING—						
			No wage earners.	1 to 5 wage earners.		6 to 20 wage earners.		21 to 50 wage earners.	
	Establishments.	Wage earners (average number).	Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries	337	2,989	68	224	390	29	291	6	1[illegible]7
Bread and other bakery products	47	57	21	23	39	3	18	.....	.....
Butter	14	42	1	12	21	.....	.....	1	21
Cars and general shop construction and repairs by steam-railroad companies	12	1,722	.....	2	6	3	50	1	47
Flour-mill and gristmill products	16	33	4	10	17	2	16	.....	.....
Lumber and timber products	69	364	3	63	95	1	7	.....	.....
Printing and publishing	81	183	13	60	111	8	72	.....	.....
All other industries	98	588	26	54	101	12	128	4	129
Total for cities	62	938	5	39	82	14	106	3	67
CHEYENNE	32	821	3	20	48	6	48	2	42
SHERIDAN	30	117	2	19	34	8	58	1	25

Table 11—Continued.

INDUSTRY AND CITY.	ESTABLISHMENTS EMPLOYING— 51 to 100 wage earners.		101 to 250 wage earners.		251 to 500 wage earners.		501 to 1,000 wage earners.		Over 1,000 wage earners.	
	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries	1	53	7	1,093	1	282	1	683	.....	.....
Bread and other bakery products	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Butter	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	.....	.....	4	654	1	282	1	683	.....	.....
Lumber and timber products	.....	.....	2	262	.....	.....	.....	.....	.....	.....
Flour-mill and gristmill products	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Printing and publishing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
All other industries	1	53	1	177	.....	.....	.....	.....	.....	.....
Total for cities	.....	.....	.....	.....	.....	.....	1	683	.....	.....
CHEYENNE	.....	.....	.....	.....	.....	.....	1	683	.....	.....
SHERIDAN	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Table 12 presents, for 1914, percentages based on the figures in Table 11 and, for 1909, similar percentages for all industries combined and for individual industries in the state as a whole.

Table 12

INDUSTRY AND CITY.	Census year.	PER CENT OF TOTAL AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS EMPLOYING SPECIFIED NUMBER. 1 to 5	6 to 20	21 to 50	51 to 100	101 to 250	251 to 500	501 to 1,000	Over 1,000
All industries	1914	13.0	9.7	6.6	1.8	36.6	9.4	22.9	.....
	1909	12.7	8.3	1.2	4.5	47.0	.....	26.3	.....
Bread and other bakery products.	1914	68.4	31.6	.....	.....	.....	.....	.....	.....
	1909	78.9	21.1	.....	.....	.....	.....	.....	.....
Butter	1914	50.0	.....	50.0	.....	.....	.....	.....	.....
	1909	30.0	70.0	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	0.3	2.9	2.7	.....	38.0	16.4	39.7	.....
	1909	.....	1.2	.....	4.4	49.9	.....	44.6	.....
Flour-mill and gristmill products.	1914	51.5	48.5	.....	.....	.....	.....	.....	.....
	1909	69.0	31.0	.....	.....	.....	.....	.....	.....
Lumber and timber products	1914	26.1	1.9	.....	.....	72.0	.....	.....	.....
	1909	14.5	7.7	.....	.....	77.8	.....	.....	.....
Printing and publishing	1914	60.7	39.3	.....	.....	.....	.....	.....	.....
	1909	69.1	30.9	.....	.....	.....	.....	.....	.....
All other industries	1914	17.2	21.8	21.9	9.0	30.1	.....	.....	.....
	1909	36.4	31.4	12.1	20.0	.....	.....	.....	.....
Total for cities	1914	8.7	11.3	7.1	.....	.....	.....	72.8	.....
CHEYENNE	1914	5.8	5.8	5.1	.....	.....	.....	83.2	.....
SHERIDAN	1914	29.0	49.6	21.4	.....	.....	.....	.....	.....

There were 68 establishments in 1914 for which no wage earners are shown. In these establishments all the work was done by the proprietors or firm members, aided in some cases by members of their families or by persons classed as salaried employees. In some cases a few wage earners were employed for short periods, but the number was so small and the term of employment so short that after the average, as described in the "Explanation of terms," had been computed no wage earners could be shown.

The 224 small establishments—those employing from 1 to 5 wage earners—represented 66.5 per cent of the total number in the state; the 35 employing from 6 to 50 represented 10.4 per cent; and the 8 employing from 51 to 250 represented 2.4 per cent. These 267 establishments gave employment to 67.7 per cent of the total number of wage earners, and the remainder were reported by 2 establishments, 1 of which employed an average of 683 and the other an average of 282. The groups of establishments having more than 50 wage earners represented only 3 per cent of the total number of establishments in the state but gave employment to 70.6 per cent of the wage earners. It will be noted that in the bakery, butter, flour-mill and gristmill, and printing and publishing industries from one-half to two-thirds of the wage earners were in establishments employing from 1 to 5. On the other hand, in the steam railroad repair shops and in the lumber and timber industry, the majority were in establishments giving employment to more than 100 wage earners.

In Cheyenne 83.2 per cent of the total wage earners were employed in one steam-railroad repair shop.

Engines and power.—Table 13 shows, for 1914, 1909, and 1904, for all industries combined, the number and horsepower of engines or motors employed in generating power (including electric motors operated by purchased current). It also shows separately the number and horsepower of electric motors operated by current generated in the establishments reporting.

Table 13

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904
Primary power, total	463	268	109	10,004	7,628	3,604	100.0	100.0	100.0
Owned	251	184	109	8,828	7,114	3,558	88.2	93.3	98.7
Steam engines and turbines [1]	156	128	69	6,925	6,467	3,088	69.2	84.8	85.7
Internal-combustion engines	73	37	24	1,366	182	88	13.6	2.4	2.4
Water wheels, turbines, and motors	22	19	16	537	465	382	5.4	6.1	10.6
Rented—Electric	212	84	.....	1,176	514	46	11.8	6.7	1.3
Electric	264	108	.....	1,691	801	132	100.0	100.0	100.0
Rented	212	84	(2)	1,176	514	46	69.5	64.2	34.8
Generated by establishments reporting	52	24	11	515	287	86	30.5	35.8	65.2

[1] Figures for horsepower include for 1909 and 1904 the amount reported under the head of "other" owned power. [2] Not reported.

This table shows an increase in primary power amounting to 2,376 horsepower, or 31.1 per cent, from 1909 to 1914, due largely to increases in the use of internal-combustion engines and of rented electric power. Steam was the predominant power at each census, although its proportion of the total primary power decreased from 85.7 per cent in 1904 to 69.2 per cent in 1914. Every item for which figures are given in the table shows an increase for each of the two five-year periods.

Fuel.—Closely related to the subject of power employed in manufactures is that of the fuel consumed in generating this power or otherwise used in the manufacturing processes.

Table 14 shows, for 1914, the quantity of each kind of fuel used, for which data were obtained, for all industries combined and for certain selected industries in the state as a whole and for all industries combined in each of the two cities.

Table 14

INDUSTRY AND CITY.	COAL.		Coke (tons, 2,000 lbs.).	Oil, including gasoline (barrels).	Gas (1,000 cubic feet).
	Anthracite (tons, 2,240 lbs.).	Bituminous (tons, 2,000 lbs.).			
All industries	102	102,611	638	259,806	4,552
Bread and other bakery products	.....	1,470	55	.....	500
Brick	.....	3,155	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	.....	79,307	188	1,361	.....
Flour-mill and gristmill products	.....	3,001	.....	30	1,048
Petroleum, refining	.....	680	380	257,749	.....
Printing and publishing	77	525	.....	78	1,832
All other industries	25	14,473	15	588	1,172
Total for cities	.....	34,586	235	1,367	548
CHEYENNE	.....	29,570	235	1,361	548
SHERIDAN	.....	5,016	.....	6	.....

SPECIAL STATISTICS.

For certain industries the Census Bureau collects, by means of special schedules, details regarding the quantities and cost of materials, the quantity and value of products, and other information for securing which no provision is made on the general schedule. Certain data of this character for two industries in Wyoming are here presented.

Flour-mill and gristmill products.—Table 15 gives the quantities and values of flour-mill and gristmill products for the last three census years.

Table 15

	1914	1909	1904
Total value	$721,818	$746,299	$283,653
Wheat flour:			
Barrels	106,189	99,537	43,758
Value	$530,528	$505,294	$226,754
Rye flour:			
Barrels	150	500	.....
Value	$792	$2,500	.....
Corn meal and corn flour:			
Barrels	1,646	1,033	74
Value	$7,829	$4,094	$204
Bran and middlings:			
Tons	3,803	(1)	(1)
Value	$83,695	(1)	(1)
Feed and offal:			
Tons	1,415	9,252	2,849
Value	$42,952	$215,913	$56,695
Breakfast foods:			
Pounds	16,000	.....	.....
Value	$700	.....	.....
All other cereal products, value	$54,647	.....	.....
All other products, value	$675	$18,498	.....

[1] Included in "feed and offal."

Wheat flour, which contributed 73.5 per cent of the total value of products for the industry as a whole in 1914, shows an increase of 62,431 barrels, or 142.7 per cent, for the decade 1904–1914—largely confined, however, to the five-year period 1904–1909, the increase from 1909 to 1914 being only 6,652 barrels, or 6.7 per cent. The value of this product increased 134 per cent during the decade 1904 to 1914 and 5 per cent during the period 1909 to 1914. The value of bran and middlings and feed and offal combined formed 17.5 per cent of the total value of products for the industry in 1914, as compared with 28.9 per cent in 1909 and 20 per cent in 1904.

The equipment in 1914 consisted of 77 stands of rolls, 2 runs of stone, and 10 attrition mills.

Butter.—The quantity and value of products for 1914, 1909, and 1904 are given in Table 16.

The number of establishments, as shown in Table 18, decreased from 5 in 1904 to 4 in 1909, but increased to 14 during the following five-year period.

For the decade 1904–1914 there was an increase of 180.8 per cent in the total quantity of butter manufactured, the greater part of it being in prints or rolls. Butter in prints or rolls increased 705,711 pounds, or 185.1 per cent, and butter packed solid increased 199,231 pounds, or 167.1 per cent, during the decade.

The figures shown for cheese in this table represent only its production as a by-product of the butter factories, and since there is but one cheese factory in the state, statistics for it can not be shown without disclosing its operations. Cream and "all other products" show large increases for the period 1909–1914.

Table 16	1914	1909	1904
Total value	[1] $543,499	$268,862	$114,354
Butter:			
Pounds	1,405,457	783,585	500,515
Value	$393,120	$223,525	$101,722
Packed solid—			
Pounds	318,431	15,344	119,200
Value	$86,811	$4,129	$23,840
Prints or rolls—			
Pounds	1,087,026	768,241	381,315
Value	$306,309	$219,396	$77,882
Full-cream cheese:			
Pounds	[1] 199,979	250,719	84,600
Value	[1] $27,359	$40,115	$8,181
Cream sold:			
Pounds	566,449	42,116	44,272
Value	$68,594	$4,455	$4,151
All other products, value	$54,426	$767	$300

[1] Excluding statistics for one establishment, to avoid disclosure of individual operations.

Laundries.—Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. Table 17, however, summarizes these statistics for Wyoming for 1914 and 1909.

Table 17	POWER LAUNDRIES.		
	Number or amount.		Per cent of increase,[1] 1909–1914.
	1914	1909	
Number of establishments	18	14	.....
Persons engaged	212	203	4.4
Proprietors and firm members	22	20	.....
Salaried employees	5	12	.....
Wage earners (average number)	185	171	8.2
Primary horsepower	322	319	0.9
Capital	$174,290	$99,573	75.0
Salaries and wages	154,168	89,303	72.6
Salaries	6,440	10,392	−38.0
Wages	147,728	78,911	87.2
Paid for contract work	1,000	.....	.....
Rent and taxes (including internal revenue)	7,388	5,818	27.0
Cost of materials	64,501	38,238	68.7
Amount received for work done	238,048	216,847	9.8

[1] A minus sign (−) denotes decrease; percentages are omitted when base is less than 100.

In 1914 Wyoming ranked forty-seventh among the states in amount received for work done, and in 1909 it ranked forty-fifth. Increases are shown for all items given except number and salaries of salaried employees. The increase from 1909 to 1914 in amount received for work done was $21,201, or 9.8 per cent. For 1914 the 18 laundries were reported, as to character of ownership, as follows: Corporation, 2; individual, 11; and all other forms, 5. The corresponding figures for 1909 are 1, 6, and 7, respectively.

GENERAL TABLES.

Table 18 gives, for 1914, 1909, and 1904, 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 for the city of Cheyenne similar data for all industries combined.

Table 19 presents for 1914 statistics in detail for each industry in the state that can be shown without the disclosure of the operations of individual establishments and the statistics for all industries combined for each of the cities in the state having more than 10,000 inhabitants.

TABLE 18.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.							
All industries	1914	337	2,989	10,004	$2,312	$5,559	$11,223
	1909	268	2,867	7,628	2,081	2,608	6,249
	1904	169	1,834	3,604	1,261	1,301	3,523
Bread and other bakery products.	1914	47	57	37	45	186	313
	1909	33	38	31	33	132	239
	1904	19	17	7	14	52	91
Butter	1914	14	42	198	35	400	543
	1909	4	20	79	17	211	269
	1904	5	11	83	7	95	114
Cars and general shop construction and repairs by steam-railroad companies.	1914	12	1,722	2,924	1,296	1,001	2,469
	1909	9	1,690	1,550	1,309	708	2,337
	1904	9	1,212	1,488	884	533	1,640
Flour-mill and gristmill products.	1914	16	33	1,163	27	555	722
	1909	13	29	885	21	583	746
	1904	11	16	591	11	219	284
Lumber and timber products.	1914	[1] 69	364	2,344	$225	$140	$718
	1909	63	648	2,251	314	198	751
	1904	32	305	707	151	64	465
Printing and publishing	1914	81	183	235	157	101	546
	1909	65	162	138	141	90	490
	1904	47	119	96	84	52	313
Saddlery and harness	1914	11	24	7	23	50	103
	1909	10	34	1	28	60	130
	1904	3	19	.....	16	27	54
Tobacco, cigars	1914	17	15	.....	11	31	68
	1909	10	18	.....	15	24	61
	1904	12	27	.....	16	15	49
All other industries	1914	70	549	3,096	493	3,095	5,7
	1909	61	228	2,693	203	602	1,241
	1904	31	108	632	78	244	526
							13
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.							
CHEYENNE	1914	32	821	1,465	$641	$669	$1,608
	1909	22	[2] 750	1,253	618	607	1,577
CHEYENNE—Continued	1904	18	552	.....	412	308	925

[1] Includes "boxes, wooden packing;" and "lumber, planing-mill products, not including planing mills connected with sawmills."
[2] Figures do not agree with those published in 1909, because certain establishments revised their reports for that census.

TABLE 19.—DETAIL STATEMENT FOR THE STATE, BY INDUS-

	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— Maximum month.		Number, 15th day of— Minimum month.		Male.	Female.	Male.	Female.	
	THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
1	All industries	337	3,696	293	139	228	47	2,989	Au	3,352	Fe 2,641	(2)	(2)	(2)	(2)	(2)	$29,270,117
2	Automobile repairing	6	24	5	.....	.....	.....	19	Jy	22	De [3] 18	18	18	.....	.....	.....	26,577
3	Bread and other bakery products	47	118	54	2	1	4	57	Je	59	Se [3] 56	60	49	10	1	.....	164,465
4	Brick	7	54	5	2	.....	.....	47	Au	91	Ja 10	78	78	.....	.....	.....	88,789
5	Butter	14	60	4	8	2	4	42	Jy	50	Fe [3] 35	46	36	10	.....	.....	203,361
6	Carriages, wagons, and repairs	5	11	5	.....	.....	.....	6	Je	8	De [3] 5	6	6	.....	.....	.....	16,020
7	Cars and general shop construction and repairs by steam-railroad companies.	12	1,841	.....	26	87	6	1,722	Oc	1,784	My 1,616	1,669	1,669	.....	.....	.....	2,841,856
8	Confectionery and ice cream	5	15	7	.....	.....	.....	8	Au [3]	11	Ja 5	9	4	5	.....	.....	34,870
9	Flour-mill and gristmill products	16	57	11	8	5	.....	33	Se	38	Ja 28	32	32	.....	.....	.....	479,059
10	Lumber and timber products	66	462	75	24	7	.....	356	Oc	556	Ap 122	692	692	.....	.....	.....	960,947
11	Mineral and soda waters	15	29	18	.....	1	.....	10	Au	13	De [3] 9	10	10	.....	.....	.....	65,150
12	Printing and publishing, job printing	5	16	3	.....	.....	.....	13	No	15	Ja 12	13	7	5	1	.....	45,692
13	Printing and publishing, newspapers and periodicals.	76	317	62	34	38	13	170	No	178	Jy 162	178	148	24	4	2	477,351
14	Saddlery and harness	11	35	8	2	1	.....	24	Au [3]	26	De [3] 22	25	25	.....	.....	.....	108,060
15	Tobacco, cigars	17	30	15	.....	.....	.....	15	De	20	Je 12	20	16	4	.....	.....	15,647
16	All other industries *	35	627	21	33	86	20	467	.....	.....	.....	.....	.....	.....	.....	.....	23,742,273
	CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																
1	CHEYENNE	32	939	16	17	70	15	821	Oc	855	My 794	828	815	13	.....	.....	$1,801,583
2	SHERIDAN	30	171	26	15	10	3	117	Je	128	Ja [3] 98	121	113	7	1	.....	673,287

[1] Owned power only.

[2] No figures given for reasons stated in "Explanation of terms."

* All other industries embrace—

Artificial stone products	2
Awnings, tents, and sails	1
Boxes, wooden packing	1
Brooms, from broom corn	1
Cars and general shop construction and repairs by electric-railroad companies	1
Cheese	1
Chemicals	1
Copper, tin, and sheet-iron work	2
Fertilizers	1
Flavoring extracts	1
Food preparations, not elsewhere specified	3
Foundry and machine-shop products	2
Fur goods	1
Gas, illuminating and heating	1
Ice, manufactured	1

TRIES, AND FOR CITIES OF 10,000 TO 50,000 INHABITANTS: 1914.

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, including internal-revenue and corporation income.	Principal materials.	Fuel and rent of power.			Total.	Steam engines.[1]	Internal-combustion engines.	Water wheels and motors.[1]	Electric (rented).		
THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
$237,044	$293,940	$2,311,754	$39,199	$94,221	$115,411	$5,207,921	$351,466	$11,223,415	$5,664,028	10,004	6,925	1,366	537	1,176	515	1
.....	.....	17,177	.....	2,180	282	3,125	1,253	30,002	25,624	29	.....	.....	.....	29	.....	2
3,000	2,210	44,901	50	7,096	1,799	178,075	8,424	313,225	126,726	37	.....	.....	.....	37	.....	3
2,400	.....	26,262	500	150	557	1,704	10,521	55,414	43,189	187	50	.....	.....	137	.....	4
10,339	4,901	35,084	500	1,420	1,412	394,612	5,363	543,499	143,524	198	105	.....	.....	93	.....	5
.....	.....	5,325	.....	.....	284	4,200	509	15,876	11,167	5	.....	.....	.....	5	.....	6
42,903	109,398	1,295,744	.....	.....	25,747	899,812	101,089	2,469,129	1,468,228	2,924	2,561	8	.....	355	355	7
.....	.....	4,370	.....	1,175	280	10,762	532	22,688	11,394	5	.....	.....	.....	5	.....	8
14,010	5,055	27,300	.....	1,012	5,432	547,440	7,281	721,818	167,097	1,163	585	93	345	140	54	9
21,700	9,200	215,510	23,281	478	3,188	124,087	620	691,184	566,477	2,262	2,050	19	180	13	.....	10
.....	1,200	7,255	.....	2,143	991	13,859	934	50,473	35,680	36	5	14	.....	17	.....	11
.....	.....	11,296	.....	2,000	331	15,063	883	48,094	32,148	19	.....	.....	.....	19	.....	12
48,666	40,019	145,317	4,039	17,807	4,733	75,455	9,873	497,624	412,296	216	.....	81	11	124	.....	13
2,400	192	22,561	.....	3,161	1,184	49,207	697	103,380	53,476	7	.....	.....	1	6	.....	14
.....	.....	10,910	.....	2,362	3,729	30,351	335	67,884	37,198	.....	.....	.....	.....	.....	.....	15
91,626	121,765	442,742	10,829	53,237	65,462	2,860,169	203,152	5,593,125	2,529,804	2,916	1,569	1,151	.....	196	106	16
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																
$33,138	$87,153	$641,284	$29	$7,303	$14,388	$607,465	$61,130	$1,607,638	$939,043	1,465	1,233	8	.....	224	321	1
32,320	14,690	110,955	250	8,207	25,206	458,642	11,048	855,575	385,885	521	248	25	40	208	5	2

[1] Same number reported for one or more other months.

* All other industries embrace—Continued.

Jewelry	1
Leather, tanned, curried, and finished	1
Lime	1
Liquors, malt	2
Lumber, planing-mill products, not including planing mills connected with sawmills	2
Marble and stonework	2
Petroleum, refining	2
Slaughtering and meat packing	1
Wall plaster	2
Wood preserving	1